

# FOURTEENTH SEAL SCHOLARSHIP CONFERENCE UNIVERSITY OF PENNSYLVANIA LAW SCHOOL PHILADELPHIA, PENNSYLVANIA APRIL 5-6 2013

**Program Schedule** 

Co-Sponsored by:

University of Pennsylvania Law School and Center for Neuroscience & Society





The Society for Evolutionary Analysis in Law (SEAL) is a scholarly association dedicated to fostering interdisciplinary exploration of issues at the intersection of law, biology, and evolutionary theory, improving the models of human behavior relevant to law, and promoting the integration of life science and social science perspectives on law-relevant topics through scholarship, teaching, and empirical research. Relevant disciplines include, among others, evolutionary and behavioral biology, cognitive science, neuroscience, complex adaptive systems, economics, evolutionary psychology, psychiatry, behavioral ecology, behavioral genetics, primatology, memetics, chaos theory, evolutionary anthropology, and gender relations. SEAL welcomes all those with serious scholarly interests in evolutionary processes and law.

## FOURTEENTH SEAL SCHOLARSHIP CONFERENCE UNIVERSITY OF PENNSYLVANIA LAW SCHOOL

# PHILADELPHIA, PENNSYLVANIA APRIL 5-6, 2013

### THURSDAY, APRIL 4, 2013

7:00 p.m. Casual dinner – Location TBA

### DAY ONE - FRIDAY, APRIL 5, 2013

8:00 - 8:45 Breakfast in the Law School

8:45 – 9:00 Welcome & Introductions

### NEUROSCIENCE AND THE LAW: OPPORTUNITIES AND CRITICAL APPRAISAL

(9:00 a.m. – 11 a.m.)

**Moderator: Owen Jones** 

New York Alumni Chancellor's Chair in Law & Professor of Biological Sciences, Vanderbilt Law School, Director, MacArthur Foundation Research Network on Law and Neuroscience

### 9:00 – 9:25 Neuroscience and Responsibility

Stephen J. Morse

Ferdinand Wakeman Hubbell Professor of Law, University of Pennsylvania Law School; Professor of Psychology and Law in Psychiatry; Associate Director, Center for Neuroscience and Society

[Abstract Forthcoming]

### 9:30 - 9:55 Freewill and the Neurolaw Revolution

**Adam Kolber** 

### Professor of Law, Brooklyn Law School

How Will Advances in Neuroscience Affect the Law? Some scholars, like Joshua Greene and Jonathan Cohen, have predicted that advances in neuroscience will revolutionize the law, while others, like Stephen Morse, have predicted that neuroscience will have much more modest effects. I argue that both have failed to make a compelling case for or against a neurolaw responsibility revolution. We can, however, expect a neurolaw technological revolution, and I offer three hypotheses about what that future may look like.

### 10:00 - 10:25 Twelve Tensions: The Neuroscientific Challenge to Law

Peter A. Alces

### Rollins Professor of Law and Cabell Research Professor of Law (William & Mary Law)

Do neuroscientific insights support change of legal doctrine or merely reevaluation of the evidence pertinent to the application of doctrine? I argue that neuroscientific insights alter the way we understand human agency and so necessarily support adjustment of the terms of legal doctrine. Twelve "tensions" presented by neuroscience challenge the formulation of legal rules and standards across the fundamental subject areas: criminal law, tort law, and contract law. My presentation will review the tensions (as well as the interrelation among them) and describe their significance for the study and practice of law.

### 10:30 - 10:40 MID-MORNING BREAK

### **NEUROSCIENCE, PUNISHMENT AND LIE DETECTION**

(10:45 a.m. - 12:30 p.m.)

**Moderator:** Martha Farah

Walter H. Annenberg Professor of Natural Sciences, University of Pennsylvania, Director of the Center for Neuroscience and Society, University of Pennsylvania

# 10:45 – 11:10 Parsing Punishment: What We Can Learn from Neuroscientific Investigations of Punishment Decisions

**Owen Jones** 

New York Alumni Chancellor's Chair in Law & Professor of Biological Sciences, Vanderbilt Law School, Director, MacArthur Foundation Research Network on Law and Neuroscience

What can targeted interference with brain activity during punishment decisions contribute to our understanding of how people blame and how they ascribe punishment? In prior work, we identified – using functional magnetic resonance imaging (fMRI) — several brain regions rain in which activity correlates with blame assessments and punishment choices. To test for a causal role, we dampened brain activity in one of these regions using a parabolically focused magnetic pulse, a technique known as repetitive transcranial magnetic stimulation (rTMS). This talk will explore some of the results

### 11:15-11:40 Blame it on the Brain: How Neuroscience Affects People's Judgments of Offenders

**Dena Gromet** 

Postdoctoral Research Fellow, The Risk Management and Decision Processes Center, The Wharton School, University of Pennsylvania

How do mind versus brain-based explanations of criminal behavior affect lay people's judgments of wrongdoing (blame and punishment)? The present research examines how, and why, these explanations differentially affect judgments of offenders' culpability and punishment. Across multiple experimental studies, we show that people view offenders as less blameworthy, and think they should be punished less severely, when their behavior is associated with a dysfunction that is described as neurological rather than psychological. We examine and discuss possible explanations for this effect, including how brain-based information affects lay people's views about the offender's character.

### 11:45 – 12:10 The Unintended Consequences of Using fMRI Imaging for Lie Detection

Jane Campbell Moriarty

Carol Los Mansmann Chair in Faculty Scholarship, Professor of Law and Associate Dean for Faculty Scholarship, Duquesne University School of Law

What might be lost in the legal process if neuroscience replaces the subjective evaluation and reconstructive decision making of human fact-finders in determining the truthfulness of witnesses? Proposed legal applications of neuroscience often aim to improve the ability to distinguish truth from deception by direct or indirect measures: fMRI lie detection; neuroimaging individuals with chronic pain to detect malingering; and neuroimaging to determine whether individuals are truly mental ill. This obsession with lie detection in law discounts the role of deception as an essential part of human development and experience. This presentation will consider some of the possible juridical consequences of successful neuroscience methods that can distinguish lies from truth.

### 12:10 – 12:25 Commentary on Moriarty by Daniel D. Langleben

Associate Professor of Psychiatry, University of Pennsylvania School of Medicine

### **LUNCH AND LUNCH KEYNOTE PRESENTATION**

(12:30 p.m. – 2:15 p.m.)

### 1:00 - 2:00 David Sloan Wilson

SUNY Distinguished Professor of Biology and Anthropology, SUNY Binghamton University

Catalyzing Acceptance of Evolution as a General Theoretical Framework for Economics, Business, and Law

Members of SEAL are a tiny fraction of the community interested in the study and practice of law. How can SEAL's message become more widely known? As president of the Evolution Institute (http://evolution-institute.org/), the first think tank that formulates public policy from an evolutionary perspective, I will report on progress that we have made for the subjects of economics and business, with the help of associates such as Jonathan Haidt and organizations such as NYU's Stern School of Business. The purpose of my talk is to initiate a collaboration between SEAL and the Evolution Institute to make similar progress for the subject of law.

### **EVOLUTION OF MORALITY, LAW AND REASON**

(2:15 p.m. – 4:10 p.m.)

**Moderator:** Robert Kurzban

Associate Professor of Psychology, University of Pennsylvania

### 2:15 – 2:40 The Evolution of Morality by Partner Choice and the Foundations of Human Rights

**Nicolas Baumard** 

### Post-doctoral researcher, University of Pennsylvania

Can evolutionary biology provide a foundation for human rights? Most evolutionary theories of cooperation focus on authority, family, hierarchy or disgust, and remain silent about rights and justice. Group selection, in particular, with its emphasis on the group, seems at odds with the human concern for protecting everyone's right, even against the interest of the majority. However, evolutionary theories based on partner choice open up new ways to account for the emergence of the notion of rights: When individuals are in competition to attract potential cooperators, being fair and granting rights to other is the only evolutionary stable strategy.

### 2:40 - 3:10 The Psychological Foundations of Rights—Human and Otherwise

### **Robin Bradley Kar**

Professor of Law and Philosophy, University of Illinois-Urbana/Champaign. Director, Illinois Program for Interdisicplinary and Comparative Jurisprudence. Vice President, SEAL

Can Evolutionary Psychology Provide Special Insight into the Psychological Capacities that Human Use to Identify and Respond to Rights? This talk integrates contemporary insights from evolutionary theory with findings from a broader range of fields, including social and cognitive psychology and philosophy, to develop a contemporary account of the special psychological capacity that humans use to identify and respond to rights. The capacity contains a special cognitive faculty, which employs recursion to allow humans to define and understand a potentially indefinite set of perceived rights, all of which operate – either directly, indirectly, or recursively – through their effects on a more primary set of thoughts of interpersonal obligation. These more primary thoughts about interpersonal obligation animate a deeply structured and highly familiar form of human social life and interaction.

### 3:10 - 3:40 The Evolution of Punishment as a Signaling Mechanism through Group Selection

### **Adam Candeub**

### Professor of Law, Michigan State Law School

Is a group selection signaling theory of deterrence better at explaining existing data than a pure economic theory of deterrence? The most recent empirical research in criminal deterrence fails to find marginal relationships between prison terms and crime levels but does find marginal relationships between police force size and crime levels—a seemingly contradictory result that an economic deterrence has difficulty explaining. On the other hand, the paper argues criminal law deters not by engaging in an economic, rational utility calculation but by signaling levels of altruistic punishment within a group. This theory, consistent with group selection, suggests effective deterrence depends upon an evolutionary-based, behavioral signaling mechanism, which, in turn, suggests an evolutionary psychological approach to deterrence as well as a normative reappraisal of retributive feelings.

### 3:40 – 4:10 Selling Speech in the Marketplace of Ideas

### Julie Seaman

Professor of Law, Emory Law School. President, SEAL

If the evolved function of reason is to win and evaluate arguments rather than to discover the truth, what might the implications be for First Amendment theory and doctrine? According to the "Argumentative Theory of Reason" proposed by Dan Sperber and Hugo Mercier, reason evolved primarily to help individuals make and evaluate arguments rather than as a means of discovering knowledge and truth, as in the classical account. Yet free speech theory, and especially the marketplace of ideas and search for truth rationales of the first amendment, are closely aligned with the classical vision of reason. Thus, this alternative account of reason, which fits much more comfortably with the experimental and empirical data on human decision-making, may offer a useful alternative for thinking about freedom of speech. Abstract TBA

### 4:10 - 4:25 **AFTERNOON BREAK**

### **EVENING KEYNOTE PRESENTATION**

(4:30 p.m. - 5:30 p.m.)

4:30 - 5:30 Geoffrey Miller

**Henry Kaufmann** 

Visiting Professor of Business, NYU Stern School of Business. Associate Professor of Psychology, University of New Mexico

[Abstract TBA]

5:30 – 6:15 Meeting of Interested Parties with David Sloan Wilson to Discuss Opportunities to Catalyze Acceptance of Evolution as a General Theoretical Framework for Economics, Business, and Law

OR

5:30 - 7:00 Free Time

7:30 p.m. RECEPTION AND DINNER (Location TBA)

DAY TWO - SATURDAY, APRIL 6, 2013

8:00 - 9:00 Breakfast

### **EARLY STAGES PRESENTATIONS**

(9:00 a.m. – 9:30 a.m.)

9:15 – 9:15 Insanity and the Inanity Defense

**Ted Blumoff** 

Professor of Law, Mercer Law School

As articulated in any variation of the M'Naughton rule, there is a disconnect between the rule and the phenomenology of insanity. Paranoid ideations that lead to violent reactions are not usefully viewed as lack of knowing; rather, it is lack of control

9:15 – 9:30 Right to Die: An Empirical Approach

**Mark Phillips** 

Law Student, William & Mary Law School

Strong emotional reactions to homicide with the victim's consent and suicide lead to often controversial moral judgments and laws. Although legal theorists tend to assume that lawmakers, actors, judges, and juries act rationally, recent findings from the cognitive sciences suggest that human brains are often irrational in predictable ways, especially when strong emotions are involved. Current Right to Die laws, based on intuitive categorical distinctions between different kinds of consensual homicides and suicides, should be scrutinized in light of developing scientific understanding.

### **EVOLUTION OF SCIENTIFIC UNDERSTANDINGS OF HUMAN NATURE**

(9:30 a.m. - 10:30 a.m.)

Moderator: Julie Seaman

Associate Professor of Law, Emory Law School, President of SEAL

### 9:30 – 9:55 The Scientific Approach to Human Nature: Between New Challenges and Eternal Returns

### Valeria Marzocco

Researcher in Philosophy of Law & Adjunct Professor of Legal Anthropology, Federico II University Naples—Law Faculty

Are the relations between law and science that arose at the beginning of legal anthropology just a positivistic illusion? From the beginning of european legal ethnology through contemporary genetic representations of human diversity, scientific paradigms runs through the history of legal anthropology. In the late 19th century, scientific advances not only offered new approaches to legal studies but also allowed legal studies to overcome earlier theories about the origins, evolution and nature of humans that were rooted in natural law theory. This talk will focus on how this trust in science was not only connected with a climate of scientific positivism but also gave the first representation of certain central issues and problems that have never abandoned by legal studies. Is this a genealogy of the contemporary relationship between law and science?

### 10:00 - 10:25 Ethics, Law, and the Onion Skin Theory of Knowledge

### **Christopher DiCarlo**

### Lecturer, University of Toronto

What are Some of the Evolving Complexities of Attributing Value amidst Layers of Causal Influences on Human Behaviour? This paper is a synopsis of my latest research for a new book, which examines how humans have valued human actions in the past and how this will change as our understanding of complex natural and cultural systems develop. Using an onion as a model of understanding, I consider how both the depth and breadth of understanding the interconnectedness of varying natural and cultural systems (i.e. the layers of the onion) will provide a more epistemically responsible account for judging either the positive or negative value of human actions. Through an increased understanding of these collective integrated systems it follows that the greater we are able to assess the constraints under which any given moral or legal agent behaves, the fairer we will be in determining judgment on such behavior.

### 10:30 - 10:45 MID-MORNING BREAK

### EVOLUTIONARY PSYCHOLOGY, MARKETS AND MARKET REGULATION

(10:45 a.m. - 12:45 p.m.)

**Moderator:** Robin Kar

Professor of Law and Philosophy, University of Illinois College of Law, Director of Illinois Program on Comparative and Interdisciplinary Jurisprudence, Vice-President SEAL

# 10:45 – 11:10 Descriptive Power, Adaptedness and Functionality of the *Nemo Dat* and Good Faith Purchaser Baselines in Property Law

Benito Arruñada

Professor of Business Organization, Pompeu Fabra University, Spain

Henry E. Smith

### Fessenden Professor of Law, Harvard Law School

Is the nemo dat rule baseline of property law maladapted to the impersonal exchange characteristic of the modern market economy? Smith (2012) [see Henry E. Smith, "On the Economy of Concepts in Property", University of Pennsylvania Law Review 160: 2097-128] applies cognitive theory to demonstrate that some central features of property law, including the nemo dat rule, serve to economize on information costs. This information-cost argument is complemented here with insights from Evolutionary Psychology and the economics of impersonal exchange to develop a contextual adaptation hypothesis that aims to explain both the current prevalence and the potentially negative effects of using nemo dat as a baseline, whatever its past or present descriptive power. The paper answers three main questions, related to: (1) the descriptive power of the different baselines; (2) the instinctive appeal of different baselines; and (3) the influence of the transactional context in making alternative baselines more or less effective.

# 11:15 – 11:40 Exposing the Myth of Consent: Strictures from Neuroscience, Economics, and Relational Contracting

Jennifer A Drobac

Professor of Law, Indiana University Robert H. McKinney School of Law

Oliver Goodenough

# Professor of Law, Vermont Law School, Faculty Fellow, Berkman Center for Internet and Society Harvard University

Is the neo-classical model of contract law consistent with recent neuroscientific discoveries concerning human development and aging, and if not, does behavioral economics or relational contract theory provide hope for the creation of an appropriate "permeable membrane" for a vulnerable consenting party? This presentation explores the limitations of our current market driven notions of consent and possible alternative approaches that can preserve autonomy while recognizing the contextual and contingent nature of any surrender of legal rights and protections. Drawing on work in progress, the presenters examine the concepts of consent, capacity, and autonomy in the real world of human thought and interaction, particularly as it effects adolescents, the elderly, and others who arguably have decision making capacity but who are at risk of exploitation in an all-or-nothing world of market-style waiver. While the extreme view of unfettered autonomy to bind by consent may have a place in certain formal market contexts, recent neurological research, and informational and power imbalances, make wide application of this inappropriate and lend support for alternative approaches that create, metaphorically, a "permeable membrane" of protection.

### 11:45 - 12:10 Fairness and Antitrust Reconsidered: An Evolutionary Perspective

Thomas J. Horton

# Associate Professor of Law, Johnson, Heidepriem & Abdallah Trial Advocacy Fellow, University of South Dakota School of Law

Should antitrust analyses incorporate moral norms of fairness? For many American jurists and scholars today, the notion that antitrust analyses should incorporate moral norms of fairness is anathema. Reconsidering that position, it is recommended that courts and regulators begin applying an evolutionary perspective in antitrust cases, instead of the static economic consumer and total welfare norms in vogue today. The courts and regulators should begin focusing on fairness norms, intent, and competitive harm, and allow jurors, rather than judges, to evaluate and decide such issues.

### 12:15 - 12:40 Psi Omega Kappa: A Sorority of Behaviorally Sophisticated Measures of Risk, Return, and Reward

Jim Chen

Professor of Law & Former Dean, Louis D. Brandeis School of Law & Justin Smith Morrill Professor of Law, Michigan State University, effective July 1, 2013

What measures of an investment vehicle or investment portfolio's vulnerability to cycles of greed and fear should the law adopt in order to protect retail investors, pension funds, spendthrift trusts, and nonprofit endowments? Persistent gaps between hypothetical investment return and actual investor return expose one of the deepest flaws in mechanical reliance on simple mean-variance optimization that lies at the heart of modern portfolio theory. Fun as it may be to tell investors that Warren Buffett invests like a girl and so should they, the social insecurity of underfunded retirement accounts and the ivory crisis of crumbling university endowments demonstrate that the law cannot be content to take a quantitatively uninformed random walk through behavioral finance. In order to provide complete guidance to fiduciaries who must prudently manage investments entrusted to them, the law should develop and enforce sophisticated measures of the impact of investor behavior on portfolio-wide performance.

12:45 - 2:00 LUNCH

### PANEL DISCUSSION ON HOT TOPICS AND EMERGING TRENDS

(2:00 p.m. - 3:00 p.m.)

**Moderator:** Amy Wax

Robert Mundheim Professor of Law, University of Pennsylvania Law

**School** 

2:00 - 3:00 Discussants & Topics:

David Sloan Wilson: Multi-Level Selection

Owen Jones: Neuroscience and the Law

**Robert Kurzban:** Evolution of Morality

Robin Bradley Kar: Genetics and the Reconstruction of Human Prehistory

3:00 - 3:30 Business Meeting

3:30 - 7:00 Free Time/Travel Back

7:30 p.m. Dinner for guests who are staying until Sunday