



FIFTEENTH SEAL SCHOLARSHIP CONFERENCE
UNIVERSITY OF ILLINOIS COLLEGE OF LAW
CHAMPAIGN, ILLINOIS
APRIL 4-5, 2014

Program Schedule

Co-Sponsored by:

**University of Illinois College of Law and the Program in Interdisciplinary &
Comparative Jurisprudence**



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, evolutionary theory, and neuroscience, 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 and topics include, human evolution (including general evolutionary and behavioral biology, evolutionary psychology, anthropology, and the evolution of human morality, law, culture, and cognitive capacity), psychology (moral, social and cognitive), neuroscience, complex adaptive systems, economics, behavioral economics, population and behavioral genetics, behavioral ecology, animal behavior, archaeobiology, psychiatry, and gender relations. SEAL welcomes all those with serious scholarly interests in evolutionary processes and law.

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THURSDAY, APRIL 3, 2014

7:00 p.m. Casual dinner for participants of Thursday arrival – KoFusion (1 Main St #104, Champaign, IL)

DAY ONE - FRIDAY, APRIL 4, 2014

8:30 – 9:00 Breakfast in the Faculty Lounge and Conference Center, College of Law

9:00 – 9:15 Welcome and Introductions

SESSION I:

EVOLUTION OF LAW & SOCIAL COMPLEXITY

(9:15 am – 12:30 pm)

MORNING KEYNOTE PRESENTATION

9:15 – 10:15 When Long Term Memory (for Social and Legal Values) is Willing but Short Term Memory is Weak

Thomas Anastasio

Associate Professor of Molecular and Integrative Physiology, Beckman Institute, University of Illinois

How do humans and human groups form long term memories, including those for social and legal values? Among many other interconnected systems of relationships, our long-term memory stores our conception of the values that we internalize from our society, yet our behavior is sometimes inconsistent with those values. This talk will present the results of conceptual and computational models that address the question of how individual and societal (collective) long-term memory, including memory for values, could form through an interdependent process, and how behavior inconsistent with those values could arise, in the context of economic games, due to simple limitations in the capacity of short-term memory.

10:15 – 10:30 MORNING BREAK

10:30 – 10:55 How Complex is the Law, and How Complex Should it Be?

Daniel Katz & JB Ruhl

Katz: Associate Professor of Law, Michigan State University College of Law

Can we measure the complexity of law (and if so how and what would we do with that knowledge)? Legal scholars have begun to employ the science of complex adaptive systems, also known as complexity science, to probe these kinds of descriptive and normative questions about the legal system. While this work is illuminating, for the most part, legal scholars have skipped the hard part—developing quantitative metrics and methods for measuring and assessing law’s complexity. This paper explores the empirical and normative dimensions of legal complexity at a depth not previously undertaken in legal scholarship—including identifying useful metrics and methods for studying legal complexity.

11:00 – 11:25 The Emergence of Constitutionalism as an Evolutionary Biocultural Adaptation

Fábio Almeida

PhD Candidate in Constitutional Law

Does constitutionalism provide a social structure that lays the foundation of value-pluralistic societies such as contemporary democracies? Gene-culture biological theories can explain stability in large human societies in which there is profound agreement on basic values. However, this theoretical framework cannot explain cooperation in social environments characterized by deep value-pluralism. By relying on functional sociology, on gene-culture theory, on memetics and on evolutionary psychology, I argue that constitutionalism is a biocultural adaptation that stabilizes cooperation in pluralistic social environments, allowing for the emergence of complex and sociologically differentiated societies.

MID-DAY KEYNOTE PRESENTATION

11:30 – 12:30 Western Legal Prehistory: On the Early Root of Large-Scale Human Social Complexity

Robin Bradley Kar

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

What can contemporary developments in linguistics, genetics, and archaeology tell us about the likely prehistory of Western legal systems, including the patterns of cultural transmission that have helped their emergence and sustainability? Legal origins scholars argue that societies differ in many ways that can be traced to the origins of their laws. But this scholarship typically looks only to the historical record, and draws distinctions primarily between civil and common law systems. Contemporary developments in linguistics, genetics and archaeology can, however, allow us peer further back into human prehistory. We now have the tools to reconstruct the earliest patterns of cultural transmission that appear relevant to the development of large-scale social complexity, including those found in modern Western legal systems. In this talk, I will draw on some of these developments to suggest a particular reconstruction. I will also draw some cautionary lessons for the exportation of Western law to some other parts of the world.

12:30 – 1:30 LUNCH

SESSION II:

THEORIZING FAMILY LAW

(1:30 pm – 2:20pm)

1:30 – 1:55 Emergent Law: Theorizing Dynamical Systems Behavior in Child Neglect Courts

John Thomas Halloran

PhD Student, University of Chicago, School of Social Service Administration

How is law situated as an outcome and a cause within the dynamic system of child protection systems? The public response to child neglect is situated in a dynamically interacting system of systems where agents, agencies, and public institutions are responsible for the identification, adjudication, and correction of caregiver neglect. Within that web, decisionmakers are constrained by their available resources (conceptual and physical) and the demands that are placed on those resources—the structural nature of which may produce systematic characteristics (such as latent carrying capacities, feedback mechanisms, and other emergent behaviors) as those decisionmakers interact with other components of the system. This paper proposes a theoretical model for analyzing the child neglect system of systems hierarchically with a positive goal of understanding extant child neglect policy and a normative goal of identifying critical points for policy intervention.

2:00 – 2:20 Life History Theory and the Endorsement of Child Support Laws

Keelah E.G. Williams

Graduate Student (JD/Social Psychology PhD), Arizona State University

Life History Theory suggests that, to maximize reproductive fitness, individuals make trade-offs between allocating resources to mating versus parenting--and that these trade-offs are influenced by an individual's sex, life history strategy, and environment. I empirically explore the usefulness of a Life History Theory framework for understanding endorsement of child support laws, with initial results suggesting that environmental cues (such as the ratio of men to women) do shape individuals' favorability toward specific child support policies.

2:20 – 2:45 BREAK

SESSION III:

APPLICATIONS OF SCIENCE TO LAW

(2:45 pm – 3:40 pm)

2:45 – 3:10 Your Genome and the Personalization of Medicine

Derek E. Wildman

Associate Professor, Center for Molecular Medicine and Genetics, Wayne State University School of Medicine

How might recent advances in genomics affect the regulation of health care and biomedical research? Recent technological advances have made it much cheaper and much easier to obtain information everyone's genome. Genomes can now be sequenced for less than \$1000, and it is likely that genomic data from patients will become a commonplace part of health care diagnosis and management in the near future. The link between individual genetic data and the competent diagnosis of various illnesses is, however, still poorly understood by the greater public. This talk discusses the ways in which approaches to patient medical care might be best regulated and personalized in light of recent advances in genomics--which are creating a sea change in many areas of medicine.

3:15 – 3:40 Should Science be Involved in a Legal Determination of Intellectual Disability?

Nancy Haydt

Attorney at Law, Board of Governors, California Attorneys for Criminal Justice (CACJ), Co-Chairperson, Death Penalty Committee CACJ

The U.S. Supreme Court is reviewing the application of Standard Error of Measurement (SEM) in the interpretation of IQ test scores in the pending capital appeal of Freddie Lee Hall v. State of Florida. The American Psychiatric Association, the American Psychological Association, and the American Association on Intellectual and Developmental Disability, unequivocally support of the application of SEM in death penalty cases, while Florida promotes a bright-line maximum IQ score of 70 allowing no statistical consideration in the interpretation of Hall's IQ test results. This session will explore the controversial policy and legal effect of excluding science, particularly SEM, in the legal determination of Intellectual Disability.

3:40 – 4:00 BREAK

SESSION IV:

A RETURN TO THE EVOLUTION OF SOCIAL COMPLEXITY

(4:00 pm – 5:00 pm)

EVENING KEYNOTE PRESENTATION

4:00 – 5:00 From Me to We: Searching for the Genetic Roots of Sociality

Gene Robinson

University Swanlund Chair of Entomology, Director of Institute for Genomic Biology, University of Illinois

How can the new science of genomics enable researchers to study social life in molecular terms? True societies are very rare in biology, but have evolved repeatedly in a group of insects that include the ants, bees, and wasps, with the honey bee widely considered a paragon of sociality. This lecture uses the honey bee and related species to demonstrate how the new science of genomics enables researchers to study social life in molecular terms, including examples of mechanisms regulating selfish behavior that have evolved to promote cooperation, and connections between socially responsive genomes and human health. Some implications for the study of human sociality will be discussed.

5:00 – 5:30 EVENING BREAK

5:30 – 7:15 Dinner (held in the College of Law, Faculty Lounge and Conference Center)

DAY TWO - SATURDAY, APRIL 5, 2014

8:30 – 9:00 Breakfast in the Faculty Lounge and Conference Center, College of Law

SESSION IV:

EARLY SESSIONS PRESENTATIONS

(9:00 am – 10:20 am)

9:00 – 9:20 The Lie Reflex: An Evolutionary Critique of the Excited Utterance Exception to the Rule Against Hearsay

Mason Marks

Law Student (2L), Vanderbilt Law School

The excited utterance exception to the rule against hearsay presumes that humans cannot lie while under the influence of stress resulting from a startling event or condition. However, animals routinely exhibit deceitful behaviors in response to startling stimuli such as encountering predators, which suggests that deceit provides a reproductive benefit in such situations. This talk proposes that similar tendencies for deceit have evolved in humans, and these mechanisms undermine the excited utterance doctrine.

9:20 – 9:40 The Law and Economics of Restrictions on Transfers of Shares: Taming Property Rights in Shares and the Silver Fox

Lécia Vicente

PhD Candidate, European University Institute (Law Department)

This paper looks at law as providing tools for designing optimal legal provisions in corporate law just as biology supplies the scientist with the necessary cognitive equipment to undertake their experiments based upon the artificial selection of species.

9:40 – 10:00 Judicial Phylogenetics

Daniel Martin Katz

Associate Professor of Law, Michigan State University College of Law

The goal of this project is to construct a method designed to trace the development of doctrine and the influence of judges who have long since left the Court. Our fossil record is the language and citation network contained in the web of judicial decisions authored over the past centuries. This information can be used to construct phylogenetic trees that can identify the intellectual ancestry of various judges/justices.

10:00 – 10:20 In Hot Blood: Towards a Proximate Account of Provocation

Carlton Patrick

PhD Candidate, University of Miami

Courts, in trying to explain the mental deficiency of those who kill in the “heat of passion,” often rely on such indefinite language as the control of reason was disturbed, bypassing the thought process, or a deprivation of the intellect. However, recent research on the evolved function of emotions, most notably anger, offers a more concrete cognitive explanation of the type of compulsion that could motivate heat of passion homicides.

10:20 – 10:45 BREAK

SESSION VI:

NEUROSCIENCE & CRIMINAL RESPONSIBILITY

(10:45 am – 2:00 pm)

10:45 – 11:10 Insanity, Rationality, and the Insanity Defense (in its future in the Age of Neuroscience)

Theodore Y. Blumoff

Professor of Law, Mercer University School of Law

Whether recent neuroscientific research on schizophrenia provides a sufficient reason to rethink our approach to the insanity defense? Individuals who suffer from chronic paranoid ideations live with deeply embedded conspiratorial delusions that are sometimes accompanied by unwanted visual and/or auditory stimuli, sometime neither: just psychotic delusions in which they feel as if they have lost control of their lives – and of course they have, albeit not from the performances of foreign forces. When those forces persevere for even a fairly short period of time, they can dictate the performance of evil deeds that the individual ultimately feels helpless to oppose. What observations and findings from neuroscience make clear is that such individuals do not lack knowledge, a quality M’Nagthen requires for exculpation; they lack control, and the laws of the many states that fail to recognize this reality are incarcerating individuals who lack blameworthiness.

11:15 – 11:40 **Are All Owners of a Damaged Brain Impaired? – Brain lesions, memory integrity, competence, and criminal responsibility.**

Zoey Cheng

PhD Student, University of Toronto, Institute of Medical Science

What type and how much of a brain damage impairs a person's judgment, memory, and competency, and minimizes his/her criminal responsibility? Images of dramatic brain lesions have been used in the courtroom to support claims usually involving the impairment of the defendant's judgment, competence, and criminal responsibility. While certain lesions of the brain may be associated with altered behaviour, the link is not always consistent: the presence of the most obvious brain damage may not result in significant impairment in functionality, and the absence of detectable brain lesion does not promise functional integrity. As part of my research looking at radiation damage to the brain's ability to regenerate neurons (neurogenesis) and its correlation to cognition, I would like to discuss the various types of brain lesions/damages, at microscopic and macroscopic levels, and their associated consequences in cognition, and conclude with how the current knowledge on brain damage, cognition, and brain imaging may help legal proceedings.

11:45 – 1:00 **LUNCH**

LUNCHTIME KEYNOTE PRESENTATION

12:00 – 1:00 **Owen D. Jones**

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

Neuroscientific Perspective on the Role of (and Control of) Emotions during Punishment Decisions

By what brain mechanisms, during punishment decisions, does an assessment of a criminal offender's mental state interact with emotional reactions to the harm he caused? While the liability phase of a trial typically treats prohibited acts and culpable mental states as distinct elements, decision-makers in the sentencing phase must somehow weigh the harm and mental state components together in order to arrive at a just punishment. But how, for instance, do brain processes ensure that a high-harm crime, performed by someone in a low-culpability mental state, is not punished quite severely? This talk will discuss an fMRI brain-imaging study illuminating the interaction between analytic and emotional circuitries during punishment decisions.

AFTERNOON KEYNOTE PRESENTATION

1:00 – 2:00 **Michael S. Moore**

Charles R. Walgreen, Jr. Chair, Professor of Law and Philosophy, Co-Director of Program in Law and Philosophy, University of Illinois

The Neuroscience of Volitional Excuse

Can recent advances in neuroscience and experimental psychology help answer questions about the bearing of volitional excuses on moral and legal responsibility? Moral and legal responsibility can be excused on a number of grounds, including a special category, which I call volitional excuse. Volitional excuse is distinguished from other modes of eliminating moral responsibility—including justification, lack of action, lack of intention, or cognitive excuse—and located within various legal defenses in criminal law, such as duress, diminished capacity, and provocation. The normative principle underlying all legal and moral instantiations of volitional excuse is the principle of alternative possibilities (PAP): if the actor could not have done other than he did, he is excused for doing it. I distinguish two interpretations of this principle: an "incompatibilist" one, whereby an actor whose choice is sufficiently caused by factors he does not control "could not have done otherwise;" and a "compatibilist" one whereby only an actor unable to realize his desires through his actions "could not have done otherwise." I pursue the compatibilist sense of PAP, and limit it various ways. I then contrast six psychological models under which an intentional wrongdoer might plausibly claim he could not do otherwise, and trace out their counterfactual implications under this compatibilist version of PAP. With this framework as background, I assess the likelihood of either experimental psychology or contemporary neuroscience reaching the point where it could verify these counterfactuals.

2:00 – 7:25 **Free Time/Travel Back**

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