

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES



In the Matter of

1-800 Contacts, Inc.,
a corporation

Docket No. 9372

**RESPONDENT 1-800 CONTACTS' MOTION PURSUANT TO
RULE 3.31A TO PERMIT RESPONDENT
TO CALL SIX (6) EXPERT WITNESSES AT TRIAL**

I. INTRODUCTION

Pursuant to Rule 3.31A(a) and (b), Respondent 1-800 Contacts, Inc. ("1-800 Contacts") seeks leave of court to call six expert witnesses at trial. Rule 3.31A(b) authorizes the Court to allow more than five expert witnesses "due to extraordinary circumstances." Respondent submits that such circumstances exist here.

II. BACKGROUND

A. The Complaint

Complaint Counsel challenge 14 bilateral trademark dispute settlement agreements entered into by 1-800 Contacts, each with a different contact lens retailer.¹ These settlement agreements relate to online search advertising. The complaint alleges that such advertising is data-intensive: "[I]n determining whether and in what order to place advertisements, search

¹ The agreements are not identical. For example, one of these agreements (with Standard Optical) expired on February 4, 2013. Another exemplary difference is that one (with Vision Direct) was implemented by the entry of a permanent injunction by Judge George Daniels of the Southern District of New York.

engines employ sophisticated algorithms” and make assessments “based largely on the search engine’s continual analysis of user feedback (such as click-through data). . . .” ¶ 11.

The complaint alleges that the settlement agreements, individually and collectively, restrained competition in at least ten distinct ways. ¶ 31. The complaint alleges two potential “relevant product market[s]” “in which to analyze the competitive effects.” ¶¶ 28-29. The complaint also alleges that the agreements “exceed the scope of any property right that 1-800 Contacts may have in its trademarks, and they are not reasonably necessary to achieve any procompetitive benefit.” ¶ 32. The complaint further alleges that “[l]ess restrictive alternatives are available to 1-800 Contacts,” *id.*, although it does not identify any such alternatives. The complaint seeks nine elements of relief. *Id.* at Notice of Contemplated Relief (pages 9-10).

B. Respondent’s Position

Respondent’s position is that the settlement agreements must be evaluated under the antitrust Rule of Reason, in which “the factfinder weighs all of the circumstances of a case in deciding whether a restrictive practice should be prohibited as imposing an unreasonable restraint on competition.” *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 49 (1977). Complaint Counsel likewise stated at the initial conference that they intend to prove their case under a methodology that considers market power and actual effects. Tr., Sept. 7, 2016, at 19:24-20:17. Respondent believes that the evidence will show that the circumstances and character of the agreements make antitrust scrutiny inappropriate, that in the alternative the procompetitive benefits of the agreements outweigh any anticompetitive effects, that the agreements are not likely to harm competition or consumers, that 1-800 Contacts does not have sufficient market power to harm competition, and that the complaint’s alleged product markets fail. Respondent also challenges the extensive relief being sought.

C. Fact Discovery

One indicator of the scope of appropriate expert discovery in this action is the scope of the fact discovery that the parties have taken. Twenty-nine third parties have been subpoenaed. More than 175,000 documents and electronic files have been produced. Forty-one depositions have been taken, 13 in the years-long pre-filing investigation and 28 during the litigation itself.

D. Experts

In light of the multiple different subject matters to be addressed at trial, and the uncertain scope of the expert reports that Complaint Counsel would be submitting, Respondent initially designated seven experts. In its expert designation, Respondent acknowledged the presumptive limit of five expert witnesses and stated that it “expects to reduce its list after receiving Complaint Counsel’s expert reports and/or file a motion seeing leave to call additional expert witnesses.” Motion, Ex. B, at 2. Respondent then conferred with Complaint Counsel and agreed to a briefing schedule that would result in an expedited resolution of the issue. Respondent received Complaint Counsel’s expert reports on February 6, 2017. Two days later, Respondent notified Complaint Counsel that it was withdrawing one of its seven designated experts. To facilitate prompt briefing, the parties agreed that Complaint Counsel would file a motion to limit Respondents to five experts, rather than Respondent’s moving for leave to call more than five experts. *See* Complaint Counsel’s Motion, Exhibit B. By its February 17, 2017 Order, the Court directed that Respondent either amend its expert witness list or file its own motion for leave to call six, rather than five, expert witnesses.² In accordance with that Order, Respondent hereby

² Respondent read FTC Rule 3.31A(b) and *Pom Wonderful* not to require it to obtain leave before serving its January 13 Expert Witness List, and as noted in that List, Respondent intended to file any motion for leave prior to submitting its expert reports, which are due on February 23. *In the Matter of Pom Wonderful LLC and Roll Int’l Corp.*, Dkt. No. 9344, 2011 WL 734462, at (footnote continued)

files the motion for such leave.

III. ARGUMENT

A. The Circumstances Of This Case Warrant One Additional Expert

Respondent respectfully requests that the Court allow Respondent to call six expert witnesses at trial rather than the presumptive five, for the reasons set forth below.

First, this is not a typical enforcement action. This action involves not one area of the law but at least two. Here, Complaint Counsel's legal theory is that the antitrust standard is violated because the reach of the agreements is allegedly beyond the rights protected by trademark law. Respondent contends that the agreements settled reasonably disputed claims and did so by commonplace and reasonable types of settlement agreements. Respondent's defenses and evidence related to Complaint Counsel's trademark theories necessitate testimony from an expert in trademark practice who has litigated and settled such disputes. This subject matter is distinct from the other subject matters on which Respondent is offering expert opinions.

To address these issues, Respondent plans to call Howard Hogan, an accomplished trademark lawyer. Mr. Hogan will testify that the agreements settling 1-800 Contacts' complaints were of a form that is both reasonable and commonplace, that the relief provided is

*1 n.1 & n.2 (Feb. 23, 2011). Respondent also believed that its contemplated timing was sensible because its review of Complaint Counsel's February 6 expert reports could – and did – narrow the scope of the issue to be presented to the Court.

Respondent apologizes to the Court if its understanding of the Rules and/or best practices was in error, and for not presenting for the Court's consideration a stipulation embodying its agreement with Complaint Counsel on the structure and timing of the initial motion. Respondent appreciates the opportunity provided to it by the Court's February 7 Order to file the current motion.

narrowly and appropriately tailored to remedy the violations alleged, and that more narrowly tailored provisions would prove to be impracticable.³

Second, Complaint Counsel’s use of the antitrust laws to scrutinize settlements of trademark litigation necessitates testimony regarding the economics of trademarks and trademark protection. Respondent intends to call William Landes, a professor of law and economics at the University of Chicago Law School. Dr. Landes co-authored, with Richard Posner, *The Economic Structure of Intellectual Property Law*, which contains two chapters on the economics of trademarks and is viewed as the seminal treatise on that subject. Dr. Landes has also published on the economics of litigation, including one of the first papers that use economics to analyze the choice between settling a dispute and going to trial. Dr. Landes will explain and apply economic principles of trademark protections. In this regard, it is important to appreciate that Complaint Counsel’s “simple” case is made simple – and Complaint Counsel are able to present their case without a trademark expert – only by Complaint Counsel’s simply ignoring the fundamental and important procompetitive benefits of trademarks and trademark settlements. Respondent should be permitted to present testimony from an economist who has literally “written the book” in this area.

Third, the subject matter out of which this case arises is quite technical. The process by which search advertising is placed involves complex algorithms that have changed over time. As demonstrated by the fifty-three pages of appendices to Complaint Counsel’s subpoenas to the search engines, there are thousands of relevant keywords and search queries involved in this

³ Exhibit 1 to the Declaration of Justin Raphael (“Raphael Declaration”) consists of Respondent’s Expert Witness List as well as Mr. Hogan’s CV and the CVs of Respondent’s five other remaining experts, which were attached to that list.

litigation. Raphael Decl., Ex. 2. In response to these subpoenas, the search engines have produced thousands of pages (and electronic equivalents) of data that they have collected on searches, the rates at which consumers click on various search results, the rates at which consumers who click complete a transaction, and other measures. Respondent therefore intends to call Anindya Ghose, a professor at NYU and an expert in information systems and digital marketing, including search engine data. Professor Ghose has published peer-reviewed studies of search engine user behavior based on analyses of large sets of search engine data. Professor Ghose will use data provided by the search engines to explain consumer Internet search behavior as relevant to the restrictions in the settlement agreements and also use such data and academic literature to analyze the potential effects of the settlement agreements.

Fourth, Complaint Counsel have retained a Dr. Jacoby, who has sponsored a purported consumer survey that supposedly shows a minimal level of consumer confusion when trademarks are used in paid search. The complaint also addresses trademark litigation that 1-800 Contacts brought against Lens.com, where a district court order excluding 1-800 Contacts' consumer survey contributed to a partial loss for 1-800 Contacts. Complaint, ¶ 26. In response, Respondent intends to call Kent Van Liere, a well-known expert in administering consumer surveys, who will testify about the proper use of surveys in trademark lawsuits of the type that were settled and who will respond to the work of Dr. Jacoby with a consumer survey that he designed.

Fifth, the complaint alleges that Respondent challenged its competitors' activities, including filing its trademark litigation, "without regard to whether the advertisements were likely to cause consumer confusion or infringed 1-800 Contacts' trademarks." *Id.*, ¶ 27. Respondent's witnesses will testify that, in fact, its relevant personnel believed that the practice

of displaying competitors' advertisements on Internet search engine results pages in response to consumers' searches for "1-800 Contacts" was confusing to consumers. Respondent should also be permitted to present an expert who can explain, from a theoretical and academic marketing point of view, the factors that explain why and how consumers would be confused by such advertisements. Respondent therefore intends to call Ronald Goodstein, a marketing professor at Georgetown. Professor Goodstein is co-author of a recent article in Trademark Reporter (the only peer-reviewed journal dedicated to trademark law) that analyzes the use of trademarks as keywords in Internet paid search advertising. R. Goodstein et al., *Using Trademarks as Keywords: Empirical Evidence of Confusion*, 105 TMR 732 (2015). Professor Goodstein will analyze the potential for consumer confusion and the potential for trademark dilution from the type of advertisements restricted by the settlement agreements.

Sixth, the complaint alleges that the procompetitive justifications for the trademark settlements do not outweigh the purported anticompetitive effects. Complaint Counsel simplify this calculus by simply ignoring the procompetitive benefits of trademark law, of trademark, trade name, and goodwill protection, and of settlements. Complaint Counsel purport to support their inappropriately narrow analysis with the testimony of an antitrust economist. Respondent intends to call Kevin Murphy, an economics professor at the University of Chicago. Based on economic principles and his analysis of the data and qualitative evidence in the case, Professor Murphy will present an economic analysis of the competitive effects of the settlement agreements, demonstrating that the agreements did not harm competition, are not inherently anticompetitive bid-rigging agreements, and that 1-800 Contacts does not have monopoly power either individually or jointly with the settling retailers in a properly defined antitrust market.

B. Complaint Counsel's Contrary Arguments Lack Merit

Complaint Counsel's arguments to date have centered on necessity and burden. In their prior motion, Complaint Counsel cited only one court decision regarding Rule 3.31A(b) – *Pom Wonderful* – but that decision supports Respondent, not Complaint Counsel. In *Pom Wonderful*, this Court allowed three additional experts, for a total of eight. The claim involved false advertising; the need for three additional experts arose from the fact that the health claims in the ads covered a number of subject areas. Here, the need for one additional expert arises from the fact that the case arises at the intersection of two areas of the law – trademark (and, more generally, intellectual property and tort) and antitrust, as well as the fact that the subject matter here – internet search advertising – requires analysis of massive troves of data related to advertiser and consumer behavior.

Complaint Counsel have made some of the same sorts of arguments that this Court overruled in *Pom Wonderful*. As they did in *Pom Wonderful*, Complaint Counsel have contended that they have designated fewer than five experts (initially four in *Pom Wonderful*, three here, although Complaint Counsel has not yet designated rebuttal experts). 2011 WL 734462, at *3. But the Court in *Pom Wonderful* looked to the fit between the Respondents' experts and the Respondents' defenses, not to how Complaint Counsel chose to present their case. *Id.* at *4-*5. The same is true here. The fact that Complaint Counsel have chosen to ignore the trademark settlement aspect of the agreements at issue does not mean that Respondent should not be able to address that aspect through expert testimony.

Complaint Counsel have also argued that other cases have been prosecuted with fewer than five experts. But as the Court said in *Pom Wonderful*, the result in other cases “is not

material to whether Respondents are entitled to defend themselves against the charges brought against them in this case with more than five experts.” *Id.* at *4.

Complaint Counsel have also contended that permitting Respondent to present an additional expert in its defense would unfairly burden Complaint Counsel. That argument has no merit. There have been 41 depositions and the equivalent of approximately two million pages of documents produced in this matter. In the Part 3 phase alone, 29 third parties have been subpoenaed. At least eight experts will be deposed regardless of the outcome of this motion. At least a dozen individual Complaint Counsel have been listed on Complaint Counsel’s filings in this proceeding. Simply put, the marginal burden of deposing and cross-examining one additional expert is not beyond Complaint Counsel’s capacity or an unfair burden on Complaint Counsel’s presentation of their case.

Finally, although Respondent believes it has shown that there will not be duplication among its experts, the Court need not now make a final determination on that issue, for as in *Pom Wonderful*, it can be addressed at trial. *Id.* at *5 (noting that “there are sufficient safeguards in place to prevent cumulative or duplicative expert testimony at trial,” citing Rules 3.41(b) and 3.43(b)). In the meantime, one additional expert deposition is not an undue burden.

IV. CONCLUSION

The Court should permit Respondent to list six experts at this time.

DATED: February 20, 2017

Respectfully submitted,

/s/ Justin P. Raphael

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Counsel for Respondent 1-800 Contacts, Inc.

CERTIFICATE OF SERVICE

I hereby certify that on February 20, 2017, I filed **RESPONDENT 1-800 CONTACTS' MOTION PURSUANT TO RULE 3.31A TO PERMIT RESPONDENT TO CALL SIX (6) EXPERT WITNESSES AT TRIAL** using the FTC's E-Filing System, which will send notification of such filing to all counsel of record as well as the following:

Donald S. Clark
Secretary
Federal Trade Commission
600 Pennsylvania Ave., NW, Rm. H-113
Washington, DC 20580

The Honorable D. Michael Chappell
Administrative Law Judge
Federal Trade Commission
600 Pennsylvania Ave., NW, Rm. H-110
Washington, DC 20580

DATED: February 20, 2017

By: /s/ Justin P. Raphael
Justin P. Raphael

CERTIFICATE FOR ELECTRONIC FILING

I hereby certify that the electronic copy sent to the Secretary of the Commission is a true and correct copy of the paper original and that I possess a paper original of the signed document that is available for review by the parties and the adjudicator.

DATED: February 20, 2017

By: /s/ Justin P. Raphael
Justin P. Raphael

**UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF THE ADMINISTRATIVE LAW JUDGES**

In the Matter of

**1-800 Contacts, Inc.,
a corporation**

Docket No. 9372

**DECLARATION OF JUSTIN P. RAPHAEL IN SUPPORT OF
RESPONDENT 1-800 CONTACTS' MOTION PURSUANT TO
RULES 3.31A(a) AND (b) TO PERMIT RESPONDENT
TO CALL SIX (6) EXPERT WITNESSES AT TRIAL**

I, Justin P. Raphael, declare as follows:

1. I am an attorney at the law firm of Munger, Tolles & Olson LLP, counsel for Respondent 1-800 Contacts, Inc. in this matter. I am licensed to practice law before the courts of the State of California and have appeared in the action pursuant to Rule 4.1 of the Commission's Rules of Practice.

2. I submit this Declaration in support of Respondent 1-800 Contacts' Motion Pursuant to Rules 3.31A(a) and (b) to Permit Respondent to Call Six (6) Expert Witnesses at Trial. I have personal knowledge of the facts stated in this declaration and, if called as a witness, could competently testify to them.

3. Attached to this declaration as Exhibit 1 is a true and correct copy of Respondent's Expert Witness List, served January 13, 2017 in this matter. Exhibit 1 includes the CVs of each of Respondent's six remaining designated experts, but omits the voluminous prior testimony that was included in the expert disclosure.

4. Attached to this declaration as Exhibit 2 is a true and correct copy of the Subpoena Duces Tecum served by Complaint Counsel on Google Inc. on or about October 20, 2016 in this matter.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed on February 20, 2017, in San Francisco, California.

/s/ Justin P. Raphael

Justin P. Raphael

EXHIBIT 1

**UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF THE ADMINISTRATIVE LAW JUDGES**

In the Matter of

**1-800 CONTACTS, INC.,
a corporation**

Docket No. 9372

RESPONDENT'S EXPERT WITNESS LIST

Pursuant to Paragraph 19(a) of the Scheduling Order and Rule 3.31A(a), Respondent hereby provides a list of experts that it currently intends to call as witnesses at the hearing. Respondent reserves the following rights:

1. Not to call at the hearing some or all of the persons listed;
2. To call any of the persons identified by Complaint Counsel as expert witnesses, including any identified as rebuttal experts;
3. To add experts to this list and/or present supplemental or surrebuttal expert reports and opinions, if necessary or appropriate, following Complaint Counsel's service of opening expert reports and/or rebuttal expert reports; and
4. To call any of these individuals or any other person at the hearing in order to respond to testimony or other evidence presented by Complaint Counsel, including in surrebuttal.

Respondent acknowledges the provision of Rule 3.31A(b) that "[e]ach side will be limited to calling at the evidentiary hearing 5 expert witnesses, including rebuttal or

surrebuttal expert witnesses,” and expects to reduce its list after receiving Complaint Counsel’s expert reports and/or file a motion seeking leave to call additional expert witnesses.

Subject to the foregoing, including its reservations of rights, Respondent provides the following list of experts:

EXPERT WITNESSES

1. **Dr. Kevin Murphy.** Professor Murphy’s background, qualifications, and publications within the past ten years are described in his curriculum vitae, a copy of which is provided herewith as Exhibit A. Transcripts of Professor Murphy’s testimony in *US Airways, Inc. v. Sabre Holdings Corp.*, United States District Court, Southern District of New York, Case No. 1:11-cv-02725-MGC are provided as Exhibit B. Transcripts of Professor Murphy’s testimony in *Aspinall v. Philip Morris, USA, Inc.*, Superior Court for the Commonwealth of Massachusetts, Case No. 98-6002-BLSI, are provided as Exhibit C. Neither Professor Murphy nor Respondent have in their possession, custody, or control any transcripts of other trial or deposition testimony given within the past four years that are not under seal.
2. **Dr. Anindya Ghose.** Professor Ghose’s background, qualifications, and publications within the past ten years are described in his curriculum vitae, provided as Exhibit D. In addition, Professor Ghose testified at a deposition in *In re Facebook, Inc., IPO Securities and Derivative Litigation*, United States District Court, Southern District of New York, Case No. 1:12-md-02389. Neither Professor Ghose nor Respondent have in their possession, custody, or control any transcripts of trial or deposition testimony given within the past four years that are not under seal.
3. **Dr. Michael Ostrovsky.** Professor Ostrovsky’s background, qualifications, and publications within the past ten years are described in his curriculum vitae, provided as Exhibit E. Professor Ostrovsky has not given trial or deposition testimony within the past four years.
4. **Dr. William Landes.** Professor Landes’s background, qualifications, and publications within the past ten years are described in his curriculum vitae, provided as Exhibit F. Professor Landes has not given trial or deposition testimony within the past four years.
5. **Mr. Howard S. Hogan.** Mr. Hogan’s background, qualifications, and publications within the past ten years are described in his curriculum vitae, provided as Exhibit G. Mr. Hogan has not given trial or deposition testimony within the past four years.

6. **Dr. Ronald Goodstein.** Professor Goodstein's background, qualifications, and publications within the past ten years are described in his curriculum vitae, provided as Exhibit H. Professor Goodstein has not given trial or deposition testimony within the past four years.

7. **Dr. Kent Van Liere.** Dr. Van Liere's background, qualifications, and publications within the past ten years are described in his curriculum vitae, provided as Exhibit I. The transcript of Dr. Van Liere's deposition in *In re: Lumber Liquidators Chinese-Manufactured Flooring Products Marketing, Sales Practice and Products Liability Litigation*, United States District for the Eastern District of Virginia, Case No. 1:15-md-02627, is provided as Exhibit J. The transcript of Dr. Van Liere's deposition in *Rock v. National College Athletic Association*, United States District Court for the Southern District of New York, Case No. 1:12-cv-01019, is provided as Exhibit K. The transcript of Dr. Van Liere's deposition in *Orix USA Corp. v. Preston Hollow Capital, LLC*, United States District Court for the Eastern District of Texas, Case No. 5:15-CV-00170, is provided as Exhibit L. The transcript of Dr. Van Liere's deposition in *Devi Khoday and Danise Townsend v. Symantec Corp., and Digital River, Inc.*, United States District Court for the District of Minnesota, Case No. 11-CV-00180, is provided as Exhibit M. The transcript of Dr. Van Liere's trial testimony in *Amey LG Ltd v. Cumbria County Council*, a matter in the United Kingdom, is provided as Exhibit N. The transcript of Dr. Van Liere's deposition in *Variety Stores, Inc. v. Wal-Mart Stores, Inc.*, United States District Court for the Eastern District of North Carolina, Case No. 5:14-cv-217, is provided as Exhibit O. Neither Dr. Van Liere nor Respondent have in their possession, custody, or control any transcripts of other trial or deposition testimony given within the past four years that are not under seal.

DATED: January 13, 2017

Respectfully submitted,

/s/ Gregory P. Stone

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Counsel for 1-800 Contacts, Inc.

CERTIFICATE OF SERVICE

I hereby certify that on January 13, 2017, I served **RESPONDENT'S EXPERT WITNESS LIST** on the following Complaint Counsel:

Thomas H. Brock, *tbrock@ftc.gov*

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DATED: January 13, 2017

By: /s/ Gregory P. Stone
Gregory P. Stone

EXHIBIT A

Curriculum Vitae

Kevin M. Murphy

January 2017

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Current Positions

July 2005-Present: George J. Stigler Distinguished Service Professor of Economics,
Department of Economics and Booth School of Business, The University of Chicago

Faculty Research Associate, National Bureau of Economic Research

Co-Chair Becker Friedman Institute for Research in Economics, The University of
Chicago

Education

University of California, Los Angeles, A.B., Economics, 1981

The University of Chicago, Ph.D., 1986

Thesis Topic: *Specialization and Human Capital*

Previous Research and Academic Positions

2002-2005: George J. Stigler Professor of Economics, Department of Economics and
Booth School of Business, The University of Chicago

1993 – 2002: George Pratt Shultz Professor of Business Economics and Industrial
Relations, The University of Chicago

1989 – 1993: Professor of Business Economics and Industrial Relations, The University
of Chicago

1988 – 1989: Associate Professor of Business Economics and Industrial Relations, The University of Chicago

1986 – 1988: Assistant Professor of Business Economics and Industrial Relations, The University of Chicago

1983 – 1986: Lecturer, Booth School of Business, The University of Chicago

1982 – 1983: Teaching Associate, Department of Economics, The University of Chicago

1979 – 1981: Research Assistant, Unicon Research Corporation, Santa Monica, California

Honors and Awards

2008: John von Neumann Lecture Award, Rajk College, Corvinus University, Budapest

2007: Kenneth J. Arrow Award (with Robert H. Topel)

October 2005: Garfield Research Prize (with Robert H. Topel)

September 2005: MacArthur Foundation Fellow

1998: Elected to the American Academy of Arts & Sciences

1997: John Bates Clark Medalist

1993: Fellow of The Econometric Society

1989 – 1991: Sloan Foundation Fellowship, The University of Chicago

1983 – 1984: Earhart Foundation Fellowship, The University of Chicago

1981 – 1983: Fellowship, Friedman Fund, The University of Chicago

1980 – 1981: Phi Beta Kappa, University of California, Los Angeles

1980 – 1981: Earhart Foundation Fellowship, University of California, Los Angeles

1979 – 1981: Department Scholar, Department of Economics, University of California, Los Angeles

Publications

Books

Social Economics: Market Behavior in a Social Environment with Gary S. Becker, Cambridge, MA: Harvard University Press (2000).

Measuring the Gains from Medical Research: An Economic Approach, edited volume with Robert H. Topel, Chicago: The University of Chicago Press (2003).

Chapters in Books

“Income and Wealth in America,” with Emmanuel Saez, in Inequality and Economic Policy, ed. Tom Church, Christopher Miller, John B. Taylor, Stanford, CA: Hoover Press (2015)

Articles

“Government Regulation of Cigarette Health Information,” with Benjamin Klein and Lynne Schneider, 24 *Journal of Law and Economics* 575 (1981).

“Estimation and Inference in Two-Step Econometric Models,” with Robert H. Topel, 3 *Journal of Business and Economic Statistics* 370 (1985).

“Unemployment, Risk, and Earnings: Testing for Equalizing Wage Differences in the Labor Market,” with Robert H. Topel, in Unemployment and the Structure of Labor Markets, pp. 103-139, ed. Kevin Lang and Jonathan S. Leonard. London: Basil Blackwell (1987).

“The Evolution of Unemployment in the United States: 1968-1985,” with Robert H. Topel, in NBER Macroeconomics Annual, pp. 11-58, ed. Stanley Fischer. Cambridge, MA: MIT Press (1987).

“Cohort Size and Earnings in the United States,” with Mark Plant and Finis Welch, in Economics of Changing Age Distributions in Developed Countries, pp. 39-58, ed. Ronald D. Lee, W. Brian Arthur, and Gerry Rodgers. Oxford: Clarendon Press (1988).

“The Family and the State,” with Gary S. Becker, 31 *Journal of Law and Economics* 1 (1988).

“A Theory of Rational Addiction,” with Gary S. Becker, 96 *Journal of Political Economy* 675 (1988).

“Vertical Restraints and Contract Enforcement,” with Benjamin Klein, 31 *Journal of Law and Economics* 265 (1988).

“Income Distribution, Market Size, and Industrialization,” with Andrei Shleifer and Robert W. Vishny, 104 *Quarterly Journal of Economics* 537 (1989).

“Wage Premiums for College Graduates: Recent Growth and Possible Explanations,” with Finis Welch, 18 *Educational Researcher* 17 (1989).

“Industrialization and the Big Push,” with Andrei Shleifer and Robert W. Vishny, 97 *Journal of Political Economy* 1003 (1989).

“Building Blocks of Market Clearing Business Cycle Models,” with Andrei Shleifer and Robert W. Vishny, in NBER Macroeconomic Annual, pp. 247-87, ed. Olivier Jean Blanchard and Stanley Fischer. Cambridge, MA: MIT Press (1989).

“Efficiency Wages Reconsidered: Theory and Evidence,” with Robert H. Topel, in Advances in the Theory and Measurement of Unemployment, pp. 204-240. ed. Yoram Weiss and Gideon Fishelson. London: Macmillan (1990).

“Empirical Age-Earnings Profiles,” with Finis Welch, 8 *Journal of Labor Economics* 202 (1990).

“Human Capital, Fertility, and Economic Growth,” with Gary S. Becker and Robert F. Tamura, 98 *Journal of Political Economy*, S12 (1990).

“Accounting for the Slowdown in Black-White Wage Convergence,” with Chinhui Juhn and Brooks Pierce, in Workers and Their Wages: Changing Patterns in the United States, pp. 107-143, ed. Marvin Kosters. Washington, D.C.: American Enterprise Institute (1991).

“The Role of International Trade in Wage Differentials,” with Finis Welch, in Workers and Their Wages: Changing Patterns in the United States, pp. 39- 69, ed. Marvin Kosters. Washington, D.C.: American Enterprise Institute (1991).

“Why Has the Natural Rate of Unemployment Increased over Time?” with Robert H. Topel and Chinhui Juhn, 2 *Brookings Papers on Economic Activity* 75 (1991).

“The Allocation of Talent: Implications for Growth,” with Andrei Shleifer and Robert W. Vishny, 106 *Quarterly Journal of Economics* 503 (1991).

“Rational Addiction and the Effect of Price on Consumption,” with Gary S. Becker and Michael Grossman, 81 *American Economic Review* 237 (1991).

“Wages of College Graduates,” in The Economics of American Higher Education, pp. 121-40, ed. William E. Becker and Darrell R. Lewis. Boston: Kluwer Academic Publishers (1992).

“Changes in Relative Wages, 1963-1987: Supply and Demand Factors,” with Lawrence F. Katz, 107 *Quarterly Journal of Economics* 35 (1992).

“The Structure of Wages,” with Finis Welch, 107 *Quarterly Journal of Economics* 285 (1992).

“The Transition to a Market Economy: Pitfalls of Partial Planning Reform,” with Andrei Shleifer and Robert W. Vishny, 107 *Quarterly Journal of Economics* 889 (1992).

“The Division of Labor, Coordination Costs, and Knowledge,” with Gary S. Becker, 107 *Quarterly Journal of Economics* 1137 (1992).

“Industrial Change and the Rising Importance of Skill” with Finis Welch, in Uneven Tides: Rising Inequality in America, pp. 101-132, ed. Peter Gottschalk and Sheldon Danziger. New York: Russell Sage Foundation Publications (1993).

“Wage Inequality and the Rise in Returns to Skill,” with Chinhui Juhn and Brooks Pierce, 101 *Journal of Political Economy* 410 (1993).

“Occupational Change and the Demand for Skill, 1940-1990,” with Finis Welch, 83 *American Economic Review* 122 (1993).

“Inequality and Relative Wages,” with Finis Welch, 83 *American Economic Review* 104 (1993).

“Why Is Rent-Seeking So Costly to Growth?” with Andrei Shleifer and Robert W. Vishny, 83 *American Economic Review* 409 (1993).

“A Simple Theory of Advertising as a Good or Bad,” with Gary S. Becker, 108 *Quarterly Journal of Economics* 941 (1993).

“Relative Wages and Skill Demand, 1940-1990,” with Chinhui Juhn, in Labor Markets, Employment Policy, and Job Creation, pp. 343-60, ed. Lewis C. Solmon and Alec R. Levenson. The Milken Institute Series in Economics and Education. Boulder, CO: Westview Press (1994).

“Cattle Cycles,” with Sherwin Rosen and Jose A. Scheinkman, 102 *Journal of Political Economy* 468 (1994).

“An Empirical Analysis of Cigarette Addiction,” with Gary S. Becker and Michael Grossman, 84 *American Economic Review* 396 (1994).

“Inequality in Labor Market Outcomes: Contrasting the 1980s and Earlier Decades,” with Chinhui Juhn, 1 *Economic Policy Review* 26 (1995).

“Employment and the 1990-91 Minimum Wage Hike,” with Donald R. Deere and Finis Welch, 85 *American Economic Review* 232 (1995).

“Examining the Evidence on Minimum Wages and Employment,” with Donald R. Deere and Finis Welch, in The Effects of the Minimum Wage on Employment, pp. 26-54, ed. Marvin H. Koster. Washington, D.C.: The AEI Press (1996).

“Social Status, Education, and Growth,” with Chaim Fershtman and Yoram Weiss, 104 *Journal of Political Economy* 108 (1996).

“Wage Inequality and Family Labor Supply,” with Chinhui Juhn, 15 *Journal of Labor Economics* 72 (1997).

“Quality and Trade,” with Andrei Shleifer, 53 *Journal of Development Economics* 1 (1997).

“Vertical Integration as a Self-Enforcing Contractual Arrangement,” with Benjamin Klein, 87 *American Economic Review* 415 (1997).

“Unemployment and Nonemployment,” with Robert H. Topel, 87 *American Economic Review* 295 (1997).

“Wages, Skills, and Technology in the United States and Canada,” with W. Craig Riddell and Paul M. Romen, in General Purpose Technologies and Economic Growth, pp. 283-309, ed. Elhanan Helpman. Cambridge, MA: M.I.T. Press (1998).

“Perspectives on the Social Security Crisis and Proposed Solutions,” with Finis Welch, 88 *American Economic Review* 142 (1998).

“Population and Economic Growth,” with Gary S. Becker and Edward Glaeser, 89 *American Economic Review* 145 (1999).

“A Competitive Perspective on Internet Explorer,” with Steven J. Davis, 90 *American Economic Review* 184 (2000).

“Industrial Change and the Demand for Skill,” with Finis Welch, in The Causes and Consequences of Increasing Inequality, pp. 263-84, ed. Finis Welch. Volume II in the Bush School Series in the Economics of Public Policy. Chicago: The University of Chicago Press (2001).

“Wage Differentials in the 1990s: Is the Glass Half Full or Half Empty?” with Finis Welch, in The Causes and Consequences of Increasing Inequality, pp. 341-64, ed. Finis Welch. Volume II in the Bush School Series in the Economics of Public Policy. Chicago: The University of Chicago Press (2001).

“Economic Perspectives on Software Design: PC Operating Systems and Platforms,” with Steven J. Davis and Jack MacCrisken, in Microsoft, Antitrust, and the New Economy: Selected Essays, pp. 361-420, ed. Davis S. Evans. Boston, MA: Kluwer (2001).

“Current Unemployment, Historically Contemplated,” with Robert H. Topel and Chinhui Juhn, 1 *Brookings Papers on Economic Activity* 79 (2002).

“The Economics of Copyright ‘Fair Use’ in A Networked World,” with Andres Lerner and Benjamin Klein, 92 *American Economic Review* 205 (2002).

“The Economic Value of Medical Research,” with Robert H. Topel, in Measuring the Gains from Medical Research: An Economic Approach, pp. 41-73, ed. Robert H. Topel and Kevin M. Murphy. Chicago: The University of Chicago Press (2003).

“School Performance and the Youth Labor Market,” with Sam Peltzman, 22 *Journal of Labor Economics* 299 (2003).

- “Entrepreneurial ability and market selection in an infant industry: evidence from the Japanese cotton spinning industry,” with Atsushi Ohyama and Serguey Braguinsky, 7 *Review of Economic Dynamics* 354 (2004).
- “Entry, Pricing, and Product Design in an Initially Monopolized Market,” with Steven J. Davis and Robert H. Topel, 112 *Journal of Political Economy* S188 (2004).
- “Diminishing Returns: The Costs and Benefits of Increased Longevity,” with Robert H. Topel, 46 *Perspectives in Biology and Medicine* S108 (2004).
- “Persuasion in Politics,” with Andrei Shleifer, 94 *American Economic Review* 435 (May 2004).
- “Black-White Differences in the Economic Value of Improving Health,” with Robert H. Topel, 48 *Perspectives in Biology and Medicine* S176 (2005).
- “The Equilibrium Distribution of Income and the Market for Status,” with Gary S. Becker and Iván Werning, 113 *Journal of Political Economy* 282 (2005).
- “The Market for Illegal Goods: The Case of Drugs,” with Gary S. Becker and Michael Grossman, 114 *Journal of Political Economy* 38 (2006).
- “Competition in Two-Sided Markets: The Antitrust Economics of Payment Card Interchange Fees,” with Benjamin Klein, Kevin Green, and Lacey Place, 73 *Antitrust Law Journal* 571 (2006).
- “The Value of Health and Longevity,” with Robert H. Topel, 114 *Journal of Political Economy* 871 (2006).
- “Social Value and the Speed of Innovation,” with Robert H. Topel, 97 *American Economic Review* 433 (2007).
- “Education and Consumption: The Effects of Education in the Household Compared to the Marketplace,” with Gary S. Becker, 1 *The Journal of Human Capital* 9 (Winter 2007).
- “Why Does Human Capital Need a Journal?” with Isaac Ehrlich, 1 *The Journal of Human Capital* 1 (Winter 2007).
- “Critical Loss Analysis in the Whole Foods Case,” with Robert H. Topel, 3 (2) *GCP Magazine* (March 2008).
- “Exclusive Dealing Intensifies Competition for Distribution,” with Benjamin Klein, 75 *Antitrust Law Journal* (October 2008).
- “Fertility Decline, the Baby Boom and Economic Growth,” with Curtis Simon and Robert Tamura, 2 *The Journal of Human Capital* 3 (Fall 2008).

“The Market for College Graduates and the Worldwide Boom in Higher Education of Women,” with Gary S. Becker and William H. J. Hubbard, 100 *American Economic Review: Papers & Proceedings* 229 (May 2010).

“Explaining the Worldwide Boom in Higher Education of Women,” with Gary S. Becker and William H. J. Hubbard," 4 *Journal of Human Capital* No. 3 (2010).

“How Exclusivity is Used to Intensify Competition for Distribution-Reply to Zenger,” with Benjamin Klein, 77 *Antitrust Law Journal* No. 2 (2011).

“Achieving Maximum Long-Run Growth,” *Federal Reserve Bank of Kansas City Proceedings of the Annual Jackson Hole Conference 2011*.

“On the Economics of Climate Policy,” with Gary S. Becker and Robert H. Topel, 10 *B.E. Journal of Economic Analysis and Policy* No. 2 (2011).

“Measuring Crack Cocaine and its Impact,” with Roland G. Fryer, Jr., Paul S. Heaton, and Steven D. Levitt, 51 *Economic Inquiry* No. 3 (July 2013).

“Some Basic Economics of National Security,” with Robert H. Topel, 103 *American Economic Review* No. 3 (2013).

“Activating *Actavis*: A More Complete Story,” with Barry C. Harris, Robert D. Willig, and Matthew B. Wright, 28 *Antitrust* No. 2 (Spring 2014).

“Competitive Discounts and Antitrust Policy,” with Edward A. Snyder and Robert H. Topel, Chapter 5 of *The Oxford Handbook of International Antitrust Economics*, Volume 2 (2014).

“Gary Becker as Teacher,” 105 *American Economic Review* No. 5 (2015).

“Black and White Fertility, Differential Baby Booms: The Value of Equal Education Opportunity,” with Robert Tamura and Curtis Simon, 82 *Journal of Demographic Economics*, Issue 1 (2016).

“Human Capital Investment, Inequality and Economic Growth,” with Robert H. Topel, 34 *Journal of Labor Economics*, No. S2/Part 2 (2016).

Selected Working Papers

“Gauging the Economic Impact of September 11th,” with Gary S. Becker, Unpublished Working Paper (October 2001).

“War In Iraq Versus Containment: Weighing the Costs,” with Steven J. Davis and Robert H. Topel, NBER Working Paper No.12092 (March 2006).

“The Interaction of Growth in Population and Income,” with Gary S. Becker, Unpublished Working Paper (2006).

“Persuasion and Indoctrination,” with Gary Becker (2007).

“The Value of Life Near Its End and Terminal Care,” with Gary S. Becker and Tomas Philipson (2007).

“On the Economics of Climate Policy,” with Gary S. Becker and Robert H. Topel, Working Paper No. 234 (January 2010, Revised September 2010).

“The Manipulation of Children’s Preferences, Old Age Support, and Investment in Children’s Human Capital,” with Gary S. Becker and Jörg L. Spenkuch, Unpublished Working Paper (February 2012).

“The Collective Licensing of Music Performance Rights: Market Power, Competition and Direct Licensing” (March 2013).

“Activating *Actavis* with A More Complete Model,” with Michael G. Baumann, John P. Bigelow, Barry C. Harris, Janusz A. Ordoover, Robert D. Willig, and Matthew B. Wright, (January 2014).

Selected Comments

Comment on “Causes of Changing Earnings Equality” by Robert Z. Lawrence. Federal Reserve Bank of Kansas City (1998).

“Comment: Asking the Right Questions in the Medicare Reform Debate,” Medicare Reform: Issues and Answers, pp. 175-81, ed. Andrew J. Rettenmaier and Thomas R. Saving. Chicago: The University of Chicago Press (2000).

Comment on “Social Security and Demographic Uncertainty” by Henning Bohn, in Risk Aspects of Investment-Based Social Security Reform, ed. John Y. Campbell and Martin Feldstein. Chicago: The University of Chicago Press (2001).

Comment on “High Technology Industries and Market Structure” by Hal R. Varian. Federal Reserve Bank of Kansas City (2001).

Popular Press Articles

“The Education Gap Rap,” *The American Enterprise* (March-April 1990), pp. 62.

“Rethinking Antitrust,” with Gary S. Becker, *Wall Street Journal* (February 26, 2001), A22.

“Prosperity Will Rise Out of the Ashes,” with Gary S. Becker, *Wall Street Journal* (October 29, 2001), A22.

“The Economics of NFL Team Ownership,” with Robert H. Topel, report prepared at the request of the National Football League Players’ Association (January 2009).

Articles About Murphy

“Higher Learning Clearly Means Higher Earning,” by Carol Kleiman. *Chicago Tribune*, March 12, 1989, Jobs Section pp. 1. Long article about “The Structure of Wages” with picture of Murphy.

“Why the Middle Class Is Anxious,” by Louis S. Richman. *Fortune*, May 21, 1990, pp. 106. Extensive reference to Murphy's work on returns to education.

“Unequal Pay Widespread in U.S.,” by Louis Uchitelle, *New York Times*, August 14, 1990, Business Day section pp. 1. Long piece on income inequality.

“One Study’s Rags to Riches Is Another’s Rut of Poverty,” by Sylvia Nasar, *New York Times*, June 17, 1992, Business Section pp. 1. Long piece on the income inequality research.

“Nobels Pile Up for Chicago, but Is the Glory Gone?” by Sylvia Nasar, *New York Times* November 4, 1993, Business Section pp. 1. Long piece on Chicago School of economics. Featured a photo of five of the “brightest stars on the economics faculty” (including Murphy) and a paragraph about Murphy’s research.

“This Sin Tax is Win-Win,” by Christopher Farrell. *Business Week*, April 11, 1994, pp. 30. Commentary section refers to Murphy, Becker, and Grossman’s work on rational addiction.

“Growing inequality and the economics of fragmentation,” by David Warsh, *Boston Sunday Globe*, August 21, 1994, pp. A1. Two-page article with picture and biographical details about Murphy and his research; part of a series about “how the new generation replaced the old in economics.”

“A Pay Raise’s Impact,” by Louis Uchitelle. *New York Times*, January 12, 1995, Business Section pp. 1. Article about consequences of proposed increase in the minimum wage. Articles featuring Murphy's comments on the minimum wage appeared in numerous other publications, including the *Chicago Tribune*; in addition, Murphy was interviewed on CNN (January 26, 1995).

“The Undereducated American,” *Wall Street Journal*, August 19, 1996, A12. Changes in the rate of returns to education.

“In Honor of Kevin M. Murphy: Winner of the John Bates Clark Medal,” by Finis Welch, 14 *Journal of Economic Perspectives* 193 (2000).

Testimony, Reports, and Depositions (Last 4 Years)

Deposition of Kevin Murphy, January 16, 2013, in the Matter of Avery Dennison Corporation v. 3M Innovative Properties and 3M Company, The United States District Court for the District of Minnesota.

Amended Expert Report of Kevin M. Murphy, February 8, 2013, in the Matter of New Jersey Dep't of Env'tl. Prot., et al. v. Atlantic Richfield Co., et al., The United States District Court Southern District of New York.

Expert Report of Professor Kevin M. Murphy, February 8, 2013, in United States of America v. Apple Inc., et al., The United States District Court Southern District of New York.

Declaration of Kevin M. Murphy, February 22, 2013, in the Matter of Willard R. Brown, et al. v. The American Tobacco Co., Inc., et al., Superior Court for the State of California for the County of San Diego.

Rebuttal Expert Report of Kevin M. Murphy, March 1, 2013, in United States of America v. Apple Inc., et al., The United States District Court Southern District of New York.
Second Supplemental Expert Report of Kevin M. Murphy, March 8, 2013, in the Matter of Retractable Technologies, Inc. and Thomas Shaw v. Becton, Dickinson and Company, The United States District Court for the Eastern District of Texas Marshall Division.

Direct Testimony of Kevin M. Murphy, April 26, 2013, in United States of America v. Apple Inc., et al., The United States District Court Southern District of New York (revised and resubmitted on May 29, 2013).

Declaration of Kevin M. Murphy, May 13, 2013, in the Matter of Brenda Blakeman v. National Milk Producers Federation, et al., The United States District Court for the Southern District of Illinois.

Expert Report of Kevin M. Murphy, May 29, 2013, in the Matter of Microsoft Corporation v. Motorola, Inc., et al., The United States District Court Western District of Washington at Seattle.

Declaration of Kevin M. Murphy, June 6, 2013, in the Matter of WNET, Thirteen, Fox Television Stations, Inc., Twentieth Century Fox Film Corporation, WPIX, Inc., Univision Television Group, Inc., The Univision Network Limited Partnership, and Public Broadcasting Service v. Aereo, Inc. f/k/a Bamboom Labs, Inc., The United States District Court for the Southern District of New York.

Expert Report of Kevin M. Murphy, June 7, 2013, in the Matter of Patrick Brady, et al., v. Airline Pilots Association, International, The United States District Court District of New Jersey.

Rebuttal Expert Report of Kevin M. Murphy, June 10, 2013, in the Matter of Microsoft Corporation v. Motorola, Inc., et al., The United States District Court Western District of Washington at Seattle.

Trial Testimony of Kevin M. Murphy, June 19, 2013, in United States of America v. Apple Inc., et al., The United States District Court Southern District of New York.

Supplemental Expert Report of Kevin M. Murphy, June 21, 2013, in re: High-Tech Employee Antitrust Litigation, The United States District Court Northern District of California San Jose Division.

Trial Testimony of Kevin M. Murphy, July 1, 2013 and July 2, 2013, in re: Tobacco Cases II, Willard R. Brown, et al., v. The American Tobacco Company, et al., The Superior Court of the State of California in and for The County of San Diego Central Division.

Expert Report of Kevin M. Murphy, July 3, 2013, in re: Text Messaging Antitrust Litigation, The United States District Court For the Northern District of Illinois Eastern Division.

Deposition (by videoconference) of Kevin M. Murphy, July 5, 2013, in re: High-Tech Employee Antitrust Litigation, The United States District Court Northern District of California San Jose Division.

Expert Report of Kevin M. Murphy, July 19, 2013, in The Apple iPod iTunes Antitrust Litigation, The United States District Court For the Northern District of California Oakland Division.

Trial Testimony of Kevin M. Murphy, August 29, 2013 and August 30, 2013, in the Matter of Microsoft Corporation v. Motorola, Inc., et al., The United States District Court Western District of Washington at Seattle.

Trial Testimony of Kevin M. Murphy, September 17, 2013, in the Matter of Retractable Technologies, Inc. and Thomas Shaw v. Becton, Dickinson and Company, The United States District Court for the Eastern District of Texas Marshall Division.

Deposition of Kevin M. Murphy, September 26, 2013, in re: Text Messaging Antitrust Litigation, The United States District Court For the Northern District of Illinois Eastern Division

Expert Report of Kevin M. Murphy, September 27, 2013, in re: Petition of Pandora Media, Inc., related to United States of America v. American Society of Composers Authors and Publishers, The United States District Court for the Southern District of New York.

Rebuttal Expert Report of Kevin M. Murphy, October 21, 2013, in re: Petition of Pandora Media, Inc., related to United States of America v. American Society of Composers Authors and Publishers, The United States District Court for the Southern District of New York.

Expert Report of Kevin M. Murphy, October 21, 2013, in the Matter of Mary A. Carroll and Betty C. Lynn, et al., v. Philip Morris USA, Inc., et al., Superior Court for the State of Delaware in and for New Castle County.

Deposition of Kevin M. Murphy, November 2, 2013, in re: Petition of Pandora Media, Inc., related to United States of America v. American Society of Composers Authors and Publishers, The United States District Court for the Southern District of New York.

Rebuttal Expert Report of Kevin M. Murphy, November 8, 2013, in the Matter of US Airways, Inc. v. Sabre Holdings Corp., Sabre, Inc., and Sabre Travel International Ltd., The United States District Court for the Southern District of New York. Case No. 1:11-cv-02725-MGC.

Deposition of Kevin M. Murphy, November 12, 2013, in The Apple iPod iTunes Antitrust Litigation, The United States District Court for the Northern District of California Oakland Division.

Expert Report of Kevin M. Murphy, November 18, 2013, in the Matter of WNET, Thirteen, Fox Television Stations, Inc., Twentieth Century Fox Film Corporation, WPIX, Inc., Univision Television Group, Inc., The Univision Network Limited Partnership, and Public Broadcasting Service v. Aereo, Inc. f/k/a Bamboom Labs, Inc., The United States District Court for the Southern District of New York.

Direct Testimony of Kevin M. Murphy, November 18, 2013, in re: Petition of Pandora Media, Inc., related to United States of America v. American Society of Composers Authors and Publishers, The United States District Court for the Southern District of New York.

Expert Report of Kevin M. Murphy, November 25, 2013, in the Matter of Re High-Tech Employee Antitrust Litigation, The United States District Court for the Northern District of California San Jose Division.

Deposition of Kevin M. Murphy, December 7, 2013, in the Matter of Re High-Tech Employee Antitrust Litigation, The United States District Court for the Northern District of California San Jose Division.

Supplemental Expert Report of Kevin M. Murphy and Robert H. Topel, December 20, 2013, in The Apple iPod iTunes Antitrust Litigation, The United States District Court for the Northern District of California Oakland Division.

Deposition of Kevin M. Murphy, January 8, 2014, in The Apple iPod iTunes Antitrust Litigation, The United States District Court for the Northern District of California Oakland Division.

Expert Report of Kevin M. Murphy, January 22, 2014, in the Matter of Janet Skold and David Dos Santos, et al. v. Intel Corporation, et al., Superior Court of the State of California for the County of Santa Clara.

Trial Testimony of Kevin M. Murphy, January 27, 2014 and January 28, 2014, in re: Petition of Pandora Media, Inc., related to United States of America v. American Society of Composers Authors and Publishers, in The United States District Court for the Southern District of New York.

Deposition of Kevin M. Murphy, March 19, 2014, in the Matter of Janet Skold and David Dos Santos, et al. v. Intel Corporation, et al., Superior Court of the State of California for the County of Santa Clara.

Expert Report of Kevin M. Murphy, May 12, 2014, in the Matter of Sharon Cobb, et al. v. BSH Home Appliances Corporation, The United States District Court for the Central District of California Southern Division.

Deposition of Kevin M. Murphy, July 8, 2014, in the Matter of Sharon Cobb, et al. v. BSH Home Appliances Corporation, The United States District Court for the Central District of California Southern Division.

Expert Report of Kevin M. Murphy, July 25, 2014, in the Matter of City of Detroit, Michigan, The United States Bankruptcy Court for the Eastern District of Michigan.

Expert Report of Kevin M. Murphy, July 31, 2014, in the Matter of Dayna Craft (Withdrawn), Deborah Larsen, individually and on behalf of all others similarly situated v. Philip Morris USA Inc., a corporation, Missouri Circuit Court for the Twenty-Second Judicial District (City of St. Louis). Case No. 002-00406-02.

Deposition of Kevin M. Murphy, August 19, 2014, in the Matter of Dayna Craft (Withdrawn), Deborah Larsen, individually and on behalf of all others similarly situated v. Philip Morris USA Inc., a corporation, Missouri Circuit Court for the Twenty-Second Judicial District (City of St. Louis). Case No. 002-00406-02.

Declaration of Kevin M. Murphy, August 27, 2014, in the Matter of Sharon Cobb, et al. v. BSH Home Appliances Corporation, The United States District Court for the Central District of California Southern Division.

Declaration of Kevin M. Murphy, Ph.D., August 29, 2014, In Support of Defendant Keurig Green Mountain's Opposition To JBR's Motion For A Preliminary Injunction, In Re: Keurig Green Mountain Single Serve Coffee Antitrust Litigation, The United States District Court for the Southern District of New York.

Verified Statement of Kevin M. Murphy, September 5, 2014, in re: STB Docket No. EP 722, Railroad Revenue Adequacy.

Declaration of Kevin M. Murphy, September 19, 2014, in the Matter of County of San Mateo v. CSL Limited; CSL Behring LLC; CSL Plasma; Baxter International Inc.; and Plasma Protein Therapeutics Association, The United States District Court for the Northern District of California San Francisco Division.

Supplemental Expert Report of Kevin M. Murphy, October 17, 2014, in the Matter of Nukote of Illinois, Inc. v. Clover Holdings, Inc., and Clover Technologies Group, LLC, The United States District Court for the Northern District of Texas (Dallas). Case No. 3:10-cv-00580-P.

Expert Report of Kevin M. Murphy, October 30, 2014, in the Matter of Processed Egg Products Antitrust Litigation, Indirect Purchaser Action, The United States District Court for the Eastern District of Pennsylvania. Case No. 08-MD-02002.

Verified Statement of Kevin M. Murphy, November 4, 2014, in re: STB Docket No. EP 722, Railroad Revenue Adequacy.

Deposition (by videoconference) of Kevin M. Murphy, November 17, 2014, in the Matter of County of San Mateo v. CSL Limited; CSL Behring LLC; CSL Plasma; Baxter International Inc.; and Plasma Protein Therapeutics Association, The United States District Court for the Northern District of California San Francisco Division.

Deposition of Kevin M. Murphy, December 1, 2014, in the Matter of Processed Egg Products Antitrust Litigation, Indirect Purchaser Action, The United States District Court for the Eastern District of Pennsylvania. Case No. 08-MD-02002.

Testimony of Kevin M. Murphy, December 10, 2014 and December 11, 2014, in The Apple iPod iTunes Antitrust Litigation, The United States District Court for the Northern District of California Oakland Division.

Deposition of Kevin M. Murphy, December 15, 2014, in the Matter of Nukote of Illinois, Inc. v. Clover Holdings, Inc., and Clover Technologies Group, LLC, The United States District Court for the Northern District of Texas (Dallas), Case No. 3:10-cv-00580-P.

Declaration of Kevin M. Murphy, December 15, 2014, in the Matter of Robert Kotsur, et al. v. Goodman Global, Inc., Goodman Manufacturing Company, L.P., and Goodman Company, L.P., The United States District Court for the Eastern District of Pennsylvania. Case No. 2:14-cv-01147-NS.

Expert Report of Kevin M. Murphy, January 9, 2015, in the Matter of Lori Aspinall and Thomas Geanocopoulos, on behalf of themselves and all others similarly situated, v. Philip Morris, USA, Inc., Superior Court for the Commonwealth of Massachusetts. Case No. 98-6002-BLSI.

Deposition of Kevin M. Murphy, January 12, 2015, in the Matter of Robert Kotsur, et al. v. Goodman Global, Inc., Goodman Manufacturing Company, L.P., and Goodman Company, L.P., The United States District Court for the Eastern District of Pennsylvania. Case No. 2:14-cv-01147-NS.

Second Supplemental Expert Report of Kevin M. Murphy, January 27, 2015, in the Matter of Nukote of Illinois, Inc. v. Clover Holdings, Inc., and Clover Technologies Group, LLC, The United States District Court for the Northern District of Texas (Dallas). Case No. 3:10-cv-00580-P.

Deposition of Kevin M. Murphy, February 9, 2015, in the Matter of Lori Aspinall and Thomas Geanocopoulos, on behalf of themselves and all others similarly situated, v. Philip Morris, USA, Inc., Superior Court for the Commonwealth of Massachusetts. Case No. 98-6002-BLSI.

Expert Report of Kevin M. Murphy, March 13, 2015, in the Matter of Processed Egg Products Antitrust Litigation, Indirect Purchaser Action, The United States District Court for the Eastern District of Pennsylvania. Case No. 08-MD-02002.

Expert Report of Kevin M. Murphy, March 13, 2015, in the Matter of The Dial Corporation, Henkel Consumer Goods, Inc., H.J. Heinz Company, H.J. Heinz Company, L.P., Foster Poultry Farms, Smithfield Foods, Inc., HP Hood LLC, BEF Foods, Inc. and Spectrum Brands, Inc. v. News Corporation, News America Inc., News America Marketing FSI L.L.C., News America Marketing In-Store Services L.L.C., The United States District Court for the Southern District of New York. Case No. 13-cv-06802 (WHP).

Expert Report of Kevin M. Murphy, March 16, 2015, in the Matter of Matthew Edwards, et al. v. National Milk Producers Federation, et al., The United States District Court for the Northern District of California Oakland Division. Case No. 3:11-cv-04766 JSW.

Brief of Professor Kevin M. Murphy, April 9, 2015, in the Matter of The Dow Chemical Company v. Industrial Polymers, Inc., Quabaug Corporation, and Seegott Holdings, Inc., et al., On Petition for Writ of Certiorari to the United States Court of Appeals for the Tenth Circuit, The Supreme Court of the United States. No. 14-1091.

Testimony of Kevin M. Murphy, April 21, 2015, in the Matter of Processed Egg Products Antitrust Litigation, Indirect Purchaser Action, The United States District Court for the Eastern District of Pennsylvania. Case No. 08-MD-02002.

Declaration of Kevin M. Murphy, April 29, 2015, in the Matter of Teladoc, Inc., Teladoc Physicians, P.A., Kyon Hood, and Emmette A. Clark v. Texas Medical Board, Michael Arambula, Julie K. Attebury, Manual G. Guajardo, John R. Guerra, J. Scott Holliday, Margaret C. McNeese, Allan N. Shulkin, Robert B. Simonson, Wynne M. Snoots, Paulette B. Southard, Karl W. Swann, Surenda K. Varma, Stanley S. Wang, and George Willeford III, et al., The United States District Court for the Western District of Texas Austin Division.

Declaration of Kevin M. Murphy, April 29, 2015, in the Matter of Anne McVicar, et al. v. Goodman Global, Inc., et al., The United States District Court for the Central District of California. Case No. 8:13-cv-01223-DOC-RNB.

Declaration of Kevin M. Murphy, April 30, 2015, in the Matter of PB Property Management, Inc., Janet Helm, Jimmy Jewell, Deborah L. Wagner and Stanley H. Wagner, et al. v. Goodman Manufacturing Company, L.P., and Goodman Global, Inc., The United States District Court for the Middle District of Florida Jacksonville Division. Case No. 3:12-cv-1366-HES-JBT.

Deposition of Kevin M. Murphy, May 1, 2015, in the Matter of The Dial Corporation, Henkel Consumer Goods, Inc., H.J. Heinz Company, H.J. Heinz Company, L.P., Foster Poultry Farms, Smithfield Foods, Inc., HP Hood LLC, BEF Foods, Inc. and Spectrum Brands, Inc. v. News Corporation, News America Inc., News America Marketing FSI L.L.C., News America Marketing In-Store Services L.L.C., The United States District Court for the Southern District of New York. Case No. 13-cv-06802 (WHP).

Deposition of Kevin M. Murphy, May 13, 2015, in the Matter of Processed Egg Products Antitrust Litigation, Indirect Purchaser Action, The United States District Court for the Eastern District of Pennsylvania. Case No. 08-MD-02002.

Deposition of Kevin M. Murphy, May 19, 2015, in the Matter of Hoskin Hogan et al. v. BP West Coast Products LLC et al., The United States Superior Court for the State of California, City of Lost Angeles. Case No. BC460880.

Rebuttal Expert Report of Kevin M. Murphy, May 29, 2015, in the Matter of ContentGuard Holdings, Inc. v. Amazon.com, Inc. et al., The United States District Court for the Eastern District of Texas Marshall Division. Case No. 2:13-cv-01112 (JRG).

Expert Report of Kevin M. Murphy, June 8, 2015, in the Matter of Kleen Products LLC, et al. v. International Paper, et al., The United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:10-cv-05711.

Confidential Submission to the U.S. Department of Justice in Connection with Modification of the ASCAP Consent Decree, June 23, 2015.

Testimony of Kevin M. Murphy, July 23, 2015, in re: STB Docket No. EP 722, Railroad Revenue Adequacy.

Expert Report of Kevin M. Murphy, July 27, 2015, in the Matter of Go Computer, Inc., and S. Jerrold Kaplan v. Microsoft Corporation, The United States Superior Court of the State of California for the City and County of San Francisco. Case No. CGC-05-442684.

Supplemental Verified Statement of Kevin M. Murphy, August, 6, 2015, in re: STB Docket No. EP 722, Railroad Revenue Adequacy.

Testimony of Kevin M. Murphy, August 6, 2015 and August 7, 2015, in the Matter of Hoskin Hogan et al. v. BP West Coast Products LLC et al., The United States Superior Court for the State of California, City of Lost Angeles. Case No. BC460880.

Rebuttal Disclosure of Kevin. M. Murphy, August 17, 2015, in the Matter of Go Computer, Inc., and S. Jerrold Kaplan v. Microsoft Corporation, The United States Superior Court of the State of California for the City and County of San Francisco. Case No. CGC-05-442684.

Direct Testimony of Kevin M. Murphy, August 18, 2015, in the Matter of US Airways, Inc. v. Sabre Holdings Corp., Sabre, Inc., and Sabre Travel International Ltd., The United States District Court for the Southern District of New York. Case No. 1:11-cv-02725-MGC.

Expert Report of Kevin M. Murphy, August 24, 2015, in the Matter of Fernanda Garber, Mark Lerner, Derek Rasmussen, Robert Silver, Garrett Traub, and Vincent Birbiglia et al. v. Office of the Commissioner of Baseball, et al., The United States District Court for the Southern District of New York. Case No. 12-cv-3704 (SAS).

Deposition of Kevin. M. Murphy, August 28, 2015, in the Matter of Go Computer, Inc., and S. Jerrold Kaplan v. Microsoft Corporation, The United States Superior Court of the State of California for the City and County of San Francisco. Case No. CGC-05-442684.

Expert Report of Kevin M. Murphy, September 8, 2015, in the Matter of Parallel Networks Licensing, LLC v. Microsoft Corporation, The United States District Court for the District of Delaware. Case No. 13-2073-SLR.

Deposition of Kevin M. Murphy, September 16, 2015, in the Matter of Kleen Products LLC, et al. v. International Paper, et al., The United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:10-cv-05711.

Deposition of Kevin M. Murphy, September 28, 2015, in the Matter of Parallel Networks Licensing, LLC v. Microsoft Corporation, The United States District Court for the District of Delaware. Case No. 13-2073-SLR.

Expert Report of Kevin M. Murphy, October 27, 2015, in the Matter of ABS Global, Inc. v. Inguran, LLC d/b/a Sexing Technologies and XY, LLC v Genus PLC, The United States District Court for the Western District of Wisconsin. Case No. 14-cv-503.

Trial Testimony of Kevin M. Murphy, November 13, 2015 and November 17, 2015, in the Matter of Lori Aspinall and Thomas Geanocopoulos, on behalf of themselves and all others similarly situated, v. Philip Morris, USA, Inc., Superior Court for the Commonwealth of Massachusetts. Case No. 98-6002-BLSI.

Deposition of Kevin M. Murphy, January 5, 2016, in the Matter of ABS Global, Inc. v. Inguran, LLC d/b/a Sexing Technologies and XY, LLC v Genus PLC, The United States District Court for the Western District of Wisconsin. Case No. 14-cv-503.

Supplemental Expert Report of Kevin M. Murphy, January 13, 2016, in the Matter of The Dial Corporation, Henkel Consumer Goods, Inc., H.J. Heinz Company, H.J. Heinz Company, L.P., Foster Poultry Farms, Smithfield Foods, Inc., HP Hood LLC, BEF Foods, Inc. and Spectrum Brands, Inc. v. News Corporation, News America Inc., News

America Marketing FSI L.L.C., News America Marketing In-Store Services L.L.C., The United States District Court for the Southern District of New York. Case No. 13-cv-06802 (WHP).

Declaration of Kevin M. Murphy, January 26, 2016, in the Matter of ABS Global, Inc. v. Inguran, LLC d/b/a Sexing Technologies and XY, LLC v Genus PLC, The United States District Court for the Western District of Wisconsin. Case No. 14-cv-503.

Expert Report of Kevin M. Murphy, February 5, 2016, in the Matter of Moldex Metric, Inc. v. 3M Company and 3M Innovative Properties Company, The United States District Court for the District of Minnesota. Case No. 2014-cv-01821 (JNE/FLN).

Confidential Submission on Fractional Licensing to the U.S. Department of Justice in Connection with Modification of the ASCAP Consent Decree, February 12, 2016.

Deposition of Kevin M. Murphy, February 16, 2016, in the Matter of Moldex Metric, Inc. v. 3M Company and 3M Innovative Properties Company, The United States District Court for the District of Minnesota. Case No. 2014-cv-01821 (JNE/FLN).

Verified Statement of Kevin M. Murphy, March 7, 2016, Exhibit II-B-2 to CSXT Reply Evidence, in re: STB Docket No. NOR 42142.

Expert Report of Kevin M. Murphy, March 8, 2016, in the Matter of ABS Global, Inc. v. Inguran, LLC d/b/a Sexing Technologies and XY, LLC v Genus PLC, The United States District Court for the Western District of Wisconsin. Case No. 14-cv-503.

Expert Report of Kevin M. Murphy, March 9, 2016, in the Matter of Lisa Watson, Wayne Miner, and James Easley, Individually and on Behalf of All Others Similarly Situated v. Philip Morris Companies, Inc. a corporation, and Philip Morris Incorporated, a corporation, in the Circuit Court of Pulaski County, Arkansas. Case No. CV03-4661.

Trial Testimony of Kevin M. Murphy, April 4, 2016, in the Matter of Dayna Craft (Withdrawn), Deborah Larsen, individually and on behalf of all others similarly situated v. Philip Morris USA Inc., a corporation, Missouri Circuit Court for the Twenty-Second Judicial District (City of St. Louis). Case No. 002-00406-02.

Reply Expert Report of Kevin M. Murphy, April 11, 2016, in the Matter of Kleen Products LLC, et al. v. International Paper, et al., The United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:10-cv-05711.

Responsive Damages Report of Kevin M. Murphy, April 12, 2016, in the Matter of ABS Global, Inc. v. Inguran, LLC d/b/a Sexing Technologies and XY, LLC v. Genus PLC, The United States District Court for the Western District of Wisconsin. Case No. 14-cv-503.

Deposition of Kevin M. Murphy, May 2, 2016, in the Matter of ABS Global, Inc. v. Inguran, LLC d/b/a Sexing Technologies and XY, LLC v. Genus PLC, The United States District Court for the Western District of Wisconsin. Case No. 14-cv-503.

Verified Statement of Kevin M. Murphy, July 26, 2016, in re: STB Docket No. 704 (Sub-No. 1), Review of Commodity, Boxcar, and TOFC/COFC Exemptions.

Expert Report of Kevin M. Murphy, July 29, 2016, In Re Biogen '755 Patent Litigation, The United States District Court for the District of New Jersey. Civil Action No. 10-2734 (CCC/JAD).

Trial Testimony of Kevin M. Murphy, August 3, 2016 and August 12, 2016, in the Matter of ABS Global, Inc. v. Inguran, LLC d/b/a Sexing Technologies and XY, LLC v. Genus PLC, The United States District Court for the Western District of Wisconsin. Case No. 14-cv-503.

Expert Report of Kevin M. Murphy, September 23, 2016, in the Matter of First Impressions Salon, Inc., Roy Mattson, Belle Foods Trust, Bankruptcy Estate of Yarnell's Ice Cream Company, Inc., Piggly Wiggly Midwest LLC and KPH Healthcare Services, Inc., aka Kinney Drugs, Inc. et.al. v. National Milk Producers Federation, Cooperatives Working Together, Dairy Farmers of America, Inc., Land O'Lakes, Inc., Dairylea Cooperative Inc., Agri-Mark, Inc. d/b/a Cabot Creamery Cooperative, Inc., The United States District Court for the Southern District of Illinois. Case No. 3:13-cv-00454-NJR-SCW.

Verified Statement of Kevin M. Murphy, October 26, 2016, in re: STB Docket EP 711 (Sub-No. 1), Reciprocal Switching.

Expert Report of Kevin M. Murphy, November 21, 2016, in the Matter of Valassis Communications, Inc. v. News America Inc., a/k/a News America Marketing Group, News America Marketing FSI, Inc., a/k/a News America Marketing FSI LLC, and News America Marketing In-Store Services, Inc. a/k/a News America Marketing In-Store Services, LLC, The United States District Court for the Eastern District of Michigan, Southern Division. Case No. 2-06-cv-10240-AJT-MJH.

Deposition of Kevin M. Murphy, December 2, 2016 and December 3, 2016, In Re Biogen '755 Patent Litigation, The United States District Court for the District of New Jersey. Civil Action No. 10-2734 (CCC/JAD).

Trial Testimony of Kevin M. Murphy, December 7, 2016 and December 8, 2016, in the Matter of US Airways, Inc. v. Sabre Holdings Corp., Sabre, Inc., and Sabre Travel International Ltd., The United States District Court for the Southern District of New York. Case No. 1:11-cv-02725-MGC.

EXHIBIT D

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ACADEMIC EXPERIENCE

5/2013 – Present **NYU Stern School of Business**
Professor of Information, Operations and Management Sciences
Professor of Marketing
Robert L. & Dale Atkins Rosen Faculty Fellow

9/2013 – 12/2014 **NYU**
Co-Chair, NYU-AIG Partnership on Innovation for Global Resilience

8/2012 – Present **NYU Stern School of Business**
Co-Director, Center for Business Analytics (CBA)

5/2010 – 4/2013 **NYU Stern School of Business**
Associate Professor (with tenure)
Robert L. & Dale Atkins Rosen Faculty Fellow
Daniel Paduano Fellow

8/2011 – 7/2012 **Wharton School of Business, University of Pennsylvania**
Visiting Associate Professor

1/2011 – 6/2012 **NYU Stern School of Business**
Co-Director, Center for Digital Economy Research (CeDER)

9/2004 – 4/2010 **NYU Stern School of Business**
Assistant Professor

EDUCATION

2004 Tepper School of Business, Carnegie Mellon University.
Ph.D. Information Systems

2002 Tepper School of Business, Carnegie Mellon University.
M.S. Information Systems

1998 Indian Institute of Management, Calcutta.
M.B.A. Finance, Marketing, & Information Systems

1996 Regional Engineering College, (REC), Jalandhar, India.
B.Tech. Instrumentation & Control Engineering

CONSULTING

Berkeley Corporation, Dataxu, Facebook, IBM, Intel, Jet, NBC Universal, OneVest, Samsung, CBS (Showtime), 3TI China, Bank of Khartoum

SELECTED ACADEMIC HONORS AND AWARDS

- **2015** Distinguished Fellow Award from INFORMS IS Society.

- **2015** Nominated for Best Paper in INFORMS-CIST
- **2015** Best Paper Award in MIS Quarterly for 2015
- **2015** Nominated for Best AIS Paper Award.
- **2015** NET Institute Grant
- **2015** Marketing Science Institute Award
- **2015** Adobe Faculty Research Award
- **2014** Best Paper Award in Management Science IS department from the last 3 years (2011-2013)
- **2014** Best Paper Award in Information Systems Research for 2014
- **2014** Best Overall Conference Paper Award at *American Marketing Association Conference*.
- **2014** Best Digital Marketing Track Paper Award at *American Marketing Association Conference*.
- **2014** Kauffman Foundation Grant
- **2014** Selected For “Top 40 under 40 Business School Professors Worldwide” by Business Week.
- **2014** Selected For “Top 200 Thought Leaders for Big Data and Business Analytics” by Analytics Week.
- **2013** Google Faculty Research Award
- **2012** Best Theme Paper Award, International Conference on Information Systems (ICIS)
- **2012** Marketing Science Institute Award
- **2012** SEI-Wharton Future of Advertising Grant
- **2012** Institute on Asian Consumer Insights Award
- **2012** Google Faculty Research Award
- **2012** NET Institute Grant
- **2012** NYU Abu Dhabi Institute Seed Grant
- **2011** Best Paper Award, 2nd *Annual Workshop on Health IT and Economics* (WHITE)
- **2011** Daniel P. Paduano Fellowship at NYU Stern
- **2011** Delphi Big Think Fellowship
- **2011** Best Paper Award, 20th *International World Wide Web Conference* (WWW)
- **2011** Marketing Science Institute Young Scholar
- **2011** NYU Abu Dhabi Institute Seed Grant
- **2010** Google-WPP Marketing Research Award
- **2010** NSF IGERT Award
- **2010** MSI-Wharton Interactive Media Initiative (WIMI) Award
- **2009** Meritorious Service Award (Associate Editor) for *Management Science*.
- **2009** MSI-Wharton Interactive Media Initiative (WIMI) Award

- **2009** NYU-Poly Research Award
- **2009** NSF SFS Award
- **2009** NYU Stern Center for Japan-US Business and Economics Studies Grant
- **2008** Best Paper Award Nominee Workshop on Information Technology and Systems
- **2008** NET Institute Grant
- **2007** Best Track Paper Award (WISA) International Conference on Information Systems
- **2007** Best Paper Award Nominee International Conference on Information Systems
- **2007** Best Published Paper Runner Up Award in *Information Systems Research*
- **2007** Marketing Science Institute Award
- **2007** Microsoft Virtual Earth Award
- **2007** NSF CAREER Award
- **2006** Microsoft Live Labs Award
- **2006** NET Institute Grant
- **2005** ACM SIGMIS Doctoral Dissertation Award. (1st Runner-Up)
- **2005** Best Paper Award Nominee Hawaiian International Conference on System Sciences (HICSS)
- **2004** Best Paper Award Nominee, International Conference on Information Systems (ICIS)
- **2003** Doctoral Consortium Fellow, International Conference on Information Systems
- **2000** William Larimer Doctoral Fellowship at Carnegie Mellon University

REFEREED JOURNAL PUBLICATIONS

1. Burtch, G., A. Ghose, and S. Wattal. 2016. Secret Admirers: Examining the Antecedents and Consequences of Crowdfunder Information Hiding, forthcoming, *Information Systems Research*.
2. Xu, K., J. Chan, Ghose, A., and S. Han. 2015. Battle of the Channels: Impact of Tablets on Digital Commerce, forthcoming, *Management Science*.
3. Ghose, A. and V. Todri. 2015. Towards Digital Attribution: Measuring the Impact of Display Advertising on Online Search Behavior, forthcoming, *MIS Quarterly*.
4. Chan, J., A. Ghose and R. Seamans. 2015. The Internet and Racial Hate Crime, forthcoming, *MIS Quarterly*.
5. Andrews, M., X. Luo, D. Zhang, and A. Ghose. 2015. Mobile Ad Effectiveness: Hyper-Contextual Targeting with Crowdedness, forthcoming, *Marketing Science*.
 - **Best Overall Conference Paper Award at 2014 American Marketing Association Conference.**
 - **Best Track Paper Award in Digital Marketing at 2014 American Marketing Association Conference.**
6. Huang, Y., P. Singh, and A. Ghose. 2015. A Structural Model of Employee Behavioral Dynamics in Enterprise Social Media, forthcoming, *Management Science*.
7. Burtch, G., A. Ghose, and S. Wattal. 2015. The Hidden Cost of Accommodating Crowd funder Privacy Preferences: A Randomized Experiment, forthcoming, *Management Science*.
8. Ghose, A., and S. Han. 2014. Estimating Demand for Mobile Apps in the New Economy,

- Management Science*, 60(6), 1470-1488.
9. Chan, J., and A. Ghose. 2014. Internet's Dirty Secret: Assessing the Impact of Online Intermediaries on HIV Transmission, *MIS Quarterly*, December, 38(4).
 - **Best Paper Award at the 2011 Workshop on Health IT and Economics**
 - **Best Paper Award in MIS Quarterly**
 - **Nominated for Best Paper Award in AIS**
 10. Burtch, G., A. Ghose, and S. Wattal. 2014. Cultural Differences and Geography as Determinants of Online Pro-Social Lending, *MIS Quarterly*, 38(3), 773-794.
 11. Ghose, A., P. Ipeirotis, and B. Li. 2014. Examining the Impact of Ranking and Consumer Behavior on Search Engine Revenue, *Management Science*, 60(7), 1632-1654.
 12. Lambrecht, A., A. Goldfarb, A. Bonatti, A. Ghose, Dan Goldstein, R. Lewis, A. Rao, N. Sahni, S. Yao. 2014. How do Firms Make Money Selling Digital Goods Online, *Marketing Letters*. 25 (3), 331-341.
 13. Burtch, G., A. Ghose, and S. Wattal. 2013. An Empirical Examination of the Antecedents and Consequences of Investment Patterns in Crowd-Funded Markets, *Information Systems Research*, 24(3), 499-519. (Lead Article).
 - **2013 ISR Best Published Paper Award**
 14. Ghose, A., A. Goldfarb, and S. Han. 2013. How is the Mobile Internet Different? Search Costs and Local Activities, *Information Systems Research*, 24(3), 613-631.
 15. Ghose, A., P. Ipeirotis, and B. Li. 2012. Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content, *Marketing Science*, 31 (3), 493-520.
 - **Best Paper Award at the 2011 International World Wide Web Conference**
 16. Ghose, A., and S. Han. 2011. An Empirical Analysis of User Content Generation and Usage Behavior on the Mobile Internet, *Management Science*, 57(9), 1671-1691.
 17. Archak, N., A. Ghose, and P. Ipeirotis. 2011. Deriving the Pricing Power of Product Features by Mining Consumer Reviews, *Management Science*, 57(8), 1485-1509.
 - **Best Paper Award from 2011-2013**
 18. Ghose, A., and P. Ipeirotis. 2011. Estimating the Helpfulness and Economic Impact of Product Reviews: Mining Text and Reviewer Characteristics, *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 23(10), 1498-1512.
 19. Ghose, A., and O. Yao. 2011. Using Transaction Prices to Re-Examine Price Dispersion in Electronic Markets, *Information Systems Research*, 22(2), 269–288.
 20. Dhar, V., and A. Ghose. 2010. Sponsored Search and Market Efficiency, *Information Systems Research*, 21(4), 760-772.
 21. Yang, S., and A. Ghose. 2010. Analyzing the Relationship between Organic and Paid Search Advertising: Positive, Negative or Zero Interdependence, *Marketing Science*, 29 (4), 602-623.
 22. Ghose, A., and S. Yang. 2009. An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets, *Management Science*, 55(10) 1605-162. (Lead Article).
 23. Ghose, A., and K. Huang. 2009. Personalized Pricing and Quality Customization, *Journal of Economics and Management Strategy*, 18(4), 1095-1135(41).
 24. Forman, C., A. Ghose, and A. Goldfarb. 2009. Competition between Local and Electronic Markets: How the Benefit of Buying Online Depends on Where You Live, *Management Science*, 55 (1), 47 57.
 25. Ghose, A. 2009. Internet Exchanges for Used Goods: An Empirical Analysis of Trade Patterns and Adverse Selection, *MIS Quarterly*, June, 33(2), 1-00
 26. Forman, C., A. Ghose, and B. Wiesenfeld. 2008. Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Information in Electronic Markets, *Information Systems Research*, September, 19(3), 291-313.
 27. Arora N., X. Dreze, A. Ghose, J. Hess, R. Iyengar, B. Jing, Y. Joshi, V. Kumar, N. Lurie, S. Neslin, S. Sajeesh, M. Su, N. Syam, J. Thomas, and Z. Zhang. 2008. Putting One-to-One

- Marketing to Work: Personalization, Customization and Choice, *Marketing Letters*, **19(3-4)**, 305-321. (Invited paper)
28. Ghose, A., T. Mukhopadhyay, and U. Rajan. 2007. Impact of Internet Referral Services on the Supply Chain, *Information Systems Research*, September, **18(3)**, 300-319.
 29. Ghose, A., and A. Sundararajan. 2006. Evaluating Pricing Strategy using eCommerce Data: Evidence and Estimation Challenges, *Statistical Science*, **21(2)**, 131-142.
 30. Ghose, A., M. Smith, and R. Telang. 2006. Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Impact. *Information Systems Research*, **17(1)**, 3-19.
 - **2006 ISR Best Published Paper Runner-up Award & Lead Article**
 31. Ghose, A., R. Telang, and R. Krishnan. 2005. Effect of Electronic Secondary Markets on the Supply Chain. *Journal of Management Information Systems*, **22(2)**, 91-120.
 32. Choudhary, V., A. Ghose, T. Mukhopadhyay, and U. Rajan. 2005. Personalized Pricing and Quality Differentiation, *Management Science*, **51(7)**, 1120-1130.
 33. Gal-Or, E., and A. Ghose. 2005. The Economic Incentives for Sharing Security Information, *Information Systems Research*, **16 (2)**, 186-208.

WORKING PAPERS

1. Ghose, A., P.V. Singh, and V. Todri. 2016. Trade-offs in Online Advertising: Modeling and Measuring Advertising Effectiveness and Annoyance Dynamics.
2. Ghose, A., S. Han, and R. Iyengar. 2013. Network Stability and Social Contagion on the Mobile Internet.
3. Ghose, A., S. Han and S. Park. 2013. Analyzing the Interdependence between Web and Mobile Advertising: A Randomized Field Experiment.
4. Molitor, D., P. Reichhart, M. Spann, and A. Ghose 2013. Measuring the Effectiveness of Location- Based Advertising: A Randomized Field Experiment.
5. Ghose, A., and S. Han. 2011. A Dynamic Structural Model of User Learning on the Mobile Internet.
6. Chan, J., A. Ghose, and A. Ansari 2012. Facebook for Patients: Examining the Antecedents and Consequences of Medical Disclosure on Healthcare Platforms.
7. Ghose, A., P. Ipeirotis, and B. Li. 2012. Surviving Social Media Overload: Predicting Consumer Footprints on Product Search Engines.
 - **Best Theme Paper Award at 2012 International Conference on Information Systems.**
8. Ghose, A., and S. Yang. 2011. Modeling Cross-Category Purchases via Sponsored Search Advertising.
9. Ghose, A., A. Goldfarb, and S. Han. 2011. An Empirical Analysis of the Relationship between Display and Sponsored Search Advertising.
10. Ghose, A., and A. Sundararajan. 2005. Software Versioning and Quality Degradation? An Exploratory Study of the Evidence.
11. Ghose, A., P. Ipeirotis, and A. Sundararajan. 2010. The Dimensions of Reputation in Electronic Markets.

PATENTS

- System, method, software arrangement and computer-accessible medium for incorporating qualitative and quantitative information into an economic model, A. Sundararajan, P. Ipeirotis, A. Ghose, US Patent 7,848,979 issued December 2010.
- Apparatus, system, method and computer-readable medium for performing a product search using user-generated and crowd-sourced content. Li, B., A. Ghose, P. Ipeirotis, International Publication Number WO 2012/064661 issued May 2012.

BOOK CHAPTERS

1. Ghose, A. and S. Han. 2012. Mobile Marketing *Advanced Database Marketing*, eds. K. Coussement, K. De Bock and S. Neslin.
2. Ghose, A. 2008. The Economic Impact of User-Generated and Firm-Published Content: Directions for Advancing the Frontiers in Electronic Commerce Research, *Statistical Methods in Ecommerce Research*, eds. W. Jank and G. Shmueli.
3. Ghose, A. 2006. Information Disclosure and Regulatory Compliance: Economic Issues and Research Directions, *Managing Information Assurance in Financial Services*, H.R. Rao, M.Gupta and S. Upadhyaya editions, Idea Group.
4. Gal-Or, E., and A. Ghose. 2004. Economic Consequences of Sharing Security Information, *Economics of Information Security*, Jean Camp and Stephen Lewis editions, Springer-Kluwer, 95-104.

PAPERS IN REFEREED CONFERENCE AND WORKSHOP PROCEEDINGS

1. Burtch, G., A. Ghose, and S. Wattal. 2014. An Experiment in Crowdfunding: Assessing the Role and Impact of Transaction-Level Information Controls. Proceedings of the *International Conference on Information Systems (ICIS 2014)*, Auckland, December.
2. Burtch, G., A. Ghose, and S. Wattal. 2014. An Empirical Examination of Peer Referrals in Online Crowdfunding. Proceedings of the *International Conference on Information Systems (ICIS 2014)*, Auckland, December.
3. Burtch, G., A. Ghose, and S. Wattal. 2013. An Empirical Examination of Users' Information Hiding in a Crowdfunding Context. Proceedings of the *International Conference on Information Systems (ICIS 2013)*, Milan, December.
4. Ghose, A., S. Han, and K. Xu. 2013. Mobile Commerce in New Tablet Economy. Proceedings of the *International Conference on Information Systems (ICIS 2013)*, Milan, December.
5. Ghose, A. and S. Han. 2012. Estimating Demand for Applications in the New 'Mobile' Economy. Proceedings of the *International Conference on Information Systems (ICIS 2012)*, Orlando, December.
6. Ghose, A., P. Ipeirotis, and B. Li. 2012. Search More Find Less: Examining Limited Consumer Search With Social Media and Search Engines. Proceedings of the *International Conference on Information Systems (ICIS 2012)*, Orlando, December. **Best Theme Paper Award**
7. Burtch, G., A. Ghose, and S. Wattal. 2012. An Empirical Examination of Cultural Differences in Online Interpersonal Exchange, Proceedings of the *International Conference on Information Systems (ICIS 2012)*, Orlando, December.
8. Wang, J., A. Ghose, and P. Ipeirotis. 2012. Money, Disclosure, and Choice: What Motivates the Creation of High-Quality Reviews? Proceedings of the *International Conference on Information Systems (ICIS 2012)*, Orlando, December.
9. Ghose, A., A. Goldfarb, and S. Han. 2011. Analyzing the Differences Between the Mobile Web and the PC Web: Search Costs and Local Activities. Proceedings of the *International Conference on Information Systems (ICIS 2011)*, Shanghai, China, December.
10. A. Ghose, S. Han and R. Iyengar. 2011. Network Stability and Social Contagion: An Empirical Analysis in the Mobile Internet. Proceedings of the *International Conference on Information Systems (ICIS 2011)*, Shanghai, China, December.
11. Burtch, G., A. Ghose, and S. Wattal. 2011. An Empirical Examination of the Antecedents of Contribution Patterns in Crowdfunded Markets. Proceedings of the *International Conference on Information Systems (ICIS 2011)*, Shanghai, China, December.
12. Chan, J. and A. Ghose. 2011. Internet's Dirty Secret: Assessing the Impact of Technology Shocks

- on the Outbreaks of STDs Workshop on Health IT & Economics (WHITE), University of Maryland at College Park. **Best Paper Award**,
13. B. Li, A. Ghose, and P. Ipeirotis. 2011. Towards a Theory Model for Product Search, *Proceedings of the 20th International World-Wide Web Conference (WWW 2011)*, Hyderabad, March, **Best Paper Award**
 14. B. Li, A. Ghose, and Panagiotis G. Ipeirotis. 2011. A Demo search Engine for Products. *Proceedings of the 20th International World-Wide Web Conference (WWW), 2011*, Hyderabad, March.
 15. Ding, Y., Y. Du, Y. Hu, Z. Liu, K. Ross, L. Wang, and A. Ghose. 2011. Broadcast Yourself: Understanding Youtube Uploaders. *Proceedings of the 2011 ACM SIGCOMM Conference on Internet Measurement*, Berlin, Germany.
 16. Huang, Y., P. Singh, and A. Ghose. 2010. Show Me the Incentives: A Dynamic Structural Model of Employee Blogging Behavior. *Proceedings of the International Conference on Information Systems (ICIS 2010)*, St. Louis, December.
 17. Ghose, A., P. Ipeirotis, and B. Li. 2010. Designing Ranking Systems for Hotels on Travel Search Engines to Enhance User Experience. *Proceedings of the International Conference on Information Systems (ICIS 2010)*, St. Louis, December.
 18. Archak, N., and A. Ghose 2010. Learning-By-Doing and Project Choice: a Dynamic Structural Model of Crowdsourcing. *Proceedings of the International Conference on Information Systems (ICIS 2010)*, St. Louis, December.
 19. Huang, Y., P. Singh, and A. Ghose. 2010. Show Me The Incentives: A Dynamic Structural Model of Employee Blogging Behavior. *Proceedings of the Conference on Information Systems and Technology (CIST 2010)*, Austin, November.
 20. Ghose, A., A. Goldfarb, and S. Han. 2010. Search Costs and Benefits on the Mobile Internet: A Comparison of Micro-blogging Responses on Mobile Devices and PCs. *Proceedings of the Conference on Information Systems and Technology (CIST 2010)*, Austin, November.
 21. Ghose, A., and S. Han. 2010. Analyzing the Impact of Social Networks, Spatial Networks and Geographical Mobility on User Behavior in the Mobile Internet. *Proceedings of the 2010 Workshop on Information Technology and Systems (WITS 2010)*, St. Louis, December.
 22. Chan. J., and A. Ghose 2010. Examining the Antecedents and Consequences of Disclosing Medical Privacy Information Online. *Proceedings of the Workshop on Health IT and Economics (WHITE)*, Maryland, October.
 23. Ghose, A. and S. Han. 2009. An Empirical Analysis of User Content Generation and Usage Behavior in Mobile Media. *Proceedings of the International Conference on Information Systems (ICIS 2009)*, Arizona, December.
 24. Ghose, A., P. Ipeirotis, and B. Li. 2009. Towards Designing Ranking Systems for Hotels on Travel Search Engines: Combining Text mining with Demand Estimation in the Hotel Industry. *Proceedings of the Workshop on Information Technology and Systems (WITS 2009)*, Phoenix, December.
 25. Ghose, A., and S. Yang. 2008. Modeling and Estimating the Relationship Between Organic and Paid Search Advertising. *Proceedings of the Workshop on Information Technology and Systems (WITS 2008)*, Paris, December. **Best Paper Award Nominee**
 26. Ghose, A., and B. Gu. 2008. Market Frictions, Demand Structure and Price Competition in Online Markets. *Proceedings of the International Conference on Information Systems (ICIS 2008)*, Paris, December.
 27. Archak, N., A. Ghose and P. Ipeirotis. 2008. Deriving the Pricing Power of Product Features by Mining User-Generated Reviews. *INFORMS Conference on Information Systems and Technology (CIST 2008)*, Washington DC, October.
 28. Balakrishnan, K., A. Ghose, and P. Ipeirotis: 2008. The Impact of Information Disclosure on Stock Market Returns: The SOX Act and the Role of Media as an Information Intermediary. *Proceedings of the Workshop on Economics and Information Security (WEIS 2008)*, Dartmouth College,

June.

29. Ghose, A., and S. Yang. 2008. Analyzing Search Engine Advertising: Sponsored Search and Cross-Selling in Electronic Markets. *Proceedings of the World Wide Web Conference (WWW 2008)*, Beijing.
30. Ghose, A., and S. Yang. 2008. An Empirical Analysis of Sponsored Search Performance in Search Engine Advertising. *Proceedings of the First ACM International Conference on Web Search and Datamining Conference (WSDM 2008)*, Stanford.
31. Ghose, A., and B. Gu. 2007. Estimating Menu Costs in Electronic Markets. *Proceedings of the International Conference on Information Systems (ICIS 2007)*, Montreal, December. Nominee for Best Overall Paper and Best Track Paper Award
32. Ghose, A., and S. Yang. 2007. An Empirical Analysis of Sponsored Search Performance in Search Engine Advertising. *INFORMS Conference on Information Systems and Technology (CIST 2007)*, Seattle, November.
33. Forman, C., A. Ghose and A. Goldfarb. 2007. Geography and Ecommerce: Measuring Convenience, Selection and Price. *INFORMS Conference on Information Systems and Technology (CIST 2007)*, Seattle, November.
34. Archak, N., A. Ghose, and P. Ipeirotis. 2007. Show me the money! Deriving the Pricing Power of Product Features by Mining Consumer Reviews. *Proceedings of the Thirteenth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2007)*, San Jose.
35. Ghose, A., P. Ipeirotis, and A. Sundararajan. 2007. Opinion Mining Using Econometrics: A Case Study on Reputation Systems. *Proceedings of the Association for Computational Linguistics (ACL 2007)*, Prague.
36. Ghose, A., and P. Ipeirotis. 2007. Towards an Understanding of the Impact of Customer Sentiment on Product Sales and Review Quality. *Proceedings of the Workshop on Information Technology and Systems (WITS 2006)*, Wisconsin, December.
37. Forman, C., A. Ghose and A. Goldfarb. 2006. The Impact of Location on Consumer Purchases in Electronic Markets. *Proceedings of the International Conference on Information Systems (ICIS 2006)*, Milwaukee, Wisconsin, December.
38. Ghose, A., and B. Gu. 2006. Estimating the Costs of Price Adjustment in Electronic Markets. *Proceedings of the INFORMS Conference on Information Systems and Technology (CIST 2006)*, Pittsburgh, November.
39. Ghose, A., and A. Sundararajan. 2006. Software Versioning and Quality Degradation? An Exploratory Study of the Evidence. *Proceedings of the INFORMS Conference on Information Systems and Technology (CIST 2006)*, Pittsburgh, November.
40. Ghose, A., and U. Rajan. 2006. The Economic Impact of Regulatory Information Disclosure on Information Security Investments, Competition, and Social Welfare. *Proceedings of the Workshop on Economics and Information Security (WEIS 2006)*, Cambridge University, June.
41. Ghose, A., and A. Sundararajan. 2005. Software Versioning and Quality Degradation? An Exploratory Study of the Evidence. *Proceedings of the International Conference on Information Systems (ICIS 2005)*, Las Vegas, Nevada, December.
42. Ghose, A., K. Huang and A. Sundararajan 2005. Versions and Successive Generations: An Analysis of Product Line Strategies and Cannibalization in Software Markets. *Proceedings of the INFORMS Conference on Information Systems and Technology (CIST)*, San Francisco, November.
43. Ghose, A., P. Ipeirotis and A. Sundararajan 2005. Reputation Premium and Network Structure in Electronic Peer-to-Peer Markets. *Proceedings of the ACM SIGCOMM Workshop on Economics of P2P*, Philadelphia, August.
44. Ghose, A., and A. Sundararajan. 2005. Pricing Security Software: Theory and Evidence. *Proceedings of the Workshop on Economics and Information Security (WEIS 2005)*, Harvard University, June.
45. Ghose, A., R. Telang, and R. Krishnan. 2005. Welfare Implications of Secondary Electronic Markets. *Proceedings of the Hawaii International Conference on System Sciences (HICSS 2005)*, Hawaii,

January. Best Paper Award Nominee

46. Ghose, A., M. Smith, and R. Telang. 2004. Price Elasticities and Social Welfare in Secondary Electronic Markets. *Proceedings of the International Conference on Information Systems (ICIS 2004), Washington D.C., December. Best Paper Award Nominee*
47. Ghose, A., R. Telang, and R. Krishnan. 2003. Durable Goods Competition in Secondary Electronic Markets. *Proceedings of the International Conference on Information Systems (ICIS 2003), Seattle December.*
48. Ghose, A., M. Smith, and R. Telang. 2003. Internet Exchanges for Used Books: An Empirical Analysis of Welfare Implications and Policy Issues. *Proceedings of the International Conference on Information Systems (ICIS 2003), Seattle, December.*
49. Ghose, A., V. Choudhary, T. Mukhopadhyay, and U. Rajan. 2003. Personalized Pricing: A Strategic Advantage for Electronic Retailers. *Proceedings of the INFORMS Conference on Information Systems and Technology (CIST 2003), Atlanta, October.*
50. Gal-Or, E., and A. Ghose. 2003. The Economic Consequences of Sharing Security Information. *Proceedings of the Workshop on Economics and Information Security (WEIS 2003), College Park, University of Maryland, May.*
51. Ghose, A., T. Mukhopadhyay, and U. Rajan. 2002. Advantage for Electronic Retailers. *Proceedings of the International Conference on Information Systems (ICIS 2002), Barcelona, Spain, December.*
52. Ghose, A., T. Mukhopadhyay, and U. Rajan. 2002. Impact of Referral Services on Channel Profits: Competition between Manufacturers & Infomediaries. *Proceedings of INFORMS Conference on Information Systems and Technology (CIST 2002), San Jose, California, October.*

PAPERS IN CONFERENCE AND WORKSHOP PROGRAMS

1. Chan, J., A. Ghose and K. Xu. 2015. The Rising Star of Digital Channels. *10th Annual Symposium on Statistical Challenges in e-Commerce Research (SCECR), Ethiopia.*
2. Ghose, A., B. Li, and S. Liu. 2015. Mobile Trajectory-based Advertising: Evidence from a Large-scale Randomized Field Experiment. *Productions and Operations Management Society Meetings. Washington DC.*
3. Ghose, A., B. Li, and S. Liu. 2015. Mobile Trajectory-based Advertising: Evidence from a Large-scale Randomized Field Experiment. *INFORMS Marketing Science Conference, Baltimore.*
4. Burtch, G., Ghose, A. and Wattal, S. 2014. The Hidden Costs of Accommodating Crowdfunder Privacy Preferences: A Randomized Field Experiment. *Marketplace Innovation Conference, Columbia University.*
5. Burtch, G., Ghose, A. and Wattal, S. 2014. The Hidden Costs of Accommodating Crowdfunder Privacy Preferences: A Randomized Field Experiment. *ZEW Conference on the Economics of Information and Communication Technologies, Mannheim, Germany.*
6. Burtch, G., Ghose, A. and Wattal, S. 2014. Do As I Say, or Do As I Do? Distinguishing Observational Learning from Word-of-Mouth Effects. *9th Annual Symposium on Statistical Challenges in e-Commerce Research (SCECR), Tel Aviv, Israel.*
7. Burtch, G., Ghose, A. and Wattal, S. 2014. An Examination of Peer Referrals in Crowdfunding. *Crowds 2.0: New Frontiers in Crowdfunding + Crowdsourcing, NYU Stern, NY.*
8. Burtch, G., Ghose, A. and Wattal, S. 2013. The Impact of Online Privacy Controls on User Engagement: Evidence from a Randomized Experiment on a Crowdfunding Platform. *Workshop on Information Systems and Economics (WISE), Milan, Italy.*
9. Burtch, G., Ghose, A., and Wattal, S. 2013. Private Displays of Affection: An Empirical Examination of Online Crowdfunder Information Hiding. *Academic Symposium on Crowdfunding, Berkeley, CA.*
10. Burtch, G., Ghose, A. and Wattal, S. 2013. The Impact of Online Privacy Controls on User

- Engagement: Evidence from a Randomized Experiment on a Crowdfunding Platform. *INFORMS Annual Meeting, Minneapolis, MN.*
11. Burtch, G., Ghose, A., and Wattal, S. 2013. Secret Benefactors: Crowdfunder Information Hiding and its Implications for Fundraising Outcomes. *INFORMS Conference on Information Systems and Technology (CIST), Minneapolis, MN.*
 12. Burtch, G., Ghose, A., and Wattal, S. 2013. An Empirical Examination of the Antecedents and Consequences of Information Hiding in Crowdfunded Markets. *INFORMS Marketing Science Conference, Istanbul, Turkey.*
 13. Burtch, G., Ghose, A., and Wattal, S. 2013. An Empirical Examination of Online Information Hiding.” 8th *Symposium on Statistical Challenges in eCommerce Research (SCECR), Lisbon, Portugal.*
 14. Burtch, G., Ghose, A. and Wattal, S. 2013. Cultural Differences and Geographic Proximity in Online Crowd-funding. *International Symposium on Information Systems (ISIS), Goa, India.*
 15. Chan, J., A. Ghose and R. Seamans. 2013. The Internet and Hate Crime. *Workshop on Information Systems and Economics (WISE), Milan, December.*
 16. Ghose, A., S. Han and S. Park. 2013. Analyzing the Interdependence Between Web and Mobile Advertising, *Marketing Science Conference, Istanbul, July.*
 17. Molitor, D., M. Spann and A. Ghose. 2013. Measuring the Effectiveness of Location Based Advertising. Randomized Field Experiments Comparing PC with Mobile, *Marketing Science Conference, Istanbul, July.*
 18. Ghose, A., S. Han and S. Park. 2013. Analyzing the Interdependence Between Web and Mobile Advertising, *Wharton Customer Analytics Conference, Wharton School, May.*
 19. Anindya Ghose, Panos Ipeirotis and Beibei Li. 2012. Surviving Social Media Overload: Predicting Consumer Footprints on Product Search Engines. *Workshop on Information Systems and Economics (WISE), Orlando, December.*
 20. Chan, J. and A. Ghose. 2012. Internet's Dirty Secret: Assessing the Impact of Online Intermediaries on the Outbreaks of STDs, *National Bureau of Economic Research Summer Meetings, Boston.*
 21. Chan, J. and A. Ghose. 2012. Internet's Dirty Secret: Assessing the Impact of Online Intermediaries on the Outbreaks of STDs, *Statistical Challenges in E-Commerce Research (SCECR), Montreal.*
 22. Ghose, A., and S. Han. 2012. Mobile Advertising and App Adoption in the New Mobile Economy, *Statistical Challenges in E-Commerce Research (SCECR), Montreal.*
 23. Ghose, A., P. Ipeirotis, and B. Li. 2012. Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content, *Research Frontiers in Marketing Science Conference, University of Texas at Dallas, February.*
 24. Ghose, A., P. Ipeirotis, and B. Li. 2011. Examining the Impact of Search Engine Ranking and Personalization on Consumer Behavior: Combining Bayesian Modeling with Randomized Field Experiments. *Workshop on Information Systems and Economics (WISE), Shanghai, December.*
 25. Ghose, A., A. Goldfarb, and S. Han. 2011. How is the Mobile Internet Different? Search Costs and Local Activities. *Summer Institute of Competitive Strategy, UC Berkeley, July.*
 26. Ghose, A., A. Goldfarb, and S. Han. 2011 How is the Mobile Internet Different? Search Costs and Local Activities. *Searle Research Symposium on the Economics and Law of Internet Search, Northwestern University, June.*
 27. Ghose, A., A. Goldfarb, and S. Han. 2011. How is the Mobile Internet Different? Search Costs and Local Activities. *Statistical Challenges in E-Commerce Research (SCECR), University of Arizona, June.*
 28. Chan, J., A. Ghose. 2011. Examining the Antecedents and Consequences of Disclosing Medical Privacy Information Online. - *Winter Conference on Business Intelligence, University of Utah, Salt Lake City, March.*
 29. Ghose, A., A. Goldfarb, and S. Han. 2010. Search Costs and Benefits on the Mobile Internet: An Empirical Analysis of Microblogging Behavior. *Workshop on Information Systems and*

- Economics (WISE), St. Louis, December.*
30. Huang, Y., P. Singh, and A. Ghose. 2010. An Empirical Analyses of Dynamics in Enterprise Social Media. *Workshop on Information Systems and Economics (WISE), St. Louis, December.*
 31. Ghose, A., P. Ipeirotis, and B. Li. 2010. Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content. *NBER IT Economics & Productivity Workshop, Boston, July.*
 32. Ghose, A. and S. Han. 2010. A Dynamic Structural Model of User Learning in Mobile Media Content. *Stanford Institute of Theoretical Economics (SITE), Stanford University, July.*
 33. Ghose, A., P. Ipeirotis, and B. Li. 2010. Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content. *Marketing Science Conference, Cologne, June.*
 34. Ghose, A., P. Ipeirotis, and B. Li. 2010. Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content. *Searle Research Symposium on the Economics and Law of Internet Search, Northwestern University, June.*
 35. Ghose, A., P. Ipeirotis, and B. Li. 2010. Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content. *Customer Insights Conference, Yale University, May.*
 36. Ghose, A. and S. Han. 2009. A Dynamic Structural Model of User Learning in Mobile Media Content. *MSI-WIMI Conference, University of Pennsylvania, Philadelphia, December.*
 37. Ghose, A. and S. Han. 2009. A Dynamic Structural Model of User Learning in Mobile Media Content, *SIEMR-Microsoft Conference, Stanford University, September.*
 38. Ghose, A. and S. Han. 2009. A Dynamic Structural Model of User Learning in Mobile Media Content. *INFORMS Marketing Science Conference, Ann Arbor, Michigan, June.*
 39. Combining Text mining with Econometrics: Monetization of User-Generated Content and Online Advertising. *CITI Conference on User-Generated Content 3.0, Columbia University, April.*
 40. Ghose, A., and S. Yang. 2009. Modeling and Estimating the Relationship Between Paid and Organic Search Advertising. *Conference on the Economics of Software & Internet Industries, Toulouse, January.*
 41. Ghose, A., and S. Yang. 2008. Organic vs. Paid Search Advertising. *Workshop on Information Systems and Economics (WISE), Paris, December.*
 42. Ghose, A., and S. Yang. 2008. Modeling and Estimating the Relationship Between Paid and Organic Search Advertising. *FTC and North-Western Microeconomics Conference, Washington DC, November.*
 43. The Dimensions of Reputation in Electronic Markets, *INFORMS Annual Meeting, Washington DC, October.*
 44. Ghose, A. and S. Yang. 2008. An Empirical Analysis of Sponsored Search Performance in Search Engine Advertising. *International Industrial Organization Conference, Washington DC, May.*
 45. Ghose, A., and S. Yang. 2008. An Empirical Analysis of Sponsored Search Performance in Search Engine Advertising, *Research Frontiers in Marketing Science Conference, University of Texas at Dallas, February.*
 46. Ghose, A., and S. Yang. 2008. An Empirical Analysis of Search Engine Advertising: Sponsored Search and Cross-Selling in Electronic Markets, *Leveraging Online Media and Online Marketing, Marketing Science Institute. February.*
 47. Ghose, A., and S. Yang. 2007. An Empirical Analysis of Sponsored Search Performance in Search Engine Advertising, *Workshop on Information Systems and Economics (WISE 2007), December.*
 48. Ghose, A., and P. Ipeirotis. 2007. Designing Novel Review Ranking Systems: Predicting Usefulness and Impact of Reviews. *Proceedings of the Ninth International Conference on Electronic Commerce (ICEC), Minnesota, August.*
 49. Ghose, A., and S. Yang. 2007. An Empirical Analysis of Paid Placement in Online Keyword Advertising, *Proceedings of the Ninth International Conference on Electronic Commerce (ICEC), Minnesota, August.*
 50. Ghose, A., M. Smith, and R. Telang. 2007. Internet Exchanges for Used Books: An Empirical

- Analysis of Product Cannibalization and Welfare Implications. *Conference on Operational Excellence in Retailing, Harvard Business School, June.*
51. Ghose, A., and P. Ipeirotis. 2007. Designing Novel Review Ranking Systems on the Web: Combining Economics with Opinion Mining. *Third Research Symposium on Statistical Challenges in E- Commerce Research (SCECR), University of Connecticut, May.*
 52. Ghose, A., and O. Yao. 2007. Goodbye Price Dispersion? New Evidence from Transaction Prices in Electronic Markets. *Third Research Symposium on Statistical Challenges in E-Commerce Research (SCECR), University of Connecticut, May.*
 53. Forman, C., A. Ghose and A. Goldfarb. 2007. Geography and Ecommerce: Measuring Convenience, Selection and Price. *International Industrial Organization Conference, Savannah, April.*
 54. Archak, N., A. Ghose and P. Ipeirotis. 2007. Towards Automating the Pricing Power of Product Attributes: An Analysis of Online Product Reviews. *Winter Business Intelligence Conference, Utah, February.*
 55. Forman, C., A. Ghose and A. Goldfarb. 2007. Geography and Ecommerce: Measuring Convenience, Selection and Price. *DIS Workshop, University of Florida, January.*
 56. Ghose, A. and P. Ipeirotis. 2007. Designing Trusted Ranking Systems for Consumer Reviews: Combining Economics with Opinion Mining. *DIMACS Workshop on Economics of Information Security, Rutgers University, January.*
 57. Ghose, A. and P. Ipeirotis. 2007. Designing Ranking Systems for Consumer Reviews: The Economic Impact of Customer Sentiment in Electronic Markets. *Proceedings of the 2007 International Conference on Decision Support Systems (ICDSS 2007), IIM Kolkata, January.*
 58. Forman, C., A. Ghose and A. Goldfarb. 2007. Geography and Ecommerce: Measuring Convenience, Selection and Price. *HICSS 20th Anniversary Symposium on Competitive Strategy, Economics, and Information Systems, Hawaii, January.*
 59. Ghose, A. and B. Gu. 2006. Estimating Menu Costs in Electronic Markets. *International Symposium on Information Systems (ISIS 2006), India, December.*
 60. Ghose, A., P. Ipeirotis and A. Sundararajan. 2006. The Dimensions of Reputation in Electronic Markets. *International Symposium on Information Systems (ISIS 2006), India, December.*
 61. Forman, C., A. Ghose and A. Goldfarb. 2006. The Impact of Geographical Location on Consumer Use of Electronic Markets. *International Symposium on Information Systems (ISIS 2006), India, December.*
 62. Ghose, A. and B. Gu. 2006. Is Consumer Demand Kinked? Estimating Menu Costs and Search Costs in Electronic Markets. *Workshop on Information Systems and Economics (WISE 2006), Northwestern University, Evanston, December.*
 63. Ghose, A., T. Mukhopadhyay, and U. Rajan. 2006. Impact of Internet Referral Services on the Supply Chain. *INFORMS Annual Meeting, Pittsburgh, Pennsylvania, November.*
 64. Ghose, A. and B. Gu. 2006. Is Consumer Demand Kinked? Estimating Menu Costs and Search Costs in Electronic Markets. *INFORMS Annual Meeting, Pittsburgh, Pennsylvania, November.*
 65. Ghose, A., K. Huang and A. Sundararajan 2006. Versions and Successive Generations: An Analysis of Product Line Strategies and Cannibalization in Software Markets. *INFORMS Annual Meeting, Pittsburgh, Pennsylvania, November.*
 66. Ghose, A. and O. Yao. 2006. Price Dispersion on the Internet: New Evidence from Transaction Prices in B2B Electronic Markets. *INFORMS Annual Meeting, Pittsburgh, Pennsylvania, November.*
 67. Forman, C., A. Ghose and A. Goldfarb. 2006. The Impact of Location on Consumer Purchases in Electronic Markets. *INFORMS Annual Meeting, Pittsburgh, Pennsylvania, November.*
 68. Ghose, A. 2006. Information Uncertainty in Electronic Markets: An Empirical Analysis of Trade Patterns and Adverse Selection. *Proceedings of ZEW Workshop on ICT, Germany, October.*
 69. Ghose, A. and K. Huang. 2006. Personalized Pricing and Quality Design. *INFORMS Marketing Science Conference, Pittsburgh, Pennsylvania, June.*

70. Forman, C., A. Ghose and A. Goldfarb. 2006. The Impact of Location on Consumer Purchases in Electronic Markets. *INFORMS Marketing Science Conference, Pittsburgh, Pennsylvania, June.*
71. Ghose, A. and B. Gu. 2006. Measuring Menu Costs of Online Retailers. *INFORMS Marketing Science Conference, Pittsburgh, Pennsylvania, June.*
72. Forman, C., A. Ghose and A. Goldfarb. 2006. The Impact of Location on Consumer Purchases in Electronic Markets. *Conference on Operational Excellence in Retailing. Wharton School, June.*
73. The Dimensions of Reputation in Electronic Markets. *Decision and Information Sciences Workshop, University of Florida, February.*
74. Ghose, A., P. Ipeirotis and A. Sundararajan. 2006. The Dimensions of Reputation in Electronic Markets. *Statistical Challenges in E-Commerce Research (SCECR), University of Minnesota, May.*
75. Forman, C., A. Ghose and A. Goldfarb. 2006. The Impact of Location on Consumer Purchases in Electronic Markets. *Statistical Challenges in E-Commerce Research (SCECR), University of Minnesota, May.*
76. Ghose, A. and B. Gu. 2006. Is Consumer Demand Kinked? Estimating Menu Costs and Search Costs in Electronic Markets. *Statistical Challenges in E-Commerce Research (SCECR), University of Minnesota, May.*
77. Ghose, A. and K. Huang. 2006. Personalized Pricing and Quality Design. *International Industrial Organization Conference, Boston, Massachusetts, April.*
78. Ghose, A. and K. Huang. 2005. Personalized Pricing and Quality Design. *Workshop on Information Systems and Economics (WISE 2005), UC Irvine, California, December.*
79. Ghose, A. and K. Huang. 2005. A Competitive Analysis of Personalized Pricing and Quality Customization. *Proceedings of the Workshop on CRM, New York University, November.*
80. Ghose, A. and A. Sundararajan. 2005. Pricing and Product Line Strategies for Software: Theory and Evidence. *INFORMS Annual Meeting, San Francisco, California, November.*
81. Ghose, A., M. Smith, and R. Telang. 2005. Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Implications. *INFORMS Annual Meeting, San Francisco, California, November.*
82. Ghose, A. 2005. Used Good Trade and Adverse Selection: A Cross-Country Comparison of Electronic Secondary Markets. *INFORMS Annual Meeting, San Francisco, California, November.*
83. Ghose, A. and A. Sundararajan. 2005. Pricing and Product Line Strategies for Software: Theory and Evidence. *Statistical Challenges in E-Commerce Research (SCECR), University of Maryland, College Park, May.*
84. Ghose, A., M. Smith, and R. Telang. 2005. Product Cannibalization and Welfare Implications. *Statistical Challenges in E-Commerce Research (SCECR), University of Maryland, College Park, May.*
85. Gal-Or, E., and A. Ghose. 2005. The Economic Consequences of Sharing Security Information. *International Industrial Organization Conference, Atlanta, Georgia, April.*
86. Ghose, A., M. Smith, and R. Telang. 2005. Internet Exchanges for Used Books: Welfare Implications and Policy Issues. *International Industrial Organization Conference, Atlanta, Georgia, April.*
87. Ghose, A., R. Telang and R. Krishnan. 2004. Impact of Electronic Secondary Markets on Information Goods Suppliers. *Workshop on Information Systems and Economics (WISE 2004), College Park, Maryland, December.*
88. Ghose, A., M. Smith, and R. Telang. 2004. Internet Exchanges for Used Books: An Empirical Analysis of Welfare Implications and Policy Issues. *INFORMS Annual Meeting, Denver, Colorado, October.*
89. Ghose, A., M. Smith, and R. Telang. 2004. Internet Exchanges for Used Books: An Empirical Analysis of Welfare Implications and Policy Issues. *MISRC/CRITO Symposium on the Digital Divide, Minneapolis, Minnesota, August.*
90. Ghose, A., T. Mukhopadhyay, and U. Rajan. 2003. Strategic Benefits of Internet Referral Services.

International Conference on Electronic Commerce (ICEC 2003), Pittsburgh, October.

91. Ghose, A., R. Telang and R. Krishnan. 2003. Durable Goods Competition in Secondary Electronic Markets. ***INFORMS Marketing Science Conference, College Park, University of Maryland, June.***
92. Ghose, A., T. Mukhopadhyay, and U. Rajan. 2002. Strategic Benefits of Internet Referral Services. ***Workshop on Information Systems and Economics (WISE 2002), Barcelona, Spain, December.***
93. Ghose, A., V. Choudhary, T. Mukhopadhyay, and U. Rajan. 2001. Dynamic Pricing on the Internet ***Workshop on Information Systems and Economics (WISE 2001), New Orleans.***

RESEARCH GRANTS AND AWARDS

- 2015 Adobe Faculty Research Award for “Combining Machine Learning with Randomized Field Experiments to Improve Mobile Advertising,” (with B. Li) \$ 50,000.
- 2015 NET Institute Grant for “Towards Digital Attribution,” (with V. Todri), \$3000.
- 2014 Wharton Customer Analytics Institute Award (with V. Todri, P. Adamapolous and P.V. Singh)
- 2014 Kauffman Grant for “Crowd funding Dynamics and its Impact on Entrepreneurial Landscape Empirical Analysis using Big Data,” (with G. Burtch and S. Wattal), \$30,000.
- 2013 Google Faculty Research Award for “Mobile Analytics in the New Mobile Economy,” \$66,500.
- 2012 Marketing Science Institute Grant for “Apps and Advertising in the Mobile Economy,” \$15,000.
- 2012 SEI-Wharton Future of Advertising Grant for “Innovative Approaches to Measuring Advertising Effectiveness,” with (S. Han), \$6000.
- 2012 Institute on Asian Consumer Insights (ACI) Grant for “Mobile Ad Effectiveness and App Adoption in Asian Markets,” \$30,000.
- 2012 Google Faculty Research Award for “Designing Ranking Systems for Product Search Engines,” (With P. Ipeirotis), \$60,000.
- 2012 NET Institute Grant for “Impact of Internet Intermediaries on Spread of STDs,” (with J. Chan), \$7000.
- 2012 NYU Abu Dhabi Institute Seed Grant (with V. Dhar, N. Memon, H. Nissenbaum and R. Karri). Research and Education Program,” (co-PI with R. Karri, N. Menon, H. Nissenbaum, and R. Zimmerman), \$2.9 mn.
- 2010 MSI-Wharton Interactive Media Initiative (WIMI) Grant for “Modeling Consumer Behavior in Social Media: Analyzing the Role of Geographical Location and Multichannel Usage in Microblogging Platforms,” (with S. Han), \$ 10,000.
- 2010 Wharton Interactive Media Initiative (WIMI) Grant for “Modeling and Examining the Interdependence between Search and Display Advertising,” (with A. Goldfarb and S. Bae), \$5000.
- 2010 Google-WPP Marketing Research Award for “Modeling The Dynamics Of Consumer Behavior In Mobile Advertising And Mobile Social Networks,” \$ 75,000.
- 2009 NSF Federal Cyberservice SFS Grant for “ASPIRE: An SFS Program for Interdisciplinary Research and Education” (co-PI with N. Menon, H. Nissenbaum, R. Karri, and R Zimmerman), \$ 2.12 million.
- 2009 NYU Stern Center for Japan-US Business and Economics Studies Grant for “The Economic Value of User-Generated Multimedia Content: A Study of the Mobile Media Market in South Korea,” \$ 10,000.
- 2009 NET Institute Summer Grant for “A Structural Model of User Learning and Dynamics in Mobile Media Content,” (with S. Han).
- 2009 MSI-Wharton Interactive Media Initiative (WIMI) Grant for “The Economic Impact of User-Generated Content: Combining Text mining with Demand Estimation in the Hotel Industry,” (with P. Ipeirotis), \$ 6,500.
- 2009 MSI-Wharton Interactive Media Initiative Grant for “User Content Generation and Usage in Digital Media,” (with S. Han), \$ 6,500.

- 2009 NYU-Poly Research Grant for “The Economics of User-Generated Content in Online Social Media,” (with V. Dhar and K. Ross), \$ 73,500.
- 2008 NET Institute Summer Grant for “Impact of Product Attributes and Geography in Search Engine Advertising”
- 2007 Marketing Science Institute Grant for “An Empirical Analysis of Search Engine Advertising,” (with S. Yang), \$ 10,000.
- 2007 NET Institute Summer Grant for “An Empirical Analysis of Sponsored Search in Online Advertising,” (with S. Yang).
- 2007 NET Institute Summer Grant for “Using Text Analytics to Estimate the Economic Value of Online Product Reviews: An Empirical Analysis,”(with P. Ipeirotis).
- 2007 Microsoft Virtual Earth Award for “Local Search for Hotels and Restaurants using Econometrics, Spatial Data, and Image Classification,” (with P. Ipeirotis), \$ 35,000.
- 2007 NSF CAREER Award, “Identifying and Measuring the Economic Value of Information on the Internet,” IIS-0643847, \$ 498,500.
- 2006 NYU Research Challenge Fund for “Consumer Use of Electronic Markets: An Empirical Analysis of New and Used Good Markets,” \$ 10, 500.
- 2006 Microsoft Live Labs Award for “Combining Econometric and Text Mining Approaches for Measuring the Effect of Online Information Exchanges,” (with P. Ipeirotis) \$ 37,500.
- 2006 NET Institute Summer Grant for “Electronic commerce and Local Competition,” (with C. Forman and A. Goldfarb).
- 2006 NET Institute Summer Grant for “Search Costs and Menu Costs in Electronic Markets: Theory and Evidence,” (with B. Gu).
- 2005 NET Institute Summer Grant for “Used Good Trade and Adverse Selection: A Cross-Country Comparison of Electronic Secondary Markets,” \$10,500.
- 2005 NET Institute Summer Grant for “Pricing and Product Line Strategies for Consumer Software,” (with A. Sundararajan).
- 2003 Finalist, Third Annual e-BRC Doctoral Support Award Competition, 2003

INVITED PRESENTATIONS, PLENARY TALKS, AND KEYNOTES

1. June 2015. Keynote Speech. Harvard Business Review, Latin America Conference, Sao Paulo, Brazil. Title: “Big Data and Analytics.”
2. June 2015. Plenary Speaker. Organization of Economic Cooperation and Development (OECD) Annual Meetings, Paris. Title: “The New Production Revolution”.
3. June 2015. Invited Speaker. ESSEC Business School. Title: “Randomized Field Experiments in Mobile Marketing.”
4. June 2015. Invited Speaker. HEC. Title: “Randomized Field Experiments in Mobile Marketing.”
5. May 2015. Invited Speaker. University of Minnesota. Title: “Randomized Field Experiments in Mobile Marketing.”
6. May 2015. Invited Speaker. Adobe, San Jose. Title: “Combining Machine Learning With Randomized Field Experiments in Mobile Marketing.”
7. May 2015. Invited Speaker. Stanford University. Title: “Randomized Field Experiments in Mobile Marketing.”
8. May 2015. Invited Speaker. John Hopkins University. Title: “Randomized Field Experiments in Mobile Marketing.”
9. April 2015. Invited Speaker. Rotman School (Marketing), University of Toronto. Title: “Randomized Field Experiments in Mobile Marketing.”

10. April 2015. Invited Speaker. KAIST University, Seoul. Title: "Randomized Field and Natural Experiments in Mobile Marketing."
11. February 2015. Invited Speaker. University of British Columbia. Title: "Randomized Field and Natural Experiments in Mobile Marketing."
12. February 2015. Invited Speaker. Arizona State University. Title: "Randomized Field and Natural Experiments in Mobile Marketing."
13. February 2015. Plenary Speech. Big Data Summit, Toronto.
14. December 2014. Keynote Speech. NYCE Day. Title: "Randomized Field Experiments in Mobile Marketing".
15. November 2014. Invited Speaker, David Eccles School of Business (Marketing), University of Utah, Title: "Randomized Field Experiments in Mobile Marketing".
16. June 2014. Keynote Speech. Start-Up Grind, Shanghai. Title: "Big Data=Big Value".
17. June 2014. Keynote Speech. BTO Conference, Milan, Italy. Title: "Leveraging Mobile for Digital Innovation".
18. June 2014. Invited Speaker. Milan, Italy. Title: "Innovations in Mobile Marketing".
19. May 2014. Invited Speaker, Foster School of Business (Marketing), University of Washington, Seattle. Title: "Analyzing the Interdependence between Web and Mobile Advertising: A Randomized Field Experiment".
20. April 2014. Invited Speaker. KAIST University, Seoul. Title: "Randomized Field Experiments in Mobile Marketing."
21. March 2014: Keynote Speech. Workshop on Social & Business Analytics, University of Texas, Austin. Title: "Big Data, Randomized Field Experiments and Mobile Marketing Analytics".
22. December 2013. Keynote Speech. BTO Conference, Milan, Italy. Title: "Leveraging Mobile for Digital Innovation".
23. November 2013. Keynote Speech. Future of Business Event, NYU Stern. Title: "Using Big Data to Leverage The Mobile Consumer."
24. November 2013. Panel Moderator. Stern Graduate Marketing Association, NYU. Title: "Solving the Digital Equation."
25. October 2013. Plenary Speech. eBeverage Conference. Denver. Title: "Big Data and Mobile Analytics.
26. October 2013. Keynote Speech. Data Science and Big Data Initiative, Charlotte. Title: "Using Big Data to Leverage The Mobile Consumer." September 2013. Keynote Speech. NYU Stern Alumni, New York. Title: "Using Big Data to Leverage the Mobile Consumer."
27. September 2013. Plenary Speech. NYC Media Lab Research Summit, New York. Title: "Tapping into Crowd funding."
28. August 2013. Keynote Speech. Digital Summit, Hyderabad. "Mobile Economy and Location-Based Marketing."
29. August 2013. Keynote Speech. MBA Launch Summit. NYU Stern School. Title: "Technology, Innovation, and the Role of Business in Society."
30. August 2013. Keynote Speech. Undergraduate Orientation. NYU Stern School. Title: "Technology, Innovation, and the Role of Business in Society."
31. June 2013. Keynote Speech. E-Metrics Conference, Chicago. Title: "Mobile Analytics: Apps, Advertising, and Commerce in the New Mobile Economy."
32. May 2013. Plenary Panelist. The Economist Innovation Forum Conference, San Francisco. Title: "Mind the Gap: Resolving the Skills Gap in Data Analytics".
33. May 2013. Invited Speaker. Innovative Approaches to Measuring Advertising Effectiveness Conference, Wharton School. Title: "Analyzing the Interdependence Between Web and Mobile Advertising."
34. April 2013. Invited Speaker. ESSEC Business School, (Marketing). Paris. Title: "Apps, Advertising, and Commerce in the New Mobile Economy."
35. April 2013. Invited Speaker. Heinz School, Carnegie Mellon, Pittsburgh. Title: "Apps, Advertising, and

- Commerce in the New Mobile Economy.”
36. March 2013. Invited Speaker. Cheung Kong Graduate School of Business, (Marketing). Beijing. Title: “Ranking Products on Search Engines.”
 37. March 2013. Invited Speaker. Fudan University, (Marketing). Shanghai. Title: “Ranking Products on Search Engines.”
 38. March 2013. Invited Speaker. Tsinghua University School of Economics and Management, (Marketing). Beijing. Title: “Ranking Products on Search Engines.”
 39. March 2013. Invited Speaker. Paul Merage School of Business, University of California, Irvine. Title: “Ranking Products on Search Engines.”
 40. February 2013. Invited Speaker. Lerner School of Business, University of Delaware, Newark. Title: “Ranking Products on Search Engines.”
 41. February 2013. Webinar. International Institute of Business Analysis. Title: “Mobile Analytics: Apps, Advertising, and Commerce in the New Mobile Economy.”
 42. January 2013. Plenary Speech. Minnesota Big Data Analytics Conference. University of Minnesota, Minneapolis. Title: “Mobile Analytics: Apps, Advertising, and Commerce in the New Mobile Economy.”
 43. January 2013. Plenary Speech. Advertising and Data Science Congress. NYU Stern. Title: “Mobile Analytics: Apps, Advertising, and Commerce in the New Mobile Economy.”
 44. January 2013. Invited Speaker. Boston University, Boston. Title: “Ranking Products on Search Engines.”
 45. December 2012. Invited Speaker. Harvard Business School (Marketing), Boston. Title: “Apps, Advertising, and Commerce in the New Mobile Economy.”
 46. December 2012. Invited Speaker. Big Data Conference. MIT, Boston. Title: “Mobile Analytics: Apps, Advertising, and Commerce in the New Mobile Economy.”
 47. December 2012. Invited Speaker. David Eccles School of Business. University of Utah. Title: “Apps, Advertising, and Commerce in the New Mobile Economy.”
 48. November 2012. Keynote Speech. Big Data and Business Analytics. BTO Conference, Rome, Italy.
 49. November 2012. Keynote Speech. Digital Marketing Summit, Indian School of Business. Title: “Mobile Analytics: Apps, Advertising, and Commerce in the New Mobile Economy.”
 50. October 2012. Plenary Speech. Orange Institute. Title: “Mobile Analytics.”
 51. October 2012. Invited Speaker. TED lecture series. TEDxNYU. Title: “Mobile Marketing Trends.”
 52. September 2012. Moderator. NYU Stern Center for Measurable Marketing. Panel on “Measurable Marketing in the Path to Purchase.”
 53. August 2012. Keynote Speech. Launch 2012. NYU Stern School. Title: “Technology, Innovation, and the Role of Business in Society.”
 54. May 2012. Plenary Speech. IBC Workshop, Institute of E-Commerce & Digital Markets (LMU) in Munich, Germany. Title: “Social Media and Digital Marketing Trends.”
 55. May 2012. Invited Speaker. London Business School (Marketing). Title: “London Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”
 56. April 2012. Invited Speaker. Korea University, Seoul. Title: “Apps, Advertising, and Commerce in the New Mobile Economy.”
 57. April 2012. Invited Speaker. University of Texas at Austin, Austin. Title: “Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”
 58. March 2012. Invited Speaker. Wharton School, Philadelphia. Title: “Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”
 59. March 2012. Keynote Speech. Allianz Group-CIO Conference, Milan, Italy. Title: “Outlook 2013: Social Media and Digital Marketing Trends.”
 60. March 2012. Plenary Speech. BTO Conference, Milan, Italy. Title: “Social Media and Digital Marketing Trends.”
 61. March 2012. Invited Speaker. University of Connecticut, Storrs. Title: “Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”

62. February 2012. Moderator. Carlson School, University of Minnesota. Panel on “Leveraging Social Media for Business.”
63. February 2012, Moderator. Stern in Africa Conference, NYU Stern. Panel on “Emerging Industries in Africa.”
64. November 2011. Invited Speaker. UCLA (Economics), Los Angeles. Title “Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”
65. November 2011. Invited Speaker. Michigan State, East Lansing. Title: “Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”
66. October 2011. Invited Speaker. Harvard Business School, Boston. Title: “Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”
67. September 2011. Invited Speaker. University of Arizona, Tucson. Title: “Interplay Between Search and Social Media: Designing Ranking Systems for Search Engines.”
68. August 2011. Keynote Speech. Launch 2011. NYU Stern School. Title: “Technology, Innovation, and the Role of Business in Society.”
69. June 2011. Plenary Panelist. Statistical Challenges in ecommerce Research (SCECR) conference, Rio De Janeiro, Brazil. Title: “Smart-Everything: Cyber Analytics Platforms and Real-Time Monitoring of the Real World.”
70. May 2011. Plenary Panelist. NYU Stern Conference on Measurable Marketing in a Digital World. Title: “Cross Media Effectiveness Measurement.”
71. September 2009. Invited Speaker. Internet Economics Conference, Stanford University. Title: “User Content Generation and Usage Behavior in Multi-Media Settings: A Dynamic Structural Model of Learning.”
72. April 2009. Invited Speaker. Columbia University. Title: “Combining Text mining with Econometrics: Monetization of User-Generated Content and Online Advertising.”
73. April 2009. Invited Speaker. Microsoft Research, Boston. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
74. April 2009. Invited Speaker. Heinz College, Carnegie Mellon University. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
75. March 2009. Invited Speaker. Wharton School, University of Pennsylvania. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
76. March 2009. Keynote Speech. Ecommerce and Banking 3.0 Conference, Frankfurt, Germany. Title: User Generated Content and Monetization in the New Economy.”
77. March 2009. Invited Speaker. University of Goethe-Frankfurt. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
78. March 2009. Invited Speaker. University of Connecticut. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
79. February 2009. Invited Speaker. University of Calgary. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
80. February 2009. Invited Speaker. Purdue University. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
81. February 2009. Invited Speaker. University of California at Irvine. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
82. November 2008. Invited Speaker. University of Texas at Dallas. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
83. November 2008. Invited Speaker. Polytechnic University of NYU. Title: “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
84. November 2008. Invited Speaker. Speaker on the Square Series, NYU. Title: “User Generated Content, Panel on Technology in the Digital Age.”
85. October 2008. Invited Speaker. McGill University. Title: “Search Engine Advertising: Sponsored

Search, Organic Search, and User-Generated Content in Electronic Markets.”

86. May 2008. Invited Speaker. University of Washington, Seattle. Title “Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets.”
87. March 2008. Invited Speaker. IBM Research. Mining User-Generated Content Using Econometrics: A Case Study on Reputation Systems.
88. February 2008. Invited Speaker. Yahoo Research. Mining User-Generated Content Using Econometrics: A Case Study on Reputation Systems.
89. February 2008. Invited Speaker. Marketing Science Institute. Title: “An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets.”
90. November 2007. Invited Speaker. University of Minnesota, Minneapolis. Title: “The Dimensions of Reputation in Electronic Markets.”
91. June 2007. Invited Speaker. City University of Hong Kong. Title: “The Dimensions of Reputation in Electronic Markets.”
92. June 2007. Invited Speaker. Hong Kong University of Science and Technology. Title: “The Dimensions of Reputation in Electronic Markets.”
93. June 2007. Invited Speaker. Nanyang Business School, Singapore. Title: “The Dimensions of Reputation in Electronic Markets.”
94. June 2007. Invited Speaker. Singapore Management University. Title: “The Dimensions of Reputation in Electronic Markets.”
95. June 2007. Invited Speaker. National University of Singapore. Title: “The Dimensions of Reputation in Electronic Markets.”
96. June 2007. Invited Speaker. Conference on Operational Excellence in Retailing. Harvard University (HBS). Title: “Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Implications.”
97. June 2007. Invited Speaker. Triennial Invitational Choice Symposium, Wharton School. Personalized Pricing and Quality Design.
98. February 2007. Invited Speaker. University of Texas at Austin. Title: “Geography and Ecommerce: Measuring Convenience, Selection and Price.”
99. January 2007. Invited Speaker. University of Florida. Title: “Geography and Ecommerce: Measuring Convenience, Selection and Price.”
100. November 2006. Invited Speaker. Moore School of Business, University of South Carolina. Geography and Ecommerce: Measuring Convenience, Selection, and Price.
101. November 2006. Invited Speaker. Marketing Lunchtime Seminar, NYU Stern School of Business. Title: “Geography and Ecommerce: Measuring Convenience, Selection, and Price.”
102. June 2006. Invited Speaker. Conference on Operational Excellence in Retailing. Wharton School. Title: “The Impact of Location on Consumer Purchases in Electronic Markets.”
103. April 2006. Invited Speaker. Drexel University. Title: “Personalized Pricing and Quality Design.”
104. January 2006. Invited Speaker. Ohio State University. Title: “Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Implications.”
105. February 2004: Invited Speaker. University of Southern California. Title: “Impact of Internet Referral Services on the Supply Chain.”
106. February 2004. Invited Speaker. University of Arizona. Title: “Impact of Internet Referral Services on the Supply Chain.”
107. February 2004. Invited Speaker. University of Maryland at College Park. Title: “Impact of Internet Referral Services on the Supply Chain.”

CONFERENCE PRESENTATIONS

1. October 2014. Invited Speaker, INFORMS Annual Conference, Thought Leader Series. Title: “Randomized Field Experiments in Mobile Marketing.”
2. May 2014. Conference Presentation. Crowds 2.0 Conference, NYU Stern School. Title: “Privacy

- Controls and Anonymity in Crowd funding.”
3. November 2013. Conference Presentation. Mapping Mobile Conference, NYU Stern School. Title: “Randomized Field Experiments to Measure ROI of Mobile Advertising and Mobile Coupons”.
 4. June 2013. Conference Presentation. Marketing Science Conference, Istanbul. Title: “Estimating Cross Platform and Cross Device Synergies Between Web and Mobile Advertising.”
 5. June 2011. Conference Presentation. Statistical Challenges in ecommerce Research (SCECR) conference, Rio De Janeiro, Brazil. Title: “How is the Mobile Internet Different?”
 6. June 2011. Conference Presentation. ZEW Conference, Mannheim. Title: “Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content.”
 7. June 2010. Conference Presentation. Marketing Science Conference, Cologne. Title: “Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content.”
 8. June 2010. Conference Presentation. Searle Research Symposium on the Economics and Law of Internet Search, Northwestern University. Title: “Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content.”
 9. May 2010. Customer Insights Conference, Yale University. Conference Presentation. Title: “Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content.”
 10. December 2009. Conference Presentation. Workshop on Information Technology and Systems (WITS), Phoenix. Title: “Towards Designing Ranking Systems for Hotels on Travel Search Engines: Combining Text mining with Demand Estimation in the Hotel Industry.”
 11. December 2009. Conference Presentation. MSI-WIMI Conference, University of Pennsylvania, Philadelphia. Title: “User Content Generation and Usage Behavior in Multi-Media Settings: A Dynamic Structural Model of Learning.”
 12. August 2009. Conference Presentation. Marketing Dynamics Conference, NYU Stern, August. Title: “User Content Generation and Usage Behavior in Multi-Media Settings: A Dynamic Structural Model of Learning.”
 13. June 2009. Conference Presentation. Marketing Science Conference, University of Michigan, Ann Arbor. Title: “User Content Generation and Usage Behavior in Multi-Media Settings: A Dynamic Structural Model of Learning.”
 14. January 2009. Conference Presentation. The Economics of the Internet and Software, Toulouse. Title: “Modeling and Estimating the Relationship Between Organic and Paid Search Advertising.”
 15. December 2008. Conference Presentation. International Symposium on Information Systems (ISIS), ISB, Hyderabad. Title: “Modeling and Estimating the Relationship Between Organic and Paid Search Advertising.”
 16. December 2008. Conference Presentation. International Conference on Information Systems (ICIS), Paris. Market Frictions, Demand Structure and Price Competition in Online Markets.
 17. December 2008. Conference Presentation. Workshop on Information Systems and Economics (WISE), Paris. Title: “Modeling and Estimating the Relationship Between Organic and Paid Search Advertising.”
 18. December 2008. Conference Presentation. Workshop on Information Technology and Systems (WITS), Paris. An Empirical Analysis of Search Engine Advertising: Sponsored and Organic Search in Electronic Markets.
 19. November 2008. Conference Presentation. Federal Trade Commission, Washington DC. Title: “Modeling and Estimating the Relationship Between Organic and Paid Search Advertising.”
 20. October 2008. Conference Presentation. INFORMS Annual Meeting, Washington DC. Title: “The Dimensions of Reputation in Electronic Markets.”
 21. October 2008. Conference Presentation. INFORMS CIST, Washington DC. Title: “Deriving the Pricing Power of Product Features by Mining User-Generated Reviews.”
 22. August 2008. Conference Presentation. International Workshop on Data mining and Audience Intelligence for Advertising. ADKDD. Las Vegas. Title: “Comparing Performance Metrics in Organic Search with Sponsored Search Advertising.”

23. June 2008. Conference Presentation. Marketing Science Conference, Vancouver. Title: "An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets."
24. May 2008. Conference Presentation. International Industrial Organization Conference, Washington DC. Title: "An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets."
25. April 2008. Conference Presentation. NET Institute Conference, NYU. Title: "An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets."
26. February 2008. Conference Presentation. ACM WSDM Conference, Stanford University. Title: "An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets."
27. December 2007. Conference Presentation. International Conference on Information Systems (ICIS) Montreal. Title: "Estimating Menu Costs in Electronic Markets."
28. December 2007. Conference Presentation. Workshop on Information Systems and Economics (WISE), Montreal. Title: "Towards Empirically Modeling Consumer and Firm Behavior in Sponsored Search Advertising."
29. November 2007. Conference Presentation. Conference on Information Systems and Technology (CIST), Seattle. Title: "An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets."
30. November 2007. Conference Presentation. INFORMS, Seattle. Title: "Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identify Disclosure in Electronic Markets."
31. August 2007. Conference Presentation. International Conference on Electronic Commerce (ICEC), Minnesota. Title: "Designing Novel Review Ranking Systems: Predicting Usefulness and Impact."
32. August 2007. Conference Presentation. International Conference on Electronic Commerce (ICEC), Minnesota. Title: "An Empirical Analyses of Paid Placement in Online Keyword Advertising."
33. May 2007. Conference Presentation. Statistical Challenges in E-Commerce. Title: "Designing Novel Review Ranking Systems on the Web: Combining Economics with Opinion Mining."
34. April 2007. Conference Presentation. NET Institute Conference, New York University. Title: "Geography and Ecommerce: Measuring Convenience, Selection and Price."
35. January 2007. Conference Presentation. DIMACS Workshop, Rutgers University. Title: "Designing Trusted Ranking Systems for Consumer Reviews: Combining Economics with Opinion Mining."
36. January 2007. Conference Presentation. International Conference on Decision Support Systems (ICDSS), IIM Kolkata, India. Title: "Designing Ranking Systems for Consumer Reviews: The Economic Impact of Customer Sentiment in Electronic Markets."
37. December 2006. Conference Presentation. International Symposium on Information Systems (ISIS), ISB, Hyderabad. Title: "Estimating Menu Costs in Electronic Markets."
38. December 2006. Conference Presentation. International Symposium on Information Systems (ISIS), ISB, Hyderabad. Title: "The Dimensions of Reputation in Electronic Markets."
39. December 2006. Conference Presentation. International Symposium on Information Systems (ISIS), ISB, Hyderabad. Title: "The Impact of Location on Consumer Use of Electronic Markets."
40. December 2006. Conference Presentation. Workshop on Information Technology and Systems (WITS), Milwaukee. Title: "Towards an Understanding of the Impact of Customer Sentiment on Product Sales and Review Quality."
41. December 2006. Conference Presentation. International Conference on Information Systems (ICIS), Milwaukee. Title: "The Impact of Location on Consumer Purchases in Electronic Markets."
42. December 2006. Conference Presentation. Workshop on Information Systems and Economics (WISE), Northwestern University, Evanston. Title: "Search Costs, Demand Structure and Long Tail in Electronic Markets: Theory and Evidence."
43. November 2006. Conference Presentation. INFORMS Annual Meeting, Pittsburgh. Title: "Impact

- of Internet Referral Services on the Supply Chain.”
44. November 2006. Conference Presentation. INFORMS Annual Meeting, Pittsburgh. Title: “Estimating Menu Costs in Electronic Markets.”
 45. November 2006. Conference Presentation. INFORMS Annual Meeting, Pittsburgh. Title: “The Impact of Location on Consumer Purchases in Electronic Markets.”
 46. November 2006. Conference Presentation. INFORMS Conference on Information Systems and Technology (CIST), Pittsburgh. Title: “Software Versioning and Quality Degradation? An Exploratory Study of the Evidence.”
 47. October 2006. Conference Presentation. ZEW Conference on ICT, Mannheim. Title: “Information Uncertainty in Electronic Markets: An Empirical Analysis of Trade Patterns and Adverse Selection.”
 48. June 2006. Conference Presentation. Workshop on Economics and Information Security (WEIS), Cambridge University. Title: “The Economic Impact of Regulatory Information Disclosure on Information Security Investments, Competition, and Social Welfare.”
 49. June 2006. Conference Presentation. INFORMS Marketing Science Conference, Pittsburgh. Title: “Personalized Pricing and Quality Design.”
 50. May 2006. Conference Presentation. Statistical Challenges in E-Commerce Research, University of Minnesota. Title: “The Dimensions of Reputation in Electronic Markets.”
 51. April 2006. Conference Presentation. International Industrial Organization Conference, Boston. Title: “Personalized Pricing and Quality Design.”
 52. April 2006. Conference Presentation. NET Institute Conference, New York University. Title: “Used Good Trade and Adverse Selection in Electronic Secondary Markets.”
 53. March 2006. Conference Presentation. Impact of Internet Referral Services on the Supply Chain. ISR Workshop, University of Michigan at Ann Arbor.
 54. February 2006. Conference Presentation. University of Florida. Title: “The Dimensions of Reputation in Electronic Markets.”
 55. December 2005. Conference Presentation. International Conference on Information Systems (ICIS), Las Vegas. Title: “Software Versioning and Quality Degradation? An Exploratory Study of the Evidence.”
 56. December 2005. Conference Presentation. Workshop on Information Systems and Economics (WISE), UC Irvine, California. Title: “Personalized Pricing and Quality Design.”
 57. November 2005. Conference Presentation. Workshop on CRM, New York University. Title: “A Competitive Analysis of Personalized Pricing and Quality Customization.”
 58. November 2005. Conference Presentation. INFORMS Annual Meeting, San Francisco, California. Title: “Pricing and Product Line Strategies for Software: Theory and Evidence.”
 59. November 2005. Conference Presentation. INFORMS Annual Meeting, San Francisco, California. Title: “Used Good Trade and Adverse Selection: A Cross-Country Comparison of Electronic Secondary Markets.”
 60. June 2005. Conference Presentation. Workshop on Economics of Information Security, Harvard University, Boston. Title: “Pricing Security Software.”
 61. May 2005. Conference Presentation. Statistical Challenges in ecommerce Research. Maryland. Title: “Pricing and Product Line Strategies for Consumer Software: Evidence from Amazon.”
 62. April 2005. Conference Presentation. International Industrial Organization Conference. Atlanta. Title: “The Economic Incentives for Sharing Security Information.”
 63. January 2005. Conference Presentation. Hawaiian International Conference on System Sciences. Hawaii. Title: “Effect of Electronic Secondary Markets on the Supply Chain.”
 64. December 2004. Conference Presentation. Workshop on Information Systems and Economics (WISE). University of Maryland at College Park. Title: “Impact of Secondary Electronic Markets on Information Goods Suppliers.”
 65. December 2003. Conference Presentation. International Conference on Information Systems (ICIS). Seattle, WA. Title: “Durable Goods Competition in the Presence of Secondary E-Marketplaces.”

66. December 2003. Conference Presentation. International Conference on Information Systems (ICIS). Seattle, WA. Title: "Internet Exchanges for Used Books: An Empirical Investigation into Welfare Implications and Policy Issues."
67. October 2003. Conference Presentation. International Conference on E-Commerce (ICEC). Pittsburgh, PA. Title: "Strategic Benefits of Internet Referral Services."
68. October 2003. Conference Presentation. Conference on Information Systems and Technology (CIST), Atlanta, GA. Title: "Dynamic Pricing: A Strategic Advantage for Electronic Retailers."
69. June 2003. Conference Presentation. Workshop on Economics of Information Security. University of Maryland at College Park. Title: "The Economic Incentives for Sharing Security Information."
70. December 2002. Conference Presentation. Workshop on Information Systems and Economics (WISE). Barcelona, Spain. Title: "Impact of Internet Referral Services on the Supply Chain."
71. December 2002. Conference Presentation. International Conference on Information Systems (ICIS). Barcelona, Spain. Title: "Dynamic Pricing: A Strategic Advantage for Internet Retailers".
72. November 2002. Conference Presentation. INFORMS Conference on Information Systems and Technology (CIST), San Jose. Title: "Impact of Referral Services on Channel Profits: Competition between Manufacturers and Info mediaries."
73. February 2004. Invited Speaker. University of California at Irvine. Title: "Impact of Internet Referral Services on the Supply Chain."
74. February 2004. Invited Speaker. Tulane University. Title: "Impact of Internet Referral Services on The Supply Chain."
75. February 2004. Invited Speaker. University of Connecticut. Title: "Impact of Internet Referral Services on the Supply Chain."
76. February 2004. Invited Speaker. New York University. Title: "Impact of Internet Referral Services on the Supply Chain."
77. January 2004. Invited Speaker. University of Alberta. Title: "Impact of Internet Referral Services on The Supply Chain."
78. May 2011. Plenary Panelist. India World Conference, New York. Title "India's IT Industry: The End of the Beginning".
79. May 2011. Invited Speaker. Rising Star Speaker Series, Case Western University. Cleveland. Title: "Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content."
80. May 2011. Invited Speaker. MIT (Sloan Marketing), Boston. Title: "Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content."
81. April 2011. Invited Speaker. Columbia University (GSB Marketing), New York. Title: "Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content."
82. April 2011. Invited Speaker. Seoul National University, Seoul. Title: "Designing Ranking Systems For Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content."
83. January 2011. Invited Speaker. MSI Young Scholar's Conference, Utah. Title: "Search and Social Media in the Digital Economy: A Research Agenda."
84. December 2010. Plenary Panelist. Workshop on Information Systems and Economics, Phoenix, Arizona. Title: "Whither WISE."
85. October 2010. Invited Speaker. University of Maryland, College Park. Title: "Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content".
86. October 2010. Invited Speaker. Distinguished Speaker Series, Georgia Tech, Atlanta, October. Title: Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd- Sourced Content.
87. September 2010. Plenary Panelist. Workshop on Interdisciplinary Studies in Information Security and Privacy, Abu Dhabi. Title: "Privacy Issues in Social Media and Ecommerce."

88. September 2010. Invited Speaker. Harvard University (Economics), Boston. Title: "Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content."
89. September 2010. Invited Speaker. George Mason University, Washington DC. Title: "Designing Ranking Systems for Hotels on Travel Search Engines By Mining User-Generated and Crowd-Sourced Content."
90. July 2010. Invited Speaker. NBER IT Economics & Productivity Workshop, Boston. Title: "Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content."
91. July 2010. Invited Speaker. Stanford Institute of Theoretical Economics (SITE), Stanford University. Title: "A Dynamic Structural Model of User Learning in Mobile Media Content."
92. June 2010. Invited Speaker. Workshop on Digital Business Models, Paris. Title: "Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content."
93. June 2010, Plenary Speech. L2 Mobile Commerce Clinic at NYU Stern. Title: "Mobile Trends, Consumers, and Social Media."
94. April 2010. Invited Speaker. Temple University. Title: "Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content."
95. February 2010. Invited Tutorial. Carlson School. University of Minnesota. Title: "Structural Econometric Modeling: Static and Dynamic Models".
96. February 2010. Invited Speaker. University of Minnesota. Title: "Estimating Demand in the Hotel Industry by Mining User-Generated and Crowd-Sourced Content."
97. September 2009. Invited Speaker. Internet Economics Conference, Stanford University. Title: "User Content Generation and Usage Behavior in Multi-Media Settings: A Dynamic Structural Model of Learning."
98. April 2009. Invited Speaker. Columbia University. Title: "Combining Text mining with Econometrics: Monetization of User-Generated Content and Online Advertising."
99. April 2009. Invited Speaker. Microsoft Research, Boston. Title: "Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets."
100. November 2008. Invited Speaker. Speaker on the Square Series, NYU. Title: "User Generated Content, Panel on Technology in the Digital Age."
101. October 2008. Invited Speaker. McGill University. Title: "Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets."
102. May 2008. Invited Speaker. University of Washington, Seattle. Title "Search Engine Advertising: Sponsored Search, Organic Search, and User-Generated Content in Electronic Markets."
103. March 2008. Invited Speaker. IBM Research. Mining User-Generated Content Using Econometrics: A Case Study on Reputation Systems.
104. February 2008. Invited Speaker. Yahoo Research. Mining User-Generated Content Using Econometrics: A Case Study on Reputation Systems.
105. February 2008. Invited Speaker. Marketing Science Institute. Title: "An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets."
106. November 2007. Invited Speaker. University of Minnesota, Minneapolis. Title: "The Dimensions Of Reputation in Electronic Markets."
107. June 2007. Invited Speaker. City University of Hong Kong. Title: "The Dimensions of Reputation In Electronic Markets."
108. June 2007. Invited Speaker. Hong Kong University of Science and Technology. Title: "The Dimensions of Reputation in Electronic Markets."
109. June 2007. Invited Speaker. Nanyang Business School, Singapore. Title: "The Dimensions of Reputation in Electronic Markets."
110. June 2007. Invited Speaker. Singapore Management University. Title: "The Dimensions of Reputation in Electronic Markets."

111. June 2007. Invited Speaker. National University of Singapore. Title: "The Dimensions of Reputation in Electronic Markets."
112. June 2007. Invited Speaker. Conference on Operational Excellence in Retailing. Harvard University (HBS). Title: "Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Implications."
113. June 2007. Invited Speaker. Triennial Invitational Choice Symposium, Wharton School. Personalized Pricing and Quality Design.
114. February 2007. Invited Speaker. University of Texas at Austin. Title: "Geography and Ecommerce: Measuring Convenience, Selection and Price."
115. January 2007. Invited Speaker. University of Florida. Title: "Geography and Ecommerce: Measuring Convenience, Selection and Price."
116. November 2006. Invited Speaker. Moore School of Business, University of South Carolina. Geography and Ecommerce: Measuring Convenience, Selection, and Price.
117. November 2006. Invited Speaker. Marketing Lunchtime Seminar, NYU Stern School of Business. Title: "Geography and Ecommerce: Measuring Convenience, Selection, and Price."
118. June 2006. Invited Speaker. Conference on Operational Excellence in Retailing. Wharton School. Title: "The Impact of Location on Consumer Purchases in Electronic Markets."
119. April 2006. Invited Speaker. Drexel University. Title: "Personalized Pricing and Quality Design."
120. January 2006. Invited Speaker. Ohio State University. Title: "Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Implications."
121. February 2004. Invited Speaker. University of Southern California. Title: "Impact of Internet Referral Services on the Supply Chain."
122. February 2004. Invited Speaker. University of Arizona. Title: "Impact of Internet Referral Services on the Supply Chain."
123. February 2004. Invited Speaker. University of Maryland at College Park. Title: "Impact of Internet Referral Services on the Supply Chain."
124. February 2004. Invited Speaker. University of California at Irvine. Title: "Impact of Internet Referral Services on the Supply Chain."
125. February 2004. Invited Speaker. Tulane University. Title: "Impact of Internet Referral Services on the Supply Chain."
126. February 2004. Invited Speaker. University of Connecticut. Title: "Impact of Internet Referral Services on the Supply Chain."
127. February 2004. Invited Speaker. New York University. Title: "Impact of Internet Referral Services on the Supply Chain."
128. January 2004. Invited Speaker. University of Alberta. Title: "Impact of Internet Referral Services on the Supply Chain."

TEACHING

- EMBA: Social Media and Digital Marketing Analytics, NYU Spring 2015. (Instructor Rating: 6.4/7)
- C20:0038: Social Media and Digital Marketing Analytics, NYU Fall 2014. (Instructor Rating: 6.8/7)
- TRIUM Global MBA course: Social Media and Digital Marketing Analytics, NYU Fall 2014. (Instructor Rating: 4.5/5)
- MSBA course: Social Media and Digital Marketing Analytics, NYU Summer 2014. (Instructor Rating: 6.9/7)
- MBA course B20:3310: Social Media and Digital Marketing Analytics, NYU Summer 2014. (Instructor Rating: 6.3/7)
- Executive Education: Leveraging Social Media and Digital Marketing, Spring 2014. (Instructor Rating: 6.9/7)
- Executive Education: Leveraging Social Media and Digital Marketing, Fall 2013. (Instructor Rating:

6.7/7)

- EMBA: Social Media and Digital Marketing Analytics, NYU Spring 2014. (Instructor Rating: 6.85/7)
- C20:0038: Social Media and Digital Marketing Analytics, NYU Fall 2013. (Instructor Rating: 6.7/7)
- MSBA course: Social Media and Digital Marketing Analytics, NYU Fall 2013. (Instructor Rating: 6.8/7)
- TRIUM Global MBA course: Social Media and Digital Marketing Analytics, NYU Fall 2013. (Instructor Rating: 3.9/5)
- MBA course B20:3310: Social Media and Digital Marketing Analytics, NYU Summer 2013. (Instructor Rating: 6.5/7)
- Executive Education: Leveraging Social Media and Digital Marketing, Spring 2013. (Instructor Rating: 6.0/7)
- MBA course B20:3310: Social Media and Digital Marketing Analytics, NYU Fall 2012. (Instructor Rating: 6.0/7)
- C20:0038: Social Media and Digital Marketing Analytics, NYU Fall 2012. (Instructor Rating: 6.2/7)
- C20:0001: IT in Business & Society: UG Core, NYU Fall 2010. (Instructor Ratings: 6.5/7, 6.6/7)
- C20:0038: Electronic Commerce and Social Media: UG Elective, NYU Fall 2009. (Instructor Rating: 6.0/7)
- C20:0001: IT in Business & Society: UG Core, NYU Fall 2008. (Instructor Ratings: 6.6/7, 6.7/7)
- C20:0038: Electronic Commerce: UG Elective, NYU Fall 2008. (Instructor Rating: 6.6/7)
- C20:0001: IT in Business & Society: UG Core, NYU Fall 2007. (Instructor Ratings: 6.6/7, 6.7/7)
- C20:0038: Electronic Commerce: UG Elective, NYU Fall 2007. (Instructor Rating: 6.8/7)
- C20:0001: IT in Business & Society: UG Core, NYU Fall 2006. (Instructor Ratings: 6.8/7, 7/7)
- C20:0038: Electronic Commerce: UG Elective, NYU Fall 2006. (Instructor Rating: 6.7/7)
- C20:0001: IT in Business & Society: UG Core, NYU Fall 2005. (Instructor Ratings: 6.6/7, 6.8/7, 6.6/7)
- C20:0001: IT in Business & Society: UG Core, NYU, Fall 2004. (Instructor Ratings: 6.2/7, 6.3/7)
- 70-451: MIS: UG Course, CMU, Summer 2003. (Instructor Rating: 5/5).

PROFESSIONAL SERVICE (JOURNALS)

- **Senior Editor** – *Information Systems Research* (September 2012 –)
- **Associate Editor** – *Management Science* (Jan 2009 – Present)
- **Associate Editor** – *Management Science* Special Issue on Business Analytics (August 2012 – Present)
- **Associate Editor (Ad Hoc)** – *Management Science* (2008 – 2009)
- **Associate Editor** – *Information Systems Research* (Jan 2009 – December 2012)
- **Associate Editor (Ad Hoc)** – *MIS Quarterly* (2010 – Present)
- **Associate Editor** – *MIS Quarterly*, Special Issue on “Perspectives on Trust in Information Systems,” 2009.
- **Editorial Board** – *Information Systems Research*, Special Issue on “Digital Systems & Competition”, 2008.
- **Reviewer** – *American Economic Review*, *Decision Support Systems*, *Economic Theory*, *Electronic Commerce Research and Applications*, *IEEE Transactions on Knowledge and Data Engineering*, *International Journal of Electronic Commerce*, *Information Systems Research*, *International Journal of Industrial Organization*, *Journal of Economics and Management Strategy*, *Journal of Industrial Economics*, *Journal of Management Information Systems*, *Management Science (Information Systems)*, *Management Science (Marketing)*, *Marketing Science*, *Journal of Marketing Research*, *MIS Quarterly*, *Operations Research Letters*, *Production and Operations Management*.
- **Panel Member** – *Hong Kong Research Grants Council*. (2014 –)

PROFESSIONAL SERVICE (CONFERENCES & WORKSHOPS)

- **Conference Co-Chair** – Workshop on Information Systems and Economics (WISE), 2014, Auckland, December.
- **Track co-Chair** – Economics of Information Systems, International Conference on Information Systems (ICIS) 2012, Orlando.
- **Senior Program Committee** – ACM Electronic Commerce Conference 2012, Spain, June.
- **Senior Program Committee** – ACM Electronic Commerce Conference 2011, San Jose, June.
- **Program Committee** – INFORMS Conference on Information Systems and Technology (CIST) 2012, October.
- **Program Committee** – INFORMS Conference on Information Systems and Technology (CIST) 2010, Austin, November.
- **Program Committee** - The First International Workshop on Opinion Mining for Business Intelligence (OMBI 2010), Toronto, August.
- **Program Committee** - Workshop on Social Media Analytics (SOMA 2010), Washington DC, July
- **Program Committee** – ACM Electronic Commerce Conference 2010, Boston, June
- **Conference Co-Chair** – INFORMS Conference on Information Systems and Technology (CIST), 2009, San Diego, October.
- **Conference Co-Chair** – Workshop on Information Systems and Economics (WISE), 2008, Paris, December.
- **Conference Co-Organizer** – First New York Computer Science and Economics Day (NYCE Day), 2008, September.
- **Steering Committee Member** - Second New York Computer Science and Economics Day (NYCE Day), 2009, November.
- **Conference Co-Chair** – Fourth Symposium on Statistical Challenges in Ecommerce Research (SCECR) 2008, NY, May.
- **Track Chair** – Pacific Asia Conference on Information Systems (PACIS) 2009, India, July (Ecommerce Track).
- **Track Chair** – Pacific Asia Conference on Information Systems (PACIS) 2008, China, July (Economics of Information Systems Track).
- **Associate Editor** – International Conference on Information Systems (ICIS) 2009, Phoenix, December (Economics of Information Systems Track).
- **Associate Editor** – International Conference on Information Systems (ICIS) 2008, Paris, December (Economics of Information Systems Track).
- **Associate Editor**–International Conference on Information Systems (ICIS) 2007, Montreal, December (*Web-Based Information Systems Track*).
- **Associate Editor**–International Conference on Information Systems (ICIS) 2007, Montreal, December (*Economics and Business Value of Information Systems Track*).
- **Program Committee** – ACM Electronic Commerce Conference 2009, Stanford, June.
- **Program Committee** – World Wide Web Conference 2009 (WWW), Spain, May.
- **Program Committee** – World Wide Web Conference 2008 (WWW), Beijing, May (*Social Networks and Web 2.0 Track and Internet Monetization Track*)
- **Program Committee** – International Conference on Web Search and Data Mining (WSDM) 2008, Stanford University, February.
- **Program Committee**–Workshop on Interdisciplinary Studies in Security and Privacy, 2008 (WISSP), NYU-Polytechnic, September.
- **Program Committee**–International Conference on Electronic Commerce 2007 (ICEC), Minnesota, August.
- **Program Committee**–Workshop on Economics of Information Security 2007 (WEIS), Pittsburgh, June.

- **Program Committee** – INFORMS Conference on Information Systems and Technology (CIST) 2007, Seattle, November.
- **Program Committee** – ACM Electronic Commerce Conference 2007, San Diego, June.
- **Program Committee**–International Conference on Decision Support Systems 2007, Kolkata, January
- **Program Committee**–International Symposium of Information Systems 2006, Hyderabad, December
- **Associate Editor**–International Conference on Information Systems 2006 (ICIS), Milwaukee, December (*Economics of Information Systems Track*).
- **Associate Editor**–International Conference on Information Systems 2006 (ICIS), Milwaukee, December (*General Track*).
- **Program Committee**–INFORMS Conference on Information Systems and Technology 2006 (CIST), Pittsburgh, November 2006.
- **Program Committee**–INFORMS Conference on Information Systems and Technology 2005 (CIST), San Francisco, November 2005.
- **Session Chair** – CIST 2008, WEIS 2007, June, Pittsburgh, ICDSS 2007, Kolkata, January, INFORMS 2006, (*ISR Sponsored Cluster*), Pittsburgh, November, INFORMS (*IS Economics Cluster*) 2005, San Francisco, November, INFORMS CIST 2005, San Francisco, November.
- **Discussant** – Workshop in Information Systems and Economics 2011 (Shanghai), Workshop in Information Systems and Economics 2010 (St. Louis), Workshop in Information Systems and Economics 2009 (Phoenix), International Industrial Organization Conference 2008 (Washington DC), International Conference on Information Systems 2007(Montreal), ZEW Workshop on ICT 2006 (Germany), Workshop in Information Systems and Economics 2006 (Evanston), Statistical Challenges in Electronic Commerce 2006 (Minneapolis), International Industrial Organization Conference 2006 (Boston), International Industrial Organization Conference 2005 (Atlanta), Workshop in Information Systems and Economics 2005 (Irvine).

UNIVERSITY SERVICE

- External Review Committee, OPIM Department, Wharton School, 2015.
- IOMS Executive Committee, 2013 – Present
- Stern Dean’s Faculty Advisory Committee, 2012 – Present
- Stern MBA Launch Committee, 2011– Present
- NYU Stern-Poly Collaboration Taskforce Committee, 2011
- Stern Doctoral Program Review Committee, 2010
- Stern Research Resources Committee, New York University, 2010 –
- Track Director for Interactive Marketing, CeDER, NYU Stern, 2009–2010.
- Panel Judge in India Leadership Exchange Program Competition, 2009.
- AACSB Review Junior Faculty Team, Stern School, 2009.
- IS faculty member, Stern Undergraduate Honors Program, 2006 – Present.
- Ph.D. Committee, IOMS Department, Stern School, 2005 – 2006, 2009–.
- Coordinator, Information Systems Research Seminar series, Stern School, 2005 – 2007.
- Stern School Team India Committee under Dean Kim Corfman, 2008 –2009.
- Panelist on “Life and Lifestyle for Untenured Faculty Members,” New Faculty Orientation at Stern School, New York University 2006, 2007, 2008.
- Promotion & Tenure Review Committee, IOMS Department, Stern School, 2006.
- Strategic Planning Meeting, Stern School, 2006.
- Faculty Recruitment Committee, IOMS Department, Stern School, 2005 – 2006.
- Panelist on “Effective Teaching Strategies”, New Faculty Orientation at NYU Stern, 2005.
- Doctoral Student Committee, Carnegie Mellon University, 2002–2004.

POST-DOCTORAL STUDENT SUPERVISION

1. Dr. Sang-Pil Han (Post Doctoral Advisor, NYU, 2008–2011 (Now Assistant Professor at City University of Hong Kong)
2. Dr. Sung-Hyuk Park (Post Doctoral Advisor, NYU, 2012–)

DOCTORAL STUDENT SUPERVISION

1. Jason Chan – Stern School, IOMS Department (Chair), (Assistant Professor at Carlson School, University of Minnesota from Fall 2014)
2. Beibei Li – Stern School, IOMS Department (co-Chair), (Assistant Professor at Carnegie Mellon University since Fall 2012)
3. Gordon Burtch – Fox School of Business, Temple University (co-Advisor), (Assistant Professor at Carlson School, University of Minnesota from Fall 2013)
4. Yan Huang – Heinz College, Carnegie Mellon University (Thesis Committee member), (Assistant Professor at Ross School, University of Michigan from Fall 2013)
5. Ke-Wei Huang – Stern School, IOMS Department (Thesis Committee member), Graduated 2007 (now Assistant Professor at National University of Singapore)
6. Zheyin (Jane) Gu – Stern School, Marketing Department (Thesis Committee member), Graduated 2008 (now Assistant Professor at SUNY Albany)
7. Rong Zheng – Stern School, IOMS Department (Thesis Committee member), Graduated 2009 (now Assistant Professor at Hong Kong University of Science and Technology)
8. Manuel Arriaga – Stern School, IOMS Department (Thesis Committee member), Graduated 2011 (now Assistant Professor at Cambridge University)
9. Nikolay Archak –Stern School, IOMS Department (Thesis Committee member), Graduated 2012 (Six Sigma)
10. Sanghee Bae – 6th year Student, Stern School, Marketing Department (Thesis Committee member)
11. Mingdi Xin – Stern School, IOMS Department (Proposal Committee member), Graduated 2009 (now Assistant Professor at University of California at Irvine)
12. Akhmed Umyarov – Stern School, IOMS Department (Proposal Committee member), Graduated 2010 (now Assistant Professor at University of Minnesota)
13. Vilma Todri – 4th year Student, Stern School, IOMS Department (Chair)
14. Xuan Ye – 4th year Student, Stern School, IOMS Department (Thesis Committee Member)
15. Zubin Jelveh – 4th year Student, NYU Poly
16. Wally Wang – 2nd year Student, Stern School, IOMS Department

UNDERGRADUATE STUDENT SUPERVISION

1. Prita Kumar – Stern School (Undergraduate Honors Thesis Advisor)
2. Rohan Deshpande – Stern School (Undergraduate Project Advisor)
3. Pratik Mehta – Stern School (Undergraduate Honors Thesis Advisor)
4. Aileen Chua – Stern School (Undergraduate Honors Thesis Advisor)
5. Elliott Finch – Stern School (Undergraduate Honors Thesis Advisor)

PROFESSIONAL MEMBERSHIPS

- **Expert Affiliate:** Cornerstone Research (2015 – Present)
- **Research Council Member:** Wharton Customer Analytics Institute (2011 – Present).
- **Advisory Board Member:** Big Data and Mobile Analytics Center, Fox School of Business, Temple University.

- **Faculty Affiliate:** Marketing Science Institute (2008 – Present)
- **Member:** Association of Information Systems (AIS), Information Systems Society (ISS), INFORMS, Marketing Science Society, American Economic Association (AEA).

INDUSTRY POSITIONS

2013 - Present	Chief Data Scientist, 3TI China
2014 - Present	Scientific Advisor, OneVest
1999-2000	Senior Consultant, E-Business Division, IBM.
1998-1999	Business Development Manager, HCL-Hewlett Packard.
1997	Management Trainee, Glaxo SmithKline Beecham.

SELECTED PRESS COVERAGE & OPINION PIECES

- Economist Group, May 2015
- *BBC World News*, March 2015
- *The Financial Times*, March 2015
- *USA Today*, February 2015
- *Washington Post*, February 2015
- *The Economist*, January 2015.
- *National Public Radio*, January 2015.
- *Newsweek*, January 2015.
- *The Guardian* January 2015.
- *The Toronto Sun*, January 2015.
- *Bloomberg Media*, January 2015.
- *The Economic Times* January 2015.
- *The Business Standard*, January 2015.
- *The Economic Times* December 2014.
- *USA Today*, December 2014.
- *OZ*, December 2014.
- *Bloomberg Media*, October 2014.
- *LA Times*, October 2014.
- *Business Week*, September 2014.
- *The Wall Street Journal*, September 2014.
- “Marketing in the Facebook Age: B-Schools Tackle Social Media with Innovative New Courses”,
- *MBAPrograms*, June 2014
- “Professor Big Data”, *The Programmatic Mind*, June 2014.
- “Hulu Lets You Order Pizza Without Leaving The Website,” *USA Today*, May 2014.
- “Yahoo Plugs Yelp Reviews Into Search”, *Ecommerce Times*, March 2014.
- “Kickstarter Backlash Over Oculus” *Market Makers, Bloomberg TV*, March 2014.
- “When Crowdfunding Goes Corporate: Kickstarter Backers Vent Over Facebook’s Oculus Buy,”
- *Time*, March 2014.
- “The Lessons of Oculus, or Why We Need a Capitalism for the Masses”, *National Review Online*, March 2014.
- “Data + Consumer Preference = The Future of Marketing”, *Business2Community*, March 2014.
- “Best 40-Under-40 Professor Anindya Ghose”, *Business Week Poets and Quants*, February 2014.

- “Push Ads Across Devices to Drive Click-throughs, Conversions: NYU professor,” *Mobile Marketer*, November 2013.
- “Topsy Buy Gives Apple Mountains of Twitter Data,” *Ecommerce Times*, November 2013
- “Top Reviewers On Amazon Get Tons Of Free Stuff,” *National Public Radio*. October 2013.
- “Investors Give Yahoo Benefit of Doubt,” *Ecommerce Times*, October 2013
- “SEC’s New Crowdfunding Rule Innovative, But With Risk”, *Xinhua*. October 2013.
- “The Crowdfunding Economy is About to Pop”, *Time*, September 2013
- “The Crowdfunding Caveat: Most Campaigns Fail”, *PC World*, September 2013.
- “B-Schools Are Putting Consumers Under the Social Media Microscope”, *BusinessWeek*, July 2013.
- “Wanelo, Next Verb in Digital Dictionary?,” *Fox Business*, July 2013.
- “Business Grads to Wall Street: Drop Dead”, *Wired*, June 2013.
- “Three Professors Share Crowdfunding Research - Tune In To Learn How To Make Your Campaign A Success.”, *Forbes*, June 2013.
- “Web Ads That Know Too Much”, *MIT Technology Review*, April 2013.
- “Facebook Gets Too Much in Your Face”, *LA Times*, April 2013.
- “Yahoo’s Mayer Revives Debate Over Flexible-Work Arrangements”. *Washington Post*, February 2013.
- “Apple Makes Play for Even Higher-End Tablet Niche”, *TechNewsWorld*, January 2013.
- “Opentable Buys Photo Food App”, *National Public Radio*, January 2013.
- “Business Schools Divided on How to Approach Analytics Training”. *US News*, November 2012.
- “Revising an Outdated Business Model? Try Predictive Analytics.” *CNBC*, October 2012.
- “Microsoft Take a Stab at News Gathering.” *Ecommerce Times*, October 2012.
- “MoneyGram Goes Mobile with Digital Wallet Money Transfer App.” *Daily Finance*, September 2012.
- “What Guided Google to Frommer’s?” *Knowledge @ Wharton*, September 2012.
- “Digital is for Real.” *SmartMoney*, August 2012.
- “Songza Music Service Streams for Business Success.” *NewYork DailyNews*, July 2012.
- “Craigslist Linked to Rise in STDs.” *NBC*, May 2012.
- “Facebook’s Dream IPO is Starting to Look Like a Nightmare.” *MSNBC*, May 2012.
- “Facebook is an Overvalued Bust.” *Ignites, Financial Times*, May 2012.
- “RIM to Post Loss, Plans ‘Significant’ Job Cuts.” *MSNBC*, May 2012.
- “The Travel Search Engine That Thinks the Way You Do?” *Knowledge @ Wharton*, May 2012.
- “Facebook closes at 38.37 dollars in market debut.” *Xinhua, China Daily*, May 2012.
- “As Headphones Invade The Office, Are We Lonelier?” *National Public Radio*, May 2012.
- “Does Craigslist Help Spread STDs?” *Washington Post*, April 2012.
- “Not So Secret Service: 5 Reasons Prostitution Could Soon Go Mainstream.” *Forbes*, April 2012.
- “The Crowd-funding Opportunity.” *Wall Street Journal - Mint*, April 2012.
- “Google’s New Privacy Policy: When Consumers’ Worlds Collide, the Company Stands to Profit.” *Forbes*, February 2012.
- “Africa Calling: Listen Up”. *NYU Stern Op-Ed*, February 2012
- “Drinking from a Fire Hose: Has Consumer Data Mining Gone Too Far?” *Knowledge @ Wharton*, November 2011.
- “Walmart’s Use of Social Media.” *BBC News*, November 2011.
- “Crowd-Funding (Finally) Goes to Washington.” *NYU Stern Op-Ed*, October 2011.
- “Something For the Weekend.” *Financial Times*, October 2011.
- “Awsom Shoes: Is it Ethical to Fix Grammatical and Spelling Errors in Internet Reviews.” *Slate*, May 2011.
- “The Value of Teaching Your Customers How to Spell.” *Harvard Business Review*, May 2011.
- “Does Reviewer Quality Matter.” Steven D. Levitt, *Freakonomics*, April 2011.
- “Personal Blogging at Work Increases Productivity.” *Forbes*, March 2011

- “Personal Blogging at Work Increases Productivity.” *Bloomberg Business Week*, March 2011.
- “This Week in Small Business: Start-Ups Surge.” *The New York Times*, March 2011.
- “Professors Strike Back.” *MTV*, August 2010.
- “Does an Organic Search Presence Help Paid Result Performance?” *Webpronews*, December 2009.
- “Top Positions in Paid Search May Not be The Most Profitable.” *Forbes*, May 2009.
- “Reading Between the Lines of Used Books.” *The New York Times*, September 2005.
- “Internet Grows as a Factor in Used-Book Business.” *The New York Times*, July 2005.

EXHIBIT F

WILLIAM M. LANDES

DEC. 2016

Clifton R. Musser Professor of Law & Economics, Emeritus
Senior Lecturer (2009-2016)
The University of Chicago

ADDRESS

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EDUCATION

Ph.D., COLUMBIA UNIVERSITY: Economics, 1966

B.A., COLUMBIA UNIVERSITY: 1960

ACADEMIC EMPLOYMENT

THE UNIVERSITY OF CHICAGO, The Law School: Senior Lecturer (05/09 to present); Clifton R. Musser Professor of Law & Economics Emeritus since 4/09; Clifton R. Musser Professor of Law & Economics (7/92-3/09); Clifton R. Musser Professor of Economics (7/80-7/92); Professor of Economics (1/74-6/80).

FORDHAM UNIVERSITY, School of Law: 19967 Bacon-Kilkenny Chair of Law for a Distinguished Visiting Professor, 8/96–12/96.

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.: Research Staff (1973-1979); Research Associate (1969-1973); Research Fellow (1968-1969); Research Assistant (1962 - 1963).

CITY UNIVERSITY OF NEW YORK, Graduate Center (1972 - 1974): Associate Professor of Economics.

COLUMBIA UNIVERSITY (1969 - 1972): Associate Professor of Economics.

THE UNIVERSITY OF CHICAGO (1966 - 1969): Assistant Professor of Economics.

STANFORD UNIVERSITY (1965 - 1966): Assistant Professor of Economics

AREAS OF SPECIALIZATION

Economic Analysis of Law
Intellectual Property
Art Law
Industrial Organization
Antitrust

ACADEMIC HONORS AND PROFESSIONAL AFFILIATIONS

President's Fellowship, Columbia University, 1962-1963.
Ford Foundation Doctoral Dissertation Fellowship, 1963-1964.
I.B.M. Watson Fellowship, 1964-1965.
Ansley Award Nomination, Economics Department, Columbia University, 1966.
Member, American Economic Association
Editorial Board, *Journal of Cultural Economics*, 2003-
Editor, *The Journal of Law and Economics*, 1975-1991,
The Journal of Legal Studies, 1991-2000
Member, Panel on Legislative Impact on the Courts, National
Academy of Sciences, 1977-1979
Member, Mont Pelerin Society
Research Advisory Committee, U.S. Sentencing Commission, 1986-88
Adviser, Restatement of the Law, Third, Unfair Competition
Council of Economic Advisers, American Enterprise Institute
Board of Editors, Intellectual Property Fraud Reporter
Member, Scientific Committee of A Bibliography of Law and Economics with abstracts of
the European, non-English literature, Ruiksuniversiteit-Gent, Belgium, 1990
Member, Committee of Patronage of the Erasmus Project in Law and Economics,
Ruiksuniversiteit-Gent, Belgium, 1990
Member, Academic Advisory Council, The Locke Institute, 1990-
Member, American Law and Economics Association,
Executive Vice President, 1991 - 1992
President, 1992 - 1993
Advisory Board, Law and Economics Abstracts, 1996 –
Editorial Board, *Journal of Cultural Economics*, 2004 –
Editorial Advisory Board, *Journal of Empirical Legal Studies*, 2004 –
Fellow, American Academy of Arts and Sciences, 2008

PUBLICATIONS

BOOKS AND MONOGRAPHS

Essays in the Economics of Crime and Punishment, edited with Gary S. Becker, National
Bureau of Economic Research (1974).

The Economic Structure of Tort Law, co-authored with Richard A. Posner, Harvard Univ. Press (1987).

The Economic Structure of Intellectual Property Law, co-authored with Richard A. Posner, Harvard Univ. Press (2003).

The Behavior of Federal Judges, co-authored with Lee Epstein and Richard A. Posner, Harvard Univ. Press (2013).

RESEARCH PAPERS

“The Effect of State Fair Employment Law on the Economic Position of Non-Whites,” Papers and Proceedings of the *American Economic Review*, Vol. LV III (May 1967).

“The Economics of Fair Employment Laws,” 76(4) *Journal of Political Economy* (July/August 1968).

“Roundtable on the Allocation of Resources to Law Enforcement,” Papers and Proceedings of the *American Economic Review*, Vol. LIX (May 1969).

“An Economic Analysis of the Courts,” 14 *Journal of Law and Economics* (April 1971). Reprinted in Becker and Landes, Essays in the Economics of Crime and Punishment (1974).

“Law and Economics,” National Bureau of Economic Research--51st Annual Report (September 1971).

“Compulsory Schooling Legislation: An Economic Analysis of Law and Social Change in the Nineteenth Century,” *Journal of Economic History* (March 1972), co-authored with Lewis Solomon.

“The Bail System: An Economic Approach,” *Journal of Legal Studies* (January 1973). Reprinted in Becker and Landes, Essays in the Economics of Crime and Punishment (1974).

“Foreign Criminal Procedure: A Comment,” The Economics of Crime and Punishment, conference volume of the American Enterprise Institute for Public Policy Research (1973).

“Legality and Reality: Some Evidence on Criminal Procedure,” *Journal of Legal Studies* (June 1974).

“The Private Enforcement of Law,” *Journal of Legal Studies* (January 1975), co-authored with Richard A. Posner.

“The Independent Judiciary in an Interest Group Perspective,” (Universities-National Bureau Conference on Economic Analysis of Political Behavior) *Journal of Law and Economics* (December 1976), co-authored with Richard A. Posner.

“Legal Precedent: A Theoretical and Empirical Analysis,” *Journal of Law and Economics* (September 1976), co-authored with Richard A. Posner.

“Salvors, Finders, Good Samaritans, and Other Rescuers: An Economic Study of Law and Altruism,” *Journal of Legal Studies* (January 1978), co-authored with Richard A. Posner.

“Should We Tax Virgin Materials to Finance Waste Disposal?” *Waste Age* (March 1978), co-authored with Richard A. Posner.

“An Economic Study of U.S. Aircraft Hijacking, 1961-1976,” *Journal of Law and Economics* (April 1978).

“Altruism in Law and Economics,” Papers and Proceedings of the *American Economic Review* (May 1978), co-authored with Richard A. Posner.

“Adjudication as a Private Good,” *Journal of Legal Studies* (March 1979), co-authored with Richard A. Posner.

“Should Indirect Purchasers Have Standing to Sue Under the Antitrust Laws?” An Economics Analysis of the Rule of Illinois Brick,” *University of Chicago Law Review* (Spring 1979), co-authored with Richard A. Posner.

“Benefits and Costs of Airline Mergers: A Case Study,” *The Bell Journal of Economics* (Spring, 1980), co-authored with Dennis W. Carlton and Richard A. Posner.

“Legal Change, Judicial Behavior and the Diversity Jurisdiction,” *Journal of Legal Studies* (March 1980), co-authored with Richard A. Posner.

“Joint and Multiple Tortfeasors: An Economic Analysis,” *Journal of Legal Studies* (June 1980), co-authored with Richard A. Posner.

“The Economics of Passing On: A Reply to Harris and Sullivan,” *University of Pennsylvania Law Review* (May 1980), co-authored with Richard A. Posner.

“Contribution Among Antitrust Defendants: A Legal and Economic Analysis,” *Journal of Law and Economics* (October 1980), co-authored with Frank H. Easterbrook and Richard A. Posner.

“An Introduction to the Economics of Antitrust,” an appendix in Richard A. Posner and Frank H. Easterbrook, Antitrust: Cases, Economic Notes and Other Materials (West, 2d ed. 1980).

“Market Power in Antitrust Cases,” *Harvard Law Review* (March 1981), co-authored with Richard A. Posner.

“The Positive Economic Theory of Tort Law,” *Georgia Law Review* (Summer 1981) co-authored with Richard A. Posner.

“An Economic Theory of Intentional Torts,” *International Review of Law and Economics* (December 1981) co-authored with Richard A. Posner.

“Causation in Tort Law: An Economic Approach,” *Journal of Legal Studies* (January 1983) co-authored with Richard A. Posner.

“Optimal Sanctions for Antitrust Violations,” *University of Chicago Law Review* (Spring 1983). Reprinted in *26 The Journal of Reprints for Antitrust Law and Economics*, 79 (1996).

“Harm to Competition: Cartels, Mergers and Joint Ventures,” *52 Antitrust Law Journal* Vol. 3. Reprinted in *Antitrust Policy in Transition: The Convergence of Law and Economics* (E. Fox and J. Halverson, eds.), American Bar Assn. (1984).

“Tort Law as a Regulatory Regime for Catastrophic Personal Injuries,” *Journal of Legal Studies* (August 1984) co-authored with Richard A. Posner.

“A Positive Economic Analysis of Products Liability,” *Journal of Legal Studies* (December 1985) co-authored with Richard A. Posner.

“New Light on Punitive Damages” *Regulation*, (Sept./Oct. 1986), co-authored with Richard A. Posner.

“Trademark Law: An Economic Perspective,” *Journal of Law and Economics* (October 1987), co-authored with Richard A. Posner. Reprinted in the *Intellectual Property Review* (1988).

“The Economics of Trademark Law,” *Trademark Reporter*, (May/June 1988), co-authored with Richard A. Posner.

Review of “The Firm, The Market and The Law” by Ronald Coase," *University of Chicago Law School Record*, (Fall 1988).

“An Economic Analysis of Copyright Law,” *Journal of Legal Studies*, (June 1989), co-authored with Richard A. Posner.

“Insolvency and Joint Torts: A Comment,” *Journal of Legal Studies* (June 1990).

“Some Economics of Trade Secret Law,” *Journal of Economic Perspectives*, (Winter, 1991) co-authored with David Friedman and Richard A. Posner.

“Copyright Protection of Letters, Diaries and Other Unpublished Works: An Economic Approach,” *Journal of Legal Studies* (January 1992).

“Sequential and Unitary Trials: An Economic Approach,” *Journal of Legal Studies* (January, 1993).

“The Influence of Economics on Law: A Quantitative Study,” *Journal of Law and Economics* (April 1993) co-authored with Richard A. Posner.

“The Economics of Anticipatory Adjudication,” *Journal of Legal Studies* (June 1994) co-authored with Richard A. Posner.

“Counterclaims: An Economic Analysis,” *International Review of Law & Economics* (Sept. 1994).

“Heavily Cited Articles in Law,” 7 *Kent Law Review* No. 3 (1996) co-authored with Richard A. Posner.

“The Economics of Legal Disputes Over The Ownership of Works of Art and Other Collectibles,” in *Essays in the Economics of the Arts* (ed. by V. A. Ginsburgh & P.-M. Menger) (Elsevier Science, 1996) co-authored with Richard A. Posner.

“The Art of Law and Economics: An Autobiographical Essay,” 41 *The American Economist*, No. 1 (Spring 1997), reprinted in “Passion and Craft, Economists at Work,” Michael Szenberg, ed. (Ann Arbor: Michigan University Press, 1999)

“Judicial Influence: A Citation Analysis of Federal Courts of Appeals Judges,” *Journal of Legal Studies* (June 1998) co-authored with Lawrence Lessig and Michael Solimine.

“Sequential and Bifurcated Trials” entry in *The New Palgrave Dictionary of Economics and the Law* (1998).

“Gary S. Becker Biography” entry in *The New Palgrave Dictionary of Economics and the Law* (1998).

“Citations, Age, Fame and the Web,” *Journal of Legal Studies* (January 2000) co-authored with Richard A. Posner.

“Introduction to Interpreting Legal Citations,” *Journal of Legal Studies* (January 2000).

“Winning the Art Lottery: The Economic Returns to the Ganz Collection,” *Recherches Economiques de Louvain, Louvain Economic Review* (Vol. 66(2) 2000).

“Harmless Error,” *Journal of Legal Studies* (January 2001) co-authored with Richard A. Posner.

“Copyright, Borrowed Images and Appropriation Art: An Economic Approach,” *George Mason Law Review* (Fall 2000).

“The Social Market for the Great Masters and Other Collectibles” with Gary S. Becker and Kevin M. Murphy in *Social Economics: Market Behavior in a Social Environment* Harvard Univ. Press (2000).

“What Has the Visual Artist’s Rights Act of 1990 Accomplished?” *Journal of Cultural Economics* (November 2001).

“Copyright” in A Handbook of Cultural Economics ed by Ruth Towse (Edward Elger 2003).

“Indefinitely Renewable Copyright” in *University of Chicago Law Review* (Spring 2003) co-authored with Richard A. Posner.

“The Empirical Side of Law and Economics,” *University of Chicago Law Review* (Winter 2003).

“Indirect Liability for Copyright Infringement: Napster and Beyond” in *Journal of Econ. Perspectives* (Spring 2003) co-authored with Douglas Lichtman.

“Acts of Terror with Guns: Multiple Shooting Victim Shootings,” in *The Bias Against Guns*, John Lott, ed. (Regnery 2003) co-authored with John Lott.

“Indirect Liability for Copyright Infringement: An Economic Perspective,” *Harvard Journal of Law & Technology* (Spring 2003) co-authored with Douglas Lichtman.

“The Test of Time: Does 20th Century American Art Survive?” in Contributions to Economic Analysis: The Economics of Art and Culture ed. by Victor Ginsburgh (Elsevier Science, 2004).

“An Empirical Analysis of Intellectual Property Litigation: Some Preliminary Results” *Houston Law Review* Vol 41 No. 3 (2004).

“An Empirical Analysis of the Patent Court” *University of Chicago Law Review* (Winter 2004) co-authored with Richard A. Posner.

The Political Economy of Intellectual Property Law, American Enterprise Institute-Brookings Joint Center for Regulatory Studies (2004) with Richard A. Posner.

“The Economic Analysis of Art Law” in Handbook of the Economics of Art and Culture, Vol. 1, ed. by Victor A. Ginsburgh and David Throsby (Elsevier B.V. 2006) co-authored with Daniel B. Levine.

“Posner on Beanie Babies,” 74 *University of Chicago Law Review* 1761 (2007)

“The Economics of Presidential Pardons and Commutations,” *Journal of Legal Studies* (Jan. 2009) co-authored with Richard A. Posner.

“Rational Judicial Behavior: A Statistical Study,” *Journal of Legal Analysis* (2009) (1(2): 775-831) co-authored with Richard A. Posner

“Inferring the Winning Party in the Supreme Court from the Pattern of Questioning at Oral Argument,” *Journal of Legal Studies* Vol. 39 (2010) co-authored with Lee Epstein and Richard A. Posner

- Research findings discussed/described/reviewed in the *New York Times*, June 27, 2012; *Detroit Free Press*, April 1, 2012; *Chicago Tribune*, March 31, 2012; *Los Angeles Times*, March 31, 2012; *New York Times*, March 30, 2012

“Why (and When) Judges Dissent: A Theoretical and Empirical Analysis,” *Journal of Legal Analysis* (2011) (3(1): 101-137) co-authored with Lee Epstein and Richard A. Posner

- Reprinted in *The Romanian Judges' Forum Review*. 2011 (3) pp. 118-141.
- Reprinted in *The Economics of Judicial Behaviour*, ed. Lee Epstein. Cheltenham, UK: Edward Elgar Publishing.

“Measuring Coase’s Influence,” *Journal of Law & Economics* (November 2011) co-authored with Sonia Lahr-Pastor;

“Are Even Unanimous Decisions in the U.S. Supreme Court Ideological?” *NW.U. L. REV.* Vol. 106 (No. 2) 699 (2012) co-authored with Lee Epstein and Richard A. Posner

- Described in *The New Republic*, July 1, 2014

“Was There Ever Such A Thing As Judicial Self-Restraint?” *Cal. L. Rev.* Vol. 100 (2012) 557 co-authored with Lee Epstein

“How Business Fares in the Supreme Court,” *Minn. L. Rev.* Vol. 97 (2013) 1431 co-authored with Lee Epstein and Richard A. Posner

- Reprinted in the *Corporate Practice Commentator*, 55: 505-543 (2013).
- Study described/mentioned in the *Economist*, March 11, 2015; *New York Times*, May 4, 2013; *ABA Journal*, May 7, 2013; *Huffington Post*, May 6, 2013; *Atlanta Journal-Constitution*, May 7, 2013; *Slate*, June 20, 2013; *Harvard Business Review*, June 21, 2013.

“Revisiting the Ideology Rankings of Supreme Court Justices,” *Journal of Legal Studies* Vol. 44 No. S1 (2015) co-authored with Lee Epstein and Richard A. Posner

- Study described in the *American Prospect* Spring 2015.

“The Best for Last: The Timing of U.S. Supreme Court Decisions,” *Duke L. Rev.* Vol. 64 (2015) co-authored with Lee Epstein and Richard A. Posner

- Study described in the *ABA Journal*, June 2015; *National Law Journal*, April 6, 2015; *New York Times*, May 4, 2013

“The Decision to Depart (or Not) from Precedent.” *NYU Law Review* Vol. 90 No. 4 (October 2015) co-authored with Lee Epstein and Adam Liptak

EXHIBIT G

HOWARD S. HOGAN

Gibson, Dunn & Crutcher LLP
1050 Connecticut Ave N.W., Suite 200
Washington, D.C. 20036
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hhogan@gibsondunn.com

EDUCATION

Georgetown University
Bachelor of Science, 1994
Major in Foreign Service
Magna Cum Laude, Phi Beta Kappa

New York University
Juris Doctorate, 1999
Cum Laude

CURRENT POSITION

Partner, Gibson, Dunn & Crutcher LLP

Howard S. Hogan is a partner in the Washington, D.C. office of Gibson, Dunn & Crutcher and is Co-Chair of the Fashion, Retail and Consumer Products group. Over the course of his career, Mr. Hogan has handled numerous complex cases in a variety of federal and state courts in several different substantive areas, but his practice focuses on intellectual property litigation and counseling, and in particular trademark matters. Mr. Hogan has represented various corporations and individuals in connection with trademark legal issues in a broad range of industries, including financial services, sports, fashion, cosmetics, entertainment, transportation, pharmaceuticals, and online services. A significant portion of Mr. Hogan's practice involves computer, Internet, and new media-related issues. He has represented and counseled a wide variety of companies on these issues, and assisted in negotiating resolutions to a significant number of disputes relating to trademarks.

Many of Mr. Hogan's matters have tested the application of traditional legal principles to the Internet and new media, such as in connection with issues of Internet jurisdiction, online contracting, and the application of trademark and copyright law to search engines, social media, and online sales. In particular, Mr. Hogan has been counsel of record in a number of matters in which the use of a trademark to trigger Internet advertising has been at issue, including but not limited to *Gucci America, Inc. v. Alibaba* (S.D.N.Y. 2014, 2015); *Rosetta Stone v. Google Inc.* (E.D. Va. 2009); *American Airlines, Inc. v. Yahoo! Inc.* (N.D. Tex. 2008); *American Airlines, Inc. v. Google Inc.* (N.D. Tex. 2007); *Aspen University Inc. v. Warren National University LLC* (E.D. Va. 2007); and *WeightWatchers.Com, Inc. v. Diet Patch, Inc.* (S.D.N.Y. 2004).

PAST EMPLOYMENT

Associate, Debevoise & Plimpton LLP (2000-04)
Law Clerk, Naomi Reice Buchwald, U.S. District Judge, Southern District of New York
(1999-2000)
Team Leader, AmeriCorps National Civilian Community Corps (1994-96)

PROFESSIONAL ACTIVITIES

1. Member, Famous and Well Known Marks Committee, International Trademark Association; Chair, Federal Litigation Task Force. (2015-present)
2. Board Member, Washington Lawyers' Committee for Civil Rights and Urban Affairs. (2016-present)
3. Advisory Council Member, Moving Picture Institute (2011-present)
4. Speaker, Design Law 2016 Symposium. (2016)
5. Speaker, Comic Book Law School, Comic-Con San Diego (2016)
6. Speaker, 14th U.S. Patent and Trademark Office – George Washington University Law School China IP Program. (2016)
7. Speaker, U.S. Department of Commerce and China's Ministry of Commerce (MOFCOM) 20th U.S.-China Legal Exchange. (2016)
8. Program co-chair & speaker, Fashion and Retail Law 2016: Trends and Developments, Practising Law Institute. (2016)
9. Speaker, National Press Club Design Patent Panel. (2016)
10. Speaker, Law Luxury Summit 2016. (2016)
11. Member, Anti-Counterfeiting Committee, International Trademark Association; Chair, Policy Task Force. (2011-15)
12. Member, Steering Committee, Northern Virginia Technology Council General Council Committee. (2010-15)
13. Speaker, The Law of Documentaries 101: Copyright and Media Law Issues, Moving Picture Institute Masterclass (2015)
14. Program co-chair & speaker, Fashion and Retail Law 2015: Trends and Developments, Practising Law Institute. (2015)
15. Speaker, Tech Chat: The Domain Name System in Transition, Northern Virginia Technology Council. (2015)
16. Speaker, Collision Course: Design Patents and the Convergence of Existing Intellectual Property Regimes, Penn Intellectual Property Group Symposium. (2015)
17. Speaker, Tech Chat: What is the Future of the FCC's 2012 Spectrum Act?, Northern Virginia Technology Council. (2014)

18. Speaker, Small Business Law & Entrepreneurship Seminar, Georgetown University Law School. (2014)
19. Speaker, Legal Protection for New Product Designs - from Mobile Technologies to Fashion, New York City Bar. (2014)
20. Speaker, Fashion Law, National Business Institute. (2014)
21. Speaker, "Choosing Your Brand: The Importance of Trademark Prosecution" and "Outsourcing – Ethical and Legislative Considerations," Global Outsourcing Association of Lawyers. (2014)
22. Speaker, Fashion Tech: Evolution of the Online Fashion Landscape, Fashion Law Week. (2014)
23. Speaker, Mod Mavericks: Championing a Legal Career within the Fashion Industry, Fashion Law Week. (2013)
24. Speaker, The Omni-Channel Experience, Gibson Dunn Webcast. (2013)
25. Speaker, Fashion Law - The Global Challenge, Practising Law Institute. (2012)
26. Speaker, Competitor's Use of Keyword Advertising and Search Engine Optimization (SEO): Hey! They're Using My Trademarks!, International Trademark Association. (2012)
27. Speaker, Practical Strategies for Maintaining Data Privacy, Association of Corporate Counsel, WMACCA Chapter. (2012)
28. Speaker, Civil Seizure Remedies: Federal and Corporate Solutions, National Intellectual Property Rights Coordination Center's 2012 Symposium. (2012)
29. Speaker, Advanced Trademark Law: Critical Issues You Need to Know, National Constitution Center. (2011)
30. Speaker, Social Media & IP: Critical Issues in the Social Network Environment, National Constitution Center. (2011)
31. Speaker, Data Customization and Privacy – Can They Coexist?, South by SouthWest (SXSW). (2011)
32. Speaker, Critical Developments in Social Media Law, Northern Virginia Tech Council. (2011)
33. Speaker, Recent Trademark Rulings in Europe and the U.S. Relating to Purchasing of Competitors' Trademarks for Search Advertising, Mirsky & Co. Podcast. (2011)
34. Speaker, Trademark Essentials: The Nuts and Bolts of Protection & Enforcement, National Constitution Center. (2010)
35. Speaker, Recent Developments in Survey Evidence, American Bar Association Section on Intellectual Property Annual Conference. (2010)
36. Speaker, Recent Trademark Rulings in Europe and the U.S. Relating to Purchasing of Competitors' Trademarks for Search Advertising, District of Columbia Bar Arts, Entertainment, Media and Sports Law Section Media Law Committee. (2010)
37. Speaker, New Trends in Anti-Counterfeiting Litigation, Gibson Dunn Webcast. (2010)

38. Speaker, Trademark Essentials: The Nuts and Bolts of Protection & Enforcement, National Constitution Center. (2009)
39. Speaker, Trademark Essentials: The Nuts and Bolts of Protection & Enforcement, National Constitution Center. (2008)
40. Speaker, Domain Names: IP Management, Protection and Litigation Strategies, National Constitution Center. (2008)
41. Speaker, What Is The Value of Your Program's Name? Trademark Fundamentals, Meals on Wheels Association of America Annual Conference. (2008)
42. Speaker, Managing Metadata in Your Law Practice: Guarding Against this Invisible Threat, Defense Research Institute Product Liability Conference. (2007)
43. Speaker, Managing Metadata in Your Law Practice: Guarding Against this Invisible Threat, National Constitution Center. (2006)

HONORS

1. "World's Leading Trademark Professionals," *World Trademark Review* (2017)
2. Cited as "Notable Practitioner" in Chambers USA Guide for Retail, Band 1 Ranking for Gibson Dunn (2014)
3. *Super Lawyer* (2013)
4. Friend of the Year, Meals on Wheels Association of America (2008)

PUBLICATIONS

1. Author, "IP Policy Under Trump" (working title), Forbes.com. (expected 2017)
2. Co-author, annual update for Intellectual Property Law in Cyberspace, chapters on "Unique Online Trademark Issues" and "Domain Name Registration, Maintenance and Protection," Bloomberg/BNA. (2017)
3. Co-author, Follow the Money, *World Trademark Review*. (2016)
4. Co-author, annual update for Intellectual Property Law in Cyberspace, chapters on "Unique Online Trademark Issues" and "Domain Name Registration, Maintenance and Protection," Bloomberg/BNA. (2016)
5. Co-author, IP Suit Over Katy Perry Dress Faces Big Hurdles, *Law360*. (2015)
6. Co-author, Lynch provides a 'Beast Mode' seminar on use of trademarks, *Sports Business Journal*. (2015)
7. Co-author, Unpacking Hargis: The Supreme Court Has Announced That Issues Necessarily Decided by the TTAB in Contested Trademark Proceedings May Have Preclusive Effect in Subsequent Litigation. What Does That Mean For Trademark Holders?, *BNA's Patent, Trademark & Copyright Journal*. (2015)
8. Author, Sixth Circuit Delves into Murky Issue of Conceptual Separability over Copyrightability of Cheerleading Uniform Designs, *Fashion Law and Business Report*. (2015)

9. Co-author, Lynch Provides a ‘Beast Mode’ Seminar On Use of Trademarks, Sports Business Daily. (2015)
10. Author, More retailers roll out in-store “beacons” to encourage customers to make purchases, Fashion Law and Business Report. (2015)
11. Editor, Fashion and Retail Law 2015: Trends and Developments, Practising Law Institute. (2015)
12. Author, Recent Developments Highlight Continuing Risks for Retailers Related to Data Privacy and Cybersecurity, Fashion Law and Business Report. (2015)
13. Update on Cyberattacks and Data Breaches Provides Useful Information for Retail Industry, Fashion Law and Business Report. (2015)
14. Co-author, Using Trademarks As Keywords: Empirical Evidence of Confusion, 105 Trademark Rep. 732. (2015)
15. Author, New Supreme Court Case Ups the Ante on Trademark Opposition Proceedings, Fashion Law and Business Report. (2015)
16. Author, Fate of Lupita Nyong’o’s Oscar dress puts spotlight on need to secure high-profile fashions, Fashion Law and Business Report. (2015)
17. Co-author, annual update for Intellectual Property Law in Cyberspace, chapters on “Unique Online Trademark Issues” and “Domain Name Registration, Maintenance and Protection,” Bloomberg/BNA. (2015)
18. Co-author, U.S. Commerce Department Announces Plan to Accelerate Transition to Private Management of the Domain Name System, IPWatchdog.com. (2014)
19. Author, A Legal Perspective on “Possessions and the Extended Self” in the Digital Age, The Journal of Marketing Theory and Practice. (2014)
20. Author, The Glamorous Side of Intellectual Property Law, National Law Journal. (2014)
21. Author, Retail Litigation Center’s 2014 Annual Report Details Its Efforts to Influence Courts in Support of Retailers, Fashion Law and Business Report. (2014)
22. Author, Michaels Stores Wins Another Round in Wage & Hour Suits Against Retailers, Fashion Law and Business Report. (2014)
23. Author, California District Court Decision Enforces a Website’s Terms of Service Even as Applied to Minors, Fashion Law and Business Report. (2014)
24. Author, New U.S. Supreme Court Case Creates Uniform Test for False Advertising Standing, Enforces a Proximate Cause Defense to Statutory Claims, But May Be Most Popular With Gray Marketeers, Fashion Law and Business Report. (2014)
25. Companies that allow employees to use social media accounts or personal communication devices for company business should be wary of new cases addressing their discovery obligations, Fashion Law and Business Report. (2014)
26. Co-author, annual update for Intellectual Property Law in Cyberspace, chapters on “Unique Online Trademark Issues” and “Domain Name Registration, Maintenance and Protection,” Bloomberg/BNA. (2014)

27. Co-author, Key Legal Issues for Online Retailers to Be Aware of, TotalRetail). (2013)
28. Co-author, Fashion Law and Business: Brands & Retailers, IP Watchdog. (2013)
29. Co-author, Fashion Law and Business: Brands & Retailers, Practising Law Institute. (2013)
30. Author, Don't Underestimate The Harm Caused By Counterfeiters, Law360. (2013)
31. Author, Class Actions Can Pose Challenges to Fashion Companies, But Defenses Are Available, Fashion Law and Business Report. (2013)
32. Co-author, U.S. Supreme Court holds that a covenant not to sue can moot a trademark challenge, Lexology. (2013)
33. Co-author, annual update for Intellectual Property Law in Cyberspace, chapters on "Unique Online Trademark Issues" and "Domain Name Registration, Maintenance and Protection," Bloomberg/BNA. (2013)
34. Author, Search Engine Advertising Trademark Claims, Intellectual Property Strategist. (2011)
35. Co-author, Courts Continue to Question Whether Using the Trademarks of Others to Trigger Search Engine Advertising Gives Rise to Trademark Liability, BNA's Patent, Trademark and Copyright Journal. (2011)
36. Co-author, New decision confirms federal courts' power to freeze counterfeiters' overseas assets and order production of foreign bank records, Financial Fraud Law Report / Lexology. (2011)
37. Co-author, U.S. Supreme Court strikes down law regulating use of medical data on free speech grounds, Lexology. (2011)
38. Co-author, Ninth Circuit rules that emailed receipts do not trigger the identity theft provisions of the Fair and Accurate Credit Transactions Act, Lexology. (2011)
39. Co-author, Intellectual Property Law in Cyberspace, chapters on "Unique Online Trademark Issues" and "Domain Name Registration, Maintenance and Protection," Bloomberg/BNA. (2011)
40. Co-author, Important new decision establishes that credit card processors may be held liable as contributory trademark infringers for knowingly servicing merchants who sell counterfeits, Lexology. (2010)

CHARITABLE POSITIONS

1. Board Member, Jewish National Fund Washington, DC Board; Co-chair, Northern Virginia Committee. (2013-present)
2. Board Member, National Foundation to End Senior Hunger; Secretary/Treasurer. (2012-present)
3. Board Member, Meals on Wheels Association of America Foundation / Meals on Wheels Research Foundation (2010-2012)

EXHIBIT H

RONALD C. GOODSTEIN

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N. Potomac, MD 20878
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ACADEMIC EMPLOYMENT

Associate Professor of Marketing

The McDonough School of Business, Georgetown University, July 1998-Present.

Courses Taught: Marketing Strategy (Undergraduate Capstone Course)
Core Marketing Strategy (MBA/IEMBA)
Integrated Marketing Communications (MBA)
Principles of Marketing (Undergraduate)

Associate Professor of Marketing

Indiana University School of Business, July 1996-June 1998.

Courses Taught: Core Marketing Strategy (MBA)
Advertising and Promotion Management (MBA)

Visiting Associate Professor of Marketing

The Wharton School, University of Pennsylvania, July 1995-June 1996.

Courses Taught: Advertising Policy (Undergraduate/MBA)
Marketing Strategy (MBA)

Assistant Professor of Marketing

Anderson Graduate School of Management, UCLA, July 1989-June 1995.

Courses Taught: Advertising Policy (MBA, FEMBA)
Consumer Behavior (Ph.D.)
Elements of Marketing (MBA)

Selected Executive Education and Consulting Clients (Topics - Equity, Positioning, IMC, Value Development)

Verizon; Sprint; HSBC; Microsoft; Assurant; LG; IBM; Credit Suisse Private Banking;
Siemens; Lexis/Nexis; CIAB and AICPCU; Rochester General Hospital; NASA; Dow;
Harcros Chemical; Kimberly-Clark; Cedars Sinai Hospital; Lincoln National; GlaxoSmithKline;
Headstart; Hughes Aircraft Co.; Johnson & Johnson; ABB; Schneider Electric; Prudential;
Ingersol Rand

EDUCATION

Ph.D. Marketing, Fuqua School of Business, Duke University, September 1990.

Thesis: *How Do Consumers Screen Advertisements? A Heuristic Model of Ad Processing*

B.S. Commerce with Distinction, McIntire School of Commerce, University of Virginia, May 1982.

Concentrations: Marketing and Organizational Management

RONALD C. GOODSTEIN

REFEREED ARTICLES

Epstein, Leonardo D., Arturo Flores, Ronald C. Goodstein, and Sandra J. Milberg (2016), "A New Approach to Measuring Retail Promotion Effectiveness: The Case of Store Traffic in Chile," *Journal of Business Research*, 69 (10), 4394-4402.

Goodstein, Ronald C., Gary J. Bamossy, Basil G. Englis, and Howard S. Hogan (2015), "Using Trademarks as Keywords: Empirical Evidence of Confusion," *The Trademark Reporter*, Vol. 105, 732-771.

Dimofte, Claudiu V., Ronald C. Goodstein, and Anne M. Brumbaugh (2015), "A Social Identity Perspective on Aspirational Advertising: Implicit Threats to Collective Self-esteem and Strategies to Overcome Them," *Journal of Consumer Psychology*, 25 (3), 416-430.

Hardesty, David A., Ronald C. Goodstein, Dhruv Grewal, Anthony D. Miyazaki, and Praveen Kopalle (2014), "The Accuracy of Scanned Prices," *Journal of Retailing*, 90 (2), 291-300.

Roggeveen, Anne L., Ronald C. Goodstein, and Dhruv Grewal (2014), "Improving the Effect of Guarantees: The Role of a Retailer's Reputation," *Journal of Retailing*, 90 (March), 27-39.

Honors: 2016 Davidson Award for Best Article of 2014

Milberg, Sandra J., Ronald C. Goodstein, Francisca Sinn, Andres Cuneo, and Leonardo D. Epstein (2013), "Call Back the Jury: Reinvestigating the Effects of Fit and Parent Brand Quality in Determining Brand Extension Success," *Journal of Marketing Management*, 29 (February), 374-390.

Milberg, Sandra J., Francisca Sinn, and Ronald C. Goodstein (2010), "Consumer Reactions to Brand Extensions in a Competitive Context: Does Fit Still Matter?" *Journal of Consumer Research*, 37 (October), 543-553.

Puccinelli, Nancy M., Ronald C. Goodstein, Dhruv Grewal, Robert Price, Priya Raghubir, David Stewart (2009), "Customer Experience Management in Retailing: Understanding the Buying Process," *Journal of Retailing*, 85 (March), 15-30.

JR Award for Most Cited Paper within a Five-Year Window.

Sinn, Francisca, Sandra J. Milberg, Leonardo Epstein, and Ronald C. Goodstein (2007), "Compromising the Compromise Effect: Brands Matter," *Marketing Letters*, 18, 223-236.

Andreasen, Alan R., Ronald C. Goodstein, and Joan W. Wilson (2005), "Transferring Marketing Knowledge to the Nonprofit Sector," *California Management Review*, 47 (4), 46-67.

Miyazaki, Anthony, Dhruv Grewal and Ronald C. Goodstein (2005), "The Effect of Multiple Extrinsic Cues on Quality Perceptions: A Matter of Consistency," *Journal of Consumer Research*, 32 (1), 146-153.

Goodstein, Ronald C., Deborah A. Cours, Brian K. Jorgensen, and Jaideep Sengupta (2005), "The Positive Effect of Negative Advertising: It's a Matter of Time," in *Applying Social Cognition to Consumer-Focused Strategy*, F. Kardes, P. Herr, and J. Nantel, eds., Mahwah, NJ: Lawrence Erlbaum Associates, 319-330.

RONALD C. GOODSTEIN

REFEREED ARTICLES (continued)

Gallagher, William E. and Ronald C. Goodstein (2004), "Inference Versus Speculation in Trademark Infringement Litigation: Abandoning the Fiction of the Vulcan Mind Meld," *Trademark Reporter*, 94 (Nov.-Dec.), 1229-1270.

Devon DeVecchio and Ronald C. Goodstein (2004), "Moving Beyond Race: The Role of Ethnicity in Evaluating Celebrity Endorsers," in *Diversity in Advertising*, P. Devine, C. Haugvedt, W. Lee, J. Williams, eds., Mahwah, NJ: Lawrence Erlbaum Associates.

Campbell, Margaret C. and Ronald C. Goodstein (2001), "The Moderating Effect of Perceived Risk on Consumers' Evaluations of Product Incongruity: Preferences for the Norm," *Journal of Consumer Research*, 28 (December 2001), 439-449.

Aylesworth, Andrew, Ronald C. Goodstein, and Ajay Kalra (1999), "Effect of Archetypal Embeds on Feelings: An Indirect Route to Affecting Attitudes?" *Journal of Advertising*, 28 (Fall), 74-81.

Kalra, Ajay and Ronald C. Goodstein (1998), "The Impact of Advertising Positioning Strategies on Consumer Price Sensitivity," *Journal of Marketing Research*, 35 (May), 210-224.

Reprinted as "Advertising Positioning Strategies," *Economic Intuition*, (Fall), 1998.

Sengupta, Jaideep, Ronald C. Goodstein, and David Boninger (1997), "All Cues Are Not Created Equal: Obtaining Low Involvement Attitude Persistence," *Journal of Consumer Research*, 23 (March), 351-361.

Goodstein, Ronald C. and Jennifer Edson Escalas (1995), "Improving Pricing Accuracy at the Supermarket: Electronic Shelving Systems and Public Policy" *Journal of Public Policy & Marketing*, 14 (2), 216-224.

Goodstein, Ronald C. and Jennifer Edson Escalas (1994), "UPC Scanner Pricing Accuracy: A Review of Research and Managerial Implications," *Pricing Strategy & Practice: An International Journal*, 2 (1), 4-10.

Goodstein, Ronald C. (1994), "UPC Scanner Pricing Systems: Are They Accurate?" *Journal of Marketing*, 58 (April), 20-30.

Reprinted as "UPC Scanner Pricing Systems: Are They Accurate?," *Stores Magazine: Retailing Review*, University of Florida Center for Retailing Education and Research, (Summer), 1994.

Goodstein, Ronald C. (1993), "Category-Based Applications and Extensions in Advertising: Motivating More Extensive Ad Processing," *Journal of Consumer Research*, 20 (June), 87-99.

Reprinted as "Las categorías y sus aplicaciones a la publicidad," *Quantum*, 1 (Diciembre), 1993.

Moore, Michael J., William Boulding, and Ronald C. Goodstein (1991), "Pioneering and Market Share: Is Entry Time Endogenous and Does It Matter?" *Journal of Marketing Research*, 28 (February), 97-104.

Goodstein, Ronald C., Julie A. Edell, and Marian C. Burke (1990), "When Are Feelings Generated? Assessing the Presence and Reliability of Feelings Generated in Pretests," in *Emotion In Advertising*, S. Agres, J. Edell and T. Dubitsky, eds., 175-193.

RONALD C. GOODSTEIN

SELECT CONFERENCE PRESENTATIONS & PROCEEDINGS

Anne Roggeveen, Jens Nordfält, Dhruv Grewal, and Ronald C. Goodstein (2016), "The Impact of Congruency of a Special Display with Its Surroundings," presented at Academy of Marketing Science, Orlando, Florida.

Sandra J. Milberg, Ronald C. Goodstein, Andres Cuneo (2016), "Critical Realities: Putting the "Market" into Marketing Research," Georgetown University Research Seminar Series.

Anne Roggeveen, Jens Nordfält, Dhruv Grewal, and Ronald C. Goodstein (2016) "Product Placement: Does Congruity Matter?" presented at American Collegiate Retailing Association Conference, Secaucus, New Jersey; presented at Summer AMA Conference, Chicago, IL, August 2015.

Anne Roggeveen, Dhruv Grewal, and Ronald Goodstein (2010) ,"Combining High-Scope and Low-Scope Retail Cues: an Integrative Perspective ", in NA - Advances in Consumer Research Volume 37, eds. Margaret C. Campbell, Jeff Inman, and Rik Pieters, Duluth, MN : Association for Consumer Research, Pages: 889-890 .

Roggeveen, Anne, Ronald C. Goodstein, and Dhruv Grewal (2008), "How Does the Presence of a Guarantee Cue Impact Evaluations of a Retailer?: It Depends on Cue Typicality and the Reputation Cue's Valence," Academy of Marketing Science Conference, BEST PAPER IN TRACK AWARD.

Milberg, Sandra, Francisca Sinn, and Ronald C. Goodstein, "Re-Examining the Wisdom of Brand Extensions: The Effects of Competitor Familiarity and Product Information on Risk and Choice," *Latin American Advances in Consumer Research*, Volume 1, 2006.

Galinsky, Karen and Ronald C. Goodstein. "Targeting the Hispanic Populace: Creating Hispanic Targeted Ads," in *Proceedings of the Society for Consumer Psychology Annual Conference*, J. Edell and R. Goodstein, eds., Winter 2002.

Goodstein, Ronald C., "The Role of Ethnicity in Celebrity Endorsements," in *Abstracts from the 15th Annual Faculty Research Forum of the Washington Consortium of Business Schools*, R. Rustagi, ed., April 1999.

Campbell, Margaret and Ronald C. Goodstein, "The Moderating Role of Perceived Risk on the Effects of Congruity on Evaluations," in *Proceedings of the Society for Consumer Psychology Annual Conference*, C. Pechmann and R. Ratneshwar, eds., Winter 1997.

Goodstein, Ronald C., "Extending Measures of Advertising Effectiveness: Ads' Effects on Price Sensitivity," in *Advances in Consumer Research*, M. Brucks and D. MacInnis, eds., 23, 1996.

Goodstein, Ronald C., "Mood Effects in Consumer Behavior: A Unifying Theme," in *Advances in Consumer Research*, C. Allen and D. John, eds., 21, 1994.

Grewal, Dhruv and Ronald C. Goodstein, "Societal and Public Policy Issue with Retail Pricing," in *Advances in Consumer Research*, L. McAlister and M. Rothschild, eds., 1993.

Kassarjian, Harold H., Ronald C. Goodstein, and Jennifer Escalas, "Scanner Bar Codes and Consumer Protection: An Empirical Study," in *Marketing for Europe - Marketing for the Future: The Proceedings of the 21st Annual Conference of the European Marketing Academy*, Aarhus, ed., 1992.

Curren, Mary T. and Ronald C. Goodstein, "Affect and Consumer Behavior: Examining the Role of Emotions on Consumers' Actions and Perceptions," in *Advances in Consumer Research*, R. Holman and M. Solomon, ed., 1991.

RONALD C. GOODSTEIN

EDITED VOLUMES

Proceedings of the 2002 Society for Consumer Psychology Annual Conference, with Julie A. Edell.

“Enhancing Knowledge Development in Marketing,” *1998 AMA Educators’ Proceedings (Vol. 9)*, with Scott MacKenzie.

PUBLISHED CASES

Beaudin, C.L., M. Senak, and R.C. Goodstein, “Strategic Planning at AIDS Project L.A.,” in *Nonprofit Boards and Leadership: Cases on Governance, Change and Board-Staff Dynamics*, M.M. Wood (ed.), San Francisco, Jossey-Bass (1996).

Beaudin, C.L., M. Senak, and R.C. Goodstein, “AIDS Project Los Angeles,” *Cases in Nonprofit Governance (CGN #12), Program on Nonprofit Organizations/Institutions for Social and Policy Studies*, Yale University (1995).

PUBLISHED CHAPTERS

Kassarjian, Harold H. and Ronald C. Goodstein (Beaudin, C.L., M. Senak, and R.C. Goodstein, “The Emergence of Consumer Research (Chapter 4), in *The SAGE Handbook of Marketing Theory*, Pauline Maclaran, Barbara Stern (eds), Thousand Oaks, SAGE Publications (2010).

SELECT WORK IN PROGRESS

Goodstein, Ronald C., Ajay Kalra, and Claudiu V. Dimofte, “Context Sensitive Advertising: A Fitting Story,” under fourth round review at the *Journal of Consumer Psychology* (working paper available).

ACADEMIC HONORS AND AWARDS

Secretary/Treasurer Elect for Society for Consumer Psychology, 2008.
American Marketing Association Hall of Fame Award, Washington, DC 2004.
Miller- Sherrerd Core Teaching Award, Wharton, Spring 1997 (*in absentia*)
Summer Research Grant, IU, 1996-1998.
Core Faculty Teaching Award, Wharton, Spring 1996.
Citibank Professor of the Year Award, UCLA, 1995.
UCLA Outstanding Faculty Member, 1993, 1995 Business Week Guide.
George Robbins Teaching Award, UCLA, 1993.
Marketing Professor of the Year, UCLA, 1991, 1993.
AMA Doctoral Consortium Fellow, 1988.
Beta Gamma Sigma/Alpha Mu Alpha.

PROFESSIONAL SERVICE

Reviewing for Academic Publications

Editorial Board, *Journal of Retailing*, *Marketing Letters*, *Journal of the Academy of Marketing Science*. Reviewer, *Journal of Consumer Research*, *Journal of Marketing Research*, *Journal of Marketing*, *Journal of Consumer Psychology*, *Journal of Retailing*, *Journal of Advertising*, *Marketing Letters*, *California Management Review*.

RONALD C. GOODSTEIN

PROFESSIONAL SERVICE (continued)

Reviewing for Professional Conference Publications

American Psychological Association Annual Meeting, Div. 23 *Chair*, 2011.
AMA. Summer Educator's Conference, *Consumer Behavior Track Chair*, 2005.
Society for Consumer Psychology Annual Meeting, *Co-Chair*, 2001.
AMA. Summer Educator's Conference, *Co-Chair*, Summer 1998.
Association for Consumer Research, Program Committee (1998-2017 various years).

Reviewing for Professional Conference Publications

Association for Consumer Research.
Western Decision Sciences Institute.
Society for Consumer Psychology Annual Meeting.
Southern Marketing Association's Annual Meetings.
Southwestern Marketing Association's Annual Meeting.
AMA Winter Educator's Conference.
AMA Summer Educators' Conference.

4 Years of Prior Testimony & Reports

Odyssey Wireless, Inc. v. Motorola Mobility, Llc., No. 3:15-cv-01741-H-RBB, United States District Court Southern District of California, San Diego Division.

Odyssey Wireless, Inc. v. Samsung Electronics Company, Ltd., No. 3:15-cv-01738-H-RBB, United States District Court Southern District of California, San Diego Division.

United States National Soccer Team Players Association, Inc. v. US Soccer Federation, Inc., US District Court for the Southern District of New York.

Weight Watchers International, Inc. v. Curves International, Inc., Civil Action No. 1:2009-CV-08972, United States District Court Southern District New York.

Soft Serve Inc. dba Sprinkles v. Sprinkles Cupcakes, Inc., Opposition Number 91194188 (parent), United States Patent and Trademark Office before the Trademark Trial and Appeal Board.

Spark Networks USA, LLC v. Smooch Labs Inc., CIVIL ACTION 14-cv-9027 (LOS), US District Court for the Southern District of New York.

Café Phillips v. Sandwiches By Phillip, Declaration in Support of Temporary Restraining Order, Washington, DC.

Association for Financial Professionals v. Institute of Managerial Accountants., Attorney Docket No. 361184US56, United States Patent and Trademark Office before The Trademark Trial and Appeal Board.

Subcommittee on Oversight & Investigations: Oversight Hearing on Media Outreach to Veteran, Congressional Expert Testimony to the Committee of Veterans' Affairs. *Soft Serve, Inc. v. Sprinkles Cupcakes, Inc.*, in the United States Patent and Trademark Office before the Trademark Trial and Appeal Board

Lester Edelberg v. Gale Edelberg, case No. 30-2012-00597092-CU-BC-CJC (Assigned to Judge David Chaffee, Dept. C-20, Superior Court of California County of Orange, Central Justice Center, Santa Ana

April Kruger and others similarly situated v. Wyeth Pharmaceuticals, CASE NO. 03-CV-2496 JAH (AJB), United States District Court Southern Division of California.

Tressa Gattimella, and KRISTINA LENGYEL individually and on behalf of all others similarly situated v. Michael Kors (USA), Inc. CASE NO. 14 CIV. 5731 (WHP), United States District Court Southern Division of New York.

CI GAMES S.A., a Corporation of Poland, v. DESTINATION FILMS DISTRIBUTION COMPANY, INC., a California corporation, SONY PICTURES ENTERTAINMENT INC., a

California Corporation, UFO INTERNATINOAL PRODUCTIONS, LLC, a California Limited Liability Company, and DOES 1-5, Case No. 2:16-cv-05719-SVW-JC, United States District Court Central District of California.

EXHIBIT I

**KENT D. VAN LIERE, Ph.D.
MANAGING DIRECTOR**

Dr. Van Liere is a Managing Director at NERA with expertise in survey research, sampling, statistics, and market research. He has testified at trial and in deposition in both state and federal courts on the application of statistical methods, sampling, and the use of surveys in a wide range of cases including anti-trust, false and deceptive advertising, intellectual property, labor and product liability mass torts. In addition to major law firms, Dr. Van Liere has testified on behalf of the Federal Trade Commission, Department of Justice, and the Internal Revenue Service.

Dr. Van Liere's regularly reviews, designs and conducts surveys for litigation on topics related to likelihood of confusion, secondary meaning, patent issues, false advertising, misrepresentations, purchase and use behaviors, cross shopping behavior, employee behavior, and other issues involving consumer or business decision makers' perceptions and behaviors.

Dr. Van Liere also regularly designs sampling plans and analyzes samples of documents, databases, products, businesses, and consumers for purposes of extrapolating or generalizing results from a sample to a relevant population.

Prior to joining NERA in 2006, Dr. Van Liere served as a Principal of Freeman Sullivan where he directed survey research and sampling projects for litigation; President of Primen (a firm that conducted market research for the energy/infrastructure industry); Senior Vice President of Hagler Bailly where he directed the survey research and market analysis practice; President/Principal of HBRS (a highly regarded survey research firm); and Associate Professor at the University of Tennessee where he taught statistics, sampling, and survey research methods at both the graduate and undergraduate levels.

Education

Washington State University

Ph.D. Sociology, specialization in research methods and statistics (1979).

Washington State University

M.A. Sociology, (1976).

Hamline University

B.A. Sociology, with Honors (1974).

Professional Experience

NERA Economic Consulting

2006-present Managing Director/Senior Vice President (2013-present), Vice President (2006-2012)

Freeman, Sullivan & Co., San Francisco

2002-2005 Principal

Primen (a joint venture of the Electric Power Research Institute and the Gas Research Institute)

2000-2002 President and Chief Executive Officer

Hagler Bailly, Inc. (HBIX)

1995-2000 Senior Vice President (1997-2000), Director (1995-1997)

HBRS, Inc., Madison, WI

1985-1995 President (1992-1995), Principal (1985-1992)

University of Wisconsin-Madison

1985 Visiting Associate Professor, Department of Rural Sociology (summer)

University of Tennessee

1978-1985 Associate Professor (with tenure), Department of Sociology (1984-1985), Assistant Professor, Department of Sociology (1978-1984)

Tennessee Valley Authority

1983-1984 Visiting Analyst, Strategic Planning Staff, Office of Planning and Budget

Expert Analysis and Testimony

Trademark, Trade Dress, and Patent Matters

The Regents of the University of California v. Medivation, Inc. and Medivation Prostate Therapeutics, Inc., San Francisco Superior Court—Opinions regarding surveys used to benchmark patent licensing terms and conditions. (Summary of Opinions: November, 2016; Deposition: January, 2017).

Alzheimer’s Foundation of America, Inc. v. Alzheimer’s Disease and Related Disorders Association, Inc., United States District Court, Southern District of New York—Expert report on surveys to measure likelihood of confusion related to Alzheimer Foundation trademarks and use of those marks in keyword advertising. (Expert Report: November, 2016).

In RE BIOGEN ’755 Patent Litigation, United States District Court, District of New Jersey—Expert rebuttal report regarding a survey conducted to measure switching and substitution choices among doctors that treat Multiple Sclerosis. (Expert Report: September, 2016; Deposition: November, 2016).

Variety Stores, Inc. v. Wal-Mart Stores, Inc., United States District Court, Eastern District of North Carolina, Western Division—Expert report on a survey to measure the relative importance of brand in consumer choices in a trademark dispute regarding BBQ grills. (Expert Report: September 2015; Rebuttal Declaration: March 2016; Supplemental Report, August 2016; Deposition: September 2016; Trial Testimony: October 2016).

C5 Medical Werks, LLC & Coorstek Medical, LLC v. CeramTec GMBH, United States District Court, District of Colorado—Expert report on likelihood of confusion regarding trade dress for a hip replacement product. (Expert Report: April, 2016; Deposition, July 2016; Trial Testimony: October 2016).

ORIX USA Corporation v. Preston Hollow Capital LLC, United States District Court, Eastern District of Texas, Texarkana Division—Expert rebuttal report regarding likelihood of confusion study of consumers in the financial services markets. (Expert Report: July, 2016; Deposition, July, 2016; Supplemental Declaration: September, 2016)

SRI International, Inc. v. Cisco Systems, Inc., United States District Court, District of Delaware—Expert report on a survey to measure use of various IDS/IPS features in network security hardware and software and a conjoint survey to measure the value consumers assign to the features related to two patents in a patent dispute matter. (Expert Report: August, 2015; Deposition: October, 2015; Trial Testimony: May, 2016).

Weber-Stephens Products LLC v. Sears Holding Corporation and Sears, Roebuck and Co, United States District Court, Northern District of Illinois, Eastern Division—Expert rebuttal report on a secondary meaning survey in a trade dress infringement matter. (Expert Report: November, 2014; Deposition: January, 2015).

Pat & Oscar’s Concepts, Inc. v. Tim Foley et al., Superior Court State of California, county of San Diego—Expert rebuttal report on the use of a mystery shopper survey to assess consumer likelihood of confusion and passing off. (Deposition: December, 2014).

The Sherwin-Williams Company v. The Wooster Brush Company, United States District Court, Northern District of Ohio—Expert report on likelihood of confusion related to the overall look and design and trade dress of products in the paint brush market. (Expert Report: February 2014; Deposition: May 2014).

Rembrandt Social Media LP v. Facebook, Inc. and Adthis, Inc., United States District Court, Eastern District of Virginia, Alexandria Division—Expert report on a survey to measure the relative importance of various attributes in a patent dispute involving social media. (Expert Report: June 2013; Surrebuttal Report: August, 2013).

Frito-Lay North America, Inc. v. Medallion Foods, Inc. and Ralcorp Holdings, Inc. United States District Court, Eastern District of Texas, Sherman Division—Expert report on likelihood of confusion over the look and design of a tortilla chip in a trade dress and patent matter. (Expert Report: October, 2012; Deposition, November 2012; Trial Testimony, February 2013).

Catalina Marketing Corporation v. Coupons, Inc., Judicial Arbitration and Mediation Services (JAMS)—Declarations and arbitration testimony regarding sampling in a patent infringement matter involving online coupons. (Declarations: May/June/August 2012, Report: September 2012; Arbitration Testimony: Nov/Dec 2012).

Apple Inc. v. Samsung Electronics Co. LTD et al, United States District Court, Northern District of California, San Jose Division—Expert report on surveys related to confusion and dilution in a trade dress infringement matter involving smart phones and tablet computers. (Expert Report: March 2012; Deposition: April 2012; Trial Testimony: August 2012).

Rosetta Stone LTD v. Google, Inc. United States District Court, Eastern District of Virginia, Alexandra Division--Expert report on likelihood of confusion with regard to trademark or branded keyword searches using the Google search engine. (Expert Report: Dec 2009, Deposition: January, 2010, Supplemental Expert Report: August 2012, Deposition: September 2012).

Convolve, Inc v. Dell Inc. et al., United States District Court, Eastern District of Texas, Marshall Division—Expert report on a conjoint survey used to estimate the value of a patented feature in a patent dispute. (Expert Report: April 2011, Deposition: May 2011, Trial Testimony: July 2011).

Celltrace, LLC v. AT&T Mobility, LLC, T-Mobile USA, Inc. et al, United States District Court, Eastern District of Texas, Tyler Division—Expert rebuttal report on use of a survey to estimate the value of a patented feature in a patent dispute. (Expert Report: April, 2011).

Stop Staring! Designs v. Tatyana, LLC d/b/a Bettie Page Clothing, United States District Court, Central District of California—Expert report on likelihood of confusion due to trade dress infringement in the women's clothing market. (Expert Report: February, 2011).

Cytosport, Inc. v. Vital Pharmaceuticals, Inc., United States District Court, Eastern District of California, Sacramento Division—Expert report on a survey in a misleading advertising/likelihood of confusion matter related to product name, trade dress, and labeling. (Expert Report: Dec 2011; Rebuttal Report: Feb 2012; Deposition: June 2012).

National Western Life Insurance Company v. Western National Life Insurance Company, United States District Court, Western District of Texas, Austin Division—Expert report on secondary meaning and rebuttal report on likelihood of confusion in a trademark dispute. (Expert Reports: October 2010, Depositions: October and November, 2010).

DirecTV, Inc. v. Elephant Group, Saveology.com et al., United States District Court, Central District of California, Western Division—Expert report on likelihood of confusion in a trademark dispute over sale of trademarks as keywords. (Expert Report: February, 2010).

ConsumerInfo.com v. J Willims and Edirect, United States District Court, Central District of California, Western Division—Expert report on confusion and misleading advertising in a trademark dispute (Expert Report: January 2010).

Mary Kay, Inc. v. Amy Weber, Scott Weber, and Touch of Pink Cosmetics, United States District Court, Northern District of Texas, Dallas Division—Expert report on likelihood of confusion with regard to sale of branded products on a website. (Expert Report: December 2008; Deposition, December 2008).

American Airlines, Inc., v. Google, Inc., United States District Court, Northern District of Texas, Fort Worth Division—Expert report on likelihood of confusion with regard to trademark or branded keyword searches using the Google search engine. (Expert Report: May 2008; Deposition, May 2008, Surrebuttal Report, June 2008).

Rocky Brands, Inc., and Rocky Brands Wholesale, LLC, v. Glen Bratcher, Westwood Footwear and Accessories, LLC, and Nantong Hong Yi Wang Shoes Co., LTD, United States District Court, Southern District of Ohio, Eastern Division—Expert report on a likelihood of confusion with regard to trade dress of products in the footwear markets. (Expert Report: April 2008, Deposition: April 2008).

Lulu Enterprises, Inc. v. N-F Newsite, LLC and Hulu Tech, Inc., United States District Court, Eastern District of North Carolina—Expert report on likelihood of confusion with regard to websites. (Expert Report: October 2007).

False Advertising, Representations/Omissions, and Claim Substantiation Matters

IN RE: SIMPLY ORANGE ORANGE JUICE MARKETING & SALES PRACTICES LITIGATION, United States District Court, Western District of Missouri—Expert rebuttal report regarding Plaintiffs proposed conjoint survey to measure damages in a food labeling matter. (Expert Report: July, 2016; Sur-Rebuttal Expert Report: September, 2016).

Nancy Lanovaz v. Twinings North America, Inc., United States District Court for the Northern District of California, San Jose Division—Expert report and rebuttal report regarding consumer expectations and perceptions in a pre-certification misleading advertising class action related to natural food labels and antioxidants. (Expert Report: February, 2014; Expert Rebuttal Declaration: May, 2016).

Steven Mcardle v. AT&T Mobility LLC. American Arbitration Association—Expert report on a survey of consumer expectations regarding charges for international calling services. (Expert Report: January, 2016; Deposition, April, 2016; Arbitration Testimony, June 2016).

Mary Garrison et al. v. Whole Foods Market Group et al., United States District Court, Northern District of California—Expert rebuttal report regarding Plaintiffs proposed survey to measure liability and their conjoint survey to measure damages in a pre-certification food labeling matter. (Expert Report: January, 2016).

In RE NJOY, INC. Consumer Class Action Litigation, United States District Court, Central District of California, Western Division—Expert report regarding consumer perceptions of advertising and packaging in a pre-certification misleading advertising class action regarding e-cigarettes. Expert rebuttal report regarding a proposed conjoint analysis to measure elements of damages. (Expert Declaration: June 2015; Deposition, June 2015; Rebuttal Declaration, November 2015; Deposition, December 2015).

Sarah Samet et al. v. The Proctor & Gamble Company, Kellogg Company and Kellogg Sales Company, United States District Court, Northern District of California, San Jose Division--Expert report regarding consumer perceptions and expectations in a pre-certification misleading advertising class action regarding various food labeling claims. (Expert Declaration: September, 2015).

Amanda Sateriale, et al. v. R.J. Reynolds Tobacco Co., United States District Court, Central District of California—Expert report regarding consumer expectations and use of the Camel Cash program in a breach of contract matter. (Expert Declaration: August 2015).

O&R Construction, LLC, v. Dun & Bradstreet Credibility Corp., et al, United States District Court, Western District of Washington at Seattle—Expert rebuttal report regarding a survey of small business owners in a false advertising matter involving business credit products. (Expert Report: July 2015, Deposition: August 2015).

Alex Ang et al. v. Bimbo Bakeries USA, Inc., United States District Court, Northern District of California, San Francisco Division—Expert report regarding consumer perceptions and expectations in a pre-certification misleading advertising class action regarding various food labeling claims. (Expert Declaration: April, 2015).

Chambers et al. v. North American Company for Life and Health Insurance, United States District Court, Southern District of Iowa, Central Division—Expert report regarding survey of consumer perceptions and expectations in the purchase of annuities in a pre-certification misleading advertising class action matter. (Expert Declaration: November, 2014, Deposition: December, 2014, Supplemental Expert Declaration: March, 2015).

Chad Brazil v. Dole Packaged Foods, LLC, United States District Court for Northern District of California, San Jose Division-- Expert report regarding consumer expectations and perceptions in a pre-certification misleading advertising class action related to all natural food labels. (Expert Report: March 2014; Reply Declaration, October 2014).

Kosta et al. v. Del Monte Foods, Inc., United States District Court for Northern District of California, Oakland Division--Expert report regarding consumer expectations and perceptions in a pre-certification misleading advertising class action related to food labels. (Expert Report: July, 2014).

Mohammed Rahman v. Mott's LLP. United States District Court for Northern District of California, San Francisco Division--Expert report regarding consumer reasons for purchasing juice products in a pre-certification misleading advertising class action related to no sugar added food labels. (Expert Report: April, 2014, Deposition June, 2014).

Billy Strack et al. v. Continental Resources, Inc., District Court of Blaine County, State of Oklahoma—Expert rebuttal report regarding surveys related to consumer perceptions of impartiality of judges. (Expert Report: June, 2014).

Devi Khoday and Danise Townsend et al. v. Symantec Corp. and Digital River, Inc., United States District Court, District of Minnesota—Expert rebuttal report regarding a conjoint survey of consumers in a precertification class action related to software download insurance products. (Expert Report: October, 2013; Deposition: November 2013).

Skye Astiana v. Ben & Jerry's Homemade, Inc., United States District Court, Northern District of California, Oakland Division—Expert report regarding a survey of consumer perceptions and expectation of ingredients in a pre-certification misleading advertising consumer class action matter involving an “All Natural” label. (Expert Report: October, 2013)

Rosalie Vaccarino et al. v. Midland National Life Insurance Company, United States District Court, Central District of California—Expert report regarding a survey of consumer perceptions and expectations in the purchase of annuities in a pre-certification misleading advertising consumer class action matter. (Expert Declaration: September, 2013; Deposition: September 2013)

McAdams et al. v. Monier Lifetile et al., Superior Court of California, County of Placer—Trial testimony, deposition testimony and expert report on statistical and survey research, sample design, data analysis regarding issues related to representations and consumer expectations for construction product longevity in a consumer class action. (Expert Report and Declarations: October/November 2005; Deposition: November 2005; Expert Report: October 2011; Deposition: October 2011; Supplemental Declaration: March 2012; Trial and Kelly-Frye Hearing Testimony: November/December 2012).

Beverly Beck-Ellman et al. v. Kaz USA Incorporated and Kaz, Incorporated, United State District Court, Southern District of California—Expert rebuttal declaration on the use of a survey in a false advertising class action regarding consumer heating pads. (Expert Declaration: August 2012).

Hewlett-Packard Company v. Oracle Corporation, Superior Court of State of California, County of Santa Clara—Expert report on a survey in a false and misleading advertising matter in the market for servers. (Expert Report: March 2012; Deposition: May 2012).

Environmental Law Foundation v. Beech-Nut Nutrition Corp., et. al., Superior Court State of California, County of Alameda—Declaration regarding use of surveys in a class action related to lead in fruit beverages. (Expert Declaration: June, 2012).

Jackson Hewitt Inc. v. H&R Block, Inc. et al., United States District Court, Southern District of New York—Expert report on claim substantiation in an advertising claims dispute. (Expert Declaration: June, 2011; Supplemental Declaration: September 2011; Deposition, Dec 2011).

POM Wonderful, LLC v. Ocean Spray Cranberries, Inc., United States District Court, Central District of California—Expert rebuttal report in a misleading advertising dispute in the beverage industry. (Expert Report: November 2010, Deposition: May 2011).

Carfax, Inc. v. AutoCheck (Experian), National Advertising Division (NAD), Better Business Bureau—Expert report on claim substantiation in advertising claims dispute related to the rates of accidents in automobile reports. (Expert Reports: September 2010, October 2010).

POM Wonderful, LLC v. Tropicana Products, Inc., United States District Court, Central District of California—Expert rebuttal report in a misleading advertising dispute in the beverage industry. (Expert Report: July 2010, Deposition: August 2010).

POM Wonderful, LLC v. Welch Foods, Inc., United States District Court, Central District of California—Expert rebuttal report in a misleading advertising dispute in the beverage industry. (Expert Report: July 2010, Deposition: July 2010).

John Sutherland et al. v. Dan Gamel, Inc., Superior Court of California, County of Fresno—Expert rebuttal report on issues related to use of a survey to characterize a putative class in a pre-certification class action related to RV sales practices. (Expert Report: May, 2009).

Real Estate Disposition Corporation v. National Home Auction Corporation, United States District Court, Central District of California—Expert report on a survey to address issues of materiality, confusion, and misleading advertising in an unfair business practices and infringement case. (Expert Report: February, 2008; Surrebuttal Report: March, 2008, Deposition: January, 2009).

IDT Telecom, Inc. and Union Telecard Alliance, LLC. v. CVT Prepaid Solutions, Inc. et al., United States District Court, District of New Jersey—Expert rebuttal report on survey and sampling issues related to consumer purchases of international pre-paid calling cards. (Expert Report: May, 2009).

Faloney et al. v. Wachovia Bank, United States District Court, and Eastern District of Pennsylvania--Expert analysis and rebuttal declaration on issues related to common representations to consumers in a precertification class action lawsuit related to telemarketing. (Expert Report: February, 2008).

Zill et al. v. Sprint Spectrum L.P. and Wireless Co. LP, Superior Court of California, County of Alameda—Expert rebuttal declarations on sampling, survey design, survey implementation, and the use of contingent valuation survey to estimate damages in a wireless communications class action. Expert report based on a survey of putative class members on consumer expectations and purchase behavior for wireless handsets. (Expert Declaration: December, 2006 and February, 2007; Deposition: April 2007; Expert Report: June 2007).

Labor Related Matters

Afrouz Nikmanesh et al. v. Wal-Mart Stores, Inc., United States District Court, Central District of California, Southern Division—Expert report regarding a proposed survey by Plaintiffs in a rest and meal break class action related to pharmacists. (Report: November, 2016).

Vaugh Banta v. American Medical Response, Inc. et al, Superior Court of the State of California for the County of Los Angeles—Expert report regarding possible statistical sampling and statistical analysis in meal and rest period PAGA action involving Paramedics and EMTs. (Report: August, 2016).

Duran et al. v. U.S. Bank N.A., Superior Court, State of California, County of Alameda—Retained as expert consultant to Judge Carvill and the Court on sampling and survey issues in a exempt/nonexempt labor class action. (April/May 2016).

Fred Devries et al. v. Morgan Stanley & Company LLC et al., United States District Court, Southern District of Florida—Expert analysis and rebuttal declaration regarding the use of a survey in an overtime wage labor class action (Report: January 2015; Deposition June 2015; Supplemental Declaration: September, 2015).

Laura Karapetian et al. v. American Medical Response, Inc., Superior Court of the State of California for the County of Los Angeles, Central District--Expert analysis and rebuttal declaration regarding a proposed sampling plan to address liability and damages issues related to meal periods, rates, and rounding claims. (Declaration: June 2015; Reply Declaration: July 2015).

Donald McLeod et al., v. Ralphs Grocery Company, Superior Court, State of California, County of Los Angeles—Expert analysis and rebuttal declaration regarding the use of a survey in an exempt/nonexempt labor class action (Report: December, 2014).

James Foster and Stone Logistics, Inc. et al v. CEVA Freight, LLC, United States District Court, Western District of North Carolina, Charlotte Division—Declaration regarding data management and statistical analysis in a class action involving trucking freight movements. (Report: June, 2012; Deposition: July, 2012).

Roberto Martinez, et al. v. Joe’s Crab Shack Holdings, Inc., Superior Court of California, County of Los Angeles—Expert analysis and rebuttal regarding the use of sampling and surveys in an exempt/nonexempt labor class action. (Report, September 2011; Deposition, October 2011).

Cencast Services, L.P., et al. v. The United States, United States Court of Federal Claims—Expert declarations regarding sampling and surveys of labor records and workers related to issues of FICA/FUTA taxes in the entertainment industry. (Expert Declarations: November, 2009; January, 2010).

Javier Olguin v. Fed Ex Ground Package Systems, Superior Court of California, County of Orange—Expert rebuttal declaration on sampling and survey design issues in a pre-certification labor class action. (Expert Declaration: March 2007; Deposition: April, 2007).

Redwood Fire and Casualty Insurance Company v. Personnel Plus et al., Superior Court of California, County of Los Angeles—Expert analysis and sample design to estimate workman compensation premiums from employee payroll records. (Deposition: December, 2007).

Anti-Trust and Commercial Disputes

State of New York and City of New York v. United Parcel Service, Inc., United States District Court, Southern District of New York—Expert rebuttal report on a survey conducted to measure the rate of shipments of cigarettes via UPS. (Expert Report: July 2016).

Federal Trade Commission and State of Illinois v. Advocate Health Care Network and Northshore University HealthSystems, United States District Court, Northern District of Illinois, Eastern Division—Expert report on a survey of employers’ interest in narrow network health care options for employees in a hospital merger matter. (Expert Report: March 2016; Deposition Testimony: March 2016; Trial Testimony: April 2016).

John Rock v. National Collegiate Athletic Association, United States District Court, Southern District of Indiana, Indianapolis Division- Expert report on a survey recording the numbers of scholarships granted to student-athletes in Division I schools. (Expert Report: December 2015; Deposition: January 2016).

United Healthcare v. USC Physicians, Arbitration-- Expert analysis regarding sampling and statistical analysis of claims in a dispute over medical claims payments. (Deposition: April, 2010).

Hamlet-Cox v. Health Net of California, Inc. Superior Court of State of California, County of Los Angeles—Expert declaration regarding sampling and statistical analysis of denial of claims in a pre-certification class action related to coverage of a medical procedure. (Expert Declaration: February, 2010).

Federal Trade Commission v. Whole Foods Market, Inc. and Wild Oats Markets, Inc., United States District Court, District of Columbia—Expert rebuttal report on sampling and survey design issues in an antitrust proceeding related to a preliminary injunction to block a proposed merger of Whole Foods Markets Inc. and Wild Oats. (Expert Report: July 2007; Deposition: July, 2007).

Adelphia Communications Corp v. Deloitte and Touche, LLP, Court of Common Pleas, Philadelphia, Pennsylvania—Expert rebuttal report on use of surveys of employees to estimate business process inputs to calculation of capitalizable costs for accounting restatement. (Expert Report: December, 2006; Deposition: February 2007).

Product Liability

Natto Iyela Gbarabe v. Chevron Corporation, United States District Court, Northern District of California, San Francisco Division—Expert rebuttal report regarding surveys and survey methodologies used by Plaintiff to measure the socio-economic impacts of an oil platform fire in Nigeria. (Expert Report: September, 2016).

IN RE: Lumber Liquidators Chinese Manufactured Flooring Product Marketing, Sales Practices and Products Liability Litigation, United States District Court, Eastern District of Virginia, Alexandria Division—Expert rebuttal declaration on the reliability of a sample of destructive tests for purposes of extrapolation of defect rates in a manufactured flooring products. (Expert Report: May 2016; Deposition, June 2016).

Amey LG Limited, v. Cumbria County Council, High Court of Justice, United Kingdom, Manchester District Registry, Queen’s Bench Division, Technology and Construction Court,—Expert report on issues related to samples and statistical extrapolations used to estimate the prevalence of failures in road works. (Expert report, November 2015; Supplemental Report, Jan 2016; Trial Testimony: April 2016).

People of the State of California et al. v. Atlantic Richfield Company et al., Superior Court, State of California, County of Santa Clara—Expert analysis regarding lead consumption and the impacts of California CLPP Programs. (Expert Disclosure: October 2012; Deposition: December, 2012; Trial Testimony: August 2013).

Virgin Valley Water District v. Vanguard Piping Systems, et al., United States District Court, District of Nevada—Expert report on issues related to samples and statistical forecasts used to estimate potential leaks in polyethylene piping. (Expert Report: June, 2010; Deposition: July 2010).

Jovan Jones et al., v. Sears, Roebuck & Company, United States District Court, Northern District of Illinois, Eastern Division—Expert affidavit on issues related to using samples and surveys to estimate the rate of installation of nonconforming appliance venting. (Affidavit: November, 2009).

Weiner, et al. v. Shake Company of California, Inc., et al., Superior Court of California, County of Contra Costa—Testifying expert on statistical analysis, sample design, causation issues, and damages regarding the prevalence of roofing failure in homes made with Cal Shake Roofing products. (For Liability Phase Trial: Multiple declarations and depositions in 2005, trial testimony June 2005. For Damage Phase Trial: Expert declaration, September, 2006; Deposition: September 2006).

Kaiser Aluminum Chemical Corporation v. Certain Underwriters at Lloyd's London et al., Superior Court of California, County of San Francisco—Statistical analysis related to sampling of insurance claims and allocation of liability among excess insurers for asbestos liability.

Lotzer, et al. v. International Window Corporation, et al., Superior Court of California, County of Solano—Consulting expert on statistical analysis for purpose of estimating sales from invoice data and design of sampling strategies for product field tests in post-certification class action.

Confidential client—Analysis of asbestos claims, exposures by occupation, settlement costs, and future claims costs associated with a major boiler manufacturer.

Confidential Client, United States Bankruptcy Court, District of Delaware—Statistical surveying, analysis and consultation regarding the prevalence of failure in homes constructed with a specific building product.

McIlhargie, et al. v. Moulded Fiberglass Companies et al., Superior Court of California, County of San Joaquin—Consulting expert on statistical analysis, sampling design, and consultation on prevalence of construction building product defect in pre-certification class action.

Bowen-Fromm v. Terra Shake Products, et al., Superior Court of California, County of Alameda—Statistical analysis, sampling design, and consultation on prevalence of product defects in a class action lawsuit.

Bayview Hunters Point, All Hallows, Shoreview and LaSalle Apartments L.P. v. Colorworks Collegiate Painters; Simonton Building Products, United States District Court, Northern District of California—Statistical analysis and sampling design for estimation of the prevalence of construction defects in windows, doors, and siding.

Nature Guard Cement Roofing Shingles Cases in Davis v. Louisiana-Pacific Corporation, Superior Court of California, County of Stanislaus—Consulting expert on statistical analysis of evidence regarding prevalence of construction defects.

People of the State of California, v. Apartment Investment and Management Company, et al., Superior Court of California, County of San Francisco—Consulting expert on statistical analysis and sampling designs related to the prevalence of hazards and other construction and maintenance issues leading to notice of violations in buildings. (Expert report, October, 2003).

Naef, et al. v. Masonite, Superior Court, County of Mobile, Alabama—Consulting expert on statistical surveying and analysis of the prevalence of siding failure in homes made with Masonite siding. Identification of factors contributing to failure, projection of failure rates observed during the survey to the population of homes manufactured with subject siding, calculation of expected future costs of legal settlement under the various terms and conditions.

Publications

Becker, Elizabeth, Alex Grecu, Sukaina Klein, Denise Martin, Mary Elizabeth Stern, and Kent Van Liere. 2010. “Data in Wage and Hour Litigation: What to Do When You Have It and What to Do When You Don’t.” *NERA Economic Consulting paper*, November 4, 2010.

Butler, Sarah, Van Liere, Kent. 2010. “Use of Surveys in Litigation: Recent Trends.” *NERA Economic Consulting paper*, April 7, 2010.

Van Liere, Kent D., Butler, Sarah. 2007. “Emerging Issues in the Use of Surveys in Trademark Infringement on the Web.” Paper published in the *Advanced Trademark & Advertising Law Conference* proceedings, Seattle, WA, September, 2007.

King, Mike, Kent Van Liere, Gene Meehan, Glenn R. George, Wayne P. Olson, Amparo D. Nieto. 2007. “Making a Business of Energy Efficiency: Sustainable Business Models for Utilities,” Edison Electric Institute, Washington, D.C., August, 2007.

Van Liere, Kent. D. 2007. “Use of Sample Surveys in Product Liability Litigation,” in *The International Comparative Legal Guide to: Product Liability 2007*. London: Global Legal Group LTD, pp. 38-43.

Lawton, Leora, Michael Sullivan, Kent D. Van Liere, Aaron Katz, and Joseph Eto “A Framework and Review of Customer Outage Costs: Integration and Analysis of Electric Utility Outage Cost Surveys,” Energy Storage Program, Office of Electric Transmission and Distribution, U.S. Department of Energy, LBNL-54365, 2004.

Dunlap, Riley E., Kent D. Van Liere, Angela G. Mertig, and Robert E. Jones. 2000. “Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale.” *Journal of Social Issues*, 56: 425-442.

Malloy, Ken, Jamie Wimberly, and Kent D. Van Liere. 1999. “The Customer Stewardship Program: Successfully Linking Consumer Education and Corporate Strategy,” *The Electricity Journal*, August/September 1999.

The High Efficiency Laundry Metering and Marketing Analysis (THELMA) Project. EPRI, Palo Alto, CA: 1997. TR-109147-Volumes 1 to 9.

Market Tracking: Assessing Sources and Access to Appliance Sales Data, EPRI, Palo Alto, CA: 1997. TR-108928.

Performance Measurement in Utilities: A Framework for Creating Effective Management Systems. EPRI, Palo Alto, CA: 1996. TR-106860 3269-34.

Van Liere, Kent D., Rick Winch, Kathleen Standen, Shel Feldman, and Dale Brugger. 1994. "The Design and Structure of a Statewide Sales Tracking System for Residential Appliances." In *Energizing the Energy Policy Process*, edited by Roberta W. Walsh and John G. Heilman, Westport, Connecticut, Quorum Books, pp. 199-216.

Van Liere, Kent D. and William Lyons. 1986. "Measuring Perceived Program Quality." In *Performance Funding in Higher Education*, edited by Trudy W. Banta, Boulder, Colorado, National Center for Higher Education Management System, pp. 85-94.

Dunlap, Riley E. and Kent D. Van Liere. 1984. "The Dominant Social Paradigm and Concern for Environmental Quality: An Empirical Analysis." *Social Science Quarterly*, 65: 1013-1028.

Hand, Carl M. and Kent D. Van Liere. 1984. "Religion, Mastery Over Nature and Environmental Concerns." *Social Forces*, 63: 555-570.

Ladd, Anthony E., Thomas C. Hood, and Kent D. Van Liere. 1983. "Ideological Themes in the Antinuclear Movement: Consensus and Diversity." *Sociological Inquiry*, 53: 252-272.

Lounsbury, John W., Kent D. Van Liere, and Gregory J. Meissen. 1983. "PsychoSocial Assessment." In *Social Impact Assessment Methods*, edited by K. Kinsterbush, L. Llewellyn, and C.P. Wolff, Beverly Hills, California, Sage, pp. 215-240.

Van Liere, Kent D. and Riley E. Dunlap. 1983. "Cognitive Integration of Social and Environmental Beliefs." *Sociological Inquiry*, 53: 333-341.

Van Liere, Kent D. and Benson H. Bronfman. 1981. "Beliefs About Social Control and Participation in a Load Management Project." *Housing and Society*, 8: 124-135.

Van Liere, Kent D. and Riley E. Dunlap. 1981. "Environmental Concern: Does it Make a Difference How It's Measured?" *Environment and Behavior*, 13: 651-676.

Van Liere, Kent D. and Frank P. Noe. 1981. "Outdoor Recreation and Environmental Attitudes: Further Examination of the Dunlap-Hefferen Thesis." *Rural Sociology*, 46: 505-513.

Van Liere, Kent D. and Riley E. Dunlap. 1980. "The Social Bases of Environmental Concern: A Review of Hypotheses, Explanations, and Empirical Evidence." *Public Opinion Quarterly*, 44: 181-197.

Tremblay, Kenneth R., Jr., Don A. Dillman, and Kent D. Van Liere. 1980. "An Examination of the Relationship Between Housing Preferences and Community Size Preferences." *Rural Sociology*, 45: 509-519.

Dunlap, Riley E. and Kent D. Van Liere. 1978. "The New Environmental Paradigm: A Proposed Measuring Instrument and Preliminary Results." *Journal of Environmental Education*, 9: 10-19.

Van Liere, Kent D. and Riley E. Dunlap. 1978. "Moral Norms and Environmental Behavior: An Application of Schwartz's Norm-Activation Model to Yard Burning." *Journal of Applied Social Psychology*, 8: 174-188.

Dunlap, Riley E. and Kent D. Van Liere. 1977. "Further Evidence of Declining Public Concern with Environmental Problems: A Research Note." *Western Sociological Review*, 8: 110-112.

Dunlap, Riley E. and Kent D. Van Liere. 1977. "Land Ethic or Golden Rule." *Journal of Social Issues*, 33: 200-207.

Dunlap, Riley E. and Kent D. Van Liere. 1977. "Response to Heberlein." *Journal of Social Issues*, 33: 211-212.

Dunlap, Riley E. and Kent D. Van Liere. 1979. "Decline in Public Concern for Environmental Quality: A Reply." *Rural Sociology*, 44: 204-212.

Professional Associations

Member, American Association of Public Opinion Research

January 2017

EXHIBIT 2



SUBPOENA DUCES TECUM

Provided by the Secretary of the Federal Trade Commission, and
Issued Pursuant to Commission Rule 3.34(b), 16 C.F.R. § 3.34(b)(2010)

<p>1. TO</p> <p>Google Inc. c/o John D. Harkrider, Esq. Axinn, Veltrop & Harkrider LLP 114 West 47th Street New York, NY 10036</p>	<p>2. FROM</p> <p style="text-align: center;">UNITED STATES OF AMERICA FEDERAL TRADE COMMISSION</p>
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This subpoena requires you to produce and permit inspection and copying of designated books, documents (as defined in Rule 3.34(b)), or tangible things, at the date and time specified in Item 5, and at the request of Counsel listed in Item 9, in the proceeding described in Item 6.

<p>3. PLACE OF PRODUCTION</p> <p>Federal Trade Commission c/o Charlotte Slaiman, Esq. 400 7th Street, SW Washington, DC 20024</p>	<p>4. MATERIAL WILL BE PRODUCED TO</p> <p>Charlotte Slaiman, Esq.</p> <hr/> <p>5. DATE AND TIME OF PRODUCTION</p> <p>November 1, 2016 at 10:00am</p>
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6. SUBJECT OF PROCEEDING

In the Matter of 1-800 Contacts, Inc., Docket No. 9372

7. MATERIAL TO BE PRODUCED

Documents & materials responsive to the attached Subpoena Duces Tecum Requests for Production

<p>8. ADMINISTRATIVE LAW JUDGE</p> <p>The Honorable D. Michael Chappell</p> <p style="margin-left: 40px;">Federal Trade Commission Washington, D.C. 20580</p>	<p>9. COUNSEL AND PARTY ISSUING SUBPOENA</p> <p>Daniel Matheson, or designee Federal Trade Commission 400 7th Street, SW Washington, DC 20024 (202) 326-2075</p>
--	--

<p>DATE SIGNED</p> <p style="font-size: 1.5em; font-family: cursive;">10/20/16</p>	<p>SIGNATURE OF COUNSEL ISSUING SUBPOENA</p> <p style="font-size: 1.5em; font-family: cursive;">Cluett</p>
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GENERAL INSTRUCTIONS

APPEARANCE

The delivery of this subpoena to you by any method prescribed by the Commission's Rules of Practice is legal service and may subject you to a penalty imposed by law for failure to comply.

MOTION TO LIMIT OR QUASH

The Commission's Rules of Practice require that any motion to limit or quash this subpoena must comply with Commission Rule 3.34(c), 16 C.F.R. § 3.34(c), and in particular must be filed within the earlier of 10 days after service or the time for compliance. The original and ten copies of the petition must be filed before the Administrative Law Judge and with the Secretary of the Commission, accompanied by an affidavit of service of the document upon counsel listed in Item 9, and upon all other parties prescribed by the Rules of Practice.

TRAVEL EXPENSES

The Commission's Rules of Practice require that fees and mileage be paid by the party that requested your appearance. You should present your claim to counsel listed in Item 9 for payment. If you are permanently or temporarily living somewhere other than the address on this subpoena and it would require excessive travel for you to appear, you must get prior approval from counsel listed in Item 9.

A copy of the Commission's Rules of Practice is available online at <http://bit.ly/FTCRulesofPractice>. Paper copies are available upon request.

This subpoena does not require approval by OMB under the Paperwork Reduction Act of 1980.

RETURN OF SERVICE

I hereby certify that a duplicate original of the within subpoena was duly served: (check the method used)

- in person.*
- by registered mail.*
- by leaving copy at principal office or place of business, to wit:*

via Fed Ex

on the person named herein on:

October 20, 2016

(Month, day, and year)

Charlotte Slaiman

(Name of person making service)

Attorney

(Official title)

**UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION**

_____)
In the Matter of)
)
1-800 Contacts, Inc.,) **DOCKET NO. 9372**
a corporation)
)
_____)

SUBPOENA DUCES TECUM ATTACHMENT

Pursuant to Federal Trade Commission Rules of Practice 3.31 and 3.34(b), 16 C.F.R. §§ 3.31 and 3.34(b), and in accordance with the Instructions and Definitions below, Complaint Counsel hereby requests that Google, Inc. produce all documents, electronically stored information, and other things in its possession, custody, or control responsive to the following requests.

REQUESTS FOR ELECTRONICALLY STORED INFORMATION

Request No. 1: Provide documents sufficient to show each person that has ever had its advertisement appear on a Google search engine results page (SERP) as a result of bidding (on an exact match, phrase match, or broad match basis) on any of the following terms as keywords:

- 1 800 contacts
- 1 800 contact
- 1 800contacts
- 1 800contact
- 1800contacts
- 1800contact
- 1800 contacts
- 1800 contact
- 1-800 contacts
- 1-800 contact
- 1800.contacts
- 1-800-contacts
- 1800contacs
- 1800 contacs
- 1.800 contacts
- 1 8000 contacts
- 800 contacts

800.contacts
800contacts
1800contacts.com
www.1800contacts.com
www.1800contacts.net
www.1800contacts.org

Request No. 2: Provide documents sufficient to show each person that has ever had its advertisement appear on a Google SERP as a result of bidding on any of the following terms as keywords:

AC Lens
Lens.com
LensCrafters
Vision Direct
contact lens
contact lenses
buy contacts online

Product Names

Acuvue
Oasys
TruEye
Air Optics
Optix
Aqua Comfort
Dailies Total
Biotrue
Soflens
PureVision
Biofinity
Proclear

Request No. 3: Provide documents sufficient to show whether any of the following persons has ever bid on any of the terms listed in Request 1 in any AdWords auction:

1-800 Contacts
2weekdisposables
Alcon
America's Best
Arlington Contact Lens Service, d/b/a AC Lens
Bausch & Lomb
BJ's
Clearly Contacts

Coastal Contacts
Contact Lens King
Contacts Direct
CooperVision
Costco
Daysoft Contact Lenses
Empire Vision, d/b/a ECCA
EZ Contacts USA, d/b/a Provision Supply
Johnson & Johnson, d/b/a Vistakon
Luxottica, d/b/a LensCrafters, d/b/a Pearle Vision, d/b/a
Sears Optical, d/b/a Target Optical
Lens.com
Lensdirect
Lens Discounters
Lenspure
Price Smart Contacts
Major Lens
Memorial Eye, d/b/a ShipMyContacts.com
Oakwood Eye Clinic, d/b/a Lenses for Less
Sam's Club
Save On Lens
Standard Optical
Tram Data, d/b/a Replace My Contacts, d/b/a Lensfast
Vision Direct, d/b/a Lensworld
Walgreens
Walmart
Web Eye Care

Request No. 4: For the persons identified in your response to Requests 1 & 2, and persons identified in Request 3, and for the keywords identified in Appendix A, provide the following data, aggregated on a monthly basis. The response should be organized by person, Ad Group and keyword. (Provide responses separately for each Ad Group even in the event that the same keyword was used in multiple Ad Groups.) For the year 2010, provide the data on a daily basis.

- a. Bidding entity;
- b. Keyword
- c. Campaign;
- d. Campaign type;
- e. Campaign sub-type;
- f. Ad Group;
- g. Keyword matching option;
- h. Impressions;
- i. Clicks;

- j. Total cost (USD)
- k. Ad position;
- l. Conversion rate where available; and
- m. Current quality score.

Request No. 5: Provide data or documents sufficient to show the total impressions, CTR, clicks, CPC, and total spend for each person identified in your response to Requests 1 & 2, and person identified in Request 3, for each month.

Request No. 6: For auctions resulting from queries in Appendix B, provide documents or data sufficient to identify the keywords that led to the inclusion of an advertisement from any person identified in your response to Requests 1 & 2, identified in Request 3, or identified in Appendix C, in the resulting auction despite the person not having bid directly on any term in Request 1. For each such keyword, provide the data items listed below. The reported totals and averages for each keyword should be based only on instances where the advertisement was included as a result of a phrase match or broad match to the queries in Appendix B. The response should be organized by person, Ad Group and keyword. (Provide responses separately for each Ad Group even in the event that the same keyword was used in multiple Ad Groups.) The data may be aggregated by up to one month, but for no greater period. For the year 2010, the data may only be aggregated on a daily basis.

- a. Bidding entity;
- b. Keyword;
- c. Keyword matching option;
- d. Campaign;
- e. Campaign type;
- f. Campaign sub-type;
- g. Ad Group;
- h. Impressions;
- i. Clicks;
- j. Total cost (USD)
- k. Ad position;
- l. Conversion rate where available; and
- m. Current quality score.

Request No. 7: Provide data or documents sufficient to show the total number of queries containing “800contact”, “800 contact”, “800-contact”, or “800.contact” for each month from August 2015 to July 2016.

Request No. 8: For each person identified in your response to Requests 1 & 2, and persons identified in Request 3, provide the following change history data for each contact lens-related Ad Group by Ad Group for the duration of the Request Period:

- a. Bid strategy;
- b. Daily maximum budget;
- c. Negative keywords;
- d. Keywords.

Request No. 9: Provide documents sufficient to show the method Google uses to enforce the advertiser's daily maximum budget over the course of the month.

Request No. 10: For each person identified in your response to Requests 1 & 2, or identified in Request 3, for each of the past five years, provide documents or data sufficient to show how frequently the bidding entity stopped search advertising for contact lenses, because it reached the maximum daily budget for keyword search advertising.

Request No. 11: For June and December of each year of the Request Period, provide all co-occurring words that appear in queries at least 25 times during the month, for any of the following key words: a) 1 800 contacts, b) 1-800 contacts, c) 1800 contacts, d) 1800.contacts, e) 1800contacts.com, and f) www.1800contacts.com.

Request No. 12: Provide documents or data sufficient to show a representative sample of the contact lens-related web browsing and web searching behavior of individual users who have entered a query containing any of the keywords identified in Specification 1.

Request No. 13: Submit all documents relating to any communication between the Company and 1-800 Contacts discussing how to limit the ability of other companies to present advertisements, procured through AdWords, that would display in response to user search queries containing 1-800 Contacts trademarks.

Request No. 14: Provide any and all search engine advertising algorithm A/B or side-by-side testing relating to the treatment of trademark searches, including the experiment design, results, recommendation, and any actual changes implemented or decisions made as a result.

Request No. 15: Provide a random sample of 1,000 AdWords advertisements that have appeared in response to user searches for the keywords listed in Request No. 1 over the request period. Provide a random sample of 1,000 AdWords advertisements that have appeared in response to user searches for the following keywords: "contacts," "contact lens," "contact lenses," "buy contacts online;" over the request period.

DEFINITIONS

1. The terms “Google,” “Company,” and “You” or “Your” mean Google Inc., its directors, officers, trustees, employees, attorneys, agents, accountants, consultants, and representatives, its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships and joint ventures, and the directors, officers, trustees, employees, attorneys, agents, consultants, and representatives of its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, and partnerships and joint ventures.
2. The term “1-800 Contacts” means Respondent 1-800 Contacts, Inc., its directors, officers, trustees, employees, attorneys, agents, accountants, consultants, and representatives, its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships and joint ventures, and the directors, officers, trustees, employees, attorneys, agents, consultants, and representatives of its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, and partnerships and joint ventures.
3. The term “Ad Group” has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product: a collection of advertisements that “contains one or more ads which target a shared set of keywords.” *See* <https://support.google.com/adwords/answer/6298>.
4. The term “Ad Rank” has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product: “A value that’s used to determine [an advertiser’s] ad position (where ads are shown on a page) and whether [an advertiser’s] ads will show at all.” *See* <https://support.google.com/adwords/answer/1752122?hl=en>.
5. The terms “and” and “or” have both conjunctive and disjunctive meanings.
6. The term “Campaign” has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product: “[a] set of ad groups (ads, keywords, and bids) that share a budget, location targeting, and other settings.” *See* <https://support.google.com/adwords/answer/6304?hl=en>.
7. The term “Click” has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product. *See* <https://support.google.com/adwords/answer/31799?hl=en>.
8. The term “Clickthrough rate” (CTR) has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product: “the number of clicks [an] ad receives divided by the number of times [the] ad is shown.” *See* <https://support.google.com/adwords/answer/2615875?hl=en>.

9. The term “Computer Files” includes information stored in, or accessible through, computer or other information retrieval systems. Thus, the Company should produce Documents that exist in machine-readable form, including Documents stored in personal computers, portable computers, workstations, minicomputers, mainframes, servers, backup disks and tapes, archive disks and tapes, and other forms of offline storage, whether on or off company premises. If the Company believes that the required search of backup disks and tapes and archive disks and tapes can be narrowed in any way that is consistent with Complaint Counsel’s need for Documents and information, you are encouraged to discuss a possible modification to this instruction with the Complaint Counsel identified on the last page of this request. Complaint Counsel will consider modifying this instruction to:
 - a. exclude the search and production of files from backup disks and tapes and archive disks and tapes unless it appears that files are missing from files that exist in personal computers, portable computers, workstations, minicomputers, mainframes, and servers searched by the Respondent;
 - b. limit the portion of backup disks and tapes and archive disks and tapes that needs to be searched and produced to certain key individuals, or certain time periods or certain specifications identified by Complaint Counsel; or
 - c. include other proposals consistent with Commission policy and the facts of the case.
10. The term “Containing” means containing, describing, or interpreting in whole or in part.
11. The terms “Conversion Rate” has the same meaning that Google ascribes to these terms in the ordinary course of business in connection with its AdWords product. *See* <https://support.google.com/adwords/answer/2684489?hl=en>.
12. The terms “Cost per Click”, “Cost Per Action,” “Cost Per Impression,” and “Cost USD” have the same meaning that Google ascribes to these terms in the ordinary course of business in connection with its AdWords product.
13. The terms “Discuss” or “Discussing” mean in whole or in part constituting, Containing, describing, analyzing, explaining, or addressing the designated subject matter, regardless of the length of the treatment or detail of analysis of the subject matter, but not merely referring to the designated subject matter without elaboration. A document that “Discusses” another document includes the other document itself.
14. The term “Documents” means all Computer Files and written, recorded, and graphic materials of every kind in the possession, custody, or control of the Respondent. The term “Documents” includes, without limitation: electronic mail messages; electronic correspondence and drafts of documents; metadata and other bibliographic or historical

data describing or Relating to documents created, revised, or distributed on computer systems; copies of documents that are not identical duplicates of the originals in that Person's files; and copies of documents the originals of which are not in the possession, custody, or control of the Respondent.

Unless otherwise specified, the term "Documents" excludes (a) bills of lading, invoices, purchase orders, customs declarations, and other similar documents of a purely transactional nature; (b) architectural Plans and engineering blueprints; and (c) documents solely Relating to environmental, tax, human resources, OSHA, or ERISA issues.

15. The term "Documents Sufficient to Show" means both documents that are necessary and documents that are sufficient to provide the specified information. If summaries, compilations, lists, or synopses are available that provide the information requested, these may be provided in lieu of the underlying documents.
16. The terms "each," "any," and "all" mean "each and every."
17. The term "Impression" has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product. *See* <https://support.google.com/adwords/answer/6320?hl=en>.
18. The term "Keyword" has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product: "[w]ords or phrases describing [an advertiser's] product that [the advertiser] choose[es] to help determine when and where [the advertiser's] ad can appear" in response to an internet search by an end user. *See* <https://support.google.com/adwords/answer/6323?hl=en>.
19. The term "Keyword Matching Option" has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product. *See* <https://support.google.com/adwords/answer/2497836?hl=en>.
20. The term "Negative Keyword" has the same meaning that Google ascribes to the term in the ordinary course of business in connection with its AdWords product: "[a] type of keyword that prevents [and advertiser's] ad from being triggered by certain words or phrases." *See* <https://support.google.com/adwords/answer/105671?hl=en>.
21. The term "Person" includes the Company, and means any natural person, corporate entity, partnership, association, joint venture, governmental entity, trust, or any other organization or entity engaged in commerce.
22. The terms "Relate" or "Relating to" mean in whole or in part Discussing, constituting, commenting, Containing, concerning, embodying, summarizing, reflecting, explaining,

describing, analyzing, identifying, stating, referring to, dealing with, or in any way pertaining to.

23. The term “Search Engine” means a computer program, available to the public without charge, to search for and identify websites on the World Wide Web based on a User Query.
24. The term “Technology Assisted Review” means any process that utilizes a computer algorithm to limit the number of potentially responsive documents subject to a manual review. A keyword search of documents with no further automated processing is not a Technology Assisted Review.
25. The term “User Query” means data entered into a computer by an end user of a Search Engine for the purpose of operating the Search Engine.

INSTRUCTIONS

1. Unless otherwise indicated, each request covers documents and information dated, generated, received, or in effect from January 1, 2004, to the present.
2. The Company need not produce responsive documents that the Company has previously produced to the Commission in relation to the prior investigation of 1-800 Contacts, FTC No. 141-0200. **The Company must produce all other responsive documents, including any otherwise responsive documents that may have been produced by the Company to the Commission in relation to any other investigation conducted by the Commission.**
3. This request for documents shall be deemed continuing in nature so as to require production of all documents responsive to any specification included in this request produced or obtained by the Company up to fifteen (15) calendar days prior to the date of the Company’s full compliance with this request.
4. Except for privileged material, the Company will produce each responsive document in its entirety by including all attachments and all pages, regardless of whether they directly relate to the specified subject matter. The Company should submit any appendix, table, or other attachment by either attaching it to the responsive document or clearly marking it to indicate the responsive document to which it corresponds. Except for privileged material, the Company will not redact, mask, cut, expunge, edit, or delete any responsive document or portion thereof in any manner.
5. Unless modified by agreement with Complaint Counsel, this subpoena requires a search of all documents in the possession, custody, or control of the Company including, without limitation, those documents held by any of the Company’s officers, directors,

employees, agents, representatives, or legal counsel, whether or not such documents are on the premises of the Company. If any person is unwilling to have his or her files searched, or is unwilling to produce responsive documents, the Company must provide the Complaint Counsel with the following information as to each such person: his or her name, address, telephone number, and relationship to the Company. In addition to hard copy documents, the search must include all of the Company's electronically stored information.

6. Form of Production. The Company shall submit all documents as instructed below absent written consent signed by Complaint Counsel.
- a. Documents stored in electronic or hard copy formats in the ordinary course of business shall be submitted in the following electronic format provided that such copies are true, correct, and complete copies of the original documents:
- i. Submit Microsoft Excel, Access, and PowerPoint files in native format with extracted text and applicable metadata and information as described in subparts (a)(iii) and (a)(iv).
 - ii. Submit emails in image format with extracted text and the following metadata and information:

Metadata/Document Information	Description
Beginning Bates number	The beginning bates number of the document.
Ending Bates number	The last bates number of the document.
Custodian	The name of the custodian of the file.
To	Recipient(s) of the email.
From	The person who authored the email.
CC	Person(s) copied on the email.
BCC	Person(s) blind copied on the email.
Subject	Subject line of the email.
Date Sent	Date the email was sent.
Time Sent	Time the email was sent.
Date Received	Date the email was received.

Time Received	Time the email was received.
Attachments	The Document ID of attachment(s).
Mail Folder Path	Location of email in personal folders, subfolders, deleted items or sent items.
Message ID	Microsoft Outlook Message ID or similar value in other message systems.

- iii. Submit email attachments in image format, or native format if the file is one of the types identified in subpart (a)(i), with extracted text and the following metadata and information:

Metadata/Document Information	Description
Beginning Bates number	The beginning bates number of the document.
Ending Bates number	The last bates number of the document.
Custodian	The name of the custodian of the file.
Parent ID	The Document ID of the parent email.
Modified Date	The date the file was last changed and saved.
Modified Time	The time the file was last changed and saved.
Filename with extension	The name of the file including the extension denoting the application in which the file was created.
Production Link	Relative file path to production media of submitted native files. Example: FTC-001\NATIVE\001\FTC-00003090.xls.
Hash	The Secure Hash Algorithm (SHA) value for the original native file.

- iv. Submit all other electronic documents in image format, or native format if the file is one of the types identified in subpart (a)(i), accompanied by extracted text and the following metadata and information:

Metadata/Document Information	Description
Beginning Bates number	The beginning bates number of the document.
Ending Bates number	The last bates number of the document.
Custodian	The name of the custodian of the file.
Modified Date	The date the file was last changed and saved.
Modified Time	The time the file was last changed and saved.
Filename with extension	The name of the file including the extension denoting the application in which the file was created.
Originating Path	File path of the file as it resided in its original environment.
Production Link	Relative file path to production media of submitted native files. Example: FTC-001\NATIVE\001\FTC-00003090.xls.
Hash	The Secure Hash Algorithm (SHA) value for the original native file.

- v. Submit documents stored in hard copy in image format accompanied by OCR with the following information:

Metadata/Document Information	Description
Beginning Bates number	The beginning bates number of the document.
Ending Bates number	The last bates number of the document.
Custodian	The name of the custodian of the file.

- vi. Submit redacted documents in image format accompanied by OCR with the metadata and information required by relevant document type in

subparts (a)(i) through (a)(v) above. For example, if the redacted file was originally an attachment to an email, provide the metadata and information specified in subpart (a)(iii) above. Additionally, please provide a basis for each privilege claim as detailed in Instruction 6.

- b. Submit data compilations in electronic format, specifically Microsoft Excel spreadsheets or delimited text formats such as CSV files, with all underlying data un-redacted and all underlying formulas and algorithms intact.
- c. If the Company intends to utilize any electronic search terms, de-duplication or email threading software or services when collecting or reviewing information that is stored in the Company's computer systems or electronic storage media, or if the Company's computer systems contain or utilize such software, the Company must contact Complaint Counsel to discuss whether and in what manner the Company may use such software or services when producing materials in response to this subpoena.
- d. Produce electronic file and image submissions as follows:
 - i. For productions over 10 gigabytes, use IDE, EIDE, and SATA hard disk drives, formatted in Microsoft Windows-compatible, uncompressed data in a USB 2.0 external enclosure;
 - ii. For productions under 10 gigabytes, CD-R CD-ROM optical disks formatted to ISO 9660 specifications, DVD-ROM optical disks for Windows-compatible personal computers, and USB 2.0 Flash Drives are acceptable storage formats; and
 - iii. All documents produced in electronic format shall be scanned for and free of viruses prior to submission. Complaint Counsel will return any infected media for replacement, which may affect the timing of the Company's compliance with this subpoena.
 - iv. Encryption of productions using NIST FIPS-compliant cryptographic hardware or software modules, with passwords sent under separate cover, is strongly encouraged.¹

¹ The National Institute of Standards and Technology (NIST) issued Federal Information Processing Standard (FIPS) Publications 140-1 and 140-2, which detail certified cryptographic modules for use by the U.S. Federal government and other regulated industries that collect, store, transfer, share, and disseminate sensitive but unclassified information. More information about FIPS 140-1 and 140-2 can be found at <http://csrc.nist.gov/publications/PubsFIPS.html>.

- e. Each production shall be submitted with a transmittal letter that includes the FTC matter number; production volume name; encryption method/software used; passwords for any password protected files; list of custodians and document identification number range for each; total number of documents; and a list of load file fields in the order in which they are organized in the load file.
7. All documents responsive to these requests:
 - a. Shall be produced in complete form, unredacted unless privileged, and in the order in which they appear in the Company's files;
 - b. Shall be marked on each page with corporate identification and consecutive document control numbers when produced in image format;
 - c. Shall be produced in color where necessary to interpret the document (if the coloring of any document communicates any substantive information, or if black and white photocopying or conversion to TIFF format of any document (e.g., a chart or graph) makes any substantive information contained in the document unintelligible, the Company must submit the original document, a like-color photocopy, or a JPEG format image);
 - d. Shall be accompanied by an affidavit of an officer of the Company stating that the copies are true, correct, and complete copies of the original documents; and
 - e. Shall be accompanied by an index that identifies (i) the name of each person from whom responsive documents are submitted; and (ii) the corresponding consecutive document control number(s) used to identify that person's documents. Complaint Counsel will provide a sample index upon request.
 8. If any documents are withheld from production based on a claim of privilege, the Respondent shall provide, pursuant to 16 C.F.R. § 3.38A, a schedule which describes the nature of documents, communications, or tangible things not produced or disclosed, in a manner that will enable Complaint Counsel to assess the claim of privilege.
 9. If the Company is unable to answer any question fully, supply such information as is available. Explain why such answer is incomplete, the efforts made by the Company to obtain the information, and the source from which the complete answer may be obtained. If books and records that provide accurate answers are not available, enter best estimates and describe how the estimates were derived, including the sources or bases of such estimates. Estimated data should be followed by the notation "est." If there is no reasonable way for the Company to make an estimate, provide an explanation.

10. If documents responsive to a particular specification no longer exist for reasons other than the ordinary course of business or the implementation of the Company's document retention policy but the Company has reason to believe have been in existence, state the circumstances under which they were lost or destroyed, describe the documents to the fullest extent possible, state the specification(s) to which they are responsive, and identify Persons having knowledge of the content of such documents.
11. The Company must provide Complaint Counsel with a statement identifying the procedures used to collect and search for electronically stored documents and documents stored in paper format. The Company must also provide a statement identifying any electronic production tools or software packages utilized by the company in responding to this subpoena for: keyword searching, Technology Assisted Review, email threading, de-duplication, global de-duplication or near-de-duplication, and
 - a. if the Company utilized keyword search terms to identify documents and information responsive to this subpoena, provide a list of the search terms used for each custodian;
 - b. if the Company utilized Technology Assisted Review software;
 - i. describe the collection methodology, including: how the software was utilized to identify responsive documents; the process the company utilized to identify and validate the seed set documents subject to manual review; the total number of documents reviewed manually; the total number of documents determined nonresponsive without manual review; the process the company used to determine and validate the accuracy of the automatic determinations of responsiveness and nonresponsiveness; how the company handled exceptions ("uncategorized documents"); and if the company's documents include foreign language documents, whether reviewed manually or by some technology-assisted method; and
 - ii. provide all statistical analyses utilized or generated by the company or its agents related to the precision, recall, accuracy, validation, or quality of its document production in response to this subpoena; and identify the person(s) able to testify on behalf of the company about information known or reasonably available to the organization, relating to its response to this specification.
 - c. if the Company intends to utilize any de-duplication or email threading software or services when collecting or reviewing information that is

stored in the Company's computer systems or electronic storage media in response to this subpoena, or if the Company's computer systems contain or utilize such software, the Company must contact a Commission representative to determine, with the assistance of the appropriate government technical officials, whether and in what manner the Company may use such software or services when producing materials in response to this subpoena

12. Any questions you have relating to the scope or meaning of anything in subpoena or suggestions for possible modifications thereto should be directed to Charlotte Slaiman at (202) 326-2233, cslaiman@ftc.gov. The response to the request shall be addressed to the attention of Charlotte Slaiman, Federal Trade Commission, 400 7th Street SW, Washington, D.C. 20024, and delivered between 8:30 a.m. and 5:00 p.m. on any business day.

CERTIFICATION

Pursuant to 28 U.S.C. § 1746, I hereby certify under penalty of perjury that this response to the Subpoena *Duces Tecum* is complete and correct to the best of my knowledge and belief.

(Signature of Official)

(Title/Company)

(Typed Name of Above Official)

(Office Telephone)

CERTIFICATE OF SERVICE

I hereby certify that I delivered via electronic mail a copy of the foregoing document to:

Gregory P. Stone
Steven M. Perry
Garth T. Vincent
Stuart N. Senator
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Counsel for Respondent 1-800 Contacts, Inc.

October 20, 2016

By: /s/ Daniel Matheson
Daniel Matheson
Federal Trade Commission
Bureau of Competition
400 7th Street SW
Washington, DC 20024
dmatheson@ftc.gov
Telephone: (202) 326-2075

*Counsel Supporting the
Complaint*

Keyword

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Alcon
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America's Best contacts
AC Lens
Bausch & Lomb
BJ's contact lens
BJ's contacts
Clearly Contacts
Coastal Contacts
Contact Lens King
Contacts Direct
CooperVision
Costco contact lens
Costco contacts
Daysoft
Empire Vision
EZ Contacts
Johnson & Johnson contact lens
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LensCrafters contact lens
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Sears Optical
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Target Optical

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Lenspure
Price Smart Contacts
Major Lens
Memorial Eye
ShipMyContacts.com
Oakwood Eye Clinic
Lenses for Less
Sam's Club contact lens
Sam's Club contacts
Save On Lens
Standard Optical
Replace My Contacts
Lensfast
Vision Direct
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1800contacts contact us
1800contacts discount coupon
1800contacts do you need a prescription
1800contacts promo code free shipping
1800contacts warehouse
1800contactz
2800contacts
800 contacts address
coupons for 800 contacts
how to order contacts from 1800contacts
ordering contacts from 1800contacts
return contacts to 1800contacts
text prescription to 1800contacts
use insurance on 1800contacts
1 800 contact lenses coupon code
1 800 contacts salt lake city
1-800 contacts customer service number
1800 contacts commercial moes
1800 contacts contact number
1800 contacts lawsuit
1800 contacts legit
1800 contacts tracking

1800contacts commercial mores
1800contacts fax back number
1800contacts provider phone number
1800contacts shipping method
1800contactss
do you need a prescription for 1 800 contacts
ebates 1800contacts
i-800-contacts
is 1800 contacts cheaper than walmart
returning contacts to 1800contacts
track 1800 contacts order
www.1-800-contacts.com
www.1800 contacts
1800 contact phone number
1800 contacts customer service number
1800 contacts special eyes
1800contacts coupon expedited shipping
1800contacts rebate code
1800contacts store locations
1800contacts website
1800contacts.com review
1800contactscom
800 contacts order code 2016
eyemed 1800 contacts
how long does 1-800 contacts take to ship
one 800 contacts phone number
1 800 contacts colored
1 800 contacts my brand commercial
1 800 contacts promo codes
1 800 contacts returns
1-800 contacts cancel order
1-800.contacts
1800 contact shipping code
1800 contacts address draper
1800 contacts delivery time
1800 contacts oasys
1800contacts cost
1800contacts glassdoor
1800contacts price list
1800contacts promo code july 2016
1800contacts vsp insurance
1800contactsd
can i use insurance at 1800contacts
do you need a prescription to order from 1800contacts
how much is 1800 contacts
phone number 1800 contacts
promo codes 1800contacts
what is 1 800 contacts
1 800 contacts promo
1800 contact price match
1800 contact reviews
1800 contacts ultra
1800 contacts using insurance
1800 contactss
1800contacts and walmart

1800contacts complaints
1800contacts fax prescription
1800contacts vision insurance
can you use insurance at 1800contacts
does 1800contacts use insurance
how fast does 1 800 contacts deliver
i 800 contacts coupons
shipping discount for 1800contacts
text 1800 contacts
use insurance for 1800contacts
1 800 contact promo code
1 800 contacts address
1-800 contacts app
1-800 contacts provider number
11800 contacts
1800 contact fax number
1800 contacts biotru
1800 contacts online coupon
1800contacts expired prescription
1800contacts free shipping code
1800contacts online exam
1800contacts text rx
1800contacts.comrebates
1800contacts\
air optix for astigmatism 1800contacts
can you use vsp 1800contacts
care credit 1800contacts
how long does 1 800 contacts take
promo code for 1 800 contacts
1 800 contacts commercial toilet
1 800 contacts military discount
1-800 contacts commercial my brand
1-800 contacts draper ut
1800 contact address
1800 contacts ad
1800 contacts avaira
1800 contacts coupon
1800 contacts davis vision
1800 contacts free shipping coupon
1800 contacts new customer
1800 contacts order status deleted
1800 contacts vsp insurance
1800contact codes
1800contact discount code
1800contacts 10 off
1800contacts cigna
1800contacts gift card
1800contacts provider line
1800contacts ultra
1800contactws
800 contacts commercial
800 contacts customer service
is 1800contacts reliable
opternative 1800 contacts
ordering from 1800contacts

shipping discount code for 1800contacts
what is 1800 contacts
1 800 contacts accept insurance
1 800 contacts exchange policy
1 800 contacts rebates
1-800 contacts code
1800 contact discounts
1800 contacts .com
1800 contacts coupon march 2016
1800 contacts customer service phone number
1800 contacts lens
1800 contacts linkedin
1800 contacts pricing
1800 contacts renew prescription
1800 contactws
1800contact order code
1800contacts adp
1800contacts promo code april 2016
1800contacts sign up
1800contacts.com discount code
check status of 1800contacts rebate
how to cancel a 1800contacts order
sites like 1800contacts
usa 800 contact
1 800 contact commercial
1-800 contacts number
1-800 contacts overnight shipping
1-800-contacts expired prescription
1800 contacts coupon code june 2016
1800 contacts site:retailmenot.com
1800contacts commercial special eyes
1800contacts dailies
1800contacts.com order code
biofinity 1800contacts
coupon codes 1800 contacts
discount codes 1800contacts
does 1800contacts contact your eye doctor
does 1800contacts take paypal
email.1800contacts.com
free expedited shipping code 1800contacts
how long for 1800contacts to ship
is 1800 contacts cheaper than costco
lumen optical 1800contacts
reviews for 1800 contacts
site:1800contacts.com 1800contacts
1 800 contacts torn lens replacement
1-800 contacts/rebates
11800contacts
1800 contacts acuvue oasys 24 pack
1800 contacts and insurance
1800 contacts coupon july 2016
1800 contacts deal
1800 contacts take insurance
1800 contactys
1800contacts code discount

1800contacts commercial never run out of contacts
1800contacts pay with insurance
1800contacts shipping options
1800contactsrebate
acuvue 1800contacts
how 1800contacts works
[https //www.1800contacts.com](https://www.1800contacts.com) coupon
i1800 contacts
john graham 1800contacts
o1800 contacts
retail me not 1800 contacts
what insurance does 1800contacts accept
why is 1800 contacts so expensive
1 800 contacts fax
1 800 contacts online coupon
1 800 contacts text prescription
1-800 contacts vsp
1-800-contacts verify prescription
1800 contact s
1800 contacts claim form
1800 contacts colored lenses
1800 contacts daily disposable
1800 contacts expedited shipping
1800 contacts hq
1800 contacts next day shipping code
1800 contacts opternative
1800 contacts overnight
1800 contacts with expired prescription
1800 contacts without doctor
1800 contacts wrong prescription
1800 contactsw
1800contacts accept vsp
1800contacts amish commercial
1800contacts buyback
1800contacts new customer
1800contacts replace torn lenses
1800contacts vsp reimbursement
1800contacts walmart locations
1800contactscoupon
800contacts coupons
can i use my insurance with 1800contacts
discount 1800contacts
do you need a prescription for 1800 contacts
do you need a valid prescription for 1800contacts
email 1800contacts
how long is shipping for 1800contacts
return 1800contacts
superior vision 1800contacts
will 1800contacts take insurance
1 800 contacts shipping code
1-800-contacts insurance
1-800-contacts rebate
1800 contactgs
1800 contacts draper address
1800 contacts out of network claim form

1800 contacts sale
1800 contacts site:groupon.com
1800contacts employment
1800contacts radio commercials song
acuvue oasis coupon code 1800contacts
call 1800contacts
coupon for 1-800 contacts
does 1800contacts ship overnight
how long does it take 1 800 contacts to deliver
site:1800contacts.com 1800 contacts
1 800 contacts free shipping code
1 800 contacts logo
1-800 contacts prescription verification fax number
1800 contact order code discount
1800 contact return policy
1800 contact/rebates
1800 contacts 10% off
1800 contacts aea
1800 contacts astigmatism
1800 contacts cupons
1800 contacts non prescription
1800contacts ceo
1800contacts oasis
1800contacts rush delivery
1800contacts student discount
1800contacts vs lens.com
anthem 1800contacts discount
can 1800contacts bill insurance
coupon code 800 contacts
proclear toric xr 1800contacts
promo codes for 1800 contacts
return policy 1800contacts
1 800 contacts freshlook colorblends
1-800 contacts without prescription
1800 contacts acuvue 1 day moist astigmatism
1800 contacts colorblends
1800 contacts create account
1800 contacts hsa
1800 contacts prescription change
1800 contacts same day shipping
1800 contacts]
1800contacts cashback
1800contacts commercial girl
1800contacts promo code march 2016
1800contacts torn lens replacement
1800contacts
7800contacts
800 contact coupons
cindy williams 1-800 contacts
coupon code for 1 800 contacts
coupon for 800 contacts
discount code for 1 800 contacts
how much are 1 800 contacts
how to cancel order 1800contacts
how to use 1800contacts

phone number to 1-800 contacts
unitedhealthcare 1800contacts
vsp with 1800contacts
who does 1800contacts use for shipping
www.1800contacts.com coupon
1 800 contacts email address
1 800 contacts price list
1 800 contacts promo code 2016
1-800 contacts revenue
1800 contact rebate status
1800 contactsd
1800 contacts aquacomfort plus
1800 contacts freshlook colors
1800 contacts proclear
1800 contacts shipping discount
1800 contacts song
1800 contacts uk
1800 contactsa
1800contactas
1800contactrs
1800contacts focus dailies
1800contacts free torn lens replacement
1800contacts order tracking
1800contacts.com
1800contactscoupons
800 contacts free expedited shipping
coupon code 1 800 contacts
davis vision 1800 contacts
does 1800contacts actually check prescription
email address for 1800contacts
how long does it take for 1 800 contacts to ship
insurance on 1800contacts
order status deleted 1 800 contacts
upload prescription 1800contacts
using insurance 1 800 contacts
walmart and 1800contacts
www.1800contacts.com promo code
1 800 contacts commercial my brand
1 800 contacts radio commercial
1- 800 contacts
1-800 contacts discount
1-800-contacts.com
1800 contact promo
1800 contacts acuvue trueye
1800 contacts customer service hours
1800 contacts discount coupon
1800 contacts online
1800 contacts online chat
1800 contacts order code may 2016
1800 contacts promo.code
1800contacts ad
1800contacts bbb
1800contacts commercial 2016
1800contacts contacts for astigmatism
1800contacts coupon 2016

1800contacts dailies total 1
1800contacts delivery options
1800contacts exchange policy
1800contacts insurance claim
1800contacts jingle
1800contacts revenue
1800contacts stock
1800contacts.com/ooninsurance
19800 contacts
cancel 1800contacts order
cancel order 1800 contacts
free overnight shipping 1800contacts
how much does 1 800 contacts cost
mail in rebate for 1800 contacts
price match 1800contacts
q800contacts
walmart 1 800 contacts
1 800 contacts discount codes
1 800 contacts draper
1 800 contacts special eyes commercial
1 800 contacts vsp provider
1-800 contacts commercials
1-800 contacts glassdoor
1-800 contacts.com/rebates
1800 contact lenses review
1800 contacte
1800 contacts code 2016
1800 contacts free overnight shipping
1800 contacts twitter
1800contacts coupons codes
1800contacts ebates
1800contacts founder
1800contacts mailing address
1800contacts shipping tracking
1800contacts verification
1800contacts verifying rx with doctor
19800contacts
800 contact promo code
800 contacts expedited shipping code
aea 1800 contacts
do you need an updated prescription for 1800contacts
does 1 800 contacts take care credit
does 1 800 contacts take insurance
does 1800contacts deliver on saturday
eye med 1800 contacts
how does 1800contacts work with insurance
how long does it take for 1800contacts to deliver
how much are contacts at 1800contacts
iex.1800contacts.com
number for 1-800 contacts
online eye exam 1800contacts
shipping 1800contacts
track order 1800 contacts
use insurance with 1800contacts
vsp insurance 1800contacts

why does 1-800-contacts require a prescription
1 800 contact discount code
1 800 contacts coupons codes
1 800 contacts return
1-800 contacts address draper
1-800 contacts vs. costco
1800 contact customer service
1800 contacts
1800 contacts 1 day shipping
1800 contacts acuvue oasis for astigmatism
1800 contacts contact us
1800 contacts expensive
1800 contacts fast shipping
1800 contacts instarx
1800 contacts text
1800 contacts trueye
1800contacts clariti
1800contacts coupon acuvue oasis
1800contacts price match guarantee
1800contacts promocode
1800contacts song
1800contacts wiki
1800contactsa
800contacts code
anthem blue cross 1800contacts
biofinity 1-800-contacts
biofinity toric 1-800-contacts
dailies aquacomfort plus 1800contacts
do you have to have a prescription for 1800contacts
does 1800contacts accept paypal
does 1800contacts take vsp insurance
does 1800contacts verify your prescription
glasdoor 1800contacts
how much does 1800contacts cost
military discount 1800contacts
my brand 1800 contacts
walmart contacts vs 1800contacts
1 800 contact coupon codes
1 800 contacts app
1 800 contacts codes promos
1 800 contacts coupon site:retailmenot.com
1 day acuvue moist 1800contacts
1-800 contact lens
1-800 contacts biofinity
1-800contacts.com
1800 contact lens coupon code
1800 contact rebates
1800 contact shipping
1800 contacts acuvue 1 day moist
1800 contacts freshlook
1800 contacts order code march 2016
1800 contacts rebate page
1800 contacts reddit
1800 contacts shipping speed
1800contacts anthem

1800contacts commercial actor
1800contacts distribution center address
1800contacts hsa
1800contacts price
1800contacts refund policy
1800contacts salary
1800contacts samples
1800contacts superior vision
1800contacts toilet commercial
800contacta
acuvue 1 day moist 1800contacts
anthem 1800 contacts
how much does 1800 contacts cost
sofmed breathables 1800contacts
vsp and 1800 contacts
www.1800contacts coupons
1 800 contact coupon code
1 800 contacts air optix
1-800 contacts rebates
1-800 contacts v. whenu.com
1-800-contacts draper office
1800 contact deals
1800 contacts acuvue oasis
1800 contacts acuvue oasys coupon
1800 contacts colors
1800 contacts cupon code
1800 contacts military discount
1800 contacts online prescription
1800contacts acuvue
1800contacts acuvue moist
1800contacts biofinity multifocal
1800contacts colors
1800contacts doesn't have my prescription
1800contacts frequency 55
1800contacts linkedin
1800contacts old prescription
1800contacts order code coupon
1800contacts price guarantee
1800contacts price match lens.com
1800contacts rebate tracker
1800contacts.com/shiptoday
1800contacts/
1800contactsrebates
7800 contacts
800 contacts free shipping code
address for 1800contacts
air optix multifocal 1800contacts
can you use insurance with 1-800-contacts
click email 1800contacts
coastal contacts vs 1800contacts
contact 1800 contacts
coupon code for 800 contacts
discount code 1 800 contacts
discount code for 1-800 contacts
eyemed and 1800contacts

fax number for 1800contacts
how fast is 1 800 contacts
how much are contacts on 1800contacts
how to change doctor on 1800 contacts
how to order from 1 800 contacts
iex.agent.1800contacts
promo code 1 800 contacts
vsp vision 1800contacts
1 800 contacts.com / rebates
1-800 contacta
1-800 contacts acuvue oasys
1-800 contacts corporate headquarters address
1-800 contacts online exam
1800 contacts acuvue daily
1800 contacts bbb
1800 contacts change doctor
1800 contacts clariti
1800 contacts connect
1800 contacts customer service email
1800 contacts founder
1800 contacts moose commercial
1800 contacts paypal
1800 contacts salt lake city
1800contacts and vsp
1800contacts commercial song
1800contacts coupons discount codes
1800contacts doctors line
1800contacts free overnight shipping
1800contacts health insurance
1800contacts how long does it take to deliver
1800contacts legit
1800contacts order code july 2016
1800contacts purevision 2
1800contacts radio commercials
1800contacts rx verification fax number
1800contacts sign in
1800contacts tracking
1800contacts verification number
800 contacts shipping
800contacts promo code
biofinity multifocal 1800contacts
biotrue 1800contacts
can you use insurance on 1800 contacts
cindy williams 1800 contacts
code for 1800 contacts
coupon 800 contacts
discount codes for 1800 contacts
does 1800 contacts take vsp
does 1800contacts call doctor
freshlook colorblends 1800contacts
number for 1800contacts
proclear toric 1800 contacts
vsp 1-800-contacts
where does 1800 contacts ship from
why was my 1800contacts order deleted

www 1800contacts com coupon
-800contacts
1 800 contacts colored contacts
1 800 contacts commercial song
1 800 contacts draper utah
1 800 contacts moises commercial
1 800 contacts prescription
1 800 contacts.
1-800 contacts aea
1-800 contacts utah
1-800 contacts v. lens.com
1-800-contacts walmart locations
1-800contact
1800 contacts 1 day acuvue moist
1800 contacts cheaper
1800 contacts youtube
1800-contact
1800contact discount
1800contactds
1800contactgs
1800contacts air optix colors
1800contacts alternative
1800contacts business days
1800contacts claim form
1800contacts commercials
1800contacts coupon code july 2016
1800contacts coupon retailmenot
1800contacts employee benefits
1800contacts exchange
1800contacts free next day shipping code
1800contacts instarx
1800contacts josh neilson
1800contacts lawsuit
1800contacts pricing
1800contacts radio commercial
1800contacts radio commercial song
1800contacts shipping cost
1800contacts shipping coupon
1800contacts youtube
800 contacts app
800 contacts.
a800 contacts
cancel order on 1800contacts
email prescription to 1800contacts
how long does it take to get contacts from 1800 contacts
instarx 1800 contacts
insurance and 1800contacts

CustomerId	ExternalCustomerId	Name
769343	1011556460	Vision Direct
15537409	1155384233	Vision Direct Backup
107551	1199684660	LensesForLess.com
21001831	1261024631	Sam's Club 2007 BTS
57831649	1658362642	Labs 17-Walmart Brand
38355275	1923030029	Lens.com Search FY 11_10020984
41937383	2162193872	Lenscrafters_28360
11873193	2373799247	29 - Walmart
1391088	2380673559	saveonlens
136980	2544527520	1 800 Contacts
1346636	3298598839	Text (Lens Direct)
9748520	3439116682	Vision Direct US
6377208	3498808349	LensCrafters Contact Lens
103471425	3510044232	America's Best (Ecom)
111677952	3549027628	daysoft.com
11871345	3677704588	Web Eye Care
15097349	3706968290	LensCrafters - US
60672090	3826235125	DVM - Luxottica Contact Lenses
15627496	3878096582	Replace My Contacts
7817513	3979345268	Memorial Eye
888921	4095112250	Vision Direct
20996288	4502114178	Lens Direct
40843011	4636911429	5 - Standard Optical
101251834	4697699163	Lenscrafters
39111445	5022582329	Razorfish: LensCrafters Search Q109_10001993
140734048	5068839453	zzz_Luxoptica usd
17940944	5139401037	VISION DIRECT PTY LIMITED
141743937	5260428653	LensPure
16909269	5984140388	lens world
31463	6016477780	Lens.com
65176588	6159982152	ä,Šæµ:æ€œŒš'æŠœœ%œ'™ä...-åð88lens.com
53787210	6355833623	Walgreens Contacts
89083463	6773249957	New Lens Crafters- US
38786721	6932309123	ZZZ Luxottica - Budget Eyewear
917684	7100401870	Wal-mart.com - Main
15916774	7119605233	LensDirect
20225793	7272918386	LensCrafters - Contact Lenses
76011	7287050050	Vision Direct
116843866	7307500820	America's Best (Retail)
39832304	7420473072	Razorfish_Lenscrafters_Sears Optical - Search 2009_10006246
109894271	7473116340	LensCrafters_SEM
13130130	7648789935	_R\$ â€—Old2 iPowerW/1-800Contacts
28435847	7747513431	Daysoft Contact Lenses
10444568	7853031882	Walgreen's Brand
4188028	8074149949	EZ Contacts USA
119055936	8091055297	Optometry (Rialto Walmart)
52762293	8125459627	America's Best
332002	8441041090	1800 Contacts

13179814	8513877982 daysoft
74153434	8676767328 www.ezcontactsusa.com
73567267	8689711134 AC Lens
9046208	8940700992 VisionDirect - NEW
852993	8970099050 Lens Direct
7320224	8975074378 Walmart_Vendor-Funded
10530625	9179023135 Lens.com - 1800-Get-Lens.com
2823856	9243502008 Lensworld
42246259	9304883476 Vision Direct, Inc.
17784951	9317293082 Luxottica Retail
16192	9454798930 Walgreen's (Old)
7952407	9523244943 ZZZ_Lens Direct > Acct. 157
78464426	9527897683 Lens Crafters
95851764	9559068771 Lenscrafters
69744660	9566437902 Walmart Vision Campaign
7588457	9598049858 LensCrafters
20180273	9712142890 1-800 Contacts - AOL
118938481	9753779959 Walmart Contact Search
1364829	9891308749 VisionDirect

Notice of Electronic Service

I hereby certify that on February 21, 2017, I filed an electronic copy of the foregoing Respondent 1-800 Contacts' Motion Pursuant to Rules 3.31A(a) and (b) to Permit Respondent to Call Six (6) Expert Witnesses at Trial, with:

D. Michael Chappell
Chief Administrative Law Judge
600 Pennsylvania Ave., NW
Suite 110
Washington, DC, 20580

Donald Clark
600 Pennsylvania Ave., NW
Suite 172
Washington, DC, 20580

I hereby certify that on February 21, 2017, I served via E-Service an electronic copy of the foregoing Respondent 1-800 Contacts' Motion Pursuant to Rules 3.31A(a) and (b) to Permit Respondent to Call Six (6) Expert Witnesses at Trial, upon:

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Complaint

Barbara Blank
Attorney
Federal Trade Commission
bblank@ftc.gov
Complaint

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Complaint

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Complaint

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Complaint

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Complaint

Nathaniel Hopkin
Attorney

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Complaint

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Federal Trade Commission
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Complaint

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Complaint

Charlotte Slaiman
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Federal Trade Commission
cslaiman@ftc.gov
Complaint

Mark Taylor
Attorney
Federal Trade Commission
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Complaint

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Respondent

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Stuart N. Senator
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stuart.senator@mto.com
Respondent

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Justin.Raphael@mto.com
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Charis Lex P.C.
sgates@charislex.com
Respondent

Mika Ikeda
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Complaint

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Respondent

Julian Beach
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julian.beach@mto.com
Respondent

Aaron Ross
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Federal Trade Commission
aross@ftc.gov
Complaint

Justin Raphael
Attorney