ASSOCIATION FOR POLITICS AND THE LIFE SCIENCES

Twenty-Ninth Annual Meeting Biddle Hotel and Conference Center – Bloomington, Indiana Indiana University October 14-16, 2010

FINAL PROGRAM

Program Chairs:

Erik Bucy, Indiana University **Patrick A. Stewart,** University of Arkansas

Program Committee:

Ronald F. White, College of Mount St. Joseph & Steve Peterson, Penn State-Harrisburg

PANELS/EVEN TS:

TARLES/ EVER 13.	
1. Achieving Health Care Reform (Dogwood Room)	Thurs. 8:15-10:00
2. Environmental Policy (Sassafras Room)	Thurs. 8:15-10:00
3. Libertarian Paternalism (Persimmon Room)	Thurs. 8:15-10:00
4. New Perspectives on Health Care Ethics (Dogwood Room)	Thurs. 10:30-12:15
5. Common Pool Resource Issues (Sassafras Room)	Thurs. 10:30-12:15
6. Workshop on the WomanStats Project (Persimmon Room)	Thurs. 10:30-12:15
7. Elinor Ostrom (Whittenburg Auditorium)	Thurs. 2-3:30
8. Reception (Georgian Room)	Thurs. 3:30-5:00
9. Biotheory and Ultimate Causation in Poli. Science (Dogwood Room)	Fri. 8:15-10:00
10. The Foundations of Ethical Leadership (Sassafras Room)	Fri. 8:15-10:00
11. Biobehavior, Public Policy, & Higher Ed (Persimmon Room)	Fri. 8:15-10:00
12. Biopolitics and International Security (Dogwood Room)	Fri. 10:30-12:15
13. Disease, Health Care, and Women (Sassafras Room)	Fri. 10:30-12:15
14. Founders 1 - Biopolicy Emphasis (Persimmon Room)	Fri. 10:30-12:15
15. Military Applications of Biology (Dogwood Room)	Fri. 1:30-3:15
16. Global Perspectives on Health Care (Sassafras Room)	Fri. 1:30-3:15
17. Founders 2 - Biotheory Emphasis (Persimmon Room)	Fri. 1:30-3:15
18. Science and Religious Belief in the 21st Century (Dogwood Room)	Fri. 3:45-5:30
19. Policy Applications of Biotheory (Sassafras Room)	Fri. 3:45-5:30
20. Founders 3 – Past/Present/Future (Persimmon Room)	Fri. 3:45-5:30
21. Biobehavior in Politics (Persimmon Room)	Sat. 8:15-10:00
22. Environmental Attitudes (Persimmon Room)	Sat. 10:30-12:15

MEETINGS

APLS Executive Council Meeting

THURSDAY, OCTOBER 14, 2010

<u>Thursday, 8:15 – 10:00 am - Panels</u>

Achieving Health Care Reform: 'But I have promises to keep and miles to go before I sleep'

Room: Dogwood

Chair: William Brandon, University of North Carolina-Charlotte

Presentations:

Health Insurance Exchanges: Making a Competitive Silk Purse out of a Sow's Ear?

William Brandon, University of North Carolina-Charlotte

Reforming Health and Transforming Medicaid: Enabling Medical Homes for the Homeless

Leslie Golden, University of North Carolina-Charlotte

William Brandon, University of North Carolina-Charlotte

Clinical-cultural drift: Practice variation from a second perspective

Robert H. Sprinkle, University of Maryland-College Park

The Health Care Workforce after Health Reform: Will We Have Enough & Right Types?

Margaret C. Wilmoth, Congressional Fellow Robert Wood Johnson Foundation

Sheldon D. Fields, Congressional Fellow Robert Wood Johnson Foundation

2 Environmental Policy

Room: Sassafras

Chair: Patrick A. Stewart, University of Arkansas

Presentations:

Ecocentrism and Oil Spills: Toward a Public Policy

Adam Konopka, College of Mount St. Joseph

Global cooling and global politics: the 1960s as a model for the future **Val Martin**, Illinois Institute of Technology, Chicago

Dewey and Leopold on the Limits of Environmental Justice

Shane Ralston, Pennsylvania State University

3 Libertarian Paternalism: Perspectives on Thaler and Sunstein's

"Nudge"

Room: Persimmon

Chair: Ronald F. White, College of Mount St. Joseph

Presentations:

Nudge Match

Bill Glod, Institute for Humane Studies-George Mason University

The Socio-Psychological Basis for Libertarian Paternalism

Missy Houlette, College of Mount St. Joseph

Libertarian Paternalism and Economic Theory

Charles Kroncke, College of Mount St. Joseph

The Biopolitical Foundations of Libertarian Paternalism

Mike Tweed, Fort Hayes State University

Thursday 10:00 – 10:15 – Mid-morning Break

<u>Thursday</u>, 10:30 – 12:15 am – Panels

4 New Perspectives on Health Care Ethics

Room: Dogwood

Chair: William Brandon, University of North Carolina-Charlotte

Presentations:

Ethical Health Care Communication in the Context of Life-Threatening Illness, Death and Dying Linda Wheeler Cardillo, College of Mount St. Joseph

Consilience, Medical Ethics and Adaptive Truth.

James Rutherford, M.D., Grant Hospital Columbus, Ohio

Some Ethical and Scientific Aspects of the Politicization of US Healthcare Reform **Edward Sankowski**, University of Oklahoma 5 Common Pool Resource Issues

Room: Sassafras

Chair: Brian C. Steed, Utah State University

Presentations:

Using proximate and ultimate causation to inform CPR theory.

Michael Cox, Indiana University Bloomington

Governance of the Fishery CPR: Analyzing vote data from a real-world fishery board **Robert Holahan**, Indiana University Bloomington

Forests in Flux: Analyzing Actor-Institution Linkages in Implementation of Forest Property Reforms

Prakash Kashwan, Indiana University Bloomington

Resource Governance in a Dynamic World: An Over Time Look at Groundwater Governance in the Los Angeles Area

Brian C. Steed, Utah State University

6 Workshop on the WomanStats Project

Room: Persimmon

Chair: Valerie Hudson, Brigham Young University

<u>Thursday</u>, 12:15 – 1:30 pm – <u>Lunch</u>

Thursday, 2:00 - 3:30- Keynote

7 Elinor Ostrom

Room: Whittenburg Auditorium

Thursday, 3:30 – 5:00 pm – Reception

8. Poster Presentations

Room: Georgian

Cash bar and Hors D'oeuvres

FRIDAY, OCTOBER 15, 2010

<u>Friday, 8:15 – 10:00 am – Panels</u>

9 Biotheory and Ultimate Causation in Political Science

Room: Dogwood

Chair: Laurette Liesen, Lewis University

Presentations:

Biological Realism: The Science of Classical Realism

Adam Cox, Northern Illinois University

Evolved Gender Psychologies

Rebecca Hannagan, Northern Illinois University

The constructivism versus Darwinism

Franchuk V. Ivanovich,

Neurodynamics and Politics

Paul Vasholz Jr., Northern Illinois University

10 The Foundations of Ethical Leadership

Room: Sassafras

Chair: **Edward Sankowski,** University of Oklahoma

Presentations:

Why Leadership Ethics Requires a Deontological Framework

James H. Fetzer, University of Minnesota Duluth

Emotion Theory and Leadership: Reconciling the Scholarly and the Popular Perspectives

Michael Sontag, College of Mount St. Joseph

Biology and the Quest for a Universal Theory of Ethical Leadership

Ronald F. White, College of Mount St. Joseph

Evolutionary Ethics: An Idea Whose Time Has Come

Peter Corning, Institute for the Study of Complex Systems

11 Biobehavior, Public Policy, & Higher Education

Room: Persimmon

Chair: Patrick A. Stewart, University of Arkansas

Presentations:

An Ethological Approach To Psychiatric Disorder: Relevance To Its Basic Science And Fate Over Three Decades

Russell Gardner, University of Wisconsin-Madison

Consilience and the Social Sciences: Predictions, Social Networks and the Life Sciences

Bernice A. Pescosolido, Department of Sociology & Indiana Consortium for Mental

Health Services Research, Indiana University

Advocacy as a New Scientific Paradigm?

Ullica Segerstrale, Illinois Institute of Technology-Chicago

Friday, 10:00 - 10:30 am - Mid-morning Break

<u>Friday, 10:30 – 12:15 am – Panels</u>

12 Biopolitics and International Security

Room: Dogwood

Chair: **Bradley Thayer,** Baylor University

Presentations:

Genes, Memes, and the Knowing Man: Constructing a Scientific Foundation for the Study of International Relations

Matthew Cantele, Northern Illinois University

Synapses at War: The Implications of Neuropolitics for the Study of International Relations

John Friend, University of Hawaii

Neuropolitics and Political Science: Providing a Foundation for the Study of Politics

Bradley A. Thayer, Baylor University **John Friend**, University of Hawaii

Sex and the Shaheed: Insights from the Life Sciences on Islamic Suicide Terrorism

Bradley A. Thayer, Baylor University

Valerie M. Hudson, Brigham Young University

13 Disease, Health Care, and Women

Room: Sassafras

Chair: Ronald F. White, College of Mount St. Joseph

Presentations:

Postpartum Depression: Skepticism of the Therapeutic State and Consideration of a New Paradigm

Bonnie Chojnacki, University of Akron

Post Traumatic Stress Disorder and Military Sexual Trauma: An Evolutionary Perspective. **Rebecca Hannagan**, Northern Illinois University

Compensation for Oocyte Donation and Advocacy Group Rhetoric: The Development of State Regulation

Alisa Von Hagel, Northern Illinois University

14 Founders 1 - Biopolicy Emphasis

Room: Persimmon

Chair: Patrick A. Stewart, University of Arkansas

Presentations:

Robert Blank,

Andrea Bonnicksen, Northern Illinois University **Odelia Funke**, U.S. Environmental Protection Agency

Amy Fletcher (on Blank/Bonnicksen/Tiger), The University of Canterbury

Friday, 12:15 - 1:30 pm - Lunch

Friday, 1:30 - 3:15 pm - Panels

15 Military Applications of Biology

Room: Dogwood

Chair: Ronald F. White, College of Mount St. Joseph

Presentations:

Autonomous Unmanned Vehicles: Perception, Motor Control Theory, and the Future of Warfare

Mike Tolston, University of Cincinnati

The Drone Missile Program, Human Error, and the Pursuit of Costless Warfare **Eliah J. White**, University of Cincinnati

16 Global Perspectives on Health Care

Room: Sassafras

Chair: Robert Sprinkle, University of Maryland – College Park

Presentations:

The Alzheimer's dilemma: Implications and recommendations for healthcare

Richard R. Haubner, College of Mount St. Joseph

The Global Health Care Maze

Charles Kroncke, College of Mount St. Joseph **Ronald F. White**, College of Mount St. Joseph

Cholera and the Historical Impact of Pandemics in the Modern World Rachel Constance Littleton, Northern Arizona University

17 Founders 2 - Biotheory Emphasis

Room: Persimmon

Chair: Patrick A. Stewart, University of Arkansas

Presentations:

Denise L. Baer, Johns Hopkins SAIS

Peter Corning, Institute for the Study of Complex Systems (pt.1)

David Goetze, Utah State University

Gary Johnson, Lake Superior State University **Roger D. Masters**, Dartmouth University

<u>Friday, 3:15 – 3:45 pm Mid-afternoon Break</u>

<u>Friday, 3:45 – 5:30 pm – Panels</u>

18 Science and Religious Belief in the 21st Century

Room: Dogwood

Chair: Laurette Liesen, Lewis University

Speakers:

Conceptualizing a productive narrative between science and religion: The intersection of religion and life

Rev. John Amankwah, College of Mount St. Joseph

The religious brain: Complex adaptive systems and the origins of religious belief

Aaron Burgess, Cincinnati Christian University

Hayek was right: Biology, Ideology and Religion

Christopher Green, Pacifica Graduate Institute

Can we find God in a brain? The technical limitations of measuring religious belief.

Susan Israel, University of Cincinnati

19 Policy Applications of Biotheory

Room: Sassafras

Chair: Rebecca Hannagan, Northern Illinois University

Presentations:

The Discovery Institute and the Organized Opposition to Evolution in Public School Science Education

Matthew M. Beatty, Wayne State University

Techné and Phūsis in Bioengineering: the Ontological Implications of Craig Venter's Experiment **Kenneth C. Blanchard, Jr.**, Northern State University

Sociobiological strategies in the post-totalitarian countries: Ukraine

Vitaliy I. Egorov, MD, Vitaliy I. Ignatenko, MD, Sergey G. Belogortzev, MD

Citizen Scientist: Biodiversity Informatics and the Democratization of Conservation **Amy L. Fletcher**, The University of Canterbury, New Zealand

20 Founders 3 – Reflections on the past, Present and Future of Interdisciplinarity

Room: Persimmon

Chair: **TBA**Presentations:

Peter Corning, Institute for the Study of Complex Systems (pt.2) **James C. Davies**, University of Oregon (as presented by John Orbell)

John Orbell, University of Oregon

Steve Peterson, Penn State – Harrisburg **Al Somit**, Southern Illinois University

SATURDAY, OCTOBER 16, 2010

APLS Executive Committee Meeting

7:00 - 8:00 pm

<u>Saturday, 8:15 – 10:00 am – Panels</u>

21 Biobehavior in Politics

Room: Persimmon

Chair: Erik Bucy, Indiana University Bloomington

Presentations:

Quantifying the Claim that Nixon Looked Bad: A Visual Analysis of the Kennedy-Nixon Debates

Erik P. Bucy, Indiana University James Ball, Indiana University

Out-group Threat and Gender Balance in Policymaking Groups

Rebecca J. Hannagan, Northern Illinois University **Christopher W. Larimer**, University of Northern Iowa

Why human irrationality cannot be experimentally demonstrated: Doubts about the "standard picture"

Phil Roberts, Jr., nonaffiliated

The "Happy Warrior" Revisited: Participant Response to Happiness-Reassurance Displays by President Barack Obama

Patrick A. Stewart, University of Arkansas **Pearl K. Ford**, University of Arkansas

Saturday, 10:00 - 10:30 am - Mid-morning Break

<u>Saturday</u>, 10:30 – 12:15 pm – Panel

22 Environmental Attitudes

Room: Persimmon

Chair: Patrick A. Stewart

Presentations:

The Potential for Regional Policy Responses in a Rural Setting: Mosquito Control in the Mississippi Delta

Thomas Greitens, University of Central Michigan **Joaquin**, **M. Ernita**, University of Nevada-Las Vegas **Patrick A. Stewart**, University of Arkansas

Identifying the Northwest Arkansas Foodshed

Angelica Kraushaar, University of Arkansas

Measuring implicit environmental attitudes

Sven van de Wetering, University of the Fraser Valley
Richelle Isaak, University of the Fraser Valley

Abstracts

Conceptualizing a productive narrative between science and religion: The intersection of religion and life

Rev. John Amankwah, College of Mount St. Joseph

The conflict between Science and Religion concerning life has been a long standing problem for many academics. A narrative that serves as a cross section for both disciplines is needed to bridge the conversation. Religion has given us a lot of pointers to do science. On issues about life, religion gives us ample insights into the interactive processes among species and also the geosphere. The fascination about life has been advanced by science in the last three centuries thus opening a horizon of scientific possibilities for human endeavors. An area of great fascination is the human brain which has thrown science and religion into a spiral convulsion because of it complexity. The context of neuro-theology is gradually surfacing in the field of theology because of man's curiosity to determine what actually constitutes the human brain. This approach is surfacing questions concerning the role of God in the universe. Pierre Teilhard de Chardin, a theologian, philosopher, and anthropologist has given both theologians and scientist an avenue for a narrative that can emerge a narrative that will hopefully propel the conversation further for mutual advancement and development. This paper seeks to provide a Teilhardian narrative for religion and science. In pursuing this narrative quest, the following questions are pertinent: what is life? And why is our brain wired in such complexity? Can the narrative of religion and science converge in teleology? Why is God not going away from our research?

The Discovery Institute and the Organized Opposition to Evolution in Public School Science Education Matthew M. Beatty, Wayne State University

Abstract: This paper examines the Discovery Institute, a Seattle-based think tank known as the hub of the intelligent design movement. The Discovery Institute's role in opposing evolution in American public schools is given historical and legal context, and some of the broad cultural implications of its work are evaluated. The goals and tactics of the Discovery Institute are considered through the lenses of morality policy theory and the advocacy coalition framework, both of which are summarized for the reader. The paper discusses the 2005 *Kitzmiller v. Dover Are School Board* decision and its implications for the future of the intelligent design movement.

Techné and Phūsis in Bioengineering: the Ontological Implications of Craig Venter's Experiment Kenneth C. Blanchard, Jr., Northern State University

According to press, and including a number of science writers, J. Craig Venter has created the first artificial life. In fact, he did nothing of the sort. What his team did do, apparently, was construct a new genome and insert it into an existing bacterium. Bad science writing exacerbates the usual anxieties about such research. Will they unleash a superbug? Will the technology fall into the wrong hands? Does this mean that we are nothing more than molecules?

This essay will examine the ontological implications of Venter's achievement. Far from representing a victory for reductionist materialism, DNA research shows that life is all about form and especially *information*. As will ink on paper, what counts in genetics is not the molecules but what they mean. I will argue that the logic of contemporary genetics, as exemplified in the Venter experiment, is more in harmony with Aristotle's biology than with any kind of materialism. The phenomena of life becomes more glorious the better we understand it.

Health Insurance Exchanges: Making a Competitive Silk Purse out of a Sow's Ear?

William Brandon, University of North Carolina-Charlotte

Central to P.L.111-148, "The Patient Protection and Affordable Care Act" of 2010, which became law in March, is the creation of health insurance exchanges that states are encouraged to establish. They are intended to foster competition between insurers selling standardized insurance policies to small

employer groups and individuals who do not qualify for employer-sponsored health insurance or public coverage (chiefly Medicare and the expanded Medicaid coverage promoted by other provisions of the Act). Health reformers anticipate that exchanges will facilitate comparative shopping for health insurance and lower prices.

The paper summarizes the key provisions of the law that pertain to exchanges and provides an update on efforts by the Department of Health and Human Services to generate federal implementing regulations. The origins of this mechanism for promoting cost-effective health reform are examined in order to contrast the provisions of P.L.111-148 with the health insurance purchasing cooperatives (HIPCs) proposed by the Clinton administration.

The final section of the paper explores some of the problems that are likely to be generated by health insurance exchanges as conceptualized in P.L.111-148 and the emerging federal regulations and suggests some possible improvements.

Quantifying the Claim that Nixon Looked Bad: A Visual Analysis of the Kennedy-Nixon Debates

Erik P. Bucy, Indiana University Bloomington

James Ball, Indiana University Bloomington

Despite the long-held assumption that Richard Nixon lost the first televised debate against John F. Kennedy in 1960 due to a poor visual presentation and awkward nonverbal communication style, no systematic investigation of the visual elements of the debate (or their 3 subsequent debates) has ever been undertaken. The claim that Kennedy prevailed was based on polling data that showed television viewers thought Kennedy won the debate while radio listeners gave Nixon the edge.

Subsequent experimental work by Druckman (2003) has validated the notion that television viewers were significantly more likely to think Kennedy won the debate than audio listeners. But aside from television's purported focus on "personality" and "image," what specifically led viewers—past and present—to form this conclusion? The present project, by performing a shot-by-shot analysis of the candidates' nonverbal communication style, delivery, visual presentation, and associated camera techniques, answers this question. Categories for analysis are derived from the coding framework introduced by Grabe and Bucy (2009) in their analysis of the visual framing of elections.

Within nonverbal communication, the candidates' facial displays (whether threatening, reassuring, evasive, or appeasing) will be coded, along with their voice tone and behavioral mannerisms, especially the rate and total number of eye blinks. In terms of visual presentation, camera shot lengths (close-up, medium, long) and camera angles will be assessed, along with the number and duration of candidate image and sound bites allotted to both Kennedy and Nixon. Reaction shots, in which the candidates are shown observing their rival, will also be coded. In terms of visual framing, the analysis will consider whether the candidates are given a proper amount of headroom and chin room while they are shown in close-ups, whether the candidates are presented head-on or at an angle (i.e., their vector orientation), and whether the camera operator adjusts for the candidate's body position. Zoom-in and zoom-out movements will also be documented, as will each shot's positive and negative volume, or proportion of the screen filled by the candidate.

Although focused primarily on the first televised Kennedy-Nixon debate for historic reasons, the analysis will include data and comparisons from all four televised encounters between Kennedy and Nixon. Complete footage of all four debates was obtained from the Kennedy Presidential Library and Museum in Boston. In addition to visual variables, the presentation will also summarize focus group responses to key encounters between Kennedy and Nixon in the first debate. In a broader sense, this paper addresses the question of what visually constitutes a political "loser," since Nixon is purported to have lost the first debate not on substance but on style and nonverbal demeanor. With specific losing qualities of both candidate behavior and visual presentation identified, subsequent research will be able to employ this framework in the analysis of contemporary televised political encounters.

The religious brain: Complex adaptive systems and the origins of religious belief

Aaron Burgess, Cincinnati Christian University

Anthropologists, philosophers, psychologists and social scientists have theorized that religious belief was something human beings intentionally created in response to the question of origins, to preserve morality, explain puzzling natural phenomena, provide comfort, explain the problem of evil or hold society together. But recent findings in the field of neurotheology (the science of spirituality) suggest that these explanations fail to truly account for why humans are religious. We are religious because our brains are pre-programmed to be religious. This paper gives an overview of Sam Harris' and Andrew Newberg's recent investigations into the origin of religious belief and analyzes their findings from the perspective of complex adaptive systems theory with the view that these findings have a tendency to over-simplify the most complex entity in the known universe: the human brain.

Genes, Memes, and the Knowing Man: Constructing a Scientific Foundation for the Study of International Relations

Matthew Cantele, Northern Illinois University

Aristotle's Zoon Politikon has undergone millions of years of evolution developing intrinsic physiological and psychological dispositions. Analyses of two replicators, the gene and meme, provide a foundation for the understanding of human political behavior and expose a teleonomic path toward greater complexity and interdependence. At a biological level, cooperative or synergistic behavior is a proven evolutionarily stable strategy. Evolutionary altruism resulting from this advantageous strategy can begin to account for the enormous amount of cooperation present in modern life. Following the advent of agriculture, cultural replication overtook genetic replication as the dominant influence on human behavior. The biological trend toward greater non-zero sum dynamics accelerated as successive information technologies enabled the formation of larger and more complex polities. Civilizations resisting these technologies experienced a decline in power vis-à-vis more open and pluralistic civilizations. This examination of our genetic and cultural evolution provides a scientifically informed view of human nature from which we can substantiate and refute various facets of realist and liberal international relations theory. An understanding of human evolution can thus better inform traditional IR theories and ultimately stand alone as a new paradigm in the study of political science.

Ethical Health Care Communication in the Context of Life-Threatening Illness, Death and Dying Linda Wheeler Cardillo, College of Mount St. Joseph

In this paper, I examine ethical issues surrounding the communication of health care providers with patients and family members in the context of life-threatening illness, death, and dying. In the current uncertain and rapidly changing cultural and medical environment, in which long-standing ethical assumptions, standards, and norms regarding life, suffering, healing, death, and dying have been seriously challenged, health care providers play a role that is at once difficult and extremely powerful. Health care providers are often those that vulnerable patients and their family members turn to for answers as they struggle with overwhelmingly difficult questions and ethical dilemmas regarding when and whether to accept or refuse medical interventions—interventions that may extend life or which may only cause needless and futile suffering in prolonging the dying process. Patients and families also look to health care providers for compassion and faithful presence in the midst of suffering, loss, and uncertainty. Thus, the communication of health care providers in these health care situations has inherent ethical implications, not only because of the potential impact on the lives of individual patients and families, but also for the less direct but equally profound influencing and shaping of cultural moral norms.

Postpartum Depression: Skepticism of the Therapeutic State and Consideration of a New Paradigm Bonnie Chojnacki, University of Akron

The Patient Protection and Affordable Care Act passed as part of the federal Health Care Reform legislation of 2010 includes a provision for increased funding for treatment of postpartum depression.

The legislation known as the MOTHER'S Act brings a mixed set of hopes and fears for feminists. Welfare feminists perceive the passage of this legislation as a success. Feminists of other stripes fear the legislation will perpetuate coercive, paternalistic, actions under the guise of medical beneficence. I will attempt to argue from the perspective of a middle ground that there is reason to be wary of successful outcomes for research into women's mental health sponsored by the federal government and reason to question the underlying assumptions and motivations within predominant modes of psychiatric intervention designed to alleviate the emotional distress of postpartum depression. I will suggest reasons for cautious optimism and sketch a new paradigm.

My skepticism of the therapeutic state will review three aspects of the current paradigm for diagnosis and treatment of postpartum depression. First, the existing classification system for mental illness developed by the American Psychiatric Association called the Diagnostic and Statistic Manual will be noted as problematic. Second, I will consider contentious historical disputes between the federal government and pharmaceutical corporations, which have led to the creation of regulatory interventions which disservice the public they were designed to paternalistically protect. Third, I will suggest that a feminist understanding of postpartum depression must expand beyond a narrow psychiatric classification of the condition as a biologically distinct etiology subject to paternalistic medical interventions to a richer understanding of the condition integrated within women's socially and culturally embedded lives.

My cautious optimism is based upon several recent or ongoing developments. Reasons for cautious optimism include the possibility that increased funding from the federal government through the MOTHER'S Act will facilitate a paradigm shift in the diagnosis and treatment of postpartum depression and the fact that a revised classification for the Diagnostic and Statistic Manual is currently under development. The paradigm shift I propose could draw upon ideas from a transnational movement, which reframed the core assumptions in the development of long-term contraceptive technologies by incorporating active women's participation in the outcome. Women in this movement differed significantly however found a basic solidarity identity as health. Women suffering from postpartum must find a point of solidarity around options for long term health and well being rather than accepting a diagnosis that they are suffering from a disease whose symptoms can only be cured by medical intervention. My position has the potential to shift our current paternalistic model of mental illness within a therapeutic state to a more scientifically rigorous and epistemically robust feminist paradigm of health.

Evolutionary Ethics: An Idea Whose Time Has Come

Peter Corning, Institute for the Study of Complex Systems

Evolutionary ethics is a subject that has been debated ever since Darwin=s day. The basic issue, in a nutshell, is whether or not human ethical systems can be explained C and justified C in terms of evolutionary principles. In recent years there has been an upsurge of publications devoted to this issue, including many new books (as well as a number of books on Darwinism and religion) and countless journal articles. Indeed, an Internet search using the term Aevolutionary ethics@ yielded 65,400 citations of various kinds. As this outpouring of publications suggests, there has been a great diversity of views on the subject over the years. However, the sea changes in evolutionary theory that were described in [my 2005 book, Holistic Darwinism] also have major implications both for our ethics and our understanding of the moral impulses that shape our lives and societies. In this chapter I critique the history of evolutionary ethics, concluding with an argument favoring the proposition that our ethical systems are products of human evolution and are genetically grounded; they are more than simply cultural inventions, or the actualized ideas of ancient philosophers.

Biological Realism: The Science of Classical Realism

Adam Cox, Northern Illinois University

The main assumptions of Classical Realism had no true basis in fact. Notions of the evil of mankind, the selfishness of man, the constant strive for power by man was based almost solely upon ideas gleaned

from theology, personal experience and abstract assumptions. These notions of human nature as seen in classical realism, also sometimes referred to as biological realism, were largely ignored following the introduction of the more positivistic structural realism. However, work by scholars in the biological fields has shed light upon these notions of human nature as outlined by classical realists. Namely, these works have given a scientific basis to the previously abstract ideas of classical realist scholars. The idea of *a human nature*, what this human nature is or may be, as well as the possible implications of this human nature may now be subjected to scientific study. This paper demonstrates the critical need for interdisciplinary studies through the injection of biology into the study of international relations. This injection breathes life into old ideas, ideas which were previously thought unscientific and therefore bunk. However, debunking this notion allows for new directions to be taken within international relations; directions sorely needed in the contemporary global environment.

Using proximate and ultimate causation to inform CPR theory.

Michael Cox, Indiana University Bloomington

The distinction between proximate and ultimate causation has been helpful to evolutionary scientists in explaining evolutionary phenomena. A proximate cause explains how an outcome is achieved in a given social or ecological setting, while an ultimate cause is more fundamental and explains the mechanism behind a proximate cause. This distinction has not been used much in social or institutional analysis, particularly when applied to natural resource management settings. This paper will explore how this distinction can be usefully applied to the institutional analysis of common-pool resource management, with particular reference to diagnostic and design principle approaches to such analysis. Using multiple levels of causation can help institutional analysts avoid simple blueprint or panacea thinking by giving them the conceptual tools to explore what works in a given setting, and what more distal causes may be generalized beyond this setting.

Sociobiological strategies in the post-totalitarian countries: Ukraine

Vitaliy I. Egorov, MD, Vitaliy I. Ignatenko, MD, Sergey G. Belogortzev, MD

Since sociobiology has been introduced as a systemic study of the biological bases of behavior including humans there are numerous scientific and philosophical attempts to apply general concepts of the new branch of the "neo-Darwinism" to human behavior and culture (Wilson, 1975; Lumsden, Wilson,1993). Of course, genetically determined behavioral strategies described in natural conditions - from social insects to higher primates can be useful as general models that exclude more fine characteristics of human behavior as consciousness, memory skills, learning, etc. But at the same time such behavioral strategies as aggression, dominance, territoriality and others have biological roots. Not occasionally that anthropologists, cross-cultural psychologists and evolutionary oriented political researchers emphasize on cultural differences in behavioral strategies.

Ukraine is an Eastern European state that was an essential part of the former Soviet Empire. From historiogenetic standpoint Ukrania being a political "organism" is quite difficult system neither from biological and/or political viewpoints. Chaotically structured Ukraine was unable to develop synchronically-working biological and political system due to well known and presently existing differences in mentality within common territory. The so called "orange revolution" was firstly recognized as the steps toward democracy but as we can observe now "genes" of totalitarian thought are" the winners" in the areas of genetic and political selection. In presented paper we will try to describe political strategies in Ukraine from the biological points of view, hopefully that this model could be applicable to other countries

Why Leadership Ethics Requires a Deontological Framework

James H. Fetzer, University of Minnesota Duluth

The term "ethics" can best be understood from the perspective of applying the principles that define moral conduct to specific domains, such as those of the law ("legal ethics"), medicine ("medical ethics"), and now leadership ("leadership ethics"). A justifiable conception of ethics thus presupposes the

determination of the most appropriate principles that define "morality", where consequentialist, deontological, and social contract theories, among others, compete. There appear to be objective criteria that can be applied to these alternatives, which support the inference that only deontological accounts can satisfy them. When applied to leadership situations, however, an ambiguity arises when a social entity, such as a street gang, practices immoral acts. Can there be "ethical leadership" for unethical activities, like those displayed by the Third Reich, the Mafia, or even General Motors?

Citizen Scientist: Biodiversity Informatics and the Democratization of Conservation

Amy L. Fletcher, The University of Canterbury, New Zealand Initiatives such as DNA-barcoding, the Encylopedia of Life (EOL) and All-Taxa Biodiversity Inventories emphasize the role of 'citizen scientists' in appeals for public support. Technologies such as the Internet, global positioning systems (GPS) and other hand-held electronic devices rapidly increase the amount of information that could inform environmental policy decision-making. These ubiquitous technologies also empower the grassroots—amateur naturalists, students, hikers, hunters, volunteers and tourists—to feed real-time data into the global grid.

Yet are assumptions that these technologies will democratize knowledge, and that more knowledge about biodiversity translates into an increased desire to save it, valid? What does conservation gain, and what does it potentially lose, by an increasing reliance on digital information? How does the digitalization of conservation affect epistemic communities and established approaches within the broad field of conservation? Finally, how are actors using these technologies to interact with the environment?

This presentation addresses these questions empirically via a frame analysis of debates about digital conservation within the scientific, policy, and popular news media. The paper concludes that the concept of biological citizenship—initially developed by Paul Rabinow and Nikolas Rose in relation to new genomics and health activism—can also advance our understanding of the new politics of citizens, science and the environment.

Synapses at War: The Implications of Neuropolitics for the Study of International Relations John Friend, University of Hawaii

Nuclear deterrence served as the cornerstone of American foreign policy during the Cold War. Today, in an international system with nine nuclear powers and the increasing possibility of proliferation, strategies of deterrence continue to play a central role in international diplomacy and the promotion of regional stability. With this continued emphasis on nuclear deterrence in foreign affairs comes the need to understand the psychological attributes and characteristics of leaders and groups of countries that pose a significant threat to interstate cooperation and internal stability. Political psychologists and evolutionary theory have successfully challenged expected utility theory's reliance on *homo oeconomicus* to interpret and explain individual decision-making. Building from these critiques of "rationality," this paper will analyze the implications of a neuronal approach to decision-making for the study of nuclear deterrence. Contemporary advances and technological breakthroughs in the fields of neuroscience, behavioral genetics, and psychopharmacology offer a wealth of new information about brain function and behavior and the rising discipline of neuroeconomics provides valuable research on decision-making, judgment, and bargaining during periods of risk, certainty, and ambiguity. Such insights from the social brain sciences will better enable us to elucidate the complexities of, and potential strategies for, counterproliferation and deterrence.

An Ethological Approach To Psychiatric Disorder: Relevance To Its Basic Science And Fate Over Three Decades

Russell Gardner, University of Wisconsin-Madison

Statement of the Problem: Psychiatry's history shows that the concept of its disease lags behind that other specialties. That is, how does a normal organ system perform physiologically and then show disease when normal workings disrupt from growths, rupture, infection, etc. Psychoanalysis presented a *faux* theoretical

pathophysiology that provided a basis to act with patients but possessed no foundation in brain or behavioral science. Some powerful individuals who felt injured by it then successfully demonized it which then meant tossing out a pathophysiological focus with the bathwater. Molecularly focused formulations support druguse that presume to rationalize treatments without reference to normal counterpart behavior and no more than casual and commonsensical references to it. The famous *DSM-III* of 1980 and its successors defined disorder without regard to how such deviate from order.

Methods and Material: In 1982, I presented an approach in a prestigious psychiatry journal that subjected an example disorder to ethological analysis; how do formal descriptions of mania and depression echo the counterpart social rank hierarchical communicational states of, respectively, alpha displays and oversubmission? Subsequently by myself or with other authors I published a number of textbook and other chapters and articles in journals on psychiatry's basic science; I deliberated with a well regarded think tank (Group for Advancement of Psychiatry or GAP) over a decade and my committee published our conclusions. For fifteen years I edited and published a newsletter called *the Across Species Comparisons and Psychopathology Newsletter* to foster pathophysiological thinking including formal observation of human behavior in the specialty. I continue to work with the GAP committee and we presently respond to an invitation from the Editor of the *American Journal of Psychiatry* for an editorial statement.

Results and Conclusion: Psychiatry over thirty years changed dramatically but not in the direction of valuing real not *faux* pathophysiology, of valuing direct systematic and informed behavioral observations. Yet for an appreciation of how neurotransmitters operate, this has critical importance; such operate in anyone, for example, not just in wrong ways in patients; selective serotonin reuptake inhibiters show effects on monkey SRH and their side effects include indifference to feelings and willfulness).

I make my conclusions about psychiatry's dubious status despite psychiatrist Eric Kandel gaining the Nobel Prize. Lauded at scientific meetings, the praise happens for his molecular work not for its application in how such operate in the walking talking person. A new text by ethology-influenced European psychiatrist Martin Bruene gives some guarded optimism. Persistent work and heightened public education may work, hopefully, towards future benefit despite enormous profit-driven motivations to keep the ignorance levels the same. For example, placebo effects that operate powerfully in any use of medication find disfavor because these positive effects of physician or caretaker behavior shed light on the problems of drug studies. So placebos possess disfavored status (even considered unethical) because they don't show drugs as sole actors in therapy.

Reforming Health and Transforming Medicaid: Enabling medical Homes for the Homeless

Leslie Golden, CRNA, MSN and William P. Brandon, PhD, MPH. University of North Carolina Charlotte Although seldom noted, the Patient Protection and Affordable Health Care Act of 2010 transforms Medicaid at the same time that it completes the evolution away from its origins in 1965 as an adjunct to income-maintenance welfare. The paper first traces that evolution from welfare medicine and subsequently categorical program for the deserving poor (especially, pregnant women and young children) to its new incarnation as a universal, egalitarian entitlement for virtually any low-income (<133% of the federal poverty level), legal U.S. resident.

The paper then focuses on its great potential for providing high quality care to the homeless, one of the most costly of the vulnerable populations that will be newly covered by the health reform legislation. Next it explores the vicious interaction between homelessness and sickness and disability, especially chronic illness. The Act's provisions for "medical homes" need to be mobilized to realize the potential benefits of improved health care access for the homeless. A concerted effort by both health care and homeless advocates is necessary to secure these positive benefits of the new legislation.

Nudge Match

Bill Glod, Institute for Humane Studies-George Mason University Sunstein and Thaler's "Libertarian Paternalism" has received much attention recently as an approach that promises to split the difference between defenders of unfettered individual liberty and proponents of coercive protection who point out our vulnerabilities to failures of reason or will. This strategy pledges to dispel what some have seen as excessive individualist emphasis on license on one hand, and excessive hard paternalistic emphasis on imposition of will between free and equal persons. Can we split the difference, however? Questions remain about whether libertarian paternalism can live up to its promise of being a third way. If, as hard paternalists like Peter Ubel maintain, we should protect people from harmful activities that provide no compensating benefits, then why should we bother with the libertarian aspect of nudging? If, as anti-paternalists maintain, respect for agency commits us to not interfering with voluntary self-regarding actions, then what interesting prescriptions can libertarian paternalism provide short of coercive ones? This presentation explores these questions, along with what role (if any) nudging can or should play in our political (that is, coercive) policies and institutions.

Hayek was right: Biology, Ideology and Religion

Christopher Green, Pacifica Graduate Institute

In his book *The Counter-Revolution of Science* (1952) Friedrich Hayek expressed concern that the study and methodology of the natural sciences would one day rise to the level of ideology or what he called scientism. While one might want to not follow science's reductionistic tendencies, we should similarly not shy away from how biological reports function within our current settings. In short, the current trajectory of the life sciences seems to indicate that the day of Hayek's scientism has possibly arrived. In this way, the life sciences are currently replacing religion in that they are functioning as an ideological institution replacing religion's role of setting morals, limitations, and obligations. This paper focuses on the life sciences as ideological templates whose findings should not be ignored but, simultaneously, should not solely determine our response to various social and even ecological problems.

The Potential for Regional Policy Responses in a Rural Setting: Mosquito Control in the Mississippi Delta

Thomas Greitens, University of Central Michigan

M. Ernita Joaquin, University of Nevada-Las Vegas

Patrick A. Stewart, University of Arkansas

In this we article, we assess the collaborative capacity of residents in a rural municipality to respond to the "wicked" environmental policy problem of mosquito infestation. We discover through a survey sent to citizens that geographical and government boundaries have a limited effect on citizen fragmentation. In fact, when individual policy responses and policy attitudes are considered, these types of boundaries have almost no effect on citizens. As a result, we argue that regional policy responses that straddle boundaries related to geography and government can occur with minimal formal capacity building from institutional actors.

Evolved Gender Psychologies

Rebecca Hannagan, Northern Illinois University

This paper matches up proposed differences in the selective pressures of war on males and females with the literature on documented sex differences in social behavior. The first step is identifying how recurrent situations created by war have differed systematically for men and women. The second is identifying sex differences in behavior that are differentially matched to handling these different sets of challenges and, where possible, connecting this gendered behavior to proximal psychological mechanisms. The paper classifies plausibly relevant sex differences based on the likelihood that they were shaped by more intense positive selection on males or females, by differential negative selection on males versus females, and those that might reflect a balancing act between likely benefits and costs for each sex.

Post Traumatic Stress Disorder and Military Sexual Trauma: An Evolutionary Perspective.

Rebecca Hannagan, Northern Illinois University

This paper presents an evolutionary framework for understanding the sexual assault of women in the military and their experience of PTSD relative to men who experience trauma in the military. I begin by

specifying the evolutionary underpinnings of tensions among heterosexual males, among heterosexual females, and between males and females, and discuss how these tensions have played out in the strongly gendered context of warrior culture. The reliance on the small unit is key to military effectiveness, but there is also a gendered nature to such group dynamics. When women experience MSA there is greater or lesser likelihood of their experience of PTSD given the small group context. In the absence of cultural interventions that take account of these deep-seated responses to small group cohesion, military women will continue to operate in an environment in which sexual assault may be deployed to enact and defend traditional military structures. There are, however, cultural accommodations to manage the reality of gendered tensions and thus reduce experience of PTSD.

Out-group Threat and Gender Balance in Policymaking Groups

Rebecca J. Hannagan, Northern Illinois University

Christopher W. Larimer, University of Northern Iowa

Does gender balancing decision making groups decrease out-group threat? We test this research question via field observations of and survey responses from a random cross-section of individuals serving on local boards and commissions in twenty cities in Iowa. The state of Iowa represents a unique case study as it recently passed a provision requiring gender balance on all local boards and commissions by January 1, 2012. We find that when more men than women are on a board/commission, they view their relationships with city councils as more adversarial than when the board/commission is gender balanced or populated by more women than men. This is evidenced by their use of "us versus them" terminology, as well as reduced use of collaborative and cooperative language. Because some boards and commissions are traditionally gender imbalanced (e.g. Planning and Zoning (male-dominated), Library Board (female-dominated)), we argue that mandating gender balance will significantly affect the policymaking process in localities.

The Alzheimer's dilemma: Implications and recommendations for healthcare

Richard R. Haubner, College of Mount St. Joseph

In 2008 there were 38.9 million people in the United States who were 65 years of age and older, representing 12.8% of the total U.S. population. Of this group, there were 22.4 million women and 16.5 million men. The 65+ population will increase to 55 million (15%) in 2020 and to 72.1 million older adults in 2030. More importantly, the oldest segment of the population, the 85+ group, is the fastest growing segment of the population. In 2007, this age segment consisted of 5.5 million people and by 2020 it will increase by 15% to 6.6 million older adults. By the year 2050, the 85+ population is projected to be 19 million. In addition, the number of people with Alzheimer's disease is expected to increase over the next forty years. In 2000 the number of new cases of Alzheimer's disease was 411,000. This is expected to rise to 454,000 by the end of 2010. By 2030 and 2050, the projections are respectively 659,000 and 959,000 cases. Although Alzheimer's disease can occur in young adults, the majority of cases are in the 65+ age group, with a substantial number in the 85+ age segment. Without medical developments to prevent this disease, by the year 2050, it is projected that sixty-percent of people with the disease will be in the 85+ age-segment. The cost of care estimated for 2010 is \$172 billion dollars, and the estimated increase is projected to be \$1,078 trillion dollars in 2050. There are those advocating for additional funds for Alzheimer's research in order to develop a cure or intervention for the disease process. Others are advocating that Alzheimer's disease be relabeled into a broader context with emphasis on preventative measures for healthy brain activity and to equate Alzheimer's disease with the aging brain. Arguments and implications for both positions will be discussed followed by recommendations for both national and international responses.

Governance of the Fishery CPR: Analyzing vote data from a real-world fishery board

Robert Holahan, Indiana University Bloomington

Actors: 14 voting members of Pacific Fisheries Management Council (PFMC), though the Chairman refrains from voting except in situations where his vote breaks a tie or causes a tie (majority vote+1)

required for passage). The PFMC regulates offshore fisheries in the federal exclusive management zone (3 nautical miles from shore out to 200 nautical miles from shore) along the coasts of California, Oregon and Washington. These three states and Idaho each have 2 state-appointed members on PFMC. Five of the remaining seats on the Council are At-Large seats appointed by the Secretary of Commerce (one per state and one from a Tribal representative of a federally organized Tribe in one of the member states). The remaining seat is held by the Regional Administrator of the National Marine Fisheries Service.

Data: All Council votes taken from 2000-2009. I went through the voting logs provided online and cross referenced vote tallies with meeting minutes. The Council meets 5 times per year and typically records 30-40 votes during each meeting. The year 2008, for example, had 258 votes taken in total, of which 42 were non-unanimous. Using these non-unanimous votes, I construct ideal point estimates for each member of the Council in 1 and 2 dimensions using W-NOMINATE software in R. Since many of the Council members are constant across the years of the dataset, dynamic DW-NOMINATE scores will be constructed as well.

Hypotheses:

- 1) Each state's delegation votes in a similar fashion such that the two official state representatives have nearly identical ideal points
 - a. Initial Results suggest this to be the case. See the 2-D Spatial Map below. Note that in most instances the states delegation are quite close to one another in 2-D space. In the case of California, the representatives are spatially far apart on the horizontal dimension, but near identical on the vertical dimension, which would seem to provide initial evidence that Hypothesis 2 (below) is false.
- 2) The policy space of the council is primarily a uni-dimensional space
 - a. This can be tested using techniques associated with calculating NOMINATE scores and monte carlo simulations
- 3) State demographic and fisheries industry characteristics account for much of the variance in voting across states. In particular, the higher the percent of state GDP dependant on fishing activities, the more likely the state delegation votes for weakened fishing regulations.
 - a. I have begun to assemble data on each state's demographic and economic data. Interestingly, Idaho is in this region despite having no coast line. I haven't settled on what to do with Idaho yet.

At Large seats on the Council will show greater voting variance as the representative for each At Large seat will represent personal (or recreational fishing) preferences.

The Socio-Psychological Basis for Libertarian Paternalism

Missy Houlette, College of Mount St. Joseph

Given the pace and complexity of the modern world, we may lack the time, interest, or cognitive resources to take into account all of the relevant information in every situation. Instead, we hone in on certain key features and rely on heuristics (mental shortcuts) to make decisions in a rather mindless fashion. This paper examines how choice architects can capitalize on these automatic decision-making processes to nudge their audience towards a particular option or outcome as well as how nudges can be resisted by their targets.

Workshop on the WomanStats Project

Valerie Hudson, Brigham Young University

The WomanStats Project, dedicated to exploring the linkage between the security of women and the security of states, has developed a key infrastructure for those interested in the situation of women worldwide. The WomanStats Database, freely accessible online, is the world's largest compendium of information concerning women worldwide. Coding for 300+ variables on violence, health, education, family law, work, civil and political rights, etc., for 174 countries, the database covers primarily the first decade of this century, but also contains some data from earlier periods. The database currently contains over 107,000 data points, each with a complete bibliographic citation, with additional data

points uploaded every day. Source material includes IGO, NGO, and national reports, as well as interviews with country experts. We enter both qualitative and quantitative information, and our coding team also scales countries on both univariate and multivariate ordinal scales. Data on practices, laws, and prevalence of relevant phenomena are recorded for each variable cluster. Mappings are also provided. This workshop will introduce the new user to the capabilities of the WomanStats Database, and a tutorial on how to get the most from its use.

Can we find God in a brain? The technical limitations of measuring religious belief.

Susan Israel, University of Cincinnati

Religious belief is a hallmark of human life, with no accepted animal equivalent, and found in all cultures. Questions abound concerning whether religious belief has a neurological basis and if the neural "God spot" exists. Neuroimaging techniques attempt to offer insight into human thought and behavior and might hold promise for localizing religious belief. The primary neuroimaging technique used to understand how the brain responds to complex human experiences is functional magnetic resonance imaging (fMRI). fMRI measures changes in blood flow (blood oxygen level dependent or BOLD effect) as a surrogate of neural activity, meaning that the signal is representing hemodynamic changes and not specific neuronal activity. While this technique offers the best glimpse into how the brain functions there are some limitations as to its capabilities, particularly in regards to what it can tell us about the neurological origins of religious belief. This paper argues that the ability of neuroscience to identify the brain region responsible for religious thought is currently not possible due to technical limitations of current neuroimaging modalities that include problems with temporal and spatial resolution and an inability to differentiate between the purpose (i.e. modulation or excitation) of the activated neuronal population activated.

The constructivism versus Darwinism

Franchuk V. Ivanovich

The researches of modern biological constructivists show, that universal mechanisms of evolution are selection and assembly, natural selection and disintegration, instead of variability, heredity and natural selection (as Darwin considered). Taking into account, that the Nature operates simply (principle of Bernoulli) and uniformly (principle of Getton) and does not invent for each stage of evolution new mechanisms, it follows from this that, creating new kinds of biological organisms, the Nature used (and continues to use) "the principle of borrowing" being a basis of the constructional approach to evolution. Really, in a human body there is no one functional organ, which (to some degree) has been having in other species of animals. The nature operates with casual way, carrying out casual "assembling" of biological organisms, but natural selection leaves "to live" only rather steady organisms which show "reasonable" behavior, i.e. organisms which adequately answer stimulus (needs), keeping its vital characteristics.

Forests in Flux: Analyzing Actor-Institution Linkages in Implementation of Forest Property Reforms Prakash Kashwan

The 'sustainability science' literature has repeatedly emphasized the importance of studying cross-scale linkages. Few empirical studies have modeled actor-institutions linkages across time and across-scale. In this paper, I make a beginning by explicitly modeling two types of across-scale linkages. First, I model the temporal linkages between institutions aimed at forest conservation and those aimed at participatory decision-making supporting forest property rights reforms. Two, I model actor-institutional linkages by modeling the behavior of leaders represented across the two institutional arrangements modeled above. Local leaders are hypothesized to be the key link between local communities and outsiders, i.e. public forest officials, and the civil society actors working towards implementation of forest conservation and forest rights campaigns. These analyses are situated within the meso-level political context to appreciate the contextual influences over institutional outcomes and leadership behavior.

The analysis posits puzzling questions about potential trade-offs between institutions aimed at forest conservation and forest property rights reforms.

Ecocentrism and Oil Spills: Toward a Public Policy

Adam Konopka, College of Mount St. Joseph

I argue in this paper that an eco-centric environmental ethic is an indispensable tool for the development of public policies relevant to oil spills. The first step of this argument presents the definition of a phenomenologically informed ecocentric theory of value that is contrasted with anthropocentrism and biocentricism. Second, I show how this definition of ecocentrism can most adequately account for the ecological problematics of, for example, the recent large-scale Gulf Coast oil spill. Finally, I explore the implications of this account for the development of national public policy reform.

Identifying the Northwest Arkansas Foodshed

Angelica Kraushaar, University of Arkansas

Food systems operate at many scales simultaneously, ranging from global to local. By definition, regional foodsheds are connected by shared social, economic, ethical and physical boundaries, but such boundaries are rarely clearly delineated or fixed. Thus, a major challenge within foodshed analysis is appropriately defining the boundaries of a local food system. *A priori* foodshed models define "local" on the basis of pre-determined boundaries, such as political divisions (e.g., counties, states), arbitrary distances (e.g., 100-mile diets), or ecological zones. In *a posteriori* foodshed models, the scale and boundary criteria of the resulting foodshed are more directly defined by the problem the model is intended to address. Several hypothetical foodshed boundaries within Northwest Arkansas can be identified, each with relative strengths and weaknesses.

The Global Health Care Maze

Charles Kroncke and Ronald F. White, College of Mount St. Joseph

One of the underlying themes in the ongoing debate over health care policy in the United States has been that other modern nations (Canada, Western Europe, Australia, and Japan) have already established stable, national health care systems that provide "universal access to high quality health care at a reasonable cost." In this presentation we will expand upon or previous research on the "Health Care Maze" in the United States, and argue that, worldwide, there are four basic kinds health care systems, all of which mask mazelike complexities, blend socialized and free market elements, and carry with them distinct advantages and disadvantages. Finally, we will argue that contrary to popular opinion, other nations complain endlessly about their health care systems and seek reform. In short, there is no "ideal system."

Libertarian Paternalism and Economic Theory

Charles Kroncke, College of Mount St. Joseph

In the introduction of *Nudge*, Richard H. Thaler and Cass R. Sunstein define the term *Libertarian Paternalism*. This is an odd coupling of words that generally don't go together. While the term Libertarian denotes an adherence to the doctrine of free will, paternalism implies a fatherly presence making decisions for someone else, indicating a denial of free will. Much of Classical and Austrian economic theory has connections to the laissez-faire doctrine which is consistent with the values of libertarianism but not those of paternalism. The authors suggest that Nudging is simply influencing someone else's choice, indicating a fine line between a free choice and paternalism. The strength of the nudge and the entity doing the nudging is important. When a strong nudge comes from an entity holding monopoly or legal power it becomes offensive to those who hold laissez-faire values. This paper uses traditional economic theory to explore libertarian paternalism and the distinction that the *Nudge* authors make between humans and econs in their decision making processes.

Cholera and the Historical Impact of Pandemics in the Modern World

Rachel Constance Littleton, Northern Arizona University

In the early19th century, Great Britain was in the process of establishing its empire in Asia. As a result of British military activities in India, an epidemic form of cholera was unleashed on the world. Thriving in the unsanitary conditions of the industrializing cities of Europe and North America, cholera would come to change large aspects of the modern world, from the development of city-wide sanitation systems to the very shape of medicine itself. It had political, social, and economic impacts on people from all walks of live—from the poorest pauper to the wealthiest resident. Because of this wide scope, cholera provides an important window into the ways in which disease has shaped the modern world. The responses to the recent H1N1 epidemic are largely the result of the ways in which governments, the media, and individuals reacted to the cholera epidemic nearly 200 years ago. What comparisons might be made between these two epidemics? What lessons might be learned? This paper will look at the impact of pandemics in a globalized world.

Global cooling and global politics: the 1960s as a model for the future

Val Martin, Illinois Institute of Technology, Chicago

The theories of climate change have engendered a cluster of models in the past 20 years about possible impacts on the future. The scope of these projections is from biodiversity, to health, to the human condition. The uncertainties implicit in modeling have created virtual 'parties' of irreconcilable adherents of one or another vision. I this situation it can be helpful to look in the past for the effect of climate change on human life. The episode of global cooling between 1941 and 1975 can serve as one such example. During that time scientists tried to find explanations, environmentalists pointed to possible human misdeeds, and drought in various parts of the world changed local economies and created famine. International trade changed in favor of countries with a better climate. There is a current opinion that climate change is cyclical, and that after the period of warming for the past 30 years, humanity is heading towards another cooling. In light of this, the study of past responses to climate change can provide guidance in regard to future situations.

Consilience and the Social Sciences: Predictions, Social Networks and the Life Sciences

Bernice A. Pescosolido, Department of Sociology & Indiana Consortium for Mental Health Services Research, Indiana University

In 1998, E.O. Wilson used the term consilience to support his call for bringing the sciences together. In that book, he argued that the social sciences were doomed. Eventually, he noted, they would split down the middle with those who focused on quantitative work heading to science while those who took a more qualitative approach would find themselves absorbed into the humanities. Focusing on issues of epidemiology and health service use, I discuss where Wilson's predictions were accurate as well as where and why they were misleading. The Network-Episode Model, a transdisciplinary, multi-level model that is designed to bring insights from the sciences together, with findings from studies that show how the social science diversity is necessary, is also discussed.

Dewey and Leopold on the Limits of Environmental Justice

Shane Ralston, Pennsylvania State University

Scholarly debates over environmental justice have been dominated by discourse over rights. While rights-based treatments are unlikely to disappear, I argue that it is helpful to reframe environmental justice issues in terms of two competing ethics. The ecologist Aldo Leopold articulated an ethic of restraint in his land ethic, especially though not exclusively in his book A Sand County Almanac. Individuals bear personal responsibility for promoting beauty, stability and diversity in their relations with the land. The philosopher John Dewey proposed an ethic of control, whereby experimental inquiry permits communities to gain greater control over their natural environment and experimentally determine the content of their shared norms. In some respects, Dewey's ethic of control resembles what Leopold calls the "outlook of a conqueror," not that of a "citizen in a land community." However, if

we adopt a weakly anthropocentric view of human-environment interaction, then exerting some degree of control over one's natural environment proves essential for survival and flourishing. So, pragmatists concerned with environmental justice issues can learn important lessons from Leopold's ethic of restraint. I demonstrate this point by appealing to the works of J. Baird Callicott, Bryan Norton, Andrew Light and Larry Hickman, as well as to recent scholarship on geoengineering.

Why human irrationality cannot be experimentally demonstrated: Doubts about the "standard picture"

Phil Roberts, Jr., nonaffiliated

Based on a simple premise, I argue that our use of the terms 'rational' and 'irrational' are simply rough appraisals of how one's rationality compares to the norm and therefore that experimental evidence that humans routinely violate established rules of inference should not be construed as evidence that humans are irrational (the standard picture) but rather as evidence that expert opinion might be relatively more rational than the norm where such matters are concerned. This is a two edged sword however in that, by the same token, some might argue that expert opinion has been relatively less rational than the norm with regard to its longstanding love affair with "the standard picture" (the view that 'being rational' is simply a matter of slavishly conforming to established rules of inference).

Consilience, Medical Ethics and Adaptive Truth.

James Rutherford, M.D., Grant Hospital Columbus, Ohio

The Nature/Nurture controversy about human nature is not an either/or situation, but a both/and situation. From the time of Hippocrates, the profession of medicine has been based on both science and an ethic. Medicine thus easily incorporates an understanding of human nature that includes both nature and nurture. Medicine is not just descriptive, but also prescriptive. In Medicine our perception of the facts is important and sometimes an overriding consideration, but the facts are not the sole determinants of our values. In moral philosophy and medicine we do not accept "what is " to be necessarily right. A reality principle and the sciences, however, also place restraints on our individual and social will. Darwinian evolution and nature on the one hand and cultural evolution on the other hand are both important in moral and political philosophy because they place limits on each other. A key concept here is the distinction that David Sloan Wilson makes between factual realism based on literal correspondence and a practical realism based on behavioral adaptiveness for survival and well being.

Some Ethical and Scientific Aspects of the Politicization of US Healthcare Reform

Edward Sankowski, University of Oklahoma

Clearly the recent and ongoing process of reforming healthcare insurance and healthcare in the US has been highly conflict-laden and is likely to continue to be so. This paper argues that some of the roots of the conflict go beyond (though they include) factors usually mentioned in public discussions, such as issues about costs, the proper powers or limits of government, or the role of markets. It is argued here that these conflicts are also about challenges about our shared conception of the biomedical sphere, specifically relations between science (especially the life sciences) and normative ethics or politics. Conflicts about evolution, climate change (especially its impact on human flourishing and health), abortion, and gay rights are not mere background noise or large-scale but peripheral disputes that sometimes affect debates about healthcare. It is increasingly realized that biomedical issues may inherently be about ethics and politics as much as science, and that social context is a fundamental and alterable element of healthcare. This realization is embraced by some, and resisted by others. This paper points out that a better picture of the relations between facts and values in healthcare can help us understand what the fights are about.

Advocacy as a New Scientific Paradigm?

Ullica Segerstrale, Illinois Institute of Technology-Chicago

An interesting change is taking place in American science. When it comes to such things as the environment, biodiversity, or climate change, the positions of leading scientists come surprisingly close to advocacy. Meanwhile scientists who disagree with the standard stance of impending doom run the risk of getting ostracized. The most egregious case is probably the statistician Bjorn Lomborg who was accused of scientific dishonesty for deviating from the current view as he concluded that available data did not in fact support catastrophic scenarios. Well-known scientists responded by not only scientifically but also morally denouncing Lomborg. Today scientists who have questioned the "received view" of a primarily anthropogenically caused climate change have been labeled "deniers", while this view, based on the IPCC report, has been promoted by the National Academies and leading scientific journals. Gag orders have been put on state climatologists who disagree with the general line on global warming. Are the believers in anthropogenic global warming motivated by a wish for truth? Do the "deniers" have ulterior motives? Or is it the other way around? Can one tell science from advocacy? Ironically, some current advocates earlier defended themselves against advocates of their time by appealing to an objectivist paradigm.

Emotion Theory and Leadership: Reconciling the Scholarly and the Popular Perspectives Michael Sontag, College of Mount St. Joseph

Emotion theory has become a model of interdisciplinary research in recent decades. Neuroscientists, psychologists, biologists, anthropologists, historians, philosophers, and more have called attention to our natures as emotional animals, providing something of a corrective for the often exclusive focus on our rational natures. This robust program of research has filtered down to the popular level in a variety of forms, perhaps most notably in the enormous number of popular works recommending the development of "emotional intelligence" as key to successful leadership and management practice. Should emotion theorists be thrilled or horrified by this development? The answer, in part, hinges on the degree to which these popular works are truly taking advantage of the scholarly work upon which they should be based. In this presentation, I assess the current literature on emotional intelligence and leadership in terms of its connection to scholarly work in emotion theory and I determine how emotional intelligence-oriented leadership accounts relate to other approaches to the study of leadership.

Clinical-cultural drift: Practice variation from a second perspective

Robert H. Sprinkle, University of Maryland

Practice variation in the American health system has been studied intensively from an outcomes perspective but has attracted little attention from a process perspective. "Clinical-cultural drift" is proposed to name a process by which practices vary reasonably enough for patient outcomes to diverge seriously with little notice and no alarm. This paper considers how such a process might arise, how it might continue, and how it might be countered. Examined for causative plausibility are ten factors, including four behavioral patterns. Assessed for preventive and remedial plausibility are three strategies — optimizations of information, incentivization, and coordination — supported in federal statutes enacted in 2009 and 2010. A satisfactory response to clinical-cultural drift is likely to require additional measures, including ones embedded in professional education and training.

Resource Governance in a Dynamic World: An Over Time Look at Groundwater Governance in the Los Angeles Area

Brian C. Steed, Indiana University Bloomington

Human ability to successfully manage natural resources has been an important topic in the social and natural sciences since the 1960s. Research points to successful and unsuccessful management approaches based on empirical observations. However, the majority of this work examines resource governance within a very limited time frame. A "snapshot" of the situation is used to determine success

or failure of resource governance regimes. This paper argues that such snapshot approaches may be critically flawed with the findings contained therein being tenuous at best. Rather, understanding human ability to manage natural resources may only be fully understood through gathering evidence over longer time frames. The paper further argues that by expanding the timeframe of analysis, different aspects of governance appear as important to obtaining successful resource management. An over time study of groundwater governance in the Los Angeles Area is used to illustrate the value of going beyond the snapshot approach to examine human ability to manage natural resources.

The "Happy Warrior" Revisited: Response to Happiness/Reassurance Displays by President Obama Patrick A. Stewart, University of Arkansas

Pearl K. Ford, University of Arkansas

This paper will attempt to build upon the pioneering research of the Dartmouth Group concerning how individuals respond to displays of happiness/reassurance by political leaders, specifically that of President Barack Obama. Namely, this study will build upon previous research in three specific ways: First, it will replicate McHugo, Lanzetta and Bushs' (1991) research concerning the influence of mild and intense happiness/reassurance displays, but will do so by using Ekman's Facial Action Coding System (FACS) to characterize facial displays. Specifically, this study will build upon the research of Mehu and Dunbar (2007) and Preuschoft and van Hoof (1997) by looking at different types of smiles. Second, this study will replicate Masters 1994 research concerning differences between black and white viewers in their response to a politician culturally defined as African American. Video of remarks made by President Obama at the White House Correspondent's Dinner on May 2, 2010 form the basis for the stimuli. Here, six facial displays (three neutral and three of different types of smiles) made during audience laughter have been coded by a FACS-trained coder (PAS) with the video stimuli having no sound and lasting ~7-9 seconds while focusing on the "head and torso shot." This web-based experiment will draw participants from area institutions of higher education and will complete the study online with an effort to recruit a large sample of African Americans to best replicate Masters (1994). The participants will identify emotional response and intensity on a 400 pixel slider scale ranging from "not at all" to "extremely" including the basic emotion terms: Happy; Angry; Sad; Fearful; and Disgusted as well as the additional term, "Playful." While this study builds upon previous research, three research questions will be tested: that of "Leader attention" - will there be better/more accurate identification of President Barack Obama's display behavior by supporters? "Angry black man" – will there be a tendency by white subjects to misinterpret facial displays of both Obamas as having greater anger/less happiness? And Out-group (party identification) hypothesis – will there be a greater tendency to misinterpret facial displays of out-group targets as having greater anger/less happiness than in-group targets.

Neuropolitics and Political Science: Providing a Foundation for the Study of Politics

Bradley A. Thayer, Baylor University

John Friend, University of Hawaii

This study is concerned with the intersection of political science and neuroscience. We focus primarily on three key areas of convergence that have influenced the direction of neuropolitics: First, decision making (emotions, preferences, and voting behavior); second, research on ingroup/outgroup relations, such as coalitional groupings and discrimination and prejudice; and, third, the rise of neuroeconomics. Following the discussion of these key areas of neuropolitics, this chapter will conclude with a section on future policy implication.

Sex and the Shaheed: Insights from the Life Sciences on Islamic Suicide Terrorism

Bradley A. Thayer, Baylor University

Valerie M. Hudson, Brigham Young University

Abstract: We explore whether application of evolutionary and ecological theoretical insights permits academics and policymakers to better understand both deep and proximate causes of suicide terrorism in the Islamic context. Conventional explanations include reference to international anarchy, American

military hegemony and presence in the Middle East, and culturally molded discourse sanctioning suicide terrorism in the Islamic context. However, the life sciences would contribute complementary explanations that would include reference to high levels of gender differentiation, prevalence of polygyny, and obstruction of marriage markets delaying marriage for young adult men in the modern Middle East. These forces, while having been extensively studied in the life sciences, have been left virtually unexplored in the social sciences despite their presumptive application in this case. A more "consilient" understanding, melding more conventional IR with life sciences insights, may permit the development of approaches better crafted to target the proximate causes of suicide terrorism in the Islamic context, augmenting the potential success of policies designed to discourage this particular form of terrorism. Importantly, these solutions might not be identified as easily using standard social science models of analyzing terrorism.

Autonomous Unmanned Vehicles: Perception, Motor Control Theory, and the Future of Warfare Mike Tolston, University of Cincinnati

With little conscious effort animals are able to successfully locomote through a cluttered environment. We are able to avoid obstacles to reach our goals while often finding the most efficient pathway. How is this possible? The standard approach which has a long history in theories of motor control and perception is to solve this problem through computation. Alternatively, an approach which portrays visual guidance as a process that involves a tight linkage between optic flow field variables and movement (Gibson, 1966, 1979) requires a detection of information in optic flow. This information can be used as a control variable to guide movement on a moment-to-moment basis (Fajen, 2007). This talk will provide a description of a recent model to account for visually guided route selection (Warren and Fajen, 2003). Such a model can account for route selection in humans, has been successfully applied to autonomous unmanned vehicles, and has potential application in future military vehicles.

The Biopolitical Foundations of Libertarian Paternalism

Mike Tweed, Fort Hayes State University

This paper will explore the biopolitical foundations of Thaler and Sunstein's theory of libertarian paternalism as described in their book 'Nudge'. It will explore why public policies often don't work from a biocognitive perspective. It also examines why bureaucratic paternalism may be a requisite for human sociality in large modern nation states. Furthermore, while public policy implementation requires some level of bureaucratic coercive enforcement, libertarian paternalism provides a way to avoid bureaucratic rigidity. Therefore, because libertarian paternalism promotes sociality while maintaining individual freedom of choice, it seems justified as the basis for public policy choice architecture that governments present individuals in society.

Measuring implicit environmental attitudes

Sven van de Wetering, University of the Fraser Valley Richelle Isaak, University of the Fraser Valley

Attitudes have long been an important component of the study of political behavior, including teh realm of environmental politics. However, it has recently been asserted that we have dual attitudes, with one attitude system comprising the explicit attitudes that have hitherto been the major object of study in this field, and the other being implicit attitudes, which are much less well studied. The first study reported here attempts to begin to remedy the dearth of work on implicit environmental attitudes by making use of Keith Payne's (2005) Affect Misattribution Paradigm (AMP). A significant positive relationship was found between environmental AMP scores and scores on the New Environmental Paradigm (NEP), and environmental AMP scores were negatively correlated with materialism. The NEP was also found to be significantly negatively correlated with scores on the Social Dominance Orientation (SDO) scale. The second study expands this by examining the association between explicit and implicit attitudes. The second study expands this work by using short statements rather than pictures for some AMP items.

Neurodynamics and Politics

Paul Vasholz Jr., Northern Illinois University

This paper considers the political implication of neuroscientific research. It looks at the brain using a neurodynamic approach, in particular drawing from the research of Walter Freeman, and examines what difference such an approach might make for the study of politics. Specifically, Freeman's theory of circular causality is considered. Such a view is then contrasted with the political conclusions drawn from neuroscience found in the work of George Lakoff, Drew Westen, Michael Gazzaniga, William Connolly, and Leslie Paul Thiele.

Compensation for Oocyte Donation and Advocacy Group Rhetoric: The Development of State Regulation

Alisa Von Hagel, Northern Illinois University

The regulation of artificial reproductive technologies (ARTs) and specifically, compensation for oocyte donation has been pursued at the state level given the federal government's reluctance to legislate these technologies. Although commonly conceived as a women's issue, ART and compensation policies have remained, for the most part, untouched by mainstream women's groups, organizations dedicated primarily to abortion politics. Conversely, politicized religious organizations have become increasingly vocal in the regulation and prohibition of particular techniques for infertility treatments as well as for research purposes. This paper will examine the role of advocacy groups in the development of state-level regulations on compensation for oocyte donation, specifically evaluating how states both frame the issue and situate the regulation under the umbrella of reproductive technology policy. Further, investigation into the motivations of these advocacy groups (promotion of pro-life interests, women's health, or biomedical interests) will further inform an understanding of policy formation and the relationship between biomedical regulation and ideologically-drive advocate interests.

The Drone Missile Program, Human Error, and the Pursuit of Costless Warfare

Eliah J. White, University of Cincinnati

The Obama Administration is relying more and more on the use of high technology, remote-controlled Predator drone aircraft for both intelligence gathering and for remote "targeted killing" of enemy insurgents. The rapidly expanding Predator Drone Missile Program is now being used extensively by both the U.S. military as an extension of "conventional warfare," and by the C.I.A as an extension of its "war on terrorism." Such predator drones, which allow for minimal allied ground forces and minimal risk of American lives, have produced tangible results; most notably, the killings of high level terrorist leaders in Afghanistan, Pakistan, Iraq, and Pakistan. However, critics of the program argue that the increased efficiency of targeted killing is now outweighed by collateral damage, as al Qaedia and Taliban members are often embedded within civilian populations. Moreover, many of these civilian deaths have been attributed to human errors by operators, who are often stationed at computer terminals in the United States. In this presentation I will describe drone technology and identify some of the psychological mechanisms that may contribute to the human errors that are likely to plague the use of this technology. I will suggest that the tangible results (killing of leaders) achieved by the Predator Drone Missile Program, are outweighed by continued likelihood of human error and the moral and political fallout that will result from those errors. Finally, I will address the growing and misguided perception that technical improvements in remote control warfare technology will ever lead to costless warfare.

Biology and the Quest for a Universal Theory of Ethical Leadership

Ronald F. White, College of Mount St. Joseph

This presentation will explore the preliminary groundwork for a universal theory of ethical leadership. This will entail sorting out the linkage between descriptive and prescriptive elements, and the interplay between biological and cultural evolution within human organizational behavior. Questions to be explored include: Is a universal theory of ethical leadership possible, or even desirable? Is it possible to develop a universal theory ethical leadership apart from evolutionary biology? Are there biological

constraints that might impede the development of a universal theory? Do descriptive theories of human behavior such presented by moral psychology and/or evolutionary psychology contribute anything substantive to a universal theory of moral leadership? Or, is ethical leadership shaped by primarily by cultural forces under spatio-temporal constrains? In short, are our beliefs about ethical leadership inexorably steeped in cultural and historical relativism?

The Health Care Workforce after Health Reform: Will We Have Enough & Right Types?

Margaret C. Wilmoth, Congressional Fellow Robert Wood Johnson Foundation
Sheldon D. Fields, Congressional Fellow Robert Wood Johnson Foundation
A recent USA Today article reported on an increase in Emergency Room visits in Massachusetts – a state with near universal health insurance coverage. One hypothesized reason for this increase was the lack of primary care providers and the subsequent two month wait for new patients to be seen by a provider. The Affordable Care Act will enable 32 million Americans previously uninsured to obtain health insurance for the first time. However, having an insurance card is only one small aspect of access to care. The passage of the bill has raised a few questions regarding its implementation. What are the provisions in the health reform law that ensure there will be enough health care providers to actually care for these 32 million newly insured Americans? What are the implications for preparing the current and future health care workforce? What else needs to be done to ensure full access? One pat answer is to fund training programs for future physicians: Health and Human Services has announced that \$250 million will be set aside to create 1,700 new primary care doctors and new community-based clinics. But who else provides primary care and are primary care providers the only workforce needed to ensure full access?

This paper will summarize the key workforce provisions in P.L. 111-148/152 and link them to the new health care delivery models that are being proposed to handle the flow from an increase in the number of those with health insurance. Details of programmatic funding to support the growth of the health care workforce will be shared. The final section of the paper will propose ways the health professions can and must adapt in order to meet the goals of the Affordable Care Act.

Founders' Presentations

Biology, Gender and Politics: Reflections on the Consilience of our Understanding of Gendered Political Behavior

Denise L. Baer, Johns Hopkins SAIS

What have we learned about gender from 30 years of studying the relation of the life sciences with politics? This is a question of the unity of the sciences as well as how we conceptualize, research and interpret gender. Biopolitics has taken one route to a deeper understanding, while feminism has taken another. Biopolitics has considered how genes, brain structure, prenatal and circulating hormones, evolutionary reproductive strategies, and group behavior have structured biologically-related gender differences. Feminism – whether viewed as academic feminist theory or the organized women's movement – has approached gender differences from a fundamentally different, human rights-based narrative. While some feminists have argued that treating gender as a duality fundamentally misrepresents human variability and free choice across the spectrum of sexual behavior and gender identity, gender remains one of the basic organizing principles of societies. In the U.S., the contemporary women's movement, while almost 50 years old, has yet to achieve equality across the board. For these reasons, gender is inherently politicized. Beyond political socialization, how we understand gender also has implications for political power and public policy. I will reflect on what we have learned from feminist, political and scientific perspectives, consider what questions remain, and provide some reflections on the potential for consilience in our understanding of gender.

Biopolicy: A Restatement of a restatement of its role in politics and the life sciencesRobert Blank

I will summarize how the APLS policy area has developed since my article in Volume 1 calling for a role of APLS in biopolicy. I plan to overview the work in the major policy areas and give examples of some PLS members on policy advisory groups (eg, Caldwell in environmental policy, Carmen in genetics, Bonnicksen in reproductive, me on OTA in neuroscience, etc), articles in mainstream journals as well as PLS. My preliminary conclusion is one of mixed success in biopolicy area.

Changes in the relationship between bioethics and biopolicy

Andrea Bonnicksen, Northern Illinois University

Interactions between the study of bioethics and biopolicy have changed in various ways in the past 30 years. My comments will highlight shifts in the study of biopolicy over time and it will anticipate changes that might be expected in the future.

Intertwined Interdisciplinarity: Building a Scholarly Association, Leading an Academic Life"

William P. Brandon, Metrolina Medical Foundation Distinguished Professor, UNC Charlotte The Association for Politics and the Life Sciences (APLS) represents the multi-disciplinary academic organization par excellence. As someone whose career has been thoroughly interdisciplinary, my reflections focus on the ups and downs, the pleasures and challenges of following an interdisciplinary path in an academic world that is still dominated by the old, but now doddering disciplinary structures. The method, such as it is, involves comparing and contrasting the personal and the organizational, the micro and the macro.

More specifically, the kind invitation to participate in the Founders' Panel allows me to reflect on the importance of professional and academic associations and the differences between the two kinds of organizations. Of course, the Association and its journal receive particular attention. Discussing APLS and *Politics and the Life Sciences* encourages me to make explicit the characterizations that have guided me in my approaches to them, although these perceptions, which have accreted over the years, may well be entirely idiosyncratic. Because the period of my career has seen the blossoming of interdisciplinary or even multi-disciplinary careers and associations, perhaps the observations related to

the pleasures and rewards, obstacles and dangers experienced by individuals and organizations that tread this path will hold the greatest interest for the audience.

The Synergism Hypothesis: Thirty Years Later (Part 1)

Peter A. Corning, Institute for the Study of Complex Systems

I think it would be fair to say that synergy is an idea whose time has come. Every week, it seems, another new example of synergy is reported in some scientific journal, and articles about synergy are nowadays routinely accepted by journal editors (and peer reviewers) in various disciplines. This was certainly not the case thirty years ago. Back then using the term "synergy" in a journal submission was an almost certain kiss of death. I speak from personal experience. So times have changed.

Holistic Darwinism: Beyond the Selfish Gene (Part 2)

Peter A. Corning, Institute for the Study of Complex Systems

Holistic Darwinism is a candidate name for a major paradigm shift that is currently underway in evolutionary biology and related disciplines. Important developments include: (1) a growing appreciation for the fact that evolution is a multi-level process, from genes to ecosystems, and that interdependent "co-evolution" is a ubiquitous phenomenon in nature; (2) a revitalization of group selection theory, which was banned (prematurely) from evolutionary biology over 30 years ago (groups may in fact be important evolutionary units); (3) a growing respect for the fact that the genome is not a "bean bag" (in biologist Ernst Mayr's caricature), much less a gladiatorial arena for competing "selfish genes," but a complex, interdependent, cooperating system; (4) an increased recognition that symbiosis is an important phenomenon in nature and that "symbiogenesis" is a major source of innovation in evolution; (5) an array of new, more advanced game theory models, which support the growing evidence that cooperation is commonplace in nature and not a rare exception; (6) new research and theoretical work that stresses the role of "nurture" in evolution, including developmental processes, "phenotypic plasticity," social information transfer (culture), and especially the role of behavioral innovations as "pacemakers" of evolutionary change (e.g., "niche construction theory," which is concerned with the active role of organisms in shaping the evolutionary process, and "gene-culture coevolution theory," which relates especially to the dynamics of human evolution); (7) and, not least, a broad effort to account for the evolution of biological complexity from "major transition theory" to the "Synergism Hypothesis." Here I will briefly review these developments and will present a case for the proposition that this paradigm shift has profound implications for the social sciences, including specifically political theory, economic theory and political science as a discipline. Interdependent "superorganisms," it turns out, have played a major role in evolution – from eukaryotes to complex human societies.

Environmental Security Redux: Rediscovering the Value of Environmental Security

Odelia Funke, U.S. Environmental Protection Agency

The term 'environmental security' emerged in the 1980s. Briefly stated, the concept urged people to think of environmental issues, particularly those related to the potential for major shifts in people or access to resources, as issues fundamental to national security, and thus requiring serious national attention. The ideas emerged from the writing of several influential thinkers, including Lynton K. Caldwell (an APLS member). Research and writing covered a variety of topics centered on concerns familiar to national security studies -- e.g., securing and maintaining key national resources, identifying and securing reliable sources of food, supporting stable communities and borders, and so forth. Those promoting the importance of environmental security were arguing that decision makers seriously consider and address the intimate relationship between a healthy environment and the ability of communities and nations to provide and maintain conditions supporting their citizens. In some cases they were sounding an alarm for policy makers to take threats to the environment very seriously and to think of environmental deterioration as a potential threat to the health and stability -- even survival -- of nations, not just a collection of commodities or a context of action. Not all natural resources are

renewable. In the mid-1990's this concept attracted some attention within the Defense Department. There were many proposals and some policy decisions that reflected broad agreement with the view that maintaining environmental health is an important and worthy goal, that it is the business of the military to care for the environment, and that there are practical and valuable ways in which promoting environmental health and stewardship abroad can be a cost-effective foreign policy tool. This paper will review these premises/concepts and assess whether/how they are affecting government (especially defense) policy and spending today. Questions asked include: Did the attention to "environmental security" in the 1990s have a lasting effect, or was it a kind of fad that has passed? What are the implications for important US policy issues, such as climate change legislation?

Politics and the Life Sciences: An Unfinished Revolution

Gary R. Johnson, Lake Superior State University

Political science has made significant strides over the last six decades. Scientific modeling and modern techniques of data analysis began to transform the study of government and politics in the years following World War II. Unfortunately, the discipline remained handicapped with an essentially eighteenth century paradigm for understanding human behavior. The first serious efforts to transform this crippling paradigm emerged in the 1960s. These efforts expanded over the succeeding years and led eventually to the establishment of a professional association and journal in 1980-81. The association and journal have helped advance this ongoing revolution. Unfortunately, most political scientists still do not perceive government and politics as phenomena of nature, and most still cling to the old paradigm, despite its shortcomings. The old paradigm has been weakened, but the revolution that will eventually destroy it remains unfinished. This paper will review the history of this ongoing revolution, assess its current state, and offer a forecast regarding its future progress.

A Founder's Reflections

Steven A. Peterson, Penn State Harrisburg

This presentation will take a look at Biopolitics—its past, present, and future. The presentation begins with a look at the origins of the linkage between biology and politics. One can go back in history to see primitive adumbrations of the approach—organismic analogies, for example. However, the roots of the current interest lie in the 1960s. The paper traces Biopolitics from then to the 1990s, when it was unclear what direction Biopolitics would take. Finally, the presentation would consider the promise for the future in two lines of research—genetics and politics and neuropolitics.

Ah, to be a Founder

Al Somit, Southern Illinois University - Cardondale

- 1. Institutional Prestige as a Factor in Achieving Paradigm Change -- The Biopolitical Experience.
- 2. What hath biopolitics achieved? Possible answers to two questions in political philosophy -- (a) What is the Nature of Political Man? and (b) Why are democracies so rare and so fragile?

An IMPPISH Perspective Reprised

Elliott White, Temple University

This IMPPISH psychogenetic approach has been dormant too long; and although it has never gained favor within our subfield (with one exception), its basic tenets have received increasing validation within other of the human sciences.

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