

## Ohlone Story

### The Brown Bag Science Seminar Program

By Yvette Niccolls

#### **Overview**

The Brown Bag Science Seminar Program is a speaker series sponsored by the Math, Science and Engineering Division. Distinguished speakers deliver rousing, audience-interactive talks about current math, science, and technology issues. The event is free and open to the public; most attendees are students from Ohlone. Typically, the speaker talks for about 40 minutes, followed by questions. Slide presentations or other visual aids are included -- one speaker brought a mountain lion; another speaker brought an environmentally friendly toilet. The audience is invited to meet the speaker afterwards.

The goal is to stimulate interest in and awareness of current topics, trends, and careers in science. This event is open to everyone -- especially students, but also faculty, staff, and members of the community, many of whom have virtually no science training. For this reason, speakers are asked to gear their talk for "the man on the street". The setting is relaxed and cordial; discussion is encouraged. Refreshments are served. Typically there are between 50 and 150 attendees, depending on the popularity of the topic. Sometimes we draw a packed house, such as the occasion when renowned chemistry professor Jim Klent ended his 38 year career at Ohlone with chemistry demonstrations -- over 300 people attended and many had to be turned away.

In spite of the stimulation of student contact, teaching can be a lonely experience. Teachers often suffer from lack of contact with their colleagues. They may be unaware of their colleagues' activities or areas of interest. In Spring 2000 Dr. Ron Quinta, Dean for Math, Science, and Engineering, suggested a welcome diversion: a casual get-together for the teachers from MSE subjects. The featured entertainment would be a speaker -- a volunteer from the faculty who agreed to share his/her expertise on a math or science topic. Friday afternoon seemed like a perfect time. Attendance would be strictly voluntary and refreshments would be served.

Our first brave volunteer was Paul Belasky, Geology, who did a presentation on his research of coral reefs. He included numerous slides and actual coral specimens for attendees to handle and inspect. Geology is a small department isolated from the other sciences (This is one more reason why Ohlone needs a Science Center because currently all the science and math subjects are flung far and wide across campus); many faculty and staff had been previously aware of Paul's research. The event was a huge success. Teachers mingled with others whom they very rarely encountered. It was agreed to make this a regular event twice each semester.

In 2003, Associated Students of Ohlone College ("ASOC", which is our student government organization) provided a small grant for this event. The money was used for modest speaker honorariums and refreshments. The focus shifted slightly to attract as many students as possible. It is remarkable how powerful is the lure of refreshments (to attract students) and honorariums (to attract speakers). The program has expanded greatly. Starting with only one or two speakers, we now host six or more speakers per semester.

This BBSS program is cost effective. The total cost of this program is under \$2000 per year for 12 speakers. This is in keeping with the 2001 Accreditation Team recommendation "to guide resource allocations for the greatest possible impact on student learning and the community."

## **Relationship to College Values**

The Brown Bag Science Seminar program supports the Mission Statement of Ohlone College by fostering opportunities for all members of the college community to learn about timely topics in math and science. The Brown Bag Science Seminar program creates a relaxed, nurturing, upbeat atmosphere where everyone, regardless of their level of understanding, can benefit, grow, and learn.

Lifelong learning opportunities for students, college personnel and the community

The Brown Bag Science Seminar Program presents speakers on current topics such as global warming, career opportunities, scientific discoveries, trends, and technical insights. All students, college personnel and members of the community are welcome and encouraged to attend free of charge. Everyone wins. Attendees -- whether they are students, faculty, staff or members of the community -- develop an appreciation for the crucial role of science and math in current events. They gain awareness of issues and become motivated to consider careers in science and math. They become more responsible voters, since many political candidates and issues bear an impact on science policy. Everyone benefits from the upbeat, supportive environment and spirit of inclusiveness. It is no secret that most people think science and math are boring or even scary subjects, stirring memories from grade school of feeling intellectually inadequate. Many people come away surprised how entertaining math and science can be. Brown Bag Science Seminars is one more way Ohlone College promotes ongoing education for all.

High standards in our constant pursuit of excellence

Virtually all the guest speakers are exemplary role models who inspire us to strive for high standards and achievement. Even the recovering methamphetamine addict inspired us to take the high road and avoid the perilous route she had taken.

## **Contribution to Achieving College Goals**

Goal #2, Learning College Model

Ohlone's strong institutional commitment to being "A World of Cultures United in Learning" views all members of the organization as learners. Thus the Brown Bag Science Seminars promotes this model by collecting together everyone at no cost, enabling students, personnel, and community members to be enriched and enlightened on topics of math and science. The BBSS supports the Learning College Model by promoting avid curiosity in new scientific discoveries. It inspires all members of the community to actively seek knowledge to become aware of future trends and job opportunities.

Clearly the BBSS program promotes the Learning College Model. It "walks the talk" by promoting ongoing learning for all. Students, personnel and members of the local community have the opportunity to meet role models and listen to them illuminate a topic, a discovery, an invention, or a career path. This exposure to successful scientists and mathematicians inspires all to see possibilities and to strive to improve the future. Science, math, and engineering are fields offering amazing possibilities and awesome challenges for the future. BBSS helps the entire community to rise to meet the future, to make smart choices, to be excited and confident enough to see a real urgency to understand the technical issues of our day. This has dividends of increased student success and more responsible stewards of our planet.

Goal #4, Continuous learning for all personnel

All Ohlone personnel are urged to attend BBSS. Flyers go in all mail boxes of all the staff, faculty, and administration. Press releases go to the news papers. There is no cost to attendees. The relaxed atmosphere and refreshments add extra inducement -- who can resist chocolate chip cookies?

## **Demonstration of the Meeting of One or More of the Accreditation Standards**

### Standard II.A. Student Learning Programs/Services: Instructional Programs

The Brown Bag Science Seminar Program augments the more formalized training found in regularly scheduled math and science classes. Often instructors encourage or require their students to attend these seminars, particularly when a speaker addresses a topic of special relevance.

Each speaker brings something unique. Sometimes former Ohlone students come back and describe their experiences, such as two of our students were in the first graduating class of the new Bio Engineering Program at UC Davis. A female forensic chemistry inspired students and faculty by her. On another occasion a visiting biologist discussed how global warming is greatly impacting the habitat of polar bears. Students realized that decisions they make – what car to drive, whether to walk or take public transportation, which light bulb to buy, other simple everyday decisions – are impacting our planet. And certainly Ohlone students have a voice to influence our nation's policies. Dr. Doug Treadway, President of Ohlone College, inspires the faculty to motivate students to be proactive in using their knowledge responsibly for the global good.

Some of the speakers are spearheading important research. In March 2007 we were entertained by the wit and energy of speaker Alex Filippenko, UC Berkeley, Professor in Astronomy who spoke on "Dark Energy and the Runaway Universe". Recipient of numerous awards, Alex received National Professor of the Year for doctoral and research universities, which is sponsored by the Carnegie Foundation for the Advancement of Teaching and Support of Education (CASE). He received the Carl Sagan Prize for Science Popularization in 2004. From his comments he seemed truly pleased and impressed with Ohlone College. Many students spoke to him at length after his talk. One student received one-to-one career counseling from Alex. He continues to welcome emails from Ohlone students. Without the Brown Bag Science Seminar program at Ohlone, it is unlikely our students would have an opportunity to meet such a highly regarded research scientist.

## **Expression of Accreditation Themes**

### Dialogue

The BBSS program stimulates both thought and dialogue. Always the speakers encourage questions and discussion. On controversial issues, members of the audience eagerly share opposing viewpoints. For example, when one speaker suggested the notion that maybe the global warming is simply a manifestation of a normal cyclic phenomenon several members of the audience offered rebuttals.

Many hands make light work, and certainly many people work tirelessly to make this event successful. Victoria Loukianoff, Math, works miracles on a shoestring budget. Mylene Pelimiano, Math, gets a real workout putting flyers in the faculty boxes, in addition to purchasing refreshments. Van Nguyen, chemistry lab technician and Jim Klent, Emeritus chemistry professor, dutifully delivers the refreshments to each event. Maru Grant, Chemistry, arranges for audio visual equipment, taping the speakers for our archives. Our collection is growing – these tapes can be viewed by anyone upon request. Yvette Niccolls lines up speakers. Cheryl Lambert publicizes these events on our webpage. Patrice Birkedahl and Gosia Gizscky make press releases. Yu Hay Kong and Yu-Pui Kong make sure all needed technology is running flawlessly. And this event certainly would not have taken off without the constant support and encouragement of Dr. Ron Quinta, Dean of Math, Science, and Technology, and Dr. Jim Wright, Vice President of Instruction. However, Yvette Niccolls, Faculty Coordinator for Math, Science & Technology, provides the leadership and coordination necessary to make this program an institution at Ohlone that now draws greater than 100 students, faculty and staff together for stimulating, thought-provoking presentations on Friday afternoons.

## The Brown Bag Science Seminar Program Events

### Spring 2000

- What Coral Reefs Tell Us about Climate Change, 4-14-00 by Paul Belasky

### Fall 2000

- Molecular Modeling Using Spartan Software, 10-13-00 by Jim Klent

### Spring 2001

- Using your PDA to Enhance Your Teaching, 4-13-01 by Rob Knight

### Fall 2001

- Super Critical Fluids and Green Chemistry 11-02-01 by Jim Klent

### Spring 2002

- Aviation Engineering, 2-08-03 by Kurt Long, NASA Aeronautical Engineer
- Forensic Chemistry 4-12-02 by Patricia Zajac

### Fall 2002

- A Scientist Speaks Out on Nuclear Armament, 11-15-01 by Andre Toupadokis

### Spring 2003

- History of Science, 3-7-03 by Steve Hannah, Ohlone Instructor

### Fall 2003

- What Did You Do This Summer? Ohlone Students describe internships, 9-5-03
- How to Find Explicit Formulas from Linear Recursive Sequences, 10-3-03 by Gregory Mellblom, Adjunct Professor
- Semiconductors, 11-7-03 by Nicki Stenton of Intel Corp
- Lasers, 12-5-03 by Vince Newell

### Spring 2004

- EHS in Biotech: Things That Should Scare You, Things That Shouldn't" 2-20-04 by Charles Kreider, Associate Director, EHS
- DNA Sequencing and the Human Genome, 3-5-04 by Dr. Mark Barnby
- Global Warming: What Does the Science Say? 4-2-04 by Dr. Jacques Guertin
- Ohlone College GIS Program & How It Can Assist Your Program, 5-14-04 by William Harmon and Narinder Bansal

### Spring 05

- Case Studies in Genetics: ethical issues arising from new reproductive technologies" 2-4-05 by Laurie Issel-Tarver
- Chemistry Demonstrations, 3-4-05 by Jim Klent
- Polar Bears of Manitoba, 4-1-05 by Juliet Hoffman

- Insects as Vectors of Disease Transmission, 5-6-05 by Jim Baxter

#### Fall 2005

- Research Opportunities for Faculty and Students, 8-26-05 by Anu Ganguly Professor – Chemistry, Matthew Hoang (student) and Thomas Myint (student)
- Urban Wildlife, 9-2-05 by Juliet Hoffman – Professor - Biology
- Moving Around with Trigonometry, 9-16-05 by David Topham, Ohlone Professor, Computer Science
- GIS on Campus – the Power of Geographic Information Systems, 10-7-05 by Narinder Bansal, Professor – Earth/Social Science
- The Math & Science of Safety in the Manufacturing of Semiconductor Chips, 10-21-05 by Aaron Zude, Engineer, Facilities & Safety Solutions
- Forensic Chemistry 11-11-05 by Patricia Zajac

#### Spring 2006

- Math is Fun, 3-3-06 by Ron Stazskow, Ohlone Professor of Mathematics
- Biomedical Engineering 3-28-06 by Sunny Shah and Supreet Singh, Ohlone students in first graduating class of Bio Engineering Program at UC Davis
- The Future of Energy, 4-7-06 by Dr. Paul Grant, IBM
- Personalized Medicine and Stem Cells, 4-21-06 by Ralph Sinibaldi
- Biomaterials and Cell Interactions, 5-5-06 by Dr. Cheng Li

#### Fall 2006

- Geologic Hazards Facing Ohlone College Friday Sept 8, 2006 by Steven Newton
- Leading by Example: Environmentally Sustainable Goals for Ohlone College , 9-22-06 by Jeff Watanabe
- Physics of Music: Instruments & Theory, 10-6-06 by Dr. Charles Darwin Hepburn
- A Flight Without Wings: the Story of a Methamphetamine Survivor, 10-20-06 by Brittany Toutou, former Ohlone College student, pre-law
- Engineering at Ohlone, 11-17-06 by Speaker Panel: Linda Messia, Howard Rathbun, Carrie Huang, Jennifer Harper, Ohlone Engineering Professors

#### Spring 2007

- Bioterrorism – Food Defense Challenges in California 3-2-07 by Dr. Paul K. Park, Food and Drug Laboratory Branch, California Dept. of Health and Human Services
- Dark Energy and the Runaway Universe 3-9-07 by Alex Filippenko, University of California, Berkeley
- Prehistoric Life and Global Climate Change 3-16-07 by Paul Belasky, Professor, Ohlone College
- Stories from Real-Life ER: a Physician Talks about Her Career as an Emergency Room Doctor 4-6-07 by Gessica Johnston, MD; Professor, Ohlone College
- Farming in the Bay Area: Breeding, Direct Marketing and Filling Niches 4-13-07 by Fred Hempel, Professor and Jill Shepard
- Quarks, Leptons, Gauge Bosons, Dark Matter, and Dark Energy: Building Blocks of the Universe, 4-20-07 by Charles Darwin Hepburn
- Robotics, 5-4-07 by George Wong, Professor, Ohlone College