AY 2011-12 Common Reading Faculty Lecture Assessment Karen Weathermon, Ph.D., Co-Chair Common Reading Program

The following information is a compilation of the assessment information gathered from student attendees at the seventeen Common Reading Faculty Lectures held during AY 2011-12 to complement Richard A. Muller's *Physics for Future Presidents: The Science Behind the Headlines*. A full listing of the year's events follows the assessment summary.

Attendance:

Attendance at the seventeen Common Reading Tuesdays lectures this year was 2,453. Attendance at the eight fall events was 1,487; attendance at the nine spring events was 966. Average attendance over the year was 144 students per event, again slightly higher in fall (185 average) than spring (107 average). For the year as a whole, the highest attended lectures were those by Carol Anelli, Dirk Schulze-Makuch, and Tom Preston; for the spring alone, the highest attended were those by Tom Preston, Richard McKinney, and Paul Brians.

There was also strong student attendance at the September lecture by author Richard Muller (total attendance of approximately 2000) and the fall tours of the WSU Nuclear Radiation Center (toured by 85 students), and at several other related events for which attendance counts are not available: screenings of *An Inconvenient Truth* and *Carbon Nation,* Jewett Observatory events, the Sustainability Fair, and numerous presentations and lectures sponsored by the Foley Institute, CEREO, the WSU Parking and Transportation Services, and by the departments of Business, History, Mathematics, Physics, and Environmental Science, and the School of Politics, Philosophy, and Public Affairs. These fifteen events sponsored by other units provided students with many additional opportunities for engagement with the book from various perspectives and illustrate the power of a common focus for university discussion. The total attendance at Common Reading related events thus is actually much higher than the 2,453 from the Common Reading-sponsored faculty lectures alone.

Of the total number who attended the faculty lecture series, we received evaluations from 1531 for a return rate of 62%. These evaluations provide the data for the following categories.

Who Came and Why:

The great majority of students who attended were freshmen (76%). Virtually all (92%) attended because of a class requirement or for extra credit, with most (61%) attending because of Gen Ed 110 or 111. Other classes that regularly sent students included Astronomy, ES/RP, Science 101, Geology 101, and English 101 and 105. Attendance by Geology 101 students was especially strong in the spring. Slightly more than half of attendees (56%) reported that they either had attended or planned to attend other Common Reading events.

Completion of the Book:

This year we also asked how much of the book students have read at the point of the lecture they attend. This number fluctuated lecture by lecture; more students had read more of the book in fall semester, perhaps reflecting great classroom use of it during fall semester. Overall, 68% reported having read at least some of the book: 35% reported having read less than half, 21% reported reading half or more, and 11% reported having read all.

The Assessment Questions:

We ask three assessment questions to provide us with students' responses to the events they attend. For each statement, the majority of responses were positive—even though students were almost always attending because of a class rather than out of personal interest. Likewise, by far the smallest category of responses were those that were negative. This seems to indicate, as has been the case in previous years, that once students attend a lecture, most find it engaging in one or more ways.

1. "I found this event interesting."

Positive responses (agree or strongly agree)	69%
Neutral responses Negative responses (disagree or strongly disagree)	22%
	9%.

On this statement, the lecture that received the highest positive response rate for the year overall was Mark O'English's lecture on Atomic Comics, with a 81% positive response rate. Other lectures with particularly high response rates to this statement were those by Grant Norton on clean energy, and Tom Dickinson on nanotechnology. Looking only at the spring lectures, the lectures rated most highly on this dimension were those by Grant Norton, Paul Brians on nuclear fiction, and Bill Kabasenche on science ethics.

2. "I'm inspired to learn more about this topic."

Positive responses (agree or strongly agree)	45%
Neutral responses	34%
Negative responses (disagree or strongly disagree)	21%

On this statement, the lecture event that received the highest positive response rates for the year overall was that by Bill Kabasenche, with a 63% positive response rate. Other lectures with particularly high response rates to this statement were Mike Wolcott's on sustainable design and Jerry Goodstein's on e-waste. Looking only at the spring lectures, those rated more highly on this dimension were Bill Kabasenche's, Jerry Goodstein's, and Grant Norton's on clean energy.

3. "This event furthered my understanding of an issue in the book."

Positive responses (agree or strongly agree)	50%
Neutral responses	31%
Negative responses (disagree or strongly disagree)	19%

Additionally, 8% did not answer this question, many indicating that they had not read the book.

On this statement, the lecture event with the highest positive response rate for the year overall was Don Wall's presentation on Nuclear Power, with a 74% positive response rate (one of the highest responses we've ever had to this question). Other lectures with particularly high positive response rates to this statement were Grant Norton's on clean energy, and Jerry Goodstein's on e-waste. Looking only at the spring lectures, those rated most highly on this dimension were Grant Norton's, Jerry Goodstein's, and Tom Preston's on bioterrorism.

The WSU Common Reading Program, a program of the University College Richard A. Muller, *Physics for Future Presidents*

AY 2011-2012 Schedule

For a student guide to library research on topics related to *Physics for Future Presidents*, see http://libguides.wsulibs.wsu.edu/physicsforfuturepresidents; for an instructor guide to library resources, see http://libguides.wsulibs.wsu.edu/instructorscommonreading
For more information on events and resources, go to www.commonreading.wsu.edu

*indicates events planned and hosted by the Common Reading Committee of the University College

Fall Semester 2011

August:

Week of Welcome

*Tuesday, August 23: screening of *An Inconvenient Truth* in Todd Auditorium (Todd 116), 7-9 pm
This 2006 film on the work of former Vice President Al Gore has become a touchstone in discussion about climate change and the related issues of clean energy and conservation. Not everyone agrees with former Gore; in fact, this year's Common Reading author Richard Muller takes issues with several of his points. But this film is a starting point to enter this year's Common Reading discussion: What do informed citizens and leaders need to know to make decisions about these important topics. (Attended by 50 students)

August 22-September 19, Terrell Library Atrium: Display curated by Lara Cummings (Libraries) and Fred Gittes (Physics) on the book's topics. Includes a continuous loop video of Icelandic glacial melting and a working Geiger counter.

*Tuesday, August 30, 7 pm, Todd 116: Don Wall, Director of WSU's Nuclear Radiation Center on "The Role of Nuclear Power as a Long-Term Energy Source."

Nuclear reactor safety has received a great deal of attention since the events at the Fukushima Daiichi reactor site in Japan. This has led to renewed scrutiny of reactor facilities throughout the world, including in-depth examinations of nuclear reactor safety in the United States. Dr. Wall will describe reactor operation from the perspective of safety, especially for the WSU reactor facility and for the next generation of reactor designs that are under construction. He will also discuss the viability of nuclear power as an energy resource in terms of its ability to meet surging energy demand in the future, including the role that nuclear waste management policy has on both sustainability and public perception. At the conclusion of the lecture, there will also be an opportunity for students to sign up to tour the WSU Nuclear Radiation Center in the following weeks. Additional sign-ups can be made at CUE 519. (Please note that visitors will be required to present government-issued photo identification when they sign up and at the reactor itself.) (Attended by 142 students.)

September:

Saturday, September 3, 7-11 pm, Jewett Observatory: Star Party, Live Jazz, and Barbeque

Live jazz and grilled brats and hot dogs will add to the atmosphere of the next Washington State University star party. Food and music by "The Unusual Suspects" will be in orbit 7-9 p.m. Telescope viewing will begin at 9 p.m and last until about 11, with a possible twilight viewing of Saturn plus a lovely

first quarter moon. A \$5 donation for the food is suggested. The observatory is located on a hilltop on the east side of campus, approximately at the intersection of Grimes Way and Olympia Avenue (look for the shiny dome on top of the hill). The star party will be hosted by the Palouse Astronomical Society and the WSU Department of Physics and Astronomy. For more information, see http://astro.wsu.edu/observatory.html

*Week of September 12-16: Tours of WSU Nuclear Radiation Center. Sign-ups at the August 30 lecture and through CUE 519. WSU operates the only research nuclear reactor in the State of Washington, and is one of only 12 university nuclear reactors in the U.S. that operate at one million or more watts of power. During the facility tour, visitors will be able to see the reactor control room as well as to observe the reactor in operation. NRC staff members will lead discussions of radiation, reactor operation and safety, and use of the WSU reactor. Questions and conversation invited! (Please note that visitors will be required to present government-issued photo identification when they sign up and at the reactor itself.) (85 students attended these tours.)

*Tuesday, September 13, 7 pm, CUE 203: Tom Dickinson, Regents Professor in Physics on "The Enormous World of Nanotechnology."

Dickinson's presentation will focus on the following questions: What is Nanotechnology and why does it matter? Why should a future president care about it? And why should a WSU undergraduate care about it? The revolutions occurring in this field of science and technology are the basis for a number of WSU projects in research and development. (Attended by 155 students.)

Wednesday, September 21, 1 pm, CUB Jr Ballroom: History Colloquiam by Andy Kirk, Professor History at University of Nevada and Las Vegas, "Doomtowns: Excavating Memory and History at the Nevada Test Site."

Lecture sponsored by Greater Columbia Plateau Initiative and the Berry Family, Columbia Endowed Chair, Pettyjohn Fund, and WSU History Department. Andy Kirk, professor of History at University of Nevada Las Vegas, will present on his latest project, *The Art of Testing and the Culture of Secrecy at the Nevada Test Site*. This talk will concern the nuclear industry and western places. Common Reading Stamp available.

*Tuesday, September 27: Campus visit and lecture by author Richard A. Muller

- Class visits to ES/RP 101 and Science 101; discussion with College of Science faculty
- Dessert with faculty and staff using the Common Reading, 1-2:30 pm, CUE 518
- Public Lecture 7 pm, Beasley Coliseum, "Physics for Future Presidents: An Update for 2011," with book signing to follow. (Attended by approximately 2000 people.)

October:

Saturday, October 1, 8:30-11 pm, Jewett Observatory: Star Party with views of Jupiter

*Tuesday, October 4, 7 pm, CUE 203 p: WSU Instructional Librarians on "Misinformation and Scientific Literature"

In the introduction to "Physics for Future Presidents," Dr. Muller provides a Josh Billing's quote which essentially says that the problem is not ignorance but that so many people are misinformed. WSU Librarians will review the central misconceptions presented in the book in light of scholarly literature

from the sciences. A main question addressed will be whether undergraduates should be expected to use this literature to become informed about difficult societal problems. (Attended by 77 students)

*Tuesday, October 18, 7 pm, CUE 203: Dirk Schulze-Makuch (School of Earth and Environmental Sciences) on "Search for Extraterrestrial Life in the Solar System and Beyond"

Professor Schulze-Makuch will take you on a tour of our Solar System exploring how life may thrive or have thrived on habitable planets and moons such as Mars, Europa, Titan, and perhaps even Venus. Based on our knowledge of extremophilic life on Earth, we can only imagine how diverse life could be elsewhere - possibly using hydrocarbons as a universal solvent rather than water, and utilizing different energy sources and building blocks. Finally, he will discuss the possibility of life on exoplanets and the implications of the Fermi Paradox on the existence of intelligent life beyond our Solar System. (Attended by 276 students)

*Tuesday, October 25, 7 pm, Todd 216: Mark O'English (Manuscripts, Archives, and Special Collections Librarian) on "Atomic Comics: Science as Seen Through Comic Books and Popular Culture"

This presentation will address the history of how nuclear issues have been portrayed (and misportrayed) in comic books on the last 60 years. Acknowledging that political leaders make decisions based as much on public impressions as on scientific data, O'English will look at how some of those public impressions have evolved over time in pop culture, using comic books as one exemplar, from the serious to the absurd. (Attended by 166 students)

Thursday, October 27, 5:30-6:30 pm, Webster 16: Eric Cornell, 2001 Nobel Laureate in Physics, giving the 2011 S. Town Stephenson Lecture with reception following

As atoms get colder and colder, they become more and more like waves, and less like particles. When a gas of atoms gets so cold the "waviness" of one atom overlaps the waviness of another, the result is a sort of quantum mechanical identity crisis, a "condensation" predicted 70 years ago by Albert Einstein. Eric Cornell will discuss how one reaches the necessary record-low temperature, and explain why one goes to all the trouble to make this bizarre state of matter. For more information, see physics.wsu.edu/stephenson

November:

*Tuesday, November 1, 7 pm, CUE 203: Mike Wolcott (Civil and Environmental Engineering, Director of the Institute for Sustainable Design) on "Sustainable Design Efforts Concepts for a Biofuel Supply Chain"

Sustainable design aims at improving the environmental, economic, and social performance of systems through a two-step process: 1) gaining increased efficiency of our current systems after which we 2) deploy new clean technologies. This process often employs a multitude of disciplines integrated towards achieving an innovative solution. While this process is most commonly associated with buildings, it is actually used for a multitude of societal systems such as transportation systems, agriculture, businesses, and even college campuses. The Northwest Advanced Renewables Alliance (NARA) was recently formed to research a sustainable supply chain for aviation biofuels in the Pacific Northwest. Our program employs concepts of improving the efficiency of industrial and community systems while overcoming key scientific and technological barriers to developing a biofuels vision for aviation. Integral to this effort is a program we are calling Bio-IDeX. This two-semester course allies

interdisciplinary student teams from WSU, Uldaho, and Penn State with communities in our region to develop a vision for the role of this region in the new biofuels economy. (Attended by 169 students)

Tuesday, November 8, 7 pm, CUB Jr Ballroom: Mia Burke, author of *Joyride: Pedaling Toward a Healthier Plant*

Burke will present the story of how Portland, Oregon, was transformed into one of the country's most active bicycling communities. She will also provide insight into some of the planet's most debated energy and transportation issues and provide suggestions about how other communities can enact changes to become more supportive of bicycles as a means of transportation. Lecture sponsored by WSU Parking and Transportation Services.

Wednesday, November 9, 10 am – 2 pm, CUB Junior Ballroom, the 2011 Sustainability Fair

This event will highlight WSU operations and accomplishments toward sustainability, including efforts by WSU Dining Services, which will serve food at the fair. Local and national green (environmentally friendly) product/service providers will have displays, including Mia Birk, author of "Joyride: Pedaling Toward A Healthier Planet," and Peter Byck, director of the documentary film "Carbon Nation."

The fair is organized by the ASWSU Environmental Task Force, the Environmental Science Club, and students from ES/RP 490/590.

Wednesday, November 9, 7 pm, Beasley Coliseum, screening of *Carbon Nation* documentary plus Q&A Panel Discussion with Film Director Peter Byck Tired of the doom-and-gloom news about climate change? *Carbon Nation* is an inspirational, optimistic, solutions-based, non-preachy, non-partisan, big tent film that shows tackling climate change boosts the economy, increases national and energy security, and promotes health and a clean environment. Narrated by Bill Kurtis, the cast includes: Richard Branson (CEO, Virgin Group), Thomas L. Friedman (The New York Times), Former CIA Director James Woolsey, Van Jones (Founder, Green For All), Col. Dan Nolan, U.S. Army (Ret), Bernie Karl (Geothermal pioneer from Alaska), Denis Hayes (Founder of Earth Day), Cliff Etheredge.

This event is sponsored by the Washington State University Center for Environmental Research and Economic Outreach, and the University of Idaho Experimental Program to Stimulate Competitive Research.

*Tuesday, November 15, 7 pm, CUE 203: Hayley Chouinard (Economics) on "The Story of the Little Red Hen: Incentives to Contribute to a Public Good."

Solutions to large environmental problems like global warming must involve cooperation between many different countries. Getting the governments associated with large carbon emissions to contribute to the common goal of carbon dioxide reductions has proven to be a great challenge. We will discuss how the incentive structure faced by these governments has hampered the efforts to reduce emissions, and what policy characteristics might help achieve lower carbon levels. (Attended by 160 students.)

Tuesday, November 29, 12:00-1:00 pm, CUE 518: Foley Institute Coffee & Politics: "Environmental Policy in Europe: New Directions and Challenges," Anne Burrill (EU fellow)

European Union environment legislation now includes more than 300 important directives and legislation, ranging from early 'end-of-pipe' rules to comprehensive 'framework' legislation in water, air, waste, and marine environment. How well is this comprehensive policy addressing the challenges of Europe today? What are the priorities for the future? Join us for pizza, pop, and discussion of environmental policy in the EU. Anne Burrill works for the European Commission where she is Deputy

Head of International Relations and Enlargement in the Directorate-General for Environment. She is presently a visiting Fellow at the University of Washington.

*Tuesday, November 29, 7 pm, Todd 116: Carol Anelli (Entomology) on "Physics for Bugs: Why Insects Can Scale Walls and Do Other Amazing Things"

Insects are the predominant animals on the planet Earth (both in terms of species and total biomass), yet often times we hardly notice them (and when we do, we'd rather they weren't there!). Why aren't there giant insects? How are some of them able to walk on water? How can ants carry things that are so much larger than themselves? Don't physical forces and laws apply to insects? We'll seek answers to these and other questions, view a few YouTube videos, and learn about gravity from a poetry reading by WSU Registrar Julia Pomerenk. (Attended by 342 students.)

Spring Semester 2012:

January:

*Tuesday, January 24, 7 pm, CUE 203: Shelley Pressley (Civil and Environmental Engineering) on "Climate Change Research by Undergraduates: How You Can Do Research that Matters in Your Own Field of Study"

Dr. Shelley Pressley, the director of WSU Undergraduate Research, will briefly discuss climate change research conducted by the Laboratory for Atmospheric Research, for which she serves as an assistant research professor. Sharing the stage with her will be undergraduates Elaina Shawver (chemical engineering) and Loren Ariza (botany), both of whom are doing mentored research. Together, the presenters will talk about how students in any discipline can get involved with undergraduate research as well as about some of the work done by WSU student researchers. (Attended by 107 students.)

February:

Thursday, February 2, 2:45 pm, Bundy Reading Room, Avery Hall: the Hon. Brian Baird, Ph.D., on "Why Good Science Fails to Become Good Policy"

As scientific research provides answers to many of society's most pressing problems—including those related to global disease prevention, climate change, clean energy, food security, and others—those answers are often ignored by policymakers and others. What are the social, political, and cultural challenges that stand in the way of making public policy reflect scientific knowledge? How can the social sciences help us better understand the practical uses of scientific research in policymaking? Baird is a former U.S. Representative for Washington's 3rd congressional district, where he served on the Committee on Science and Technology, and was the Chairman of the subcommittee on Energy and Environment. He also holds a Ph.D. in Clinical Psychology and was Chair of the Psychology Department of Pacific Lutheran University. This event is cosponsored by the Foley Institute and by the College of Business.

*Tuesday, February 7, 7 pm, CUE 203: William Kabasenche (Philosophy) on "Ethics for Scientists and Science-Savvy Citizens"

How should scientists and science-savvy citizens think about the ethics of science? Is it immune to ethical considerations? Would the ethics of science be done best by scientists themselves? These are the questions we'll consider in this talk. Kabasenche will first discuss how science, as a form of social inquiry, can't succeed unless most participants abide by an ethics of inquiry that enables scientists to achieve

the aims of their research. Second, he'll talk about a variety of cases in which an ethics of responsibility emerges and can't be understood just by bolstering our knowledge of the relevant science. For example, do human embryos have moral status? Are there any ethical concerns with using genetic and pharmacological means to enhance ourselves and our children? How should ethical values be incorporated into environmental research and policy formation? This presentation will look at cases where researchers have particular ethical responsibilities and cases where the broad use of science and technology will be of interest to science-savvy citizens and policy-makers. (Attended by 37 students.)

*Tuesday, February 21, 7 pm, CUE 203: Grant Norton (Mechanical and Materials Engineering) on "What's Next for Clean Tech: Searching the Periodic Table for Ideas"

Our current energy technology heavily relies on a single element—carbon. Wood, coal, and the liquid fuels we use today all have their energy value based on their carbon content. These carbon-based fuels have allowed enormous technological developments, but their use is not sustainable. At some state, we will run out of oil, coal, and gas, and their burning also produces carbon dioxide (and a host of other undesirable products) linked to global climate change. This presentation will explore the Periodic Table of Elements—the fundamental building blocks for all materials—to show how creating sustainable energy technologies is spearheading the use of a wide and diverse range of elements. But, as we find some "rare" solutions, are we simply switching from one unsustainable element to another? This presentation will examine a number of examples from elements from the moon that might help Boeing make a "greener" airplane, to the origin of the elements found in every Toyota Prius, and to the discovery and use of "rare earth elements" in the U.S. (Attended by 100 students.)

*Tuesday, February 28, 7 pm, CUE 203: Paul Brians (Emeritus Professor of English) on "Radioactive Thinking: Nuclear Imagery and American Culture"

This talk will explore some of the ways in which thinking about nuclear issues is distorted by various currents in American culture: nuclear deterrence, nuclear terrorism, apocalyptic thinking, post-holocaust fantasy, and psychological avoidance. Brians will illustrate the politics affect by theses distortions by their reflections in literature, film, and other arts. It will conclude with some suggestions about thinking more clearly about nuclear-related issues. Professor Brians is the author of *Nuclear Holocausts: Atomic War in Fiction, 1894-1985* and edited the newsletter *Nuclear Texts and Contexts*. This lecture is cosponsored by the Visual, Performing, and Literary Arts Committee, the College of Liberal Arts, the Libraries, the Foley Institute, and the Department of English. Reception to follow in the CUE Atrium. (Attended by 125 students.)

March:

Monday, March 5, 3 pm, FSHN T-101: James Galloway (CEREO Distinguished Speaker) on "What Is Your Nitrogen Footprint?"

As part of the CEREO Distinguished Speaker Series Dr. James Galloway will present a seminar introducing nitrogen footprint tools for both individuals and institutions. Dr. Galloway in one of the nation's leading Nitrogen researchers who's research includes investigations on the natural and anthropogenic controls on chemical cycles at the watershed, regional and global scales. His seminar will illustrate how nitrogen lost to the environment impacts human and ecosystems health and how choices people make determine the magnitude of the loss. Dr. Galloway will present the US Nitrogen Calculator, a nitrogen management tool and the institution-level nitrogen footprint model currently being developed. Reception to follow. CR stamp available.

Wednesday, March 21, 7:30 pm, Todd 130: J. Iwan Alexander (Case Western Reserve University) on "Our Energy Future"

Dr. Alexander, the Cady Staley Professor of Mechanical and Aerospace Engineering at Case-Western Reserve Univeristy, will present the 2012 Ostrom Lecture. Alexander's lecture will present an overview of present methods of extracting and distributing energy generated from fossil fuels as well as future means of production involving green sources. Event sponsored by the WSU Department of Mathematics with a reception to follow. CR Stamp available.

Thursday, March 22, 4 pm, Neill 5W: J. Iwan Alexander (Case Western Reserve University) on "Wind, Wakes, and Watts"

In this colloquium Dr. Alexander will be discussing wind turbines—focusing mainly on wind turbine wakes, on wind measurement, and on the prediction of extreme wind events—all of which are important aspects in designing wind farms. Event sponsored by the WSU Department of Mathematics with refreshments t follow. CR Stamp available.

*Tuesday, March 27, 7 pm, CUE 203: Robby Rosenman (Economics) on "Statistical Hypothesis Inference Testing: What Statistics Tell Us about Policy Making?"

Dr. Rosenman, recipient of the 2012 Sahlin Faculty Excellence Award in the Leadership Category, will be presenting on the ways in which statistics are used (and misused) for making policy. People tend to take things as true because they don't have any facts they are false. It follows that policy is based not on what you know to be true, but on what you have not been able to prove false. Should policymakers turn to a preponderance of such truths when making decisions? Dr. Rosenman will lead students through examples to make his points clear (Attended by 110 students.)

April:

*Tuesday, April 3, 7 pm, Todd 216: Kirsten Peters (CAHNRS and syndicated "Rock Doc") on "Falling Head-long Into Science Writing"

Writing may well be an activity that's subject to the 10,000 hour rule – if you do it for 10,000 hours, you will become proficient at the task. Ten thousand hours is about 3 hours a day for ten years, which sounds like a lot until or unless you simply build it into your daily life. Kirsten Peters has been writing every day for about 20 years and has 8 books to show for the effort, many of them explaining geology or other sciences to the general reader. Peters will share her experiences as a writer and share her suggestions about how undergraduates can hone their writing skills now.

Peters publishes a writes a weekly syndicated newspaper column, "Rock Doc," exploring a variety of scientific topics for a general audience. WSU Press has just published a collection of these columns together as *Planet Rock Doc: Nuggets from Explorations of the Natural World*; copies will be available at the lecture. (Attended by 72 students.)

*Tuesday, April 10, 7 pm, Todd 216: Tom Preston (Political Science) on "The Bio-Terror Threat for Future Presidents"

The threat posed by biological weapons to state security in the twenty-first century is often underappreciated by both scholars and practitioners alike, lost in their usual focus upon nuclear proliferation. But while such proliferation merits concern, the rapid pace of the biotechnical revolution and spread of related know-how and technology – coupled with the rise of terror groups (like Al Qaeda) whose focus is upon creating mass casualty attacks – makes biological warfare a far more dangerous and likely 'new face of terrorism' over the coming years. In this lecture, the growing bio-terrorism threat is explored

and the implications of recent advances in biotechnology discussed that could make bioweapons the 'WMD of choice' for future terrorists. Along with exploring how these weapons could potentially be used and their possible societal consequences, Dr. Preston also discusses some available strategies for reducing our vulnerabilities to such attacks and limiting the damage they will inflict. (Attended by 178 students.)

Thursday, April 12, The Ethics of Global Climate Change, 4:30-6:00, Todd 276

There are many ethical questions surrounding global climate change. Should you trust the experts who claim the data support dire predictions for our future? Are some attempts to address the causes and implications of climate change ethically flawed? Is adopting nuclear energy a good policy option for controlling emissions? How much risk can we take on? What do we owe to future generations and the planet we will leave them? Join our panel of experts who will be discussing these and other issues. Panelists will be:

Bill Kabasenche WSU Department of Politics, Philosophy and Public Affairs

Kent Keller WSU School of Earth & Environmental Sciences

Andrew Light Senior Fellow and Director, International Climate Policy, Center for

American Progress

Gene Rosa WSU Department of Sociology

Co-sponsored by the Foley Institute and the School of Politics, Philosophy, and Public Affairs

*Thursday, April 12, 7 pm, Todd 276: Jerry Goodstein (Business) on "The Global Challenge of E-waste: A Stakeholder Perspective"

In this presentation, Goodstein will be focusing on three key areas: what is meant by the term "e-waste," why e-waste represents a global challenge, and possible strategies key stakeholder groups, such as manufacturers, governments, and consumers, can adopt to confront the global challenge of e-waste. (Attended by 67 students.)

Tuesday, April 17, 5:30 pm, CUE 419: Focus the Nation Forum on Campus Energy Conservation Efforts Panelists will include representatives from Schweitzer Engineering, Avista, and WSU.

*Wednesday, April 18, 7 pm, Todd 116: Richard McKinney (Deputy Under Secretary of the Air Force for Space Program, WSU Alum, and Air Force ROTC graduate) on "How Does the Air Force Use Space?" Mr. McKinney provides guidance, direction and oversight for the formulation, review and execution of military space programs. In this role, he supports planning, program assessment, architecture development, and related activities to integrate military, civil, commercial, and intelligence space capabilities. Mr. McKinney will talk about how your U.S. Air Force uses space for supporting our Armed Forces around the world. He will explain how the military develops, procures, and employs satellites for space operations. And he will explain who the major users are of space. He will present a briefing used to educate Congressional staffers on space. (Attended by 170 students)

*Thursday, April 19, 10:30 am, Bundy Reading Room, Avery Hall: Coffee and Poltics with Richard McKinney (Deputy Under Secretary of the Air Force for Space Program, WSU Alum, and Air Force ROTC graduate) on "Space Policy 101"

Mr. McKinney provides guidance, direction and oversight for the formulation, review and execution of military space programs. In this role, he supports planning, program assessment, architecture, development, and related activities to integrate military, civil, commercial, and intelligence space capabilities. Mr. McKinney will talk about how national space policy is made at the highest levels of our government, including how decisions are made about what goes in and what stays out. He will look at

the 4 sectors of our national space capability and explain the importance of each to the nation's space policy. Richard McKinney graduated from WSU in 1973, went on to serve 28 years in the Air Force, and was the program Director for both the Evolved Expendable Launch Vehicle Program and the Space Acquisition Program. Co-sponsored with the Foley Institute.