

VII. STANDING COMMITTEES

A. Academic and Student Affairs Committee

An Invitation from the Faculty Senate to Visit Sites of Campus Research

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For information only

Attachment.

An Invitation from the Faculty Senate to Visits Sites of Campus Research

Goals: to engage the Regents in the excitement of learning activities at UW through:

- Discussions of frontier research projects and results with articulate faculty,
- Firsthand observations and conversations that show how UW students participate in exciting faculty-led research and scholarship,
- Tours of a few of UW's major state-of-the-art research facilities,
- Optional visits to undergraduate classes

Proposal: Visits once per quarter on afternoons prior to scheduled Board of Regents meetings;
select from a menu of eight possible events per year; invitations to two regents at a time.



"They're harmless when they're alone, but get a bunch of them together with a research grant and watch out."

New Yorker, c.2004

Below is a list of examples of widely engaging research (in no particular order) plucked from various websites on the Seattle campus. There are many more.

1. History (Jim Gregory, Professor of History). Hear about the Civil Rights and Labor Histories of Seattle. This online project explores the history of movements for racial and economic justice in Seattle and western Washington State. This online resource features more than 70 interviews with former activists as well as hundreds of photographs, documents, and research reports starting well before the civil rights movements of the 50s and 60s.

2. Jackson School (Joel Migdal, Provost's Distinguished Lecturer 2008). Learn about microfinancing programs in third-world countries and the many participating NGOs from Seattle.

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3. Asian Languages (Richard Salomon, Director, Early Buddhist Manuscripts Project, with Collett Cox). Learn of the project at UW to decipher the most ancient Buddhist manuscript and attend a seminar on the research.
4. Biochemistry/eScience (David Baker, co-winner of The Raymond & Beverly Sackler International Prize in Biophysics, 2008). Hear about models of protein-folding is essential for determining how genetic information directs protein formation, how proteins work, and how misfolded, misshapen, and malfunctioning proteins might underlie serious degenerative diseases.
5. DX Arts (Shawn Brixley, Director and Richard Karpen, Founding Director). Experience the innovative forms of art being developed and to watch students at work in a studio.
6. Chemical Engineering (Guozhong Cao, Professor of Materials Science and Engineering). Visit the lab of the project to increase efficiency of solar cells. Recent results have more than doubled the efficiency of photovoltaic devices.
7. Green Futures Research & Design Lab (Nancy Rottle, College of Built Environments). Explore how this program and other units in the college develop innovative approaches to the ecological planning and design of public space through interdisciplinary research, design and education.
8. The Decision to drop the Bomb, 1945 (Bruce Hevley, History of Science). Discuss how the decision was reached to deploy the A Bomb on Japan, including the complex political issues. Chapters 16 and 17 of "The Making of the Atomic Bomb" book by Richard Rhodes will provide much of the background for a very lively discussion.
9. Global Health (Christopher J.L. Murray, Director). Learn more about one of the newest and most exciting Global Health Programs at UW: The Institute for Health Metrics & Evaluation. IHME aspires to make available to the world high quality information on population health, its determinants, and the performance of health systems.
10. Medicine/Autism Center (Stephen Dager, Interim Director). Learn how the UW Autism program has established a program of diagnostic evaluations and multi-disciplinary intervention services for children with autism spectrum disorders from infancy through adolescence and a wide range of professional training opportunities.
11. Sustainable Business Practices. (Martin Westerman, Business). Westerman teaches a senior course that covers how firms can restructure their thinking, operations, products and services so they can become more ecologically efficient, and create less negative impacts on the planet, which support them.
12. Law (Michael Robinson-Dorn, Berman Environmental Law Clinic & Assistant Professor of Law). Find out how the law clinic provides legal support for environmental activities around the state. The clinic's caseload covers all aspects of environmental law from issues of air and water pollution, nuclear power plant sites, wildlife and marine protection, fisheries, toxics, to the Federal Advisory Committee Act.

Goal: To showcase research @ U.W.

What

- Projects within departments
- Selection criteria:
 - Interesting, exciting, and explainable topic
 - Engages under/grad students
 - Strategic impact on Dept/College

When

- Once per quarter, 1.5 - 3 hours
- Afternoon prior to normal BOR meetings

Who/Where

- Intimate: ≈2 two regents + faculty/students
- "Al fresco" (in the lab, that is)

Visit Plan: **Optional** + Standard Events

- 1:00: greeting in Gerberding 36
- 1:10: escorted walk to the department
- 1:15: welcome by Dept Chair
- 1:25: attend regular class lecture
- (2:20): greeting in Gerber 36, escorted walk
- 2:30: talk with department chair, short briefing on Dept's history, current activities, & aspirations
- 3:00: visit with selected faculty member and associated students in their 'native habitat'
- 3:50: visit ends; departure

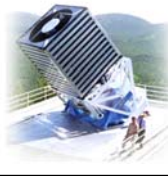
Preview of First Visit

Astronomy's Strategic Research Plan: "Deep-Sky Survey Science"

Since 1999: "Sloan Digital Sky Survey"

*What is SDSS? 94-inch aperture and 120-megapixel, 5-color camera
1/3 billion stars, galaxies & quasars, 1300 new asteroids, 300 supernovae
Plus supplemental spectra of 460,000 stars, 930,000 galaxies, 120,000 quasars*

- Construction: UW-Princeton-JHU-Fermilab partnership
- Operational since 2000 @ Apache Point NM
- Now 25 international partners
- Funding: Sloan, NSF, DOE, partners
- 2000 publications; 70,000 citations
- @UW: 100 under/grads, many publications
- Heart of 'Google Sky'



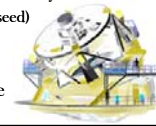
Future: "Large Synoptic Survey Telescope" (LSST)



Mirror courtesy Charles Simonyi & Bill Gates Jr.

*What is LSST? 330-inch aperture w/ 3200 megapixels, 4 colors
100x more stars, galaxies, asteroids, cosmological supernovae*

- New science includes dark energy, NEOs, planet searches
- LSST is now a 'decadal priority' of U.S. astronomy
 - \$470M/NSF+DOE, \$30M private, \$100K/UW (seed)
 - Operational 2014 @ high Andes, Chile
 - UW one of four founding partners
- Major element in UW's 'e-Science' initiative



Program Launch

*What: "Astronomical Surveys:
Revelations of the Deep Cosmos"*

*Who: Profs. Zeljko Ivezic & Andy Connolly
(Introduced by Chair Suzanne Hawley)*

When: June 10, 2009, 3:00 (90 minutes)

*Where: Meet at Faculty Senate Office,
Gerberding 36, 2:45 P.M.*