



# Law and Technology at Penn

2012-2013



Center for Technology, Innovation and Competition





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The University of Pennsylvania Law School's Center for Technology, Innovation and Competition is dedicated to promoting foundational research that will shape and reshape the way policymakers think about technology-related issues. To do so, CTIC organizes events that explore the full range of scholarly perspectives.

The University of Pennsylvania is uniquely well positioned to support the Center's mission. The Law School is home to many of the nation's leading experts on intellectual property, Internet law, and technology policy. In addition, CTIC is able to draw on the expertise of scholars from across the University, including the Wharton School, the Annenberg School for Communication, the Cinema Studies Program, and the School of Engineering and Applied Science. Philadelphia is home to a vibrant high-tech legal community and many of the world's leading technology companies. CTIC's proximity to New York and Washington, D.C. allows it to enjoy frequent visits from key industry players and policymakers.

For more information and current events at CTIC, visit our website at [www.law.upenn.edu/academics/institutes/ctic](http://www.law.upenn.edu/academics/institutes/ctic).



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Left to Right:  
Matt Corriel L'13, Cynthia Dahl, David Abrams, Gideon Parchomovsky, R. Polk Wagner, Christopher Yoo, Shyamkrishna Balganesh, Justin (Gus) Hurwitz



## A Message from the Directors

This book celebrates the Center for Technology, Innovation and Competition's sixth year, a year of growth and transition as law and technology play an increasingly important role at Penn Law.

This year saw CTIC's most expansive program to date. At Penn Law, we hosted two major conferences. The first, co-sponsored with the *University of Pennsylvania Law Review*, considered legal challenges posed by evolving Internet technologies. The second, which launched an annual series, brought legal academics and computer scientists together to develop an interdisciplinary research agenda in law and computer science.

Outside of Penn Law, CTIC co-sponsored a conference on Understanding Entrepreneurship with Bar-Ilan University in Ramat Gan, Israel.

CTIC also continued to develop its support for Penn Law students. This year saw the launch of Penn Law's new Detkin Intellectual Property and Technology Legal Clinic, directed by Cynthia Dahl. The first of its kind, the Detkin Clinic allows students to work in a transactional IP setting with both large and small clients.

The Center continued its support for the student-run Penn Intellectual Property Group's annual symposium, which focused this year on user modifications to IP-protected works. We are also delighted that Penn Law students, advised by CTIC faculty, won the 2012 IP LawMeet and, for the third consecutive year, won the western regional division of the American Intellectual Property Law Association's annual Giles S. Rich Moot Court Competition.

We are thrilled to welcome Matt Corriel as CTIC's new Research Fellow. Matt follows Gus Hurwitz, CTIC's inaugural Fellow, who is now an Assistant Professor at the University of Nebraska College of Law.

As in previous years, we were pleased to host a number of top scholars in our annual workshop series.

The program planned for year seven continues to raise the bar. We are already planning conferences on Patent Reform, Natural Language Processing, and the second installment of Law and Computer Science. We also look forward to October 7 and 8, when the Federal Circuit will be sitting at Penn Law.

Finally, this coming year Penn Law is launching a new Law and Technology degree program, for which CTIC is both the anchor and the inspiration. This joint degree program builds on CTIC's success and will allow students to receive a J.D. from Penn Law and a master's degree from Penn's School of Engineering and Applied Science.

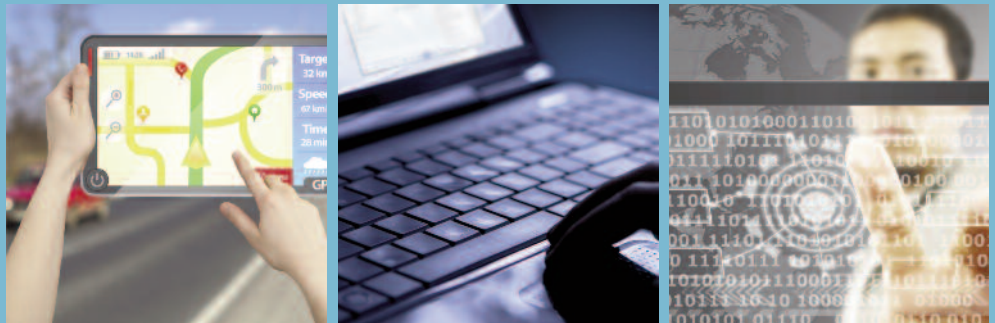
We extend our heartfelt thanks to all of our friends and supporters for bringing their perspectives, experiences, participation, and expertise to all that we do. We note, in particular, the support of the New York Bar Foundation, which has made much of our work possible through a generous multi-year grant. Through this and other support, CTIC has been able to build a successful foundation to continue serving as a leading academic center in technology and innovation policy.





Center for Technology, Innovation and Competition





# CTIC Programs

Symposium on The Evolving Internet

Roundtable on Computer Science and the Law

Conference on Understanding Entrepreneurship

Penn Intellectual Property Group: Symposium on Creation Nation

Workshops & Visitors



## The Evolving Internet

Co-sponsored by the *University of Pennsylvania Law Review*  
and the Center for Technology, Innovation and Competition

October 19 – 20, 2012

In October, CTIC partnered with the *University of Pennsylvania Law Review* to present “The Evolving Internet,” a two-day symposium on issues arising from changes in the Internet’s architecture and new Internet uses. Bringing together scholars, regulators, and industry professionals from the U.S. and Europe, the conference explored online privacy, competition, gaming, First Amendment rights, and topics in other areas undergoing rapid change as the Internet continues to mature. The conference was structured around a series of papers that were published in volume 161 of the *University of Pennsylvania Law Review*.







Opposite Page, Left to Right: David Pogue, C. Scott Hemphill, Kevin Coates, Howard Shelanski

Above: Craig Partridge





## The Evolving Internet

October 19 – 20, 2012

October 19, 2012

### Welcome

Michael Fitts

Dean and Bernard G. Segal Professor of Law,  
University of Pennsylvania Law School

### INTERNET 101

Craig Partridge

Chief Scientist, Raytheon BBN Technologies

### TRUST AND ONLINE INTERACTION

Justin (Gus) Hurwitz

Fellow, Center for Technology, Innovation and Competition,  
University of Pennsylvania Law School

### Commentators

Jerry Kang

Professor of Law, UCLA School of Law

Peter Swire

C. William O'Neill Professor of Law,  
Moritz College of Law, Ohio State University

### Moderator

R. Polk Wagner

Professor of Law, University of Pennsylvania Law School

### ALGORITHMS, COMMUNICATION, AND THE FIRST AMENDMENT

### Panelists

Stuart Benjamin

Douglas B. Maggs Chair in Law, Duke University School of Law

Tim Wu

Isidor and Seville Sulzbacher Professor of Law, Columbia Law School

### Moderator

Tobias Barrington Wolff

Professor of Law, University of Pennsylvania Law School

October 20, 2012

### THE FUTURE OF THE CLOUD AND INFORMATION PRIVACY

Paul Schwartz

Professor of Law, UC Berkeley School of Law;  
Director, Berkeley Center for Law & Technology

### Commentators

Helen Nissenbaum

Professor of Media, Culture and Communication, and Computer Science,  
New York University; Visiting Scholar, Annenberg School for Communication  
at University of Pennsylvania

Paul Ohm

Senior Policy Advisor, Federal Trade Commission;  
Associate Professor, University of Colorado Law School (on leave)

### Moderator

Anita Allen

Henry R. Silverman Professor of Law and Professor of Philosophy,  
University of Pennsylvania

### INFORMATION, INNOVATION, AND COMPETITION POLICY FOR THE INTERNET

Howard Shelanski

Director, Bureau of Economics, Federal Trade Commission;  
Professor of Law, Georgetown University Law Center (on leave)

### Commentators

Kevin Coates

Directorate General for Competition, European Commission

C. Scott Hemphill

Chief, Antitrust Bureau, Office of the New York State Attorney General;  
Professor of Law, Columbia Law School (on leave)

### Moderator

Edward Rock

Saul A. Fox Distinguished Professor of Business Law,  
University of Pennsylvania Law School





Left to Right:  
Christopher Yoo, Jonathan Smith, Steven Bellovin  
Tim Wu, Stuart Benjamin  
Jennifer Rothman, Dan Burk, David Abrams

## KEYNOTE ADDRESS

**David Pogue**  
*New York Times* Technology Columnist;  
CBS News Correspondent

## BREAKOUT SESSIONS: INTERNET ON THE GO

### Session 1

**Richard Whitt**  
Global Head for Public Policy and Government Relations,  
Motorola Mobility LLC

*Interview by:*

**Andrea Matwyshyn**  
Assistant Professor of Legal Studies and Business Ethics,  
Wharton School, University of Pennsylvania

### Session 2

**Philip Junker**  
Executive Director of Strategic Alliances, Verizon Wireless

*Interview by:*

**Cynthia Dahl**  
Practice Associate Professor and Inaugural Director of the Detkin Intellectual  
Property and Technology Legal Clinic, University of Pennsylvania Law School

### Session 3

**Glenn Reitmeier**  
Senior Vice President for Advanced Technology, NBC Universal

*Interview by:*

**Peter Decherney**  
Associate Professor of Cinema Studies and English,  
University of Pennsylvania

## PROTOCOL LAYERING AND INTERNET POLICY

**Christopher Yoo**  
John H. Chestnut Professor of Law, Communication, and  
Computer & Information Science, University of Pennsylvania

### Commentators

**Steven Bellovin**  
Chief Technologist, Federal Trade Commission;  
Professor of Computer Science, Columbia University (on leave)

**Jonathan Zittrain**  
Professor of Law, Harvard Law School;  
Co-founder, Berkman Center for Internet & Society, Harvard University

### Moderator

**Jonathan Smith**  
Olga and Alberico Pompa Professor of Engineering and Applied Science,  
University of Pennsylvania

## OWNING E-SPORTS: PROPRIETARY RIGHTS IN PROFESSIONAL COMPUTER GAMING

**Dan Burk**  
Chancellor's Professor of Law, University of California, Irvine

### Commentators

**Michael Madison**  
Professor of Law, University of Pittsburgh School of Law

**Jennifer Rothman**  
Professor of Law, Loyola Law School, Los Angeles

### Moderator

**David Abrams**  
Assistant Professor of Law, Business Economics, and Public Policy,  
University of Pennsylvania



## Computer Science and the Law

June 24 – 25, 2013

Advocates practicing in many areas of the law are discovering the need for a better understanding of the technologies that frame legal issues. At the same time, technologists are realizing the need for a stronger foundation in the legal principles that frame the way technology interacts with society as well as a better appreciation of the economics of information. To foster the development of high-quality interdisciplinary scholarship, CTIC convened a roundtable in June 2013 that brought together legal academics and computer scientists interested in exploring the intersection between these disciplines. This conference was structured around a series of works-in-progress, each having substantial legal and technical components. These papers were used to consider how an understanding of technical concepts affects legal analysis and vice versa. We are currently planning to expand this initiative into a larger conference next year to continue the discussion started in June.







Opposite Page, Left to Right: Jerry Kang, Justin (Gus) Hurwitz

Above: Edward Felten





## Computer Science and the Law

June 24 – 25, 2013

June 24, 2013

### Welcome and Technical Tutorial

Christopher Yoo

John H. Chestnut Professor of Law, Communication, and Computer & Information Science, University of Pennsylvania

### SESSION 1

#### MULTI-STAKEHOLDER PROCESSES IN THE OPEN INTERNET: A CASE STUDY ON PORT BLOCKING

Douglas Sicker

DBC Endowed Professor of Computer Science, University of Colorado

#### INSTITUTIONS, REGULATION AND GOVERNANCE OF THE INTERNET: A EUROPEAN PERSPECTIVE ON TRAFFIC, USES AND BUSINESS PRACTICES IN THE DIGITAL ECONOMY

Jonathan Liebenau

Reader in Technology Management, London School of Economics

Silvia Elaluf-Calderwood

Research Fellow, London School of Economics

### Moderator

Jonathan Smith

Olga and Alberico Pompa Professor of Engineering and Applied Science, University of Pennsylvania

### SESSION 2

#### NEXT GENERATION NETWORKS

Stefan Bechtold

Professor of Intellectual Property, ETH Zurich

#### MODULARITY THEORY AND INTERNET POLICY

Christopher Yoo

John H. Chestnut Professor of Law, Communication, and Computer & Information Science, University of Pennsylvania

### Moderator

Craig Partridge

Chief Scientist, Raytheon BBN Technologies

### SESSION 3

#### THE ECONOMICS OF BITCOIN MINING OR, BITCOIN IN THE PRESENCE OF ADVERSARIES

Edward Felten

Professor of Computer Science and Public Affairs, Princeton University

#### LAW AND ENGINEERING AS PROBLEM-SOLVING DISCIPLINES

Justin (Gus) Hurwitz

Fellow, Center for Technology, Innovation and Competition, University of Pennsylvania Law School

### Moderator

Andrea Matwyshyn

Assistant Professor of Legal Studies and Business Ethics, Wharton School, University of Pennsylvania



Left to Right:  
Douglas Sicker  
Jonathan Liebenau  
Orin Kerr



June 25, 2013

#### SESSION 4

##### THE NEXT GENERATION PRIVACY ACT

Orin Kerr  
Fred C. Stevenson Research Professor of Law,  
George Washington University Law School

##### IMPLICIT BIAS AS A SECURITY PROBLEM

Jerry Kang  
Professor of Law, UCLA School of Law

#### Moderator

Frank Pasquale  
Schering-Plough Professor in Health Care Regulation and Enforcement,  
Seton Hall University School of Law

#### SESSION 5

##### OBFUSCATION AS A TOOL FOR PRIVACY SELF-HELP

Helen Nissenbaum  
Professor of Media, Culture and Communication, and Computer Science,  
New York University; Visiting Scholar, Annenberg School for Communication  
at University of Pennsylvania

##### THE ANTI BOTNET CASES

David Robinson  
Principal, Robinson + Yu LLC

#### Moderator

Eric Goldman  
Professor of Law and Director of the High Tech Law Institute,  
Santa Clara University School of Law

#### DISCUSSION:

##### FUTURE RESEARCH DIRECTIONS IN LAW AND COMPUTER SCIENCE

#### Moderator

Christopher Yoo  
John H. Chestnut Professor of Law, Communication, and Computer  
& Information Science, University of Pennsylvania



Top to Bottom:  
Andrea Matwyshyn, Helen Nissenbaum  
Stefan Bechtold



## Understanding Entrepreneurship: On IP, Culture, and Innovation Environments

Co-sponsored by the Bar-Ilan University Faculty of Law and the  
Center for Technology, Innovation and Competition

May 20 - 21, 2013

In May 2013, CTIC Faculty visited Bar-Ilan University in Ramat Gan, Israel to participate in a conference on innovation and entrepreneurship. In recent years, Israel has been recognized as one of the top entrepreneurial economies in the world. This conference considered the role of IP, technology, and culture in the development of innovation economies generally. This discussion drew from similarities and differences in the Israeli and American experiences to better understand how cultural, economic, and legal settings affect innovation and entrepreneurship.







Opposite Page, Left to Right: Roy Keidar, Yossi Smoler, Nir Ben-Aharon, Sharon Bar-Ziv, Daniel Ben-Oliel, Stuart Graham

Above:

Back Row: Matt Corriel L'13, Shyamkrishna Balganesh, R. Polk Wagner

Middle Row: David Abrams, Abraham Bell, Daniel Ben-Oliel, Yoav Oestreicher, Stuart Graham

Front Row: David Mirchin, Amir Khoury, Gideon Parchomovsky, Miriam Bitton, Cynthia Dahl, Christopher Yoo, Justin (Gus) Hurwitz, Daniel Goldstein, Sharon Bar-Ziv





## Understanding Entrepreneurship: On IP, Culture, and Innovation Environments

May 20 - 21, 2013

Co-sponsored by the Bar-Ilan University Faculty of Law and  
the Center for Technology, Innovation and Competition

May 20, 2013

### Welcome

**Shahar Lifshitz**

Dean, Faculty of Law, Bar-Ilan University

**Christopher Yoo**

John H. Chestnut Professor of Law, Communication, and Computer  
& Information Science, University of Pennsylvania

### KEYNOTE ADDRESS

#### LANDING AN ISRAELI SPACESHIP ON THE MOON

**Yanki Margalit**

Social Entrepreneur; Chairman, Spacell

### GOVERNMENT PERSPECTIVE:

#### THE ROLE OF GOVERNMENT IN ENTREPRENEURSHIP

### Panelists

**Sharon Bar-Ziv**

Research Fellow, Haifa Center for Law & Technology,  
Faculty of Law, University of Haifa

**Nir Ben-Aharon**

Head of Policy and Research, Small and Medium Size Business Agency,  
Israel Ministry of Industry, Trade & Labor

**Yossi Smoler**

Technological Incubators Program Director, Office of the Chief Scientist,  
Israel Ministry of Industry, Trade & Labor

**Roy Keidar**

CEO, The Reut Institute

### Moderator

**Miriam Bitton**

Assistant Professor of Law, Faculty of Law, Bar-Ilan University

## THE INTERSECTION OF PATENT LAW & ENTREPRENEURSHIP

### Panelists

**David Abrams**

Assistant Professor of Law, Business Economics, and Public Policy,  
University of Pennsylvania

**Stuart Graham**

Senior Advisor on Economic Policy, USPTO;  
Professor of Strategy, Scheller College of Business,  
Georgia Institute of Technology

**R. Polk Wagner**

Professor of Law, University of Pennsylvania Law School

**Daniel Ben-Oliel**

Assistant Professor of Law, Faculty of Law, University of Haifa

**Yoav Oestreicher**

Partner, Head of Intellectual Property and Technology Litigation,  
Meitar Liquornik Geva Leshem Tal

### Moderator

**Christopher Yoo**

John H. Chestnut Professor of Law, Communication, and Computer  
& Information Science, University of Pennsylvania

May 21, 2013

## INTERNET AND ENTREPRENEURSHIP

### Panelists

**Christopher Yoo**

John H. Chestnut Professor of Law, Communication, and Computer  
& Information Science, University of Pennsylvania

**Tal Zarsky**

Senior Lecturer, Faculty of Law, University of Haifa

**David Mirchin**

Partner, Chair of Technology Transactions Department,  
Meitar Liquornik Geva Leshem Tal

### Moderator

**Justin (Gus) Hurwitz**

Fellow, Center for Technology, Innovation and Competition,  
University of Pennsylvania Law School





Left to Right:  
R. Polk Wagner, Shyamkrishna Balganesh, Amir Khoury,  
Abraham Bell, Gideon Parchomovsky  
David Abrams, Inbal Arieli, Cynthia Dahl

## LEGAL PERSPECTIVE: LAW REFORM PROPOSALS

### Panelists

**Shyamkrishna Balganesh**

Assistant Professor of Law, University of Pennsylvania Law School

**Amir Khoury**

Senior Lecturer, Faculty of Law, Tel Aviv University

**Abraham Bell**

Professor, Faculty of Law, Bar-Ilan University;

Professor of Law, University of San Diego Law School

**Gideon Parchomovsky**

Robert G. Fuller, Jr. Professor of Law, University of Pennsylvania Law School;

Professor, Faculty of Law, Bar-Ilan University

**Daniel Goldstein**

Senior Patent Attorney, Sanford T. Colb & Co

**Sanford Colb**

Founder, Sanford T. Colb & Co

### Moderator

**R. Polk Wagner**

Professor of Law, University of Pennsylvania Law School



## CULTURAL PERSPECTIVE: THE ROLE OF CULTURE IN ENTREPRENEURSHIP

### Panelists

**Inbal Arieli**

Head of the 8200 Entrepreneurship and Innovation Support Program

**Cynthia Dahl**

Practice Associate Professor and Inaugural Director of the Detkin Intellectual Property and Technology Clinic, University of Pennsylvania Law School

### Moderator

**David Abrams**

Assistant Professor of Law, Business Economics, and Public Policy,  
University of Pennsylvania

Top to Bottom:  
Yanki Margalit  
Christopher Yoo, Tal Zarsky, David Mirchin



## Symposium on Creation Nation: IP & The Rise of Prosumerism

Penn Intellectual Property Group

March 29, 2013

With support from CTIC, Penn Law's student-run Penn Intellectual Property Group held its sixth annual symposium in March 2013. This year's PIPG Symposium explored the IP implications of the shifting divide between content creators and providers. The discussion comprised three panels, considering game development, fan fiction writing, and home fabrication with 3D printing. These panels brought academics together with legal counsel from industry leaders to discuss the challenges that each of these areas poses to IP law. The symposium concluded with a keynote address by Cindy Cohn, the Legal Director and General Counsel of the Electronic Frontier Foundation.





Opposite Page, Left to Right: Rebecca Tushnet, Heidi Tandy, Dale Nelson, Cindy Cohn  
Left: Mark Methenitis, Jon Festinger, Greg Lastowka



## Welcome

**Matt Corriel & Ashley Kwon**  
Co-Presidents, Penn Intellectual Property Group

## GAME DEVELOPMENT & MODIFICATION

**Greg Lastowka**  
Professor of Law, Rutgers School of Law-Camden  
**Mark Methenitis**  
Corporate Counsel, MetroPCS  
**Jon Festinger**  
Professor, Center for Digital Media, University of British Columbia

## FAN FICTION

**Rebecca Tushnet**  
Professor of Law, Georgetown University Law Center  
**Heidi Tandy**  
Legal Committee, Organization for Transformative Works  
**Dale Nelson**  
Vice President & Senior IP Counsel, Warner Bros. Entertainment, Inc.

## 3D PRINTING

**William Cass**  
Partner, Cantor Colburn LLP  
**Michael Weinberg**  
Vice President, Public Knowledge

## KEYNOTE ADDRESS

**Cindy Cohn**  
Legal Director & General Counsel, Electronic Frontier Foundation



Top to Bottom:  
Christopher Kim L'14, Matt Corriel L'13, Ashley Kwon L'13  
William Cass, Michael Weinberg



## 2012-2013 Visiting Scholars

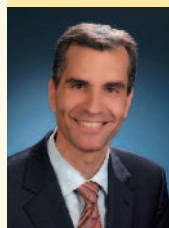
Each year, CTIC invites a small number of scholars for multi-week visits to Penn Law. Each visiting scholar is hosted by an individual member of the CTIC faculty in order to facilitate collaborative research. In addition, visiting scholars participate in the intellectual life of Penn Law and the broader University, including participating in workshops, guest lecturing in classes, and otherwise interacting with the University.



### Lee Petherbridge L'02

Professor of Law and Richard a. Vachon, S.J. Fellow, Loyola Law School, Los Angeles

Lee Petherbridge visited Penn Law in Fall 2012 to work with Polk Wagner. During this visit, Petherbridge and Wagner built on their prior collaboration by working on a forthcoming project about unenforceable patents and presented an early version of this work to the Penn Law faculty in a CTIC workshop. This project, an empirical study of the characteristics of patents that the Federal Circuit has held to be unenforceable due to inequitable conduct, finds that patents held unenforceable have clear hallmarks of risky prosecution behavior, such as longer pendency and fewer disclosures of prior art, as compared to other types of litigated patents. Wagner and Petherbridge's results indicate that the doctrine is likely to be operating better than the conventional wisdom would suggest.



### Thomas Fetzer

Professor of Law, University of Mannheim

Thomas Fetzer visited the Law School in June 2013 to continue ongoing work with Christopher Yoo on international telecommunications law. Fetzer is a long-time collaborator with Professor Yoo, with whom he is currently working on a book project comparing U.S. and E.U. telecommunications law. During his visit he participated in various CTIC events, including the roundtable on Computer Science and the Law.



## 2012-2013 Workshop Series

Each year, CTIC invites top scholars to present cutting-edge research to the Penn Law faculty as part of CTIC's ongoing workshop series. Seven scholars presented their work during the 2012–2013 year, engaging the faculty with both formal presentations of their work and the intense, informal discussions that followed.



**Oren Bracha** (with Talha Syed)  
UT Austin School of Law  
*Beyond the Incentive-Access Framework?  
Product Differentiation & Copyright  
Reevaluated*



**Brett Frischmann**  
Cardozo Law School  
*Leveraging Nonrivalry to Support Capabilities:  
Notes on a New Consequentialism for  
Information and Infrastructure*



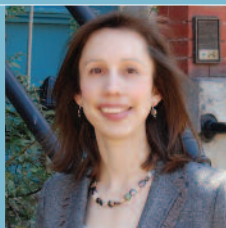
**Jeanne Fromer**  
Fordham University School of Law  
*Technical Substitution, Market Substitution,  
and the Audience in IP Infringement*



**Michael Froomkin**  
University of Miami School of Law  
*Privacy Impact Notices – Now*



**Sandra González-Bailón**  
Oxford Internet Institute  
*Sociology and Online Studies*



**Lisa Larrimore Ouellette**  
Yale Law School  
*The Google Shortcut to Trademark Law*



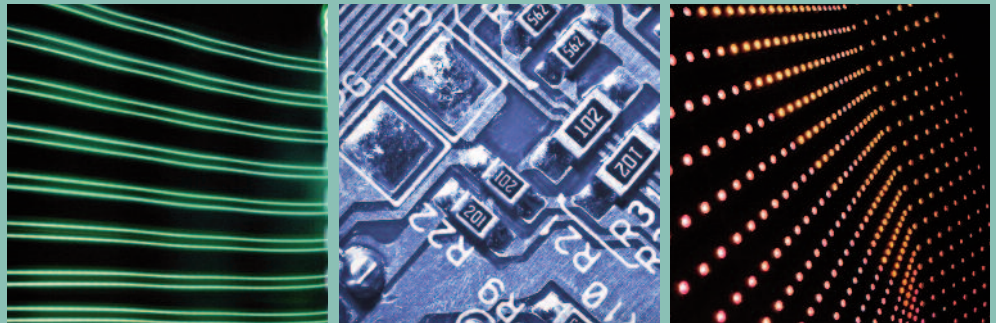
**Talha Syed** (with Oren Bracha)  
University of California  
at Berkeley School of Law  
*Beyond the Incentive-Access Framework?  
Product Differentiation & Copyright  
Reevaluated*





Center for Technology, Innovation and Competition





# CTIC News

Joint Degree Program in Law and Engineering

CTIC Fellow Matt Corriel

New York Bar Foundation Research Grant

Detkin Intellectual Property and Technology Legal Clinic

Student and Public Interest Fellows

Student Achievements





## University of Pennsylvania Law School and School of Engineering and Applied Science Launch Joint Degree Program in Law and Engineering

In August 2013, the University of Pennsylvania Law School and the School of Engineering and Applied Science (SEAS) launched a joint degree program to produce professionals with advanced training in both law and engineering. The joint degree program will provide lawyers and engineers with the training needed to work on cutting edge issues and nurture a vibrant intellectual community that will help the law and technology program thrive. The impetus for this program comes from CTIC's success over the past six years, and CTIC faculty will be integral to the program's design.

The program will offer a four-year joint J.D./master's degree, buttressed by genuine collaboration between Penn Law and SEAS faculty, as well as the expansion of research and extracurricular programs to provide guidance and structure to students and faculty engaged with the program. With this pursuit, Penn Law and Engineering are positioning themselves to produce research and curricular programs that will inform national and global agendas on law and technology across many related areas such as computer and information technology, bioengineering, patent, robotics and privacy.

This program will enroll its first class in Fall 2014. The program will welcome students who majored in engineering as undergraduates and are able to satisfy SEAS's standards for admission to the Master of Science in Engineering (MSE) program as well as students interested in a Master of Computer and Information Technology (MCIT) degree. The joint degree program will include robust collaboration at the research level as well.

Christopher Yoo and co-instructor Matthew Blaze





## CTIC Fellow Matt Corriel

Matt Corriel joins the CTIC faculty as its second Research Fellow. His research focuses on intellectual property theory, property theory, and personal property. His current work considers the treatment under copyright law of creative works that develop through sometimes ongoing iterative processes. In addition, in Fall 2013 he will co-lead the Law School's Intellectual Property Theory Colloquium.

Matt earned his J.D. from Penn Law (L'13, magna cum laude, Order of the Coif), where he was a teaching assistant for first-year Property under CTIC professor Shyamkrishna Balganesh, a legal writing instructor, and the inaugural symposium editor on the *University of Pennsylvania Law Review*. As symposium editor, he collaborated with CTIC founding director Christopher Yoo to organize The Evolving Internet, a symposium CTIC co-sponsored with the *Law Review* in 2012. Matt was also co-president of the Penn Intellectual Property Group and founder of the Careers in Academia Club.

Matt's background gives him unique insight into the creative process. Prior to law school, he worked as a musical theatre composer/lyricist, and his four published plays have been performed in over twenty states. From 2007-2010, he was the director of operations for Harvard's Freshman Arts Program, Resident Songwriter at Harvard's Adams House, and taught a co-curricular class called "How Songs Work" under the auspices of Harvard's Office for the Arts. Matt earned his B.A. from Harvard in 2005.

In 2014-2015, Matt will clerk for the Honorable Kermit V. Lipetz on the U.S. Court of Appeals for the First Circuit.



Matt Corriel L'13





Global Research Seminar students in Washington, D.C.

## New York Bar Foundation Research Grant

Many of CTIC's initiatives over the past three years have been made possible by a three-year grant awarded to CTIC by the New York Bar Foundation to explore policy issues surrounding the Internet.

This grant is the unexpected byproduct of the landmark *Grinnell* litigation, in which the federal government successfully prosecuted a number of leading alarm monitoring companies for price fixing. The Supreme Court decision in this case established the standard that has governed all monopolization cases ever since. Prominent Philadelphia attorney and Penn alumnus David Berger C'32, L'36 represented plaintiffs in the private antitrust suits brought in parallel with the federal prosecution. When these cases were settled in 1971, a small amount was held in reserve for class members that the court could not identify. Parts of these funds were never claimed. They remained forgotten in an interest bearing account for nearly 40 years until they were discovered by Berger's son, Daniel Berger, after his father's death in 2007.

The cy pres doctrine requires that such funds be used for charitable purposes that are closely related to the issues that were the focus of the original litigation. Daniel Berger worked with Howard Shecter L'68, a partner with Reed Smith and a past president of the Penn Law Alumni Society, and Lesley Friedman Rosenthal, the Chair of the New York Bar Foundation's Cy Pres Committee, to identify an appropriate recipient. The fact that early alarm technologies represented an important precursor to the modern Internet led them to recommend CTIC as the beneficiary of these funds. Their recommendation was subsequently approved by Chief Judge Loretta A. Preska of the U.S. District Court for the Southern District of New York in December 2010.

Over the past year, this grant has helped fund the Center's conference on Computer Science and the Law, Visiting Scholars and Research Fellow programs, CTIC faculty research, the conferences on The Evolving Internet and Innovation and Entrepreneurship, student initiatives, the Penn Intellectual Property Group's annual symposium, and fellowships for Penn Law students. CTIC is grateful for the opportunity to help honor *Grinnell's* legacy.





## Detkin Intellectual Property and Technology Legal Clinic

In January 2013, Penn Law launched the Detkin Intellectual Property and Technology Legal Clinic, directed by CTIC's Cynthia Dahl. Designed as an upper-level IP course, the Detkin Clinic is part seminar and part IP law firm, where students take primary responsibility for helping their clients commercialize innovation.

The Detkin Clinic is unique in that it consciously introduces law students to the disciplines of the professionals they will meet in practice, especially business, technology, science, and the arts. At the core of the curriculum are opportunities for clinic students to work on projects with students from Wharton, the School of Engineering and Applied Science (SEAS), the Perelman School of Medicine, and other schools at Penn. Law students learn to leverage and value different perspectives and to consider nonlegal as well as legal aspects to client challenges.

The Detkin Clinic's client work is also unique. Penn's Detkin Clinic is one of very few clinics in the country to work with a university commercialization venture, in this case, the Penn Center for Technology Transfer ("CTT"). This past year, clinic students counseled several labs with early stage discoveries, helping them to analyze their legal and business options and choose their best path to commercialization. In addition to the CTT client work, Detkin Clinic students also resolved a variety of legal issues for a range of clients, including drafting and negotiating several international publishing and distribution agreements for nonprofits and individuals, supporting a multinational pharmaceutical company's anti-counterfeiting work, navigating the brand new copyright reversion process for a music composer, and guiding several entrepreneurial ventures through complicated privacy, Internet, copyright and trademark issues.

Next semester, Detkin Clinic students will continue their "hands-on" application of practical legal skills by counseling twelve new clients, chosen in part for the interesting and challenging range of IP issues they present. Students will also leverage their impact within the Penn community by adding a legal voice to existing interdisciplinary student entrepreneurial teams (made up of Wharton, School of Nursing and SEAS students) seeking to commercialize innovative health care applications. And looking to the future, the Detkin Clinic will broaden its reach into the Philadelphia landscape even further by co-sponsoring educational events with major city business and arts departments and nonprofits.



Top to Bottom:  
The inaugural student class of the Detkin Intellectual Property and Technology Legal Clinic

A client discusses her case with Detkin Clinic students  
Chanel Lattimer L'13 and Ionna Bantouna LLM'13





## Student and Public Interest Fellows

Over the past several years, CTIC has developed two fellowship programs for Penn Law students. The first, the CTIC Student Fellows Program, allows outstanding Penn Law students to participate in CTIC faculty research in various capacities during the school year. The Student Fellows from the past year were:

Ioanna Bantouna LLM'13

Eric Hague L'13

Levi Morris L'14

Neel Rane L'13

Maki Takahashi LLM'13

Dafan Zhang L'14

CTIC also awards a number of Public Interest Fellowships. These fellowships help place Penn Law students in summer internships with public interest or government organizations doing work relevant to CTIC's focus on technology, innovation and competition law. The fellowships include a stipend to support the Fellow's work and assistance placing the Fellow with an appropriate organization.

This year's CTIC Public Interest Fellows were Marcus Epstein L'14 and Joshua Wright L'15.

Marcus worked as a summer research fellow for the American Antitrust Institute based in Washington, D.C. At AAI he helped edit a collection of essays on competition policy, drafted amicus briefs, assisted senior research fellows in their research, and wrote original material for the organization's publications. He also helped with logistics for the Institute's conference on the role of in-house counsel and antitrust compliance.

Joshua Wright interned with the Civil Division of the United States Attorney's Office for the Eastern District of New York. The Division is on the forefront of a wide variety of litigation involving major economic interests, and frequently handles matters relating to competition and high-technology firms. Joshua has an interest in antitrust and economic litigation, which the EDNY's caseload and the Civil Division's mentorship program helped him to hone.

Top to bottom:  
Marcus Epstein L'14  
Joshua Wright L'15





## Student Achievements

2012-13 was an exciting year in terms of accomplishments by Penn Law students. Advised by CTIC faculty, Penn Law students competed in two national moot court programs: the 40th Annual Giles S. Rich Memorial Moot Court Competition and the 2012 National IP LawMeet.

Lauren Saltiel L'14 and Christina Wong L'14 won both Best Negotiation Overall and top honors for Best Draft at the 2012 IP LawMeet. The IP LawMeet is a national transactional IP "moot court" in which teams conduct a multi-month competitive drafting and negotiation process, drafting a complex license, redlining drafts from opposing counsel, and negotiating against other teams in qualifying, semi-final and final rounds. Saltiel and Wong were advised by CTIC's Cynthia Dahl.

Taylor Gooch L'13 and Ben Sirolly L'13 won the Western Regional competition of the American Intellectual Property Law Association's Giles S. Rich National Patent Law Moot Court, including awards for best Appellant and best Appellee briefs. They were advised by CTIC's Polk Wagner, competing in the moot court as part of Professor Wagner's Patent Law Appellate Advocacy class. This is the third consecutive year that Penn Law students have won the Western Regional competition of the AIPLA Giles S. Rich National Patent Law Moot Court.



Top to Bottom:  
Lauren Saltiel L'14, Dean Michael Fitts, Professor Cynthia Dahl, Christina Wong L'14  
Ben Sirolly L'13, Taylor Gooch L'13





Center for Technology, Innovation and Competition





# CTIC Faculty

The Center for Technology, Innovation and Competition is privileged to draw on cross-disciplinary expertise from across the University of Pennsylvania. In addition to the Law School, CTIC brings together faculty from the top-ranked Wharton School, the University's School of Engineering and Applied Science, the Cinema Studies Program, and the Annenberg School for Communication.





## CTIC Primary Faculty



### David S. Abrams

Assistant Professor of Law, Business Economics, and Public Policy

David Abrams is one of the leading young scholars working in empirical law and economics. His work strives to understand and measure how individuals respond to incentives in various legal contexts. In his work on intellectual property law, he has investigated the expected impact of the America Invents Act, examined the effect of patent duration on innovation, and is using natural language processing to establish more reliable measures of patent value. In his latest empirical work he shows that long-held views on patent value and citations do not hold and introduces a new model of innovation to account for the findings. He has also done substantial work in criminal justice, including investigating whether longer sentences deter crime, how a defendant's race impacts judicial decisions, to what extent attorney skill affects case outcomes, and how much individuals value freedom. His interests also include law and health economics, labor economics, and corporate finance. His work has appeared in top peer-reviewed journals and law reviews including the *Stanford Law Review*, *University of Chicago Law Review*, *University of Pennsylvania Law Review*, *American Economic Journal: Applied Economics*, and *Journal of Legal Studies*.



### Shyamkrishna Balganesh

Assistant Professor of Law

Shyam Balganesh's scholarship focuses on understanding how intellectual property and innovation policy can benefit from the use of ideas, concepts, and structures from different areas of the common law. His most recent work examines the possible role that third party funders may play in copyright litigation and the related phenomenon of "copyright trolling." He is currently editing a collection of scholarly essays on the topic of intellectual property and the common law, scheduled to be published by the Cambridge University Press in 2014.



### Matt Corriel L'13

CTIC Fellow

Matt Corriel is CTIC's second fellow. His work focuses on intellectual property theory, property theory, and personal property. His current project considers the treatment under copyright law of creative works that develop through sometimes ongoing iterative processes. In 2014-2015, Matt will clerk for the Honorable Kermit V. Lipez on the U.S. Court of Appeals for the First Circuit.



### Cynthia Dahl

Practice Associate Professor and Inaugural Director of the Detkin Intellectual Property and Technology Legal Clinic

Cynthia Dahl, an accomplished intellectual property lawyer and leader with experience as both corporate counsel and law firm litigator, is the inaugural Director of the University of Pennsylvania Law School's new Detkin Intellectual Property and Technology Legal Clinic. Dahl comes to Penn Law with broad experience in every aspect of intellectual property and technology law and its business applications. After graduating from Stanford Law in 1998, she litigated patent and trademark cases at Pennie and Edmonds in New York and at Holland and Hart in Denver, Colorado. In 2001, Dahl became a Corporate Counsel at TruePosition, Inc., a technology-driven international wireless location company based in Berwyn, Pennsylvania, where she grew the patent portfolio from 20 to more than 125 patents worldwide and developed the IP portfolio of TruePosition's three spin-off entrepreneurial subsidiaries. She was promoted to Senior Counsel in 2005 and won company leadership awards in 2007 and 2010.





### Justin (Gus) Hurwitz

CTIC Fellow

Gus Hurwitz joined the faculty as the Center's inaugural fellow in 2011 and will join the faculty at the University of Nebraska College of Law in 2013. His work draws on his background in law, technology, and economics to consider the interface between law and technology and the role of regulation of high-tech industries. He previously served as a Visiting Assistant Professor at George Mason University Law School. Prior to that he was a Trial Attorney with the United States Department of Justice Antitrust Division, Telecommunications and Media Enforcement Section. He has a background in technology and is the recipient of professional awards from organizations such as the Federal Laboratory Consortium, R&D Magazine, Los Alamos National Lab, IEEE & ACM, and the Corporation for Education Network Initiatives in California. In addition, he held an Internet2 Land Speed World Record with the Guinness Book of World Records.



### R. Polk Wagner

Professor of Law

Polk Wagner focuses his research and teaching in intellectual property law and policy, with a special interest in patent law. He has written over twenty articles on topics ranging from an empirical analysis of judicial decision-making in patent law to the First Amendment status of software programs. He is the co-author of *Patent Law (Concepts and Insights)* (Foundation 2008) (with Craig Allen Nard). He is a frequent lecturer on intellectual property topics worldwide. Prior to joining the Penn Law faculty in 2000, Wagner served as a clerk to Judge Raymond C. Clevenger III of the U.S. Court of Appeals for the Federal Circuit.



### Christopher S. Yoo

John H. Chestnut Professor of Law, Professor of Communication, and Professor of Computer and Information Science

Christopher Yoo has emerged as one of the nation's leading authorities on law and technology. His research focuses on how technological developments and economic theories of imperfect competition are transforming the regulation of the Internet and other forms of electronic communications. He has been a leading voice in the "network neutrality" debate that has dominated Internet policy over the past several years. He is also pursuing research on copyright theory as well as the history of presidential power. He is the author of four books, including *Networks in Telecommunications: Economics and Law* (Cambridge 2009) (with Daniel F. Spulber), as well as over sixty articles and book chapters. Yoo testifies frequently before Congress, the Federal Communications Commission, and the Federal Trade Commission. Before entering law teaching, Yoo clerked for Justice Anthony M. Kennedy of the Supreme Court of the United States and Judge A. Raymond Randolph L'69 of the U.S. Court of Appeals for the D.C. Circuit.



### Gideon Parchomovsky

Robert G. Fuller, Jr. Professor of Law

Gideon Parchomovsky specializes in intellectual property law, property law, and cyberlaw. He has already made significant contributions to the field through his wide-ranging scholarship, having written numerous articles for major law reviews on property and liability rules, insider trading, trademarks, domain names, and patents. Most recently, he has been advocating the need for a comprehensive property theory and the need to introduce a value-oriented theory. Parchomovsky has received the A. Leo Levin Award presented to the best teacher of a first-year course.





## CTIC Secondary Faculty



### Anita L. Allen

Henry R. Silverman Professor of Law and Professor of Philosophy

Anita Allen is an expert on privacy law, bioethics, and contemporary values and is recognized for her scholarship about legal philosophy, women's rights, and race relations. She is a member of the Presidential Commission for the Study of Bioethical Issues. Her books include *Unpopular Privacy* (Oxford 2011); *Privacy Law and Society* (Thomson/West 2011); *The New Ethics: A Guided Tour of the 21st Century Moral Landscape* (Miramax/Hyperion 2004); *Why Privacy Isn't Everything: Feminist Reflections on Personal Accountability* (Rowman and Littlefield 2003); and *Uneasy Access: Privacy for Women in a Free Society* (Rowman and Littlefield 1988). She co-edited (with Milton Regan) *Debating Democracy's Discontent* (Oxford 1998). Allen writes for popular magazines and blogs and has frequently appeared on nationally broadcast television and radio programs.



### Cary Coglianese

Edward B. Shils Professor of Law, Professor of Political Science, and Director of the Penn Program on Regulation

Cary Coglianese specializes in the study of regulatory policy and processes, with a particular emphasis on the empirical evaluation of alternative regulatory strategies and on the role of conflict and cooperation in business-government relations. He teaches administrative law, regulatory policy, and environmental regulation and is the founding director of the university-wide Penn Program on Regulation. He is also the founder and current advisor to *RegBlog.org* and has served as Penn Law's Deputy Dean for Academic Affairs. He founded the Law & Society Association's international Collaborative Research Network on Regulatory Governance, served as a founding editor of the peer-reviewed journal *Regulation & Governance*, and currently co-chairs the American Bar Association's Administrative Law and Regulatory Practice Section's committee on e-government. He is the editor or co-editor of five books, including most

recently *Regulatory Breakdown: The Crisis of Confidence in U.S. Regulation and Import Safety: Regulatory Governance in a Global Economy*, and is the author or co-author of over a hundred articles, chapters, reports, and essays on various aspects of regulation and the regulatory process. Previously a member of the faculty of Harvard University's John F. Kennedy School of Government for over a decade, he has served as a visiting professor of law at Stanford University and Vanderbilt University.



### Seth Kreimer

Kenneth W. Gemmill Professor of Law

Seth Kreimer's first article, *Allocational Sanctions: The Problem of Negative Rights in a Positive State*, set the terms for a generation of discussion of unconstitutional government manipulation of public benefits. His subsequent work has shaped analysis of governmental control of private information, abortion regulation, assisted suicide, and gay marriage. He has explored the implications of DNA testing in criminal justice, free speech on the Internet, and the dangers of abuse in the "war on terror." Kreimer has represented plaintiffs in a wide array of litigation. He served as co-counsel in *Ferguson v. City of Charleston* (U.S. 2001), establishing the right of obstetrical patients to refuse non-consensual drug testing; *In re R.B.F.* (Pa. 2002), securing the right of gay and lesbian parents to establish families by second parent adoption; *Nixon v. Commonwealth* (Pa. 2003), successfully challenging the constitutionality of lifetime disqualification of sex-offenders from employment; and *Buck v. Stankovic* (M.D. Pa. 2007), enjoining denial of a marriage license to a citizen who wished to marry an undocumented non-citizen. Prior to joining the Penn Law faculty, Kreimer clerked for Judge Arlin M. Adams L'47 of the U.S. Court of Appeals for the Third Circuit.



## CTIC Affiliated Faculty



### Matthew Blaze

Associate Professor of Computer and Information Science,  
School of Engineering and Applied Science

Matthew Blaze focuses his research on the architecture and design of secure systems based on cryptographic techniques, analysis of secure systems against practical attack models, and finding new cryptographic primitives and techniques. He is especially interested in the use of encryption to protect insecure systems such as the Internet. He was a designer of swlPe, a predecessor of the now standard IPSEC protocol for protecting Internet traffic. Another project, CFS, investigated and demonstrated the feasibility of including encryption as a file system service. Recently, he has applied cryptologic techniques to other areas, including the analysis of physical security systems. This work yielded a powerful and practical attack against virtually all commonly used master-keyed mechanical locks.



### Gerald R. Faulhaber

Professor Emeritus of Business and Public Policy,  
Wharton School

Gerry Faulhaber served as Chief Economist at the Federal Communications Commission from July 1, 2000 to June 30, 2001, where he worked on many telecommunications and Internet issues, including the AOL-Time Warner merger. His current research focuses on public policy and broadband infrastructure and the political economy of regulation. He has published widely in professional journals and is the author of several books, including *European Economic Integration: Technological Perspectives* (Springer 1991) and *Telecommunications in Turmoil: Technology and Public Policy* (Harper 1988). He has served on numerous scholarly boards and review committees and was Vice-President of the Board of Directors of the Telecommunications Policy Research Conference in Washington, D.C. He was an Associate Editor of the *Journal of Industrial Economics* and serves on the Board of Editors of *Information Economics and Policy*. Prior to his academic career, Faulhaber was Director of Strategic Planning and Financial Management at AT&T, after holding the position of Head, Economics Research at Bell Laboratories.

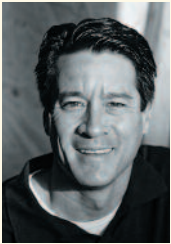


### Peter Decherney

Professor of Cinema Studies and English,  
School of Arts and Sciences

Peter Decherney is Professor of Cinema Studies and English and the Director of the Cinema Studies Program at the University of Pennsylvania. He also holds a secondary appointment at the Annenberg School for Communication and is a faculty affiliate of the Center for Technology Innovation and Competition at Penn Law School. Decherney is the author of *Hollywood's Copyright Wars: From Edison to the Internet* and *Hollywood and the Culture Elite: How the Movies Became American*, as well as the co-editor of the journal *Critical Studies in Media Communication*. He has testified before the Copyright Office of the United States, and in 2011 he filed an amicus brief in the Supreme Court Case of *Golan v. Holder*. Decherney has been an Academy of Motion Picture Arts and Sciences Scholar and a fellow of the American Council of Learned Societies.





#### **Michael Kearns**

National Center Professor of Management and Technology, School of Engineering and Applied Science; Professor of Operations and Information Management and Statistics, Wharton School

Since 2002, Michael Kearns has been on the faculty of the Computer and Information Science Department at the University of Pennsylvania, where he holds the National Center Chair. He is the Founding Director of the new Singh Program in Networked and Social Science Engineering (NETS, [www.nets.upenn.edu](http://www.nets.upenn.edu)) and holds secondary appointments in the Statistics and Operations and Information Management (OPIM) departments of the Wharton School. He has worked extensively with quantitative trading groups on Wall Street and is actively involved in a number of technology startup companies. He has also served as a consultant and expert witness on a number of technology and regulatory matters.



#### **Monroe E. Price**

Director of the Center for Global Communication Studies, Annenberg School for Communication

Monroe Price is director of the University of Pennsylvania's Center for Global Communication Studies (CGCS) at the Annenberg School for Communication, where he works with a wide transnational network of regulators, scholars, and practitioners in Europe, Africa, Latin America, and Asia, as well as in the United States. Price also founded the Programme in Comparative Media Law and Policy at Oxford University and remains a research fellow there. He chairs the Center for Media and Communications Studies at Central European University, a project instituted and encouraged by CGCS. Price has served on the President's Task Force on Telecommunications Policy and the Sloan Commission on Cable Communications (both in the 1970s) and on the Carter-Sagalaev Commission on Radio and Television Policy (in the 1990s). He was a long-time member of the International Broadcasting Institute (now the International Communications Institute). He is the author and editor of numerous publications including *Media and Sovereignty: The Global Information Revolution and its Challenge to State Power* (MIT 2002); *Owning the Olympics: Narratives of the New China* (Michigan 2008), and the *Routledge Handbook of Media Law* (Routledge 2012).



#### **Andrea M. Matwyshyn**

Assistant Professor of Legal Studies and Business Ethics, Wharton School

Andrea Matwyshyn joined the Wharton School in 2007. Her research and consulting focus on corporate information security regulation, consumer data privacy law, and technology regulation. She is also an affiliate scholar at the Stanford Law School Center for Internet and Society and an advisory board member of the Network of Excellence in Internet Science project at the Oxford Internet Institute.





### Katja Seim

Assistant Professor of Business and Public Policy,  
Wharton School

Katja Seim specializes in applied microeconomics and industrial organization. Her research focuses on two areas. First, she studies how firms make product placement and entry decisions, how they assess the competitive implications of different market entry strategies, and how their decisions are affected by public policies and regulatory interventions. Second, she analyzes firm and consumer behavior in information and communications industries. Specific topics she has worked on in this area include consumer adoption of online services; consumer choice among the commonly offered nonlinear pricing plans for such services; and the effect of entry on the characteristics of such sophisticated pricing strategies. Her research has been published in leading journals such as *American Economic Review*, *American Economic Journal: Microeconomics*, *Marketing Science*, *Quantitative Marketing and Economics*, and the *RAND Journal of Economics*.



### Jonathan M. Smith

Olga and Alberico Pompa Professor of Engineering and Applied Science, School of Engineering and Applied Science

Jonathan Smith is currently the Olga and Alberico Pompa Professor of Engineering and Applied Science and a Professor of Computer and Information Science at the University of Pennsylvania. He was previously at Bell Laboratories and Bell Communications Research, joining Penn in 1989. He served as a Program Manager at the Defense Advanced Research Projects Agency (DARPA) from 2004-2006 and was awarded the Office of the Secretary of Defense Medal for Exceptional Public Service in 2006. Among the research programs he managed was the “Quantum Information Science and Technology” (QIST) program. He is an IEEE Fellow.





### Joseph Turow

Robert Lewis Shayon Professor of Communication,  
Annenberg School for Communication

Joe Turow is a recipient of the National Communication Association's Distinguished Scholar Award and is an elected Fellow of the International Communication Association. A 2005 *New York Times* magazine article called Professor Turow "probably the reigning academic expert on media fragmentation." He has authored nine books, edited five, and written more than 100 articles on mass media industries. His most recent book is *The Daily You: How the New Advertising Industry Is Defining Your Identity and Your Worth* (Yale 2012). Turow's continuing national surveys of the American public on issues relating to marketing, new media, and society have received a great deal of attention in both the popular press and the research community. The recipient of a number of conference paper and book awards, Turow has lectured widely and been invited to give the Pockrass Distinguished Lecture at Penn State University and to be a Chancellor's Distinguished Lecturer at Louisiana State University. Turow currently serves on the editorial boards of the *Journal of Broadcasting and Electronic Media*, *Poetics*, and *New Media & Society*.



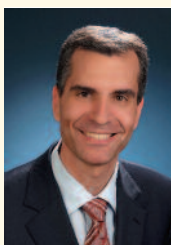
### Kevin Werbach

Associate Professor of Legal Studies and Business Ethics,  
Wharton School

Kevin Werbach is a leading expert on the business, policy, and social implications of emerging Internet and communications technologies. While serving as Counsel for New Technology Policy at the FCC during the Clinton Administration, Werbach was named by *Wired* magazine as "one of the few policy wonks who really got it." He is the founder of the Supernova Group, a technology analysis and conference firm. He co-led the review of the Federal Communications Commission (FCC) for the Obama-Biden Transition Project and subsequently served as an advisor to the FCC and the National Telecommunications and Information Administration. Werbach is also a pioneer in the emerging field of gamification and developed one of the first and most successful Massive Open Online Courses (MOOCs). He was named the Wharton School's first "Iron Prof" in 2010.



## Adjunct Faculty



### Thomas Fetzer

Professor of Law, University of Mannheim;  
Lecturer in Law

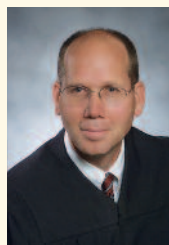
Thomas Fetzer is Professor of Law at the University of Mannheim Law School, Germany, where he holds a Chair of Public Economic Law, Regulation and Taxation. Before taking up his current position he was Professor of Law at the TU Dresden Law School, Germany. He has been a guest lecturer at the Vanderbilt Law School, the University of Freiburg, Germany, and the University of Jena, Germany. He is also an Adjunct Professor at the Mannheim Business School. His fields of expertise include telecommunications law, media law, and privacy/data protection law. He has also published several articles on tax law and European community law and co-authored books on Internet law, telecommunications law, and public economics law.



### Osagie Imasogie L'85

Senior Managing Partner, Phoenix IP Ventures;  
Adjunct Professor of Law

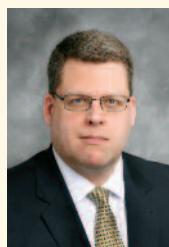
Osagie Imasogie has over thirty years of experience in the fields of law, finance, business management, healthcare and the pharmaceutical industry. Prior to co-founding Phoenix IP Ventures, an IP-based Merchant Bank, Imasogie conceptualized and established GlaxoSmithKline Ventures and was its founding VP. He led GSK Ventures in investing over thirty GSK R&D non-progressed assets into existing companies and/or as the basis of starting new companies. Imasogie holds post-graduate degrees from the London School of Economics and the University of Pennsylvania Law School. In addition, he is a member of the Board of Overseers of the University of Pennsylvania Law School and a member of the Board of Trustees of the University of Pennsylvania.



### The Honorable Kent A. Jordan

Judge, U.S. Court of Appeals for the Third Circuit;  
Adjunct Professor of Law

Kent Jordan was appointed in 2006 to serve as a Judge on the United States Court of Appeals for the Third Circuit. Prior to that appointment, Judge Jordan held appointments as a United States District Judge for the District of Delaware from 2002 to 2006 and as an Assistant United States Attorney for the District of Delaware, serving as Civil Chief for that office in 1991 and 1992. He has also been an officer and member of the boards of directors of privately held businesses and was a partner in a law firm in Wilmington, Delaware, where his practice focused on intellectual property, corporate, and commercial litigation.



### Matthew Pearson L'05

Counsel, Akin Gump Strauss Hauer & Feld LLP;  
Lecturer in Law

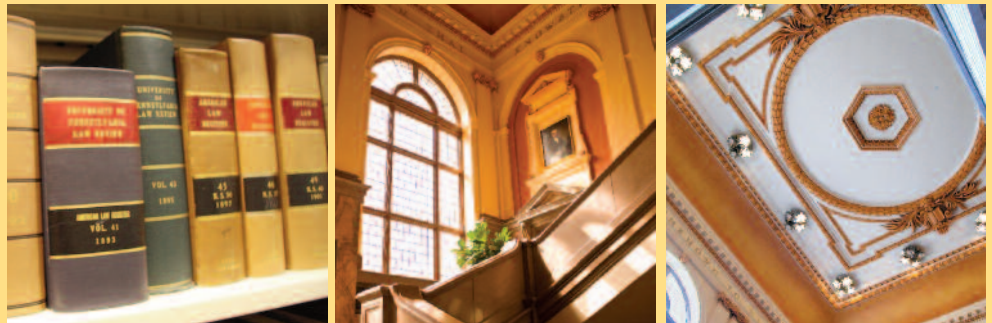
Matthew Pearson focuses his practice on intellectual property litigation. He received a J.D. in 2005 from the University of Pennsylvania Law School. As a doctoral student at Cornell University and a postdoctoral fellow at the National Institutes of Health, he studied the three-dimensional molecular structures of proteins using x-ray crystallography. Pearson earned B.S. degrees in 1993 in biochemistry and chemistry from Michigan State University. He served for two years as a law clerk to the Honorable Kent A. Jordan of the U.S. District Court for the District of Delaware and the U.S. Court of Appeals for the Third Circuit.





Center for Technology, Innovation and Competition





# CTIC Research

Research output is a core function of the Center for Technology, Innovation and Competition. By providing a forum where faculty can engage with one another across multiple disciplines, the Center seeks to encourage informed, high-quality research that will advance the understanding of technology and innovation policy.

Listed in the next several pages is a sampling of recently published papers related to technology, innovation, and competition by CTIC faculty members. All primary and secondary faculty appointments are in the University of Pennsylvania Law School unless otherwise noted. All affiliated and adjunct faculty appointments are in the University of Pennsylvania.





## Primary Faculty

### David S. Abrams

Assistant Professor of Law, Business Economics, and Public Policy

*Do Judges Vary in Their Treatment of Race?*, 42 J. LEGAL STUD. 347 (2012) (with Marianne Bertrand & Sendhil Mullainathan).

*Estimating the Deterrent Effect of Incarceration Using Sentencing Enhancements*, 4 AM. ECON. J.: APPLIED ECON. 32 (2012).

*The Prisoner's Dilemma: A Cost-Benefit Approach to Incarceration*, 98 IOWA L. REV. 905 (2013).

*Poisoning the Next Apple: How the America Invents Act Harms Inventors*, 65 STAN. L. REV. 517 (2013) (with R. Polk Wagner).

*How Do We Decide How Long to Incarcerate?*, in EMPIRICAL LEGAL STUDIES OF JUDICIAL SYSTEMS (forthcoming 2013).

*A Market for Justice*, 15 U. PA. J. BUS. L. (forthcoming 2013) (with Daniel L. Chen).

### Shyamkrishna Balganesch

Assistant Professor of Law

*The Uncertain Future of "Hot News" Misappropriation After Barclays Capital v. Theflyonthewall.com*, 112 COLUM. L. REV. SIDEBAR 134 (2012).

*Quasi-Property: Like, But Not Quite Property*, 160 U. PA. L. REV. 1889 (2012).

*The Obligatory Structure of Copyright Law: Unbundling the Wrong of Copying*, 125 HARV. L. REV. 1664 (2012).

*The Normativity of Copying in Copyright Law*, 62 DUKE L.J. 203 (2012).

*Copyright Infringement Markets*, 113 COLUM. L. REV. (forthcoming 2013).

*Gandhi and Copyright Pragmatism*, 101 CALIF. L. REV. (forthcoming 2013).

*Stewarding the Common Law of Copyright*, 61 J. COPYRIGHT SOC'Y U.S.A. (forthcoming 2013).

*Alienability and Copyright Law*, in CONCEPTS OF PROPERTY IN INTELLECTUAL PROPERTY (Helena Howe ed., Cambridge forthcoming 2013).

*The Uneasy Case Against Copyright Trolls*, 86 S. CAL. L. REV. (forthcoming 2013).

INTELLECTUAL PROPERTY AND THE COMMON LAW (Shyamkrishna Balganesch ed., Cambridge forthcoming 2014).

*The Normative Structure of Copyright Law*, in INTELLECTUAL PROPERTY AND THE COMMON LAW (Shyamkrishna Balganesch ed., Cambridge forthcoming 2014).

*The Role of Unfair Competition in the Common Law*, in INTELLECTUAL PROPERTY AND THE COMMON LAW (Shyamkrishna Balganesch ed., Cambridge forthcoming 2014) (with Gideon Parchomovsky).

### Matt Corriel L'13

CTIC Fellow

Comment, *Up for Grabs: A Workable System for the Unilateral Acquisition of Chattels*, 161 U. PA. L. REV. 807 (2013).

### Justin (Gus) Hurwitz

CTIC Fellow

*Trust and Online Interaction*, 161 U. PA. L. REV. 1579 (2013).

### Gideon Parchomovsky

Robert G. Fuller, Jr. Professor of Law

*Torts and Innovation*, in LAW AND ECONOMICS OF INNOVATION 761 (Eli M. Salzberger ed., Edward Elgar 2012) (with Alex Stein).

*The Case for Imperfect Enforcement of Property Rights*, 160 U. PA. L. REV. 1927 (2012).

*Cities, Property, and Positive Externalities*, 54 WM. & MARY L. REV. 211 (2012) (with Peter Siegelman).

*The Relational Contingency of Right*, 98 VA. L. REV. 1313 (2012) (with Alex Stein).

*Quasi-Patents and Semi-Patents in Biobanking*, in COMPARATIVE ISSUES IN THE GOVERNANCE OF RESEARCH BIOBANKS: PROPERTY, PRIVACY, INTELLECTUAL PROPERTY, AND THE ROLE OF TECHNOLOGY 251 (Giovanni Pascuzzi et al. eds., Springer 2013) (with Michael Mattioli).

*Property Lost in Translation*, 80 U. CHI. L. REV. (forthcoming 2013) (with Abraham Bell).

*Intellectual Property Defense*, 114 COLUM. L. REV. (forthcoming 2014) (with Alex Stein).

*The Role of Unfair Competition in the Common Law*, in INTELLECTUAL PROPERTY AND THE COMMON LAW (Shyamkrishna Balganesch ed., Cambridge forthcoming 2014) (with Shyamkrishna Balganesch).

### R. Polk Wagner

Professor of Law

*Poisoning the Next Apple: How the America Invents Act Harms Inventors*, 65 STAN. L. REV. 517 (2013) (with David Abrams).

*Unenforceable Patents*, 70 WASH. & LEE L. REV. (forthcoming 2013) (with Lee Petherbridge & Jason Rantanen).

*Did Phillips Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence*, in INTELLECTUAL PROPERTY AND THE COMMON LAW (Shyamkrishna Balganesch ed., Cambridge forthcoming 2014) (with Lee Petherbridge).

### Christopher S. Yoo

John H. Chestnut Professor of Law, Professor of Communication, and Professor of Computer and Information Science

THE DYNAMIC INTERNET: HOW TECHNOLOGY, USERS, AND BUSINESSES ARE TRANSFORMING THE NETWORK (AEI Press 2012).

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*When Antitrust Met Facebook*, 19 GEO. MASON L. REV. 1147 (2012).

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### Anita L. Allen

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### Cary Coglianese

Edward B. Shils Professor of Law, Professor of Political Science, and Director of the Penn Program on Regulation

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### Peter Decherney

Professor of Cinema Studies and English, School of Arts and Sciences

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### Gerald R. Faulhaber

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### Michael Kearns

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### Katja Seim

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### Jonathan M. Smith

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