

Brookhaven Women in Science (BWIS) Meeting Minutes

October 20, 2011

1. FY2012 BWIS Board Elections results are in. See attached Response Summary. Twenty-six (26) members voted out of forty (40).
2. BWIS Colloquia Series for FY2012 is set. Dates are 10/27, 11/10, 12/15, 2/16, 3/15, 4/19, 5/17, 6/14 and 9/19. Confirmed speakers and topics will be posted on our web site. See attached for details.
3. A Networking Officer and a Funding Officer candidate position for next year may be an option to add to BWIS Board.
4. Ms. Frederica Grizzel has volunteered to handle photography and video requests for upcoming BWIS events, seminars, etc. Any other volunteers, please notify BWIS Board. Thank you.
5. Chasman scholarship applications have been low and/or incomplete. It is possibility for the BWIS Board to re-think the terms and conditions of the scholarship.
6. APS site visit report committee meetings held on 9/26, 10/3, and 10/31. Vivian Stojanoff attended the meetings on 9/26 and 10/3. The following items were discussed:
 - Tenure track aspect needs improvement
 - Laboratory management must be clear in policy and practice regarding employees acting in intimidating behaviors and disciplinary actions
 - BNL hires women at the post-doc level but are not retained
 - Stigmas associated with women and flex time and family time
 - Guests/Visitors are "held hostage" on site if they do not have a car. Other laboratories use the fire department for transportation. May be possible to work with Stony Brook University and their shuttle/bus service
7. The APS report is currently on the BNL Diversity web site page.
8. Annual Fall Wine and Cheese party date must be set.

RESPONSE SUMMARY

Election Start: October 11, 2011
Election End: October 19, 2011; 17:00
Total voting members: 26
BWIS membership: ~40

SLATE - Offices candidates	Results (%)
1. Coordinators: (2011-2012) Vivian Stojanoff (2012-2013) Linda Bowerman	96.2
2. Tresurer: Loralie Smart	100
3. Secretary: Firoza Zaroni	96.2
4. Goldhaber Scholarship: Linda Bowerman and Mary Bishai	100
5. Chasman Scholarship: Loralie Smart	100
6. Colloquia/Seminar: Vivian Stojanoff and Cecilia Sanchez Hanke	100 (1 skipped)
7. Membership: Aimee Sumereau and Gretchen Cisco	100
8. Outreach/Career Day: Kahille Dorsinvil	100
9. Publicity: Diane Greenberg	100

Confirmed Speakers

BWIS Colloquia Series

FY 2012

Oct 27, 2011 Joanna Fowler (BNL)

Hamilton Seminar Room – 4 pm

Imaging Brain Chemistry in Diseases of Addiction

Positron Emission Tomography (PET) measures the concentration and movement of a positron emitting radioisotope in a volume element of living tissue. When the positron emitting isotope such as carbon-11 (t_{1/2}: 20.4 min) or fluorine-18 (t_{1/2}: 110 min) is incorporated into a molecule which is targeted to a specific cellular element (receptor, transporter, enzyme) or when it is incorporated into a drug molecule, PET can provide information on biochemical transformations or the movement of drugs in the living human and animal body. In this presentation, we highlight some examples of development and applications selective radiotracers to measure drug action in the human brain. We will also highlight new radiotracer methods which will serve as scientific tools for advancing molecular imaging and knowledge of the human brain

Nov 10, 2011 Ya Ha (YALE)

Berkner Hall – 4 pm

A step closer in the understanding of Alzheimer's disease

Genetic mutations in the presenilin protein are known to cause Alzheimer's disease. Presenilin is a multipass transmembrane protein. Going through the cell membrane (lipid bilayer) multiple times it uses water to break other membrane proteins inside the water-excluding environment of the lipid bilayer, but how it catalyzes this highly unusual reaction is unclear. To help answer this question, we used a method called X-ray crystallography to determine the atomic structure of FlaK, a protein that is a close relative of presenilin. The knowledge of FlaK's atomic structure will help to shed light on presenilin's shape and function, which in turn could reveal new opportunities to treat or prevent Alzheimer's in its more common forms.

Dec 15, 2011 Dava Sobel

Berkner Hall – 7 pm

A MORE PERFECT HEAVEN: HOW COPERNICUS REVOLUTIONIZED THE COSMOS

Abstract

By 1514, reclusive cleric Nicolaus Copernicus had written and hand-copied an outline of his heliocentric theory in which he defied common sense and placed the sun, not the earth, at the center of our universe and set the earth spinning among the other planets. Over the next two decades, Copernicus expanded his theory through hundreds of observations, while compiling in secret a book-length manuscript that tantalized mathematicians and scientists throughout Europe. For

fear of ridicule, he refused to publish. In 1539, young German mathematician Georg Joachim Rheticus traveled to Poland to seek out Copernicus and, in 1543, arranged to have Copernicus' manuscript published as *De Revolutionibus Orbium Coelestium* (On the Revolutions of the Celestial Spheres). Sobel's latest work provides an unforgettable portrait of scientific achievement, and of the ever-present tensions between science and faith. In her talk, Dava Sobel will describe the conflicting personalities and extraordinary discoveries that shaped the Copernican Revolution. She will also discuss her play, *And the Sun Stood Still*, in which she imagines Rheticus's struggle to convince Copernicus to let his manuscript see the light of day. Dava Sobel is an internationally bestselling, award-winning author: *Longitude* (1997 British Book of the Year) was made into a PBS documentary and mini-series; *Galileo's Daughter* (Pulitzer finalist).

Feb 16, 2012 Anna M Dietrich (Terrafugia Inc)
Berkner Hall – 3 pm meet the students, talk 4 pm
Terrafugia from the highway to the sky

Mar 15, 2012 Katherine P. Prestridge (Los Alamos)
Berkner Hall – 4 pm
Inertial confinement, fusion to exploding stars: Understanding fluid mixing in extreme flow regimes

Apr 19, 2012 Laura Snyder (St. John's University)
Hamilton Seminar Room – 4 pm
Tentative title: A Debate on Science and Society

May 17, 2012 TBC
Berkner Hall – 3 pm meet the students, talk at 4 pm
Title to be determined

Jun 14, 2012 Ingrid Daubechies (Duke University)
Berkner Hall – 3 pm meet the students, talk at 4 pm
Surfing with wavelets

September 19, 2012 TBC
Berkner Hall – 3 pm meet the students, talk at 4 pm
Title to be determined