ANNUAL MEETING OF THE
ASSOCIATION FOR POLITICS
AND THE LIFE SCIENCES

October 25-26, 2013
Texas Tech University

"EVOLUTION, CONSUMPTION AND THE POLITICAL"
Association for Politics and the Life Sciences
2013 Annual Meeting

Program Contents

- Keynote Address Information
- Schedule of Addresses and Panels
- Paper Abstracts
- Lubbock: “Getting Here”
- Map of Lubbock
- Map of Texas Tech Campus
- Map of Meeting Site (Student Union Building)
- Map of Campus Public Art Walk

Conference Directors

Program Directors:  Ron White (College of Mount Saint Joseph)
                   Steve Peterson (Penn State Harrisburg)

Site Directors:    Erik Bucy (Texas Tech University)
                   Gregg Murray (Texas Tech University)

Keynote Address
(Open to the public)

Annual Meeting of the
Association for Politics and the Life Sciences

Gad Saad, Ph.D.
Professor of Marketing
Research Chair in Evolutionary Behavioral Sciences & Darwinian Consumption
John Molson School of Business
Concordia University

Friday, October 25, 2013
3:30 – 5:00 pm
Mesa Room, 2nd Floor, Student Union Building

Professor Saad will discuss his work in the area of evolutionary consumption. In particular, he will address key tenets from his books The Consuming Instinct (2011, Prometheus) and The Evolutionary Bases of Consumption (2007, Psychology Press). He will argue that: (1) many consumption acts can be mapped onto four key Darwinian modules (survival, mating, kin selection, and reciprocal altruism); and (2) cultural products (e.g., song lyrics, movie plotlines) are fossils of the human mind that highlight a shared, biologically based human nature. He will also tackle several of his other empirical works including the effects of conspicuous consumption on men's testosterone levels (Saad & Vongas, 2009) and the effects of the ovulatory cycle on consumption phenomena (Saad & Stenstrom, 2012). Overall, Professor Saad will present his argument that an infusion of evolutionary and biologically based theorizing into the discipline of consumer behavior yields many benefits including greater consilience, an ethos of interdisciplinarity, and methodological pluralism.

For more information contact:

Dr. Erik Bucy
erik.bucy@ttu.edu
Department of Advertising

Dr. Gregg Murray
g.murray@ttu.edu
Department of Political Science
FRIDAY, OCTOBER 25

Friday, 8:00 – 8:45 AM
Traditions Room, Student Union Building

Welcoming Remarks
Lawrence Schovanec
Interim Provost & Senior Vice President
Texas Tech University
Conference Introductions

Erik P. Bucy
Regents Professor of Strategic Communication
College of Media and Communication

Gregg R. Murray
Associate Professor
Department of Political Science

Opening Plenary Lecture
Friday, 9:00 – 10:30 AM
Mesa Room, Student Union Building

Disinformation Squared:
Was the HIV-from-Fort-Detrick Myth a Stasi Success?
Robert Hunt Sprinkle
University of Maryland

PANEL #1
Friday, 9:00 – 10:30 AM
Playa Room, Student Union Building

Leadership
Chair: Mike Sontag
College of Mount St. Joseph

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Presenter</th>
</tr>
</thead>
</table>
| Evolutionary Leadership Preferences: Group Interests, Distrust of Leaders, and Leader Evaluations | Gregg R. Murray
Texas Tech University                                                              |
Northern State University                                                             |
| Party Followership and Political Leadership: Towards Good Governance in Ghana       | Enoch Antwi
Indiana Wesleyan University                                                          |
| Evolutionary Leadership, Complexity, and Change in Higher Education                | Aaron Burgess
Cincinnati Christian University                                                      |
| The Age of Exploration and Exploitation: Younger Leaders Endorsed for Change and Older Leaders Endorsed for Stability | Brian R. Spisak
VU University Amsterdam                                                               |
Morning Coffee Break
Friday, 10:30 – 10:45 AM
Traditions Room, Student Union Building

WORKSHOP #1
Friday, 10:45 AM – 12:15 PM
Playa Room, Student Union Building

Politics, Emotions, and Coding Facial Display Behavior
Patrick A. Stewart
University of Arkansas

PANEL #2
Friday, 10:45-12:15 PM
Mesa Room, Student Union Building

Libertarian Perspectives on Gun Control
Chair: Aaron Burgess
Cincinnati Christian University

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolutionary Biology, Neuroscience, and Gun Control</td>
<td>John Bickle, Mississippi State University</td>
</tr>
<tr>
<td>Parental Investment and Guns</td>
<td>Marica Bernstein, Independent Scholar</td>
</tr>
<tr>
<td>Gun Rights, Non-Aggression, and Pre-Eemption: A Challenge for Gun-Toting Libertarians</td>
<td>Ronald F. White, College of Mount St. Joseph</td>
</tr>
<tr>
<td>The Emotions and Marketing of Gun Control</td>
<td>Michael Sontag, College of Mount St. Joseph</td>
</tr>
</tbody>
</table>

APLS Council Meeting
Friday, 12:15 – 1:30 PM
Traditions Room, Student Union Building

APLS Executive Council Meeting
Chair: Robert Hunt Sprinkle
University of Maryland

Lunch Break
12:15 – 1:30 PM

Optional Tour
Center for Communication Research Lab
(psychophysiology, eye tracking, dial testing demonstrations, and more)
Media and Communication Bldg., 3003 15th Street, Rm. 061
Glenn Cummins, CCR Director & Associate Dean for Research
## PANEL #3
Friday, 1:30 – 3:00 PM
Mesa Room, Student Union Building

**Evolutionary Politics 1**
Chair: Steven A. Peterson
Penn State University, Harrisburg

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Group Favoritism, Partisan Perception, and Evolution</td>
<td>J. David Schmitz, Texas Tech University</td>
</tr>
<tr>
<td>A Libertarian Theory of Cooperation</td>
<td>John Bickle, Mississippi State University</td>
</tr>
<tr>
<td>Threats that Improvised Nuclear Devices Pose to Major American Cities</td>
<td>Carl Adrianopoli, U.S. Dept of Health and Human Services</td>
</tr>
<tr>
<td>Managing the Matrix: Female Aggression, Status Seeking and Social Networks</td>
<td>Laurette Liesen, Lewis University</td>
</tr>
</tbody>
</table>

## PANEL #4
Friday, 1:30 – 3:00 PM
Playa Room, Student Union Building

**Public Policy and the Environment**
Chair: Bettina Franzese

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educating the Public on Complex Water Issues to Improve Water Literacy</td>
<td>Thomas L. Arsuffi, Texas Tech University</td>
</tr>
<tr>
<td>Risk Perception and Political Culture: Regulating Genetically Modified Food Across the Globe</td>
<td>Tony Wohlers, Cameron University</td>
</tr>
<tr>
<td>Natural Gas Extraction Policy Reform</td>
<td>Adam Konopka, College of Mount St. Joseph</td>
</tr>
<tr>
<td>Who Gets the Gold? Golden Rice and the Introduction of GMO Technology into Rice-Dependent Asian Societies</td>
<td>Karl Zuelke, College of Mount St. Joseph</td>
</tr>
</tbody>
</table>

## Afternoon Coffee Break
Friday, 3:00 – 3:15 PM
Traditions Room, Student Union Building

## Keynote Address
Friday, 3:30 – 5:00 PM
Mesa Room, Student Union Building

**The Consuming Instinct**
Gad Saad
Concordia University, Canada
**Reception**
Light Dinner and Cash Bar
Friday, 5:30 – 7:30 PM
Sazón Restaurant
1205 University Avenue (across from campus)

**SATURDAY, OCTOBER 26**

**PANEL #5**
Saturday, 9:00 – 10:30 AM
Mesa Room, Student Union Building

**Roundtable Discussion:**
_Gad Saad’s The Evolutionary Bases of Consumption and The Consuming Instinct_

Chair: Charles Kroncke
College of Mount St. Joseph

**Roundtable Discussants**
- Missy Houlette
  College of Mount St. Joseph
- Ronald F. White
  College of Mount St. Joseph
- Troy Camplin
  University of North Texas at Dallas

**Morning Coffee Break**
Saturday, 10:30 – 10:45
Traditions Room, Student Union Building

**PANEL #6**
Saturday, 10:45 AM – 12:15 PM
Playa Room, Student Union Building

**Evolution, Complexity, and Economics**
Chair: Charles Kroncke
College of Mount St. Joseph

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Presenter</th>
</tr>
</thead>
</table>
| On the Varieties of Spontaneous Orders: Economies and Ecosystems                   | Troy Camplin
  University of North Texas at Dallas                                               |
| Cultural Economics: An Evolutionary Perspective on Scarcity                        | Jason Schutte
  Carroll University                                                                |
| When Competition Is Good for the Host: A Potential New Paradigm for Political Science and Economics | Carmi Turchick
  Independent Researcher                                                             |
### Androgens and Attitudes toward Economic Equality

**Presenter:** Lee Ellis  
**Affiliation:** Independent Researcher

### The FTC and Green Guides: Have We Regulated Ourselves Out of the Ability to Market “Green?”

**Presenter:** Ann H. Rodriguez  
**Affiliation:** Texas Tech University

---

**Panel #7**  
**Date:** Saturday, 10:45 AM – 12:15 PM  
**Location:** Mesa Room, Student Union Building  
**Title:** Evolutionary Politics 2

**Chair:** Brian R. Spisak  
**Affiliation:** VU University, Amsterdam

#### Presentation Title

<table>
<thead>
<tr>
<th>Title</th>
<th>Presenter</th>
</tr>
</thead>
</table>
| Does Propensity Towards Disgust Affect Emotional Response to Political Leaders? Evidence from the 2012 Presidential Election | Patrick Stewart  
University of Arkansas                                                  |
| Power Holders and Challengers: An Analysis of the 2012 Presidential Debates from a Biobehavioral Perspective | Zijian Gong, Erik P. Bucy, & Desiree Markham  
Texas Tech University                                                    |
| Issues within Biology and Their Implications for Politics: Three Case Studies | Albert Somit, Southern Illinois University  
Steven A. Peterson, Penn State Harrisburg                                 |
| Response to Threat: Developing a New Metric of Candidate Viability    | Erik P. Bucy, Texas Tech University  
Gregg R. Murray, Texas Tech University  
Patrick Stewart, University of Arkansas                                  |

---

**Editorial Board Meeting**  
**Date:** Friday, 12:15 – 1:30 PM  
**Location:** Traditions Room, Student Union Building  
**Title:** PLS Editorial Board Meeting

**Chair:** Erik P. Bucy  
**Affiliation:** Texas Tech University

**Lunch Break**  
**Date:** Saturday, 12:15 – 1:30 PM

---

**Panel #8**  
**Date:** Saturday, 1:30-3:00 PM  
**Location:** Playa Room, Student Union Building  
**Title:** Media, Politics and Education

**Chair:** Missy Houlette  
**Affiliation:** College of Mount St. Joseph

#### Presentation Title

<table>
<thead>
<tr>
<th>Title</th>
<th>Presenter</th>
</tr>
</thead>
</table>
| The Decline of Civic Education in an Age of Political Ignorance     | John Amankwah  
College of Mount St. Joseph                                               |
Environmental Illiteracy: Effects of Having an Uninformed Electorate on Natural Resources, Policy, Ethics and a Remedy  
Thomas L. Arsuffi  
Texas Tech University

Science Communication, Science Culture Policy and *Doctor Who* Fandom: A Case Study  
Hyo Jin Kim  
Texas Tech University

Teaching Evolution in a Democracy  
David F. Prindle  
University of Texas at Austin

**PANEL #9**  
Saturday, 1:30 – 3:00 PM  
Mesa Room, Student Union Building

**Health Care and Public Health**  
Chair: Eileen Burgin  
University of Vermont

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
</table>
| Child Maltreatment and Public Policy                                | Bettina Franzese  
Independent Researcher                                                |
| Patenting Life: Law, Biology, and Health                           | Bonnie Chojnacki  
University of Akron                                                  |
| Smartphone Mediated Preventive Nutrition to Counter Obesity Among College Girls | Priyanka Khandelwal  
Texas Tech University                                                 |
Oklahoma University                                                  |
| An Evolutionary Perspective on How Greek Membership and Sexual Media Use May Reinforce Rape Myths, Perpetration, and Victimization | Rebecca R. Ortiz  
Texas Tech University                                                  |

**Afternoon Coffee Break**  
Saturday, 3:00 – 3:15 PM  
Traditions Room, Student Union Building

**Closing Plenary Lecture**  
Saturday, 3:30 – 4:45 PM  
Mesa Room, Student Union Building

**Towards Effective Emerging Infectious Diseases Surveillance:**  
Evidence from Cambodia, Indonesia, and Mexico  
Sophal Ear  
U.S. Naval Postgraduate School
ABSTRACTS

“The Decline of Civic Education in an Age of Political Ignorance: From George W. Bush to Barack H. Obama”

John Amankwah
College of Mount St. Joseph

The polarization of our political system since the period of George W. Bush until the present administration has tarnished our democratic process. To the minds of many, our political system is perceived to be corrupt because of monetary influence by rich individuals and corporations. Since the ruling by the Supreme Court that corporations are persons, the political landscape has become so murky that a greater number of citizens have become disinterested in our political system. Research demonstrate that a greater percentage of those capable of voting dropped during the last term of George W. Bush and for many of these political researchers, the reasons are driven by the loss of interest in our political and also ignorance of the principles underlying our democracy. The evolution of this political ignorance has gradually sent to both chambers (the House of Representatives and the Senate) candidates whose understanding of “self-governance” is so skewed that our political trend is taking a direction that does not augur well for our country. There is plenty of evidence that no nation can achieve the level of understanding and knowledge of their democratic principles and pass them on to the next generation unless that particular generation has the capacity to absorb the very foundation upon which their self-governance is built. Alexis de Tocqueville has rightly noted that each generation is a new people that must be helped to equip themselves with the necessary knowledge, skills and develop the dispositions deserved of any private and public character necessary for and support any constitutional democracy. The last twelve years, beginning with G. W. Bush to Obama have in fact seen the decline of a democratic nation whose citizens have slipped into political ignorance and this fact is amply demonstrated in the kind of political rhetoric we have witnessed from the two branches of our government, namely, the legislative and the executive. This paper calls for a panel discussion on this subject to deliberate and propose some ways of addressing the significance of civic education in our democracy.

“Party Followership and Political Leadership: Towards Good Governance in Ghana”

Enoch Antwi
Indiana Wesleyan University

This study explores the sources and nature of political leadership corruption in Ghana, arising from the possible influences that political party followership may have on political leadership, and their implications for good governance. Due to the manner in which power and authority are acquired, organized, and exercised by party followers and political leaders in African countries; it is possible that party followers exert influence on the behavior of political leaders. Corruption of the political leadership is the focus of such possible influence in this paper. Is corruption of the political leadership partly traceable to the reaction or the perception of these leaders to the
demands or expectations of party faithfuls? If such relationships exist, then, it will not be difficult to infer their negative effects. One such effect is the possible negative influences stemming from intense pressure on political leaders to satisfy numerous demands on them from party followers in their constituents. The other deleterious effect is the serious threat to the country’s young democracy if political leaders have to pay their way into office during the primaries, and need to pay to retain their political positions. Thus, the paper answers the following questions: (a) does party followership influence political leaders to undertake corrupt decisions and behaviors? (b) What are the possible avenues by which party followership may influence career politicians to undertake corrupt decisions or behaviors? (c) What are the policy implications of the influence of party followers on the corruption of party leaders and on good governance?


T.L. Arsuffi
Llano River Field Station, Texas Tech University at Junction

Christy Muse
Hill Country Alliance

Given the gap between scientists and the public as well as looming water crises: “Scientists must find new ways to engage with the public. One cannot just exhort ‘we all agree you should agree with us.’ It’s a much more interactive process that’s involved. It’s time consuming and can be tedious. But it’s very important.” To fill this education gap, we developed the Texas Water Symposium: http://www.schreiner.edu/water/index.htm as a unique, innovative approach to educating the public about water in Texas. The series provides perspectives from key experts illustrating the complexity and challenges in providing water for Texans in this century. The venue alternates among cities and Texas Public Radio records for NewsMaker Hour broadcast. The series covers a variety of water issues, including climate change, water science, drought, water law, fracking, conservation, invasive species, instream flow and others. Panelists and agencies include: state legislators, general managers of river authorities/groundwater agencies, scientists, NGOs, municipalities, ranchers and lawyers, Texas Parks and Wildlife Department, Texas Water Development Board, The Nature Conservancy, Sierra Club, San Antonio Water System, Environmental Defense Fund, Dixon Water Foundation, universities. The successful series is in its 6th year with four symposia per year reaching tens of thousands of citizens.
“Environmental Illiteracy: Effects of Having an Uninformed Electorate on Natural Resources, Policy, Ethics and a Remedy”

Thomas L. Arsuffi
Llano River Field Station, Texas Tech University at Junction

Water, the environment, and natural resources are critical issues for present and future generations, especially with population increases in the next century. An ecologically literate public will be needed to make informed decisions on a variety of issues as resources become limited. Yet studies consistently reveal that the U.S. public suffers from a tremendous environmental literacy gap that is increasing rather than decreasing. Further, >90% of U.S. will live in urban areas and children will have increasingly little contact with nature. The disconnect between children and nature has important health, policy and career ramifications (Richard Louv, Last Child in the Woods). Here, we examine the structure and function of environmental education and literacy at various scales in Texas. The new Natural Resource and Environmental Literacy Plan for Texas provides a framework on getting the next generation informed on land, water, climate and ecosystems. The plan emerged from planning meetings, discussions from multiple stakeholders and partnerships and focuses on assessment and implementation approaches at all levels of environmental education, to improve ecological and scientific literacy of a public and generation increasingly removed from the natural resources on which they depend.

“A Framing Analysis of the Politics of Hydraulic Fracturing: How U.S. Media Reports the Controversy”

Adeniyi Bello
Texas Tech

Campaigns by activist groups against hydraulic fracturing (otherwise called fracking, hydro-fracking, or horizontal drilling), a process of extracting natural gas from shale rocks, have intensified on social media. They point to potential impacts of toxic chemicals indirectly seeping into drinking waters, and unregulated dumping of radioactive wastes polluting the environment and causing health hazards to marine life and humans in the localities around extracting sites. Yet, there seem no popular alarm about the ‘perceived hazard’; public perception of the debate remains muted and uncertain, because the issue has not received a celebrity status in the mainstream media, the arena where national public policies are rectified.

This study deconstructs the meanings of the dominant media frames in the game between the social problems work groups and proponents of fracking operations. The study analyzes the relationship between media frames and activist campaigns, while answering the following questions: (1) How is the fracking controversy defined? and (2) is the playing field level for the contending parties? Using a content analysis, the study explores the ‘contests over meaning’ on the fracking debate from a constructivist perspective. A systematic analysis of news coverage of the debacle is compared with social movement campaigns, to ascertain the relationship between
the different kinds of frames, and the implications of fracking coverage as it relates to journalistic norms, social activism, and overarching framing processes.

“Parental Investment and Guns”

Marica Bernstein
Independent Scholar

Successfully raising a child to adulthood requires parents to invest resources which protect the child, and themselves, from physical or emotional harm. Using a recent traumatic example of a mother’s choice to be unarmed in her own home, I will argue that responsible gun ownership by parents fulfills a basic biological drive to protect their children.

“Gun Control, Gun Liberties, and Biology”

John Bickle
Mississippi State University

An uptick in public discussions of gun control measures and liberties following the Newtown mass murders revealed a new aspect of this issue: the biology of gun control measures. This included a much-discussed piece by evolutionary biologist and psychologist David Barash, published in *The Chronicle of Higher Education*, and drawing on the work of Konrad Lorenz. What are some biological factors that pertain to political issues involving guns? This presentation will explore some of these, including the neuroscience of rewarded behavior, the biology of maternal behavior, and other issues.

Panelists:
Marica Bernstein
John Bickle

“A Libertarian Theory of Cooperation”

John Bickle
Mississippi State University

Under what conditions will libertarians rationally agree to cooperate in political projects that require multiple interacting persons to achieve goods only available through joint cooperative ventures? Contemporary rational decision theory provides a precise answer that avoids both a Hobbesian Leviathan and a Rousseauian general will—both of the latter being inconsistent with strong libertarian political commitments. I’ll present this formal argument in a fashion accessible to those less familiar with the mathematics of rational decision theory and discuss concrete examples of cooperative ventures that illustrate the key mathematical concepts.
Plato presents a theory of moral responsibility as self-government in the *Gorgias* and *Republic*. When the better (i.e. more intelligent) parts of the soul rule the lesser parts, then the soul is well ordered. At first glance, this seems to restrict moral responsibility to the philosopher-king, in whom the intelligence is grounded in a grasp of what truly is. Likewise, it seems that only an authoritarian regime is really a regime.

However, Plato recognized that, for most people, the role of intelligence in ordering the soul is played by the common sense opinions of the political society. Unlike scientific knowledge, opinions can be widely shared. This view of moral responsibility is more democratic and points to a kind of leadership that is political more than royal.

Modern biosocial science has arrived at a similar conclusion. Moral responsibility is a result of our capacity to internalize the rules of our native moral communities. The individual human psychology is not self-sufficient; it requires the pressure of social norms for its integrity. Conversely, the ordering of the society requires common allegiance to such norms and this limits the power of the leader. This paper will weave these ancient and modern threads together.
shouldn’t political candidates be evaluated in light of threats and crises, to estimate their effectiveness if elected?

To address this question, this paper reports the results of an original experiment designed to develop a new measure of candidate viability. The measure is based on an experimental paradigm that assesses political performance in relation to crisis news rather than the trial heats popular with media tracking polls. For the study, a repeated measures experiment was conducted online with 397 adult participants, using 8 stimulus stories and responses by 8 presidential hopefuls, including 4 Democrats (Biden, Clinton, Cuomo, Warner) and 4 Republicans (Christie, Bush, Paul, Ryan), plus President Obama. The stories, which averaged 76.9 secs in length, were edited to show high intensity, negative news images of domestic calamities and international threats: North Korea, Iraq, Hurricane Sandy, avian influenza, the Boston Marathon attacks, terrorist threats in the Middle East, cyber attacks, and hacking by China. Following a randomly selected threat, 30-second clips of presidential hopefuls, and President Obama, were shown to viewers with the sound off to isolate the effect of leader nonverbal communication. Footage of political leaders was manipulated to be either high or low in potency, defined as having authority, power, or strength.

Data analysis focuses on emotional and evaluative responses to the news story-leader reaction sequences, with special attention paid to the relationship between leader evaluations and political support. The 2016 presidential election campaign, which will be contested within both the Democratic and Republican parties, provides an opportune moment to study this new approach to candidate viability in a dynamic setting.

“Evolutionary Leadership, Complexity & Change in Higher Education”

Aaron Burgess

Classical managerial and leadership theory abounds with examples of leaders’ attempts to predict, classify, and control for every possible variable within their organizations (Munro, 2008). Much of the classical literature in educational leadership has also reflected this approach (Becher & Kogan, 1992; Samier, 2002). But what if higher educational institutions and systems were unpredictable and impossible to control? What if there was a new way of looking at these organizations -- a way that treats higher educational institutions as evolutionary systems rather than simple systems and takes into account the non-linear interactions that take place in ambiguous environments like institutions of higher education? This literature review aims to introduce higher educational leaders to a new managerial and leadership approach that understands higher educational institutions as evolutionary and complex adaptive systems (CAS). The review leads to the conclusion that higher educational institutions are ideal systems for such types of analyses. Additionally, the paper concludes that higher educational leaders can benefit from applying evolutionary model to their organizations.
On the Varieties of Spontaneous Orders: Economies and Ecosystems

Troy Camplin
University of North Texas at Dallas

When organisms interact with each other in a given climate, we get an ecosystem. That ecosystem, in turn, provides the environment for speciation, or specialization. All of the ecosystems together constitute the biosphere. When humans interact with each other in a given institutional climate, we get an economy (broadly understood to include market, political, religious, and gift economies). That economy, in turn, provides the environment for specialization, or mental speciation. All of the economies together constitute civil society. The analogy between ecosystem and economy is more than mere metaphor. Oikos means “home” in ancient Greek, and humans have social homes (economies) as well as biological homes (ecologies), which they share with other living things. As ecologies are biological environments, our cultures, economies, and civil societies are our human psychosocial environments. Within them we speciate (specialize), and when we do not adapt, we do poorly within that given economy. Given that our economies are products of our mental actions, the biological individual does not go extinct, though his/her mental constructs (businesses, technologies, etc.) may. This lays the groundwork for describing a real social Darwinism, opposed to the kind of biological-social confusion that has to now been termed social Darwinism.

Patenting Life: Law, Biology, and Health

Bonnie Chojnacki
University of Akron

On June 13, 2013 the Supreme Court of the United States ruled that naturally occurring genes are not eligible for patents. While there was much speculation on how the court would rule in the end the court made a clear and unambiguous decision on a technical point. The court distinguished naturally occurring DNA from the synthetic version and affirmed patents are still valid on the latter. The lengthy analyses leading up to this decision included discussions about the degree to which proteins mirror chemistry. Using this materialistic, reductionist strategy, advocates of genomic patents made arguments about the mechanistic properties of proteins as the basic stuff of mechanistically structured life forms. Both in the courts and in laboratories another line of argument asserts that DNA as biologists understand it is something more than a sum of parts or a string of code. It is to some degree determined by context of the living form and produces a synergy greater than the parts. Some intuitively grasp the distinction yet articulating the ambiguity of life as molecular biologists understand it is more nuanced than forcefully argued reductionist accounts of chemistry. Why does this matter? It matters in one sense because understanding life challenges us to consider meaning, health and the economic cost of promoting and preserving health care across the globe. It matters, as well because articulating the optimization of health underpins what is written into and agreed upon in international treaties and national policies. This presentation will draw upon the chemical and biological rationale as developed by Addy Pross and Steve Talbott and the philosophical significance as developed by Ken Blanchard to argue that patenting life brings us to questionable outcomes for law, culture,
and health. A better model for global health care is the holistic, contextual, synergetic approach to health and healing found in of Traditional Chinese Medicine.

“Androgens and Attitudes toward Economic Equality”

Lee Ellis
Independent Researcher

According to a recently published study, upper-body strength is positively associated with tendencies to oppose economic redistribution policies, at least among males (Petersen, Sznycer, Sell, Cosmides, & Tooby, 2013). The researchers interpreted their findings in evolutionary terms. They argued that at least in the evolutionary past males who were physically strong should have favored more self-serving monetary reward policies, while physically weak males should have subscribed to more equitable reward policies. The present study will attempt to replicate and extend the findings from Petersen and associates. At the time of this writing, results are not yet available.

“Towards Effective Emerging Infectious Diseases Surveillance: Evidence from Kenya, Peru, and Thailand”

Sophal Ear
U.S. Naval Postgraduate School

This paper examines the political economy of emerging infectious disease (EID) surveillance programs. It provides lessons learned for U.S. military medical research laboratories collaborating with developing countries and is comprised of four case studies: Kenya (U.S. Army Medical Research Unit-K or USAMRU-K), Peru (U.S. Naval Area Medical Research Unit-6 or NAMRU-6), Thailand (Armed Forces Research Institute of Medical Sciences or AFRIMS), and the U.S.-Mexico Border (Early Warning Infectious Disease Surveillance or EWIDS). The paper provides policymakers tools for improving the effectiveness of new or existing EID surveillance programs. Moreover, it offers host countries the opportunity to incorporate ideas, provide opinions, and debate the management of political and economic constraints facing their programs. Constraints are found for each case study and general recommendations are given for improving global emerging infectious disease surveillance across political, economic, and cultural dimensions.

“Child Maltreatment and Public Policy”

Bettina Franzese
Milton Hershey School

Each year child protective services receive over 3 million reports of suspected child abuse, neglect and maltreatment. Many more are never reported. Child maltreatment can have
devastating long term effects including negative developmental outcomes on children’s brain development, early attachment, academic achievement, psychological problems, entry into the juvenile justice system, poor health outcomes and lower economic productivity. Many of these problems continue into adulthood. The costs to society are enormous and varied and include hospital costs for medical treatment of injuries, out of home placement and foster care, academic underachievement, adult criminality and lifelong mental health problems. This presentation will outline the effects of child maltreatment and its economic and public policy implications as child maltreatment has been called by some the likely single most important health care challenge.

“The Power Holders and Challengers: An Analysis of Presidential Debates from the Biobehavioral Perspective”

Zijian Gong, Erik Bucy, and Desiree Markham
Texas Tech University

Human and other animals express power motives through highly specific nonverbal displays. Previous neuroendocrine research indicated powerful displays and desire for power are linked to two key hormones, testosterone and cortisol. Testosterone levels reflect and reinforce dominant behaviors, which further elevate testosterone level. Stress hormone cortisol is also linked to power, such that cortisol level drops when power is achieved. When competing for power, power-holders typically have a higher testosterone level coupled with a lower cortisol level than challengers, which lead to more expression of open, aggressive, and expansive postures, and less powerless behaviors. This study probes the differences between power-holders and challengers in terms of nonverbal display of power motives by conducting a shot-by-shot analysis of the 2012 presidential debates. Categories for analysis include gaze direction, facial expression, blink rate, head movement, and gestures. In a broader sense, this study addresses whether the findings in biobehavioral and neuroendocrine research can be applied in the context of political communication, and what constitutes a nonverbal “power holder” and “challenger.”

“Smartphone Mediated Preventive Nutri-cation (Nutrition Education) to Counter Obesity among College Girls”

Priyanka Khandelwal

Global trends of obesity continue to rise alarmingly (WHO 2000). One of the reasons for this is the societal trends and obesogenic environments which encourage over eating little attention to physical activities. With technological advancements, innovative personalized intervention techniques can be devised to reach target population. Such personalized interventions can arrest this chronic but preventable or at least modifiable disease through dietary and life–style changes (Van Horn, 1996). In this article we explore how smart phones can be used for personalized intervention techniques to control obesity. This study will encompass the effectiveness of smart interventions with the attractive features of smart phones namely apps, podcasts, voice to voice
communication. The target population is college going girls from (15 to 21 years of age) who have smart phones. We propose to conduct an intervention using the mobile technology by which the participants' diet will be constantly monitored for a period of 3 months. The post-intervention body mass index of the participants will be compared to that of the control group, after adjusting for the confounders, to illustrate the efficacy of the intervention technique.

“Science Communication, Science Culture Policy, and Doctor Who Fandom: A South Korean Case Study”

Hyo Jin Kim
Texas Tech University

For many people, science is not an easy subject to understand or enjoy. However, science fiction can make science more palatable, and even appealing, to the public. This case study of Doctor Who fandom in South Korea demonstrates that fans learned scientific information such as time travel, parallel universe theory and big bang theory from the show, indicating that science fiction can be a good way to engage segments of the public regarding science. Science policy in South Korea has shifted from emphasizing the economic value of science to encouraging appreciation for its creative, cultural aspects. As a result, the South Korean government has stressed “science culture” policy since 2000. This study suggests that science fiction fandom can facilitate attainment of science culture policy goals by increasing the awareness and enjoyment of science among the general public.

“Natural Gas Extraction Policy Reform”

Adam Konopka
College of Mount St. Joseph

This presentation is an exploration of the policy regimes that govern the oil and gas development resulting from hydraulic fracturing. Applying both “strong” and “weak” formulations of the precautionary principle, I argue that known risks to underground drinking water contamination warrant a reconsideration of regulating hydraulic fracturing under the Safe Drinking Water Act (SDWA). First, I examine the justification for exempting hydraulic fracturing from the SDWA through the Energy Policy Act. Second, these justifications are reconsidered in light of ongoing investigations into hydraulic fracturing well designs (including wellbore trajectory, casing perforation and stress) and geologic and hydrologic features of underground water systems in which drilling occurs. Finally, these reconsiderations are expanded upon in a decision making procedure that incorporates formulations of the precautionary principle.
“Managing the Matrix: Female Aggression, Status Seeking and Social Networks”

Laurette Liesen
Lewis University

Evolutionary perspectives demonstrate that primate females, including girls and women, can be aggressive and seek status within their groups. They use a variety of direct and indirect tactics as they pursue their reproductive success. In order to better understand women’s aggression and status seeking, one also must examine their social networks. Women must not only deal with the dynamics within their groups, they also must deal with pressures from other groups. Success in maintaining connections in one’s social network is vital for access to the various resources women need for their own reproductive success and to keep competitors in check. Overall, women’s social networks, while serving both supportive and competitive functions, profoundly impact the reproductive future of women and especially the survival and future reproductive strategies of their children.

“Evolutionary Leadership Preferences: Group Interests, Distrust of Leaders, and Leader Evaluations”

Gregg R. Murray
Texas Tech University

Evidence suggests evolutionary forces may influence modern leadership preferences. In particular, because humans benefitted so greatly from sociality in the harsh evolutionary environment, theory suggests humans should be especially sensitive to violations of group norms. Further, as a result of the decision making authority group leaders have to distribute resources and to organize activities, they are in position to exploit group resources for their personal gain at the expense of the group and its members. Due to this vulnerability, group members are expected to be particularly sensitive to potential violations of group norms by leaders. This research tests and finds support for assertions derived from the evolutionary argument presented here that evaluations of a political leader’s willingness to violate group interests are associated with individuals’ favorability toward and support for that leader. Moreover, the effect is most powerful for those most vulnerable to violations of group interests, which underscores the evolutionary argument regarding group norms. As well, the magnitude of effect of distrust of a leader relative to other factors that affect leader evaluations is striking. Distrust effectively competes with, and in many cases outperforms, specified prototypic leadership traits as well as assessments of policy performance.
Evolutionary psychology may explain why males engage in rape by hypothesizing that rape occurs in groups in which males are more aggressive and sexually assertive. It is suggested that it may be useful to characterize rapists as belonging to one of several types, indicated by individual differences and existence in circumstances where male sexual aggression is more likely to be reinforced. Aggressive male behaviors are often reinforced in specific areas of culture, such as male fraternities and sexual media. This study examined how reinforcement of such behaviors among college students through membership in male fraternities and sexual media use may impact rape myth acceptance and rape prevalence. A representative sample of undergraduate students (N = 505) from a southwestern university were surveyed on these variables. Results indicated that membership in a fraternity and higher engagement with sexual media (which was also highest among male fraternity members) was associated with greater acceptance of rape myths and greater prevalence of having seen traditional rape behaviors (i.e., male perpetration, female victimization) occur while a student at the university. Findings should be used to design strategic messages targeted to male fraternity members and heavy sexual media users to reduce reinforcement of rape behaviors.

The teaching of evolution in public-school biology classes presents a problem for partisans of democracy. For decades, public-opinion surveys have shown that a large majority of American citizens would prefer that creationism be taught alongside scientific biology, in public schools. But to give the people what they want would be to violate the principle of separation of church and state, as well as to teach children nonsense. One way of resolving the dilemma would be to teach evolution so well that successive generations of students would endorse it, thus altering public opinion in the long run. In this article, I report on the results of a before-and-after survey conducted after my own attempts to alter students’ opinions by “teaching the controversy,” that is, exposing them to both scientific and creationist arguments. My results were disappointing. Although a very small percentage of students moved toward endorsing the scientific theory after a semester of considering the arguments, a larger percentage of them defected from the scientific position, either embracing creationism outright, or, more commonly, confessing theoretical agnosticism.
“The FTC & Green Guides: Have We Regulated Ourselves Out of the Ability to Market ‘Green’?”

Ann H. Rodriguez, J.D.
Texas Tech University

The FTC recently updated its guidelines regarding “green” advertising. The revisions include updates to the existing Green Guides as well as new sections addressing the use of carbon offsets, “green” certifications and seals, and renewable energy/materials claims. The FTC first issued its Green Guides in 1992, revising several times since, to help marketers to avoid making misleading environmental claims, addressing how consumers might interpret particular claims, how marketers might successfully be able to substantiate such claims, and how marketers can qualify their claims to avoid misleading or deceiving consumers.

As is often the case, as soon as new guidelines are released, there are legal cases initiated that challenge their clarity, their applicability and any appropriate sanctions. And so it is with these new Guides as numerous complaints have been filed with the FTC and indeed several decisions have already been made reflecting the direction and philosophical stance of that regulatory agency with regard to these new Guides and their importance in today’s highly competitive green marketing environment.

This research provides an overview of the new Green Guides, also of recent FTC challenges based on the new Green Guides, and provides insight as to the direction green marketing may be headed, particularly as regulations regarding such have become more restrictive and as consumers have become more aware and more demanding of substantiation and clarity to better facilitate their educated purchase decisions.


Edward Sankowski

There has been persistent and strenuous political opposition from some persons and organizations in the US to implementing the Affordable Care Act (“Obamacare”). Why, and what lessons may we learn from this? While the ACA has been the product of a process full of compromises and disappointments for some, it nonetheless opens up possibilities that are alarming for some and encouraging for others. In this paper, some interpretations of the sources of the prolonged opposition are outlined and examined. Also, related normative ideas for consideration in guiding ongoing political theory and practice are discussed and justified.
“In-Group Favoritism, Partisan Perception, and Evolution”

J. David Schmitz
Texas Tech University

Evidence has shown a seemingly innate desire for an in-group/out-group dichotomization of people’s perception of political parties. The purpose of this paper is to use theory rooted in evolutionary psychology to assert that a voter’s perception of his or her party leadership is influenced by emotion-driven perceptions that have evolved over time – an adaptation linked to survival when considering humans’ ancestral past. I present preliminary results of a study aiming to gauge respondents’ perception of the 2008 and 2012 presidential and vice-presidential candidates’ physical stature relative to their opponents’ before and after the election. Preliminary results show a desire among partisan respondents to exaggerate the physical stature of their preferred candidate relative to the candidate of whom they oppose in the weeks leading up to an election when no incumbent is running. When an incumbent exists, all respondents tend to represent the incumbent as being physically larger than his opponent.

“Cultural Economics: An Evolutionary Perspective on Scarcity”

Jason Schutte
Carroll University

Scarcity creates a very well-known and understood set of problems in societies of all types. Scarcity has two specific variables in terms of societies in general, mainly scarcity of resources and scarcity of labor. Historically, societies have benefitted from a glut of natural resources, causing a scarcity of labor with which to create products. Modern societies, however, suffer from the opposite effect, and as a result we have seen the explosion of political instability, rampant xenophobia, aggregation of wealth, privatization of public goods, and social stratification. The biological elements composing our social nature offer a number of clues into the evolution of societies, and the role that scarcity plays in that evolution. This leads us into a series of interesting questions about the future of sociopolitical structures in an increasingly small world.

“Issues within Biology and Their Implications for Politics: Three Case Studies”

Albert Somit
Southern Illinois University

Steven A. Peterson
Penn State Harrisburg

There are new developments within biology and these have implications for political science. This paper will look at three case studies: (a) individual selection versus other models; (b) the roots of Altruism and their political implications; (c) the role of genes in politics. There is
considerable debate with each of these issues, and this paper will simply note the implications of such debates for the study of politics.

Workshop: “Politics, Emotions, and Coding Facial Display Behavior”
Patrick A. Stewart
University of Arkansas

Politics often entails face-to-face interaction between individuals, whether real life situations or mediated by technologies such as television and the internet. These interactions may be cooperative activities between followers and their leaders, such as in speeches that rally followers to action and bond them together, competition between putative leaders, as seen in political debates in which politicians attempt to assert intellectual and emotive dominance and, as a result, win followers, as well as in situations where there are combinations of competition and cooperation, as occurs when leaders of distinct political entities meet to negotiate interactions between their respective units. As such, understanding nonverbal interactions and the emotions and behavioral intent they communicate is important for scholars considering political interactions. Here, emotion and behavioral intent are transmitted by a range of nonverbal behaviors (in addition to verbal content) such as vocalics, body language, and facial displays; these behaviors in turn influence the behavior of others through their signal qualities. As a result, the major issues to be addressed with in this workshop will be the identification and specification of emotions through the major communication conduit – the face. Specifically, we will explore muscular movements of the face through the well-validated and extensively used Facial Action Coding System (FACS) and how these facial muscle movements (i.e., Action Units {AU}) cohere with the state of the art in emotion research.

The workshop will be organized as follows:
Pt. 1: Emotions and the “so what” question (~30 minutes)
1. A brief introduction to the use of emotion and facial display research in political science.
2. Defining the major theories of emotion – a brief primer and application to facial displays:
   a. Basic/Core theory of emotion
   b. Dimensional theory of emotion
   c. Componential Processing Model (CPM) of emotion appraisal.
3. Delineating the CPM and how it relates to the basic emotion theory; e.g. how component parts of appraisal (relevance, implications, coping potential, normative significance) relate to specific emotion families (fear, anger, joy, sadness, disgust)

Pt. 2: Coding the face (~50 minutes)
1. A brief introduction and definition of the Facial Action Coding System (FACS) and the Action Units (AUs)
2. Upper FACS-AUs (AUs 1&2; AU4; AU5; AUs 6&7)
3. Lower FACS-AUs (AUs 9&10; AU 12; AU14; AUs 15&20; AUs 16&17; AUs 22&24; AUs 25, 26&27)
4. The process of coding

Pt. 3: Bringing theory and measurement together (~30 minutes)
1. Delineating the FACS-AUs and how they are connected with the CPM appraisal components. Building up to emotions
2. Case study using 2012 Republican presidential candidate displays.

“The Age of Exploration and Exploitation: Younger Leaders Endorsed for Change and Older Leaders Endorsed for Stability”

Brian R. Spisak
VU University Amsterdam

The current contribution extends theorizing on leadership and the exploration-exploitation dilemma and builds theory by incorporating a biological and cultural evolutionary perspective. A connection is made between the exploration-exploitation dilemma and age-biased leadership endorsement in times of exploratory change versus stable exploitation. For the majority of human evolution (approximately 2.3 million years) our species was semi or entirely nomadic and the tradeoff between exploration versus exploitation had substantial physical- and experience-based requirements which align with leadership opportunities as moderated by age. Thus, given the consistency and importance of correctly assigning leadership for the exploration-exploitation dilemma, human evolution has likely selected for age-biased leadership. Across three experiments we find younger candidates are endorsed for times of exploratory change and older candidates for stable exploitation and that these biases extend to older candidates emerging for conservative exploitation of nonrenewable resources and younger candidates for exploration of renewable alternatives (i.e., green leadership). The results provide clarity to the exploration-exploitation dilemma, unify a number of proximate theories, and introduce an age-biased leadership endorsement hypothesis.

“Disinformation Squared: Was the HIV-from-Fort-Detrick Myth a Stasi Success?”

R. H. Sprinkle, M.D., Ph.D.
University of Maryland

Erhard Geissler
Max Delbrück Center for Molecular Medicine

When in May 1983 the acquired immunodeficiency syndrome, AIDS, was first securely attributed to a virus, eventually called the human immunodeficiency virus, HIV, many controversies arose. Among these was one centering on HIV’s origin. A startling hypothesis, called here the “HIV-from-Fort-Detrick myth,” asserted that HIV had been a product, accidental or intentional, of bioweaponry research. While its earliest identifiable contributors were in the West, this myth’s most dynamic propagators were in the East. The Soviet security service, the KGB, took “active measures” beginning no later than July 1983. The East German security service, a complex bureaucracy popularly known as “the Stasi,” was involved, too, but how early, how deeply, how uniformly, how ably, and how successfully has not been clear. Following
German reunification, claims arose attributing to the Stasi the masterful execution of ingenious elements in a disinformation campaign they helped shape and soon came to dominate. We have tested these claims.

Question. Was the HIV-from-Fort-Detrick myth a Stasi success?

Methods. Primary sources were documents and photographs assembled by the Ministry of State Security (MfS) of the German Democratic Republic (GDR or East Germany), the Ministry of Interior of the People’s Republic of Bulgaria, and the United States Department of State; the estate of myth principals Jakob and Lilli Segal; the “AIDS box” in the estate of East German literary figure Stefan Heym; participant-observer recollections, interviews, and correspondence; and expert interviews. We examined secondary sources in light of primary sources.

Findings. The HIV-from-Fort-Detrick myth had debuted in print in India in 1983 and had been described in publications worldwide prior to 1986, when the Stasi’s awareness of the myth could first be documented. Many of the myth’s exponents were seemingly independent conspiracy theorists. Its single most creative exponent was Jakob Segal, an idiosyncratic Soviet biologist long resident in, and long retired in, the GDR. Segal applied to the myth a thin but tenacious layer of plausibility. We could not exclude a direct KGB influence on him but found no evidence demonstrating it. The Stasi did not direct his efforts and had difficulty tracking his activities. The Stasi were prone to interpretive error and self-aggrandizement. They credited themselves with successes they did not achieve, and, in one instance, failed to appreciate that a major presumptive success had actually been a fiasco. Senior Stasi officers came to see the myth’s propagation as an embarrassment threatening broader interests, especially the GDR’s interest in being accepted as a scientifically sophisticated state. In 1986, 1988, and 1989, officers of HV A/X, the Stasi’s disinformation and “active measures” department, discussed the myth in meetings with the Bulgarian secret service. In the last of these meetings, HV A/X officers tried to interest their Bulgarian counterparts in taking up, or taking over, the myth’s propagation. Further efforts, if any, were obscured by collapse of the East German and Bulgarian governments.

Conclusion. No, the HIV-from-Fort-Detrick myth was not a Stasi success.

“The Emotions and the Marketing of Gun Control”

Michael Sontag
College of Mount St. Joseph

An examination of the history of public discourse regarding gun control makes clear the degree to which appeals to emotion drive the debates. Advocates for gun control highlight the cases of gun violence most likely to elicit emotional responses from the public, while opponents similarly highlight potential dangers of increased gun control most likely to elicit emotional responses. It is not clear in either case that these emotional appeals have the potential to lead to good policy. I argue for the troubling conclusion that effective rhetoric has crowded out the potential for effective policy in gun control debates, and I consider some of the potentially effective policies that may have been obscured by the rhetorical focus on emotional appeals.
This paper explores the effect of predisposition to feeling disgust on emotional response to political leaders. Specifically, we assert that the tendency to respond with disgust (i.e., the Behavioral Immune System) to a range of different stimuli will affect an individual’s interaction with their political environment, including but not limited to political leaders. To address this question, we will analyze the effect of individual predispositions as measured by the Three Domains of Disgust Scale (TDDS), a well-validated scale measuring response to stimuli inducing basic/core disgust (e.g., insects, feces, vomit, and other body secretions), sexual disgust, and moral disgust, on emotional response to President Barack Obama as well as his Republican challenger for the U.S. presidency Mitt Romney, in two studies. Furthermore, we consider the role other factors, including participant sex, age, ethnicity, and political ideology, as well as personality traits, play in response to the candidates. In study 1, cross-sectional data collected in the spring of 2011 from 555 undergraduate students concerning how angry, disgusted, fearful, sad, happy and playful President Obama made them feel provides us initial findings. Study 2 analyzes experimental data collected during the summer of 2012 considering the effect of an odorant experimentally administered to 46 study participants randomly assigned to either a butyric acid (stink) or control condition, and considers emotional response to still neutral displays of Obama and Romney as measured through clustered emotion terms of amused, content, angry, disgusted, fearful, and sad. Findings suggest that disgust plays an important role in emotional response to political leaders, both as a trait and as an emotional state.

“When Competition is Good for the Host: A Potential New Paradigm for Political Science and Economics”

Carmi Turchick
Independent Researcher

Competition for fitness limiting resources is a primary force of selection in evolution. For viruses and parasites, a host body is the resource they compete over. For selfish individuals, groups of altruists are the resource. Recent work indicates that if there are multiple poorly-related viruses (Chao, et al. 2000), parasites (Johnson and Hoverman, 2013), or selfish (Eldakar, Farrell, and D.S. Wilson, 2008) infecting a host then the competition between these exacts a cost which can
reduce their effect and virulence in the host. In viruses, it has been shown that such competition can select for lower virulence (Chao, et al. 2000). My conjecture is that similar processes may occur with sub-groups infecting national "superorganisms" (Wilson and Hölldobler, 2008). It seems the more diverse and numerous political parties, interest groups, religions, industries, and corporations in a nation are, the less harm they usually cause the host population and the more symbiotic they become. A robust national immune system of laws and regulations may also influence virulence. If my conjecture is correct, it may provide fertile ground for new insights in Economics, Political Science, and other fields. I will also suggest ways in which my conjecture may be falsified.

“Gun Rights, Non-Aggression, and Pre-Emption: A Challenge for Gun-Toting Libertarians”

Ronald F. White
College of Mount St. Joseph

Although libertarians as a whole tend to frown on governmentally enforced gun regulations, gun ownership does imply a set of moral constraints. The most puzzling involve respecting the “non-aggression axiom” and how that “respect” might relate to the possession and use of various kinds of defensive weapons; and under what circumstances those weapons might be used for personal and/or collective self-defense? However, the right of self-defense can only be exercised in the context of a real threat (as opposed to an “imagined threat”). There is also the question of whether the right to use lethal force is limited to “defense of self” or whether it also includes “defense of property.” Does it apply to the “defense of the weak” or other “potential” or “actual” victims? Finally, can the “pre-emptive” use of lethal weapons by individuals and collectives ever be justified; and if so, under what conditions? I’ll illustrate these puzzles via several cases.

“Risk Perception and Political Culture: Regulating Genetically Modified Food across the Globe”

Tony Wohlers
Cameron University

Policymakers in industrialized countries have responded differently to the perceived opportunities and threats regarding the genetic modification of agricultural food production. In particular, a biotechnology policy divide has emerged since the 1990s between North America and some countries in South America on the one hand and many countries in the European Union. This study asks whether national differences in political culture, as expressed through different levels of tolerance for uncertainty and risk affect the formulation of protective regulatory policy in the area of genetically modified food. To answer this question, the analysis applies elements of the cultural model developed by Hofstede and uses a modified version of the Margolis Risk Matrix to assess risk tolerance in regards to the regulation of genetically modified food in the United States, Canada, Brazil, the European Union, and other relevant countries.
Rice is one of the world’s most important staple crops, but its biological lack of β-carotene, a chemical precursor that the body converts to vitamin A, can lead to serious vitamin A deficiencies in the diet, especially among poorer societies in Asia where rice often provides the bulk of an individual’s calorie intake. The World Health Organization estimates that between 250,000 to 500,000 children become blind every year due to debilitating vitamin A deficiencies. Golden rice is touted by the agriculture industry, with the backing of much of the scientific community, as a potential remedy, with β-carotene added to the grain through gene splicing. The resultant GMO looks to have great promise for alleviating this specific nutritional deficiency. The advent of golden rice, however, is being met with strong opposition from environmental and social justice activists, who claim that adherents of golden rice stress its potential for adding a critical micronutrient to the diet of poor Asians while ignoring associated problems concerning potential damage to the diversity of traditional crops, the development of local, sustainable agricultures, and the encroachment of corporate control onto rice-dependent Asian societies.
Airports

Public

Lubbock Preston Smith International Airport (LBB)
5401 N. Martin Luther King Boulevard, Lubbock, TX 79403
(806) 775-2035
www.flylia.com

Lubbock Preston Smith International Airport (LBB) provides the city of Lubbock and its surrounding communities with all scheduled jet services. LBB receives jet service from American Eagle, Continental Express, Delta Sky Team and Southwest Airlines.

LBB offers flights daily to and from Houston, Dallas, Las Vegas, Memphis, El Paso, Albuquerque, Austin and more. Please check the following Web sites for detailed schedules and to make reservations.

Airlines Servicing Lubbock
American Eagle • (800) 433-7300 • www.aa.com
United Airlines • (800) 864-8331 • www.united.com
Southwest Airlines • (800) 435-9792 • www.southwest.com

Private/Civil Airports

Lubbock Aero
6304 N. Cedar Avenue, Lubbock, TX 79403
(806) 747-5101
www.lubbockaero.com

Lubbock Aero was formed to serve the private and civil aviation needs of the West Texas area. This company was founded on a commitment to total quality and customer service. The Lubbock Aero team is dedicated to providing their customers a superior buying experience that will evolve into an ever-expanding customer base.

Driving

Five major highways intersect in Lubbock:

US Highway 87
US Highway 84
State Road 114
Interstate Highway 27
US Highway 62/82
Car Rentals

Alamo
www.alamo.com
5401 N. Martin Luther King Boulevard • (806) 762-2161

All Star Rent-A-Car
www.allstarrentacar.net
5901 63rd Street • (806) 698-8511

Avis
www.avis.com
5401 N. Martin Luther King Boulevard • (806) 763-5433

Budget
www.budget.com
5401 N. Martin Luther King Boulevard • (806) 763-6471

Enterprise
www.enterprise.com
Airport/Downtown Lubbock • (806) 765-0622
Lubbock Southest • (806) 798-3373
Lubbock West • (806) 785-2996

Hertz Car Rental
www.hertz.com
5401 N. Martin Luther King Boulevard • (806) 762-0222

National
www.nationalcar.com
5401 N. Martin Luther King Boulevard • (806) 762-2161

Trusty Rent-A-Car
www.trustyrentacar.com
5828 Spur 327 • (806) 744-5080

X-press Rent-A-Car
9605 Avenue P • (806) 745-9044

Charter Buses

Citibus & Greyhound
www.citibus.com
801 Texas Avenue • (806) 712-2000

New Mexico | Texas Coaches
4011 Clovis Road • (806) 749-9999
Contact trips@1800Buslimo.com for more information.

Public Transportation

Taxi Cabs

City Cab
2307 Erskine Street • (806) 765-7474

Yellow Cab
2307 Erskine Street • (806) 765-7777

Bus

Citibus & Greyhound
www.citibus.com
WELCOME TO
Lubbock, Texas

ATTRACTIONS/ENTERTAINMENT
Apple Country at Hi-Plains Orchards
Buddy Holly Statue & West Texas Walk of Fame
Buffalo Springs Lake
Cactus Theater
Depot Entertainment District
Joyland Amusement Park
Legacy Play Village
Lubbock Memorial Civic Center
City Bank Auditorium & Coliseum
Lubbock Preston Smith International Airport
Mackenzie Park/Prairie Dog Town
Municipal Garden & Arts Center
Panhandle South Plains Fairgrounds
Science Spectrum & OMNI Theater
Texas Tech Equestrian Center

MUSEUMS
1. American Museum of Agriculture
2. American Wind Power Center
3. Buddy Holly Center
4. Lubbock Area Veterans War Memorial
5. Lubbock Lake National Historic Landmark
6. Museum of Texas Tech University
7. National Ranching Heritage Center
8. Silent Wings Museum
9. The Louise Hopkins Underwood Center for the Arts/Lubbock Arts Alliance
10. The Vietnam Center & Archive/Southwest Collection Library

UNIVERSITIES
1. Lubbock Christian University
2. South Plains College – Reese Technology Center
3. Texas Tech University Health Sciences Center
4. Texas Tech University
5. Wayland Baptist University

WINERIES
1. CapRock Winery
2. La Diosa Cellars
3. Llano Estacado Winery
4. McPherson Cellars
5. Pheasant Ridge Winery

MEDICAL
1. Covenant Health
2. Covenant Southwest Medical Park
3. Grace Clinic
4. Grace Medical Center
5. Lubbock Heart Hospital
6. NorthStar Surgical Center
7. TrustPoint Hospital
8. University Medical Center

SHOPPING
1. Cactus Alley
2. Canyon West Shopping Center
3. Kingsgate Center
4. South Plains Mall

The best of Lubbock is now in the palm of your hands. Scan the QR code with your mobile device to find information about events, attractions, dining options and much more.
VisitLubbock.org
P. 800.692.4035

Visit Lubbock
Lubbock, Texas

Legend
THE UNIVERSITY PUBLIC ART COLLECTION: IT’S GOOD FOR YOUR HEART!

Cool mornings, lunchtime breaks, or breezy afternoons are great times to walk the Texas Tech campus and enjoy its public art, landscaping, and architecture. A leisurely stroll to view the artwork highlighted in this brochure takes one to two hours. The distance is approximately 1.5-2 miles.

FLINT AVENUE PARKING FACILITY
Seasons of the Llano Estacado, ornamental ironwork
by Steve Teeters

ENGLISH/ PHILOSOPHY/ EDUCATION COMPLEX
Headwaters, sculpture and fountain
by Larry Kirkland

FOREIGN LANGUAGE
Paintings
by Ken Dixon and Lahib Jaddo
Sculpture
by Ethan Crenson

CHARLES E. MAEDGEN, JR. THEATRE
Paintings
by Tina Fuentes

18TH STREET PARK
Baldes of Grass, sculptural seating
by Barbara Grygutis

UNIVERSITY LIBRARY
Prometheus, sculpture
by Charles Umlauf

STUDENT UNION BLDG.
Read Reader, sculpture
by Terry Allen
Tornado of Ideas, sculpture
by Tom Otterness
Comma, sculpture
by Po Shu Wang

ADMINISTRATION BLDG.
Preston Smith, sculpture (exterior)
by Glenna Goodacre
Photographs (interior lobbies)
by Diana Dopson and Joel Salcido

HUMAN SCIENCES
Park Place and Irish Madonna, sculptures
by Glenna Goodacre

MEMORIAL CIRCLE
Will Rogers, sculpture
by Electra Waggoner Biggs

WEST HALL VISITORS CENTER
Works of art in a variety of media
by Ken Dixon, Juan Granados, Jim Rabby, Sara Waters, James Watkins, and Michael Hurd

GORDON RESIDENCE HALL
The Way West, sculpture
by John Buck

HOLDEN HALL
Pioneer Mural, fresco
by Peter Hurd
Freedom of Youth, sculpture
by Rosie Sandifer

FRAZIER PAVILION
Masked Rider, sculpture
by Grant Speed

JONES AT&T STADIUM
Mosaics
by Mike Mandel
Universal Signs, sculptural seating
by Barbara Grygutis

COMPUTER SCIENCES BLDG.
Screenprints
by Lynwood Kreneck

DISCOVERY MALL
Lapstrake, sculpture
by Jesús Moroles

EXPERIMENTAL SCIENCES
Square Spiral Arch, sculpture
by Jesús Moroles

MURRAY RESIDENCE HALL
Wind River, sculpture
by Deborah Butterfield

STUDENT WELLNESS CENTER
Lluvia Luminosa, suspension sculpture
by Ray King
Photos by Kate Breakey and Diana Dopson

ANIMAL AND FOOD SCIENCES BLDG.
Bulls, sculpture
by Peter Woytuk

OUTREACH AND EXTENDED STUDIES
Ornamental Iron Gates and Panels
by Lars Stanley

HEALTH SCIENCES CENTER
ACADEMIC CLASSROOM BLDG.
Paintings
by Elmer Schooley
HSC, F. MARIE HALL
SYNERGISTIC CENTER
Playsas, ceramic tiles
by James Watkins

HSC, MEDICAL PAVILION BLDG.
DNA, architectural art glass curtain wall and suspension sculpture
by Shan-Shan Sheng
Association for Politics and the Life Sciences

Website: APLSnet.org

Journal Website: PoliticsAndTheLifeSciences.org

Facebook: facebook.com/AssnPoliticsLifeSciences

Twitter: @AsnPLS

Council, Association for Politics and the Life Sciences

Rebecca C. Hannagan, Ph.D.
Northern Illinois University, Vice Chair

Rebecca C. Harris, Ph.D.
Washington and Lee University

Samuel M. Hines, Jr., Ph.D.
The Citadel

Laurette Liesen, Ph.D.
Lewis University

John Orbell, Ph.D.
University of Oregon

Steven A. Peterson, Ph.D.
Pennsylvania State University, Harrisburg

Robert Hunt Sprinkle, M.D., Ph.D.
University of Maryland, Chair

Patrick Stewart, Ph.D.
University of Arkansas

John Strate, Ph.D.
Wayne State University

Bradley A. Thayer, Ph.D.
Utah State University

Ronald F. White, Ph.D.
College of Mount Saint Joseph, Secretary

Editor-in-Chief, Politics and the Life Sciences

Erik P. Bucy, Ph.D.
Texas Tech University