# Northwestern PRITZKER SCHOOL OF LAW Searle Center on Law, Regulation, and Economic Growth



# Tenth Annual Searle Center/USPTO Conference on Innovation Economics

Thursday, June 22, 2017 — Friday, June 23, 2017

# **Northwestern University School of Law**

Wieboldt Hall #147 340 E. Superior Street, Chicago, IL, 60611

This conference is organized by Daniel F. Spulber with the help of Pere Arqué-Castells and Justus Baron.

# Thursday, June 22

9:00 a.m. **Registration Check-In** (1st Floor of Wieboldt Hall)

**Breakfast** (Wieboldt Hall #540)

10:00 Welcome and Introduction to the Conference (Wieboldt Hall #147)

**Matthew L. Spitzer**, Howard and Elizabeth Chapman Professor and Director, Searle Center on Law, Regulation, and Economic Growth at Northwestern University Pritzker School of Law

**Daniel F. Spulber**, Elinor Hobbs Distinguished Professor of International Business, Kellogg School of Management and Research Director, Searle Center on Law, Regulation, and Economic Growth

Alan C. Marco, Chief Economist, U.S. Patent and Trademark Office

10:00-11:30 **Session One—Entrepreneurship and Innovation** (Wieboldt Hall #147)

Session Chair: **Pere Arque-Castells**, Searle Center on Law, Regulation, and Economic Growth, Northwestern Pritzker School of Law

Creative Destruction and Strategic Protection: Evidence from Pharmaceutical Patenting

Alan C. Marco, Chief Economist, U.S. Patent and Trademark Office

Charles A. deGrazia, U.S. Patent and Trademark Office (ADDX Corporation) and Royal

Holloway, University of London\*

Discussant: Benjamin Balsmeier, University of Luxembourg

Finding Mr. Schumpeter: An Empirical Study of Competition and Technology Adoption

Jeffrey T. Macher, McDonough School of Business, Georgetown University\*
Nathan H. Miller, McDonough School of Business at Georgetown University
Matthew Osborne, University of Toronto, Rotman School of Management

Discussant: Asrat Tesfayesus, U.S. Patent and Trademark Office

Entrepreneurship and the American Dream: How far does the Upward Mobility Ladder Reach?

Sarada, Wisconsin School of Business, University of Wisconsin-Madison\*

Oana Tocoian, Claremont McKenna College

Discussant: **Martin Murmann**, Centre for European Economic Research (ZEW), Mannheim, Germany and Institute for Employment Research (IAB), and University of Zurich, Switzerland

# **Entrepreneurial Migration**

Jorge Guzman, MIT Sloan School of Management

Discussant: Supradeep Dutta, SUNY Buffalo, School of Management

# 11:30-12:30 **Lunch** (Wieboldt Hall #540)

# 12:30-2:30 **Session Two— Patent Litigation and Public Policy** (Wieboldt Hall #147)

Session Chair: Frank R. Lichtenberg, Columbia University

# Patent Assertion Entity Activity: An FTC Study

Julie Carlson, Federal Trade Commission

Discussant: David L. Schwartz, Northwestern Pritzker School of Law

### Pharmaceutical Patent Citations and Real Value

David S. Abrams, University of Pennsylvania Law School\*

Bhaven N. Sampat, Columbia University, Mailman School of Public Health and NBER

Discussant: Xi Xiong, Economics Department, New York University

Patents and Cumulative Innovation –Evidence from Post-Grant Patent Oppositions

Fabian Gaessler, Max Planck Institute for Innovation and Competition,

**Dietmar Harhoff**, Max Planck Institute for Innovation and Competition and Munich School of Management, Ludwig-Maximilians-University, and Centre for Economic Policy Research (CEPR)\*

**Stefan Sorg**, Max Planck Institute for Innovation and Competition and Munich Graduate School of Economics, Ludwig-Maximilians-University

Discussant: Christian Helmers, Leavey School of Business, Santa Clara University

# 2:30-3:00 **Break** (Wieboldt Hall #150)

# 3:00-5:00 Parallel Session Three A—Patent Examination and Innovation

(Wieboldt Hall #147)

Session Chair: **Alan C. Marco**, Chief Economist, United States Patent and Trademark Office

Screening for Patent Quality: Examination, Fees and the Courts Mark Schankerman, London School of Economics and CEPR\*

Florian Schuett, Tilburg University

Discussant: Scott Hiller, Fairfield University

# Low-Quality Patents in the Eye of the Beholder: Evidence from Multiple Examiners

Gaétan de Rassenfosse, École polytechnique fédérale de Lausanne (EPFL)\*

**Adam B. Jaffe**, Motu Economic and Public Policy Research and Queensland University of Technology

**Elizabeth Webster**, Centre for Transformative Innovation, Swinburne University of Technology

Discussant: Michael A. Verba, Tilburg School of Governance, Tilburg University

Patent Prosecution and the Timing of Licensing

Ayfer Ali, Carlos III de Madrid

**Iain M. Cockburn**, Boston University, Questrom School of Business and NBER\* Discussant: **Justus Baron**, Searle Center on Law, Regulation, and Economic Growth, Northwestern Pritzker School of Law

# The Effect of Patent Protection on Inventor Mobility

Eduardo Melero, Universidad Carlos III de Madrid\* Neus Palomeras, Universidad Carlos III de Madrid David Wehrheim, Universidad Carlos III de Madrid

Discussant: Henry (Hyun Jong) Na, The George Washington University

# Parallel Session Three B—Education, Research, and Innovation

(Wieboldt Hall #250)

Session Chair: Jeffrey T. Prince, Kelley School of Business, Indiana University

Who Climbs onto the Shoulders of Giants? Who Stumbles and Who Sees Farther? Evidence from the Transformative New DNA-Editing Technology, CRISPR Samantha Zvontz, MIT Sloan School of Management\*

Neil Thompson, MIT Sloan School of Management

Discussant: **Scott Bryan Guernsey**, Michael F. Price College of Business, The University of Oklahoma

The Role of Universities in Local Invention: Evidence from the Establishment of U.S. Colleges

Michael Andrews, Department of Economics, University of Iowa

Discussant: **Roberto Fontana**, Department of Economics and Management University of Pavia and ICRIOS-Bocconi University

Scientific Education and Innovation: From Technical Diplomas to University STEM Degrees

Nicola Bianchi, Kellogg School of Management, Northwestern University

Michela Giorcelli, University of California, Los Angeles

Discussant: **Annamaria Conti**, Georgia Institute of Technology, Scheller College of Business

On the Firms' Decision to Hire Academic Scientists

Sarah Parlane, School of Economics, University College Dublin\*

Catalina Martínez, Institute of Public Goods and Policies, Spanish National Research

Council (CSIC-IPP)

Discussant: Anna Toldrà-Simats, Universidad Carlos III de Madrid

5:00-6:00 **Cocktail Reception** (Wieboldt Hall #440)

6:00 **Dinner** (Wieboldt Hall #540)

7:00 **Keynote Address** 

Introduction

Daniel F. Spulber

European Commission's Economics Research Agenda for the EU Internal Market **Kamil Kiljanski**, Chief Economist, European Commission Internal Market and Industry Department

# Friday, June 23

8:00 a.m. **Breakfast** (Wieboldt Hall #540)

9:00-11:00 **Session Four— Financing Innovation** (Wieboldt Hall #147)

Session Chair: Stuart Graham, Georgia Institute of Technology, Scheller College of

**Business** 

Firms' Innovation Strategy under the Shadow of Analyst Coverage

**Bing Guo**, Universidad Carlos III de Madrid, Business and Administration Department **David Pérez-Castrillo**, Universitat Autònoma de Barcelona and Barcelona GSE\*

Anna Toldrà-Simats, Universidad Carlos III de Madrid

Discussant: Teng Wang, Board of Governors of the Federal Reserve System

CEO Evaluation Horizons and Innovation

**Lingtian Kong**, Rotterdam School of Management, Erasmus University, Department of Finance

Discussant: Elvira Sojli, University of New South Wales School of Banking and Finance

# Selling Innovation in Bankruptcy

**Song Ma**, Yale School of Management\* **Joy Tianjiao Tong**, Duke University

Wei Wang, Queen's University

Discussant: **Wing Wah Tham**, University of New South Wales School of Banking and Finance

Large Firm Advantage and Entrepreneurial Disadvantage: How Non-competes Increase Market Concentration

Hyo Kang, Haas School of Business, UC Berkeley\*

Lee Fleming, Fung Institute for Engineering Leadership, UC Berkeley

Discussant: Martin Hud, Economics of Innovation and Industrial Dynamics, Centre for

European Economic Research (ZEW)

# 11:00-11:15 **Break** (Wieboldt Hall #150)

# 11:15-12:45 Parallel Session Five A—Competition and Incentives to Innovate

(Wieboldt Hall #147)

Session Chair: **Pierre Larouche**, Tilburg University and Northwestern Pritzker School of Law

Strategic Incentives for Innovations and Market Competition

Evangelia Chalioti, Yale University, Department of Economics

Konstantinos Serfes, Drexel University, School of Economics

Discussant: Joaquin Poblete, Pontificia Universidad Católica de Chile, Business School

Mergers in Innovative Industries: The Role of Product Market Competition

**Guillermo Marshall**, Department of Economics, University of Illinois at Urbana-Champaign

Álvaro Parra, Sauder School of Business, University of British Columbia\*

Discussant: **Francisco Ruiz-Aliseda**, Pontificia Universidad Católica de Chile, Business School

Innovation, Intellectual Property, and the Role of Competition

Jonathan Lee, Queen's University, Department of Economics

Discussant: **Francisco Ruiz-Aliseda**, Pontificia Universidad Católica de Chile, Business School

### Parallel Session Five B— Technology Standards and Patent Boxes

(Wieboldt Hall #250)

Session Chair: **Justus Baron**, Searle Center on Law, Regulation, and Economic Growth, Northwestern Pritzker School of Law

The Ties that Bind: Railroad Gauge Standards, Collusion, and Internal Trade in the 19th Century U.S.

**Daniel P. Gross,** Harvard Business School and NBER

Discussant: **Francesco Di Lorenzo**, Copenhagen Business School (CBS), Strategic Management and Globalization (SMG) Department

Learning When to Quit

**Emanuele Tarantino**, University of Mannheim, Department of Economics, and CEPR\* **Bernhard Ganglmair**, University of Texas at Dallas

Timothy Simcoe, Boston University & NBER

Discussant: Nicholas Pairolero, Economist, United States Patent and Trademark Office

### Patent Boxes and the Relocation of Intellectual Property

**Laurie Ciaramella**, Mines ParisTech, PSL - Research University, CERNA Discussant: **Xiaoshu Bei**, Fuqua School of Business, Duke University

# 12:45-1:30 **Lunch** (Wieboldt Hall #540)

# 1:30-3:00 **Session Six**— **Intellectual property and Innovation** (Wieboldt Hall #147)

Session Chair: **Stijepko Tokic**, Associate Professor and Department Chair, Northeastern Illinois University

Does Winning a Patent Race Lead to More Follow-on Innovation?

**Neil C. Thompson**, MIT Sloan School of Management **Jeffrey M. Kuhn**, UC Berkeley Haas School of Business

Discussant: **Julian Atanassov**, University of Nebraska, College of Business Administration

# The Inverse Cournot Effect in Royalty Negotiations with Complementary Patents

**Gerard Llobet**, CEMFI and CEPR **Jorge Padilla**, Compass Lexecon

Discussant: Avik Charkrabarti, University of Wisconsin, Milwaukee

The Impact of Patent Protection on R&D: Evidence Using Export Markets

Joël Blit, University of Waterloo, Department of Economics

Mauricio Zelaya, NERA Economic Consulting

Discussant: **Zack Liu**, Department of Finance, Bauer College of Business, University of Houston; Department of Finance, McCombs School of Business, University of Texas at Austin

# 3:00 Adjourn

Presenters are indicated with an \*