Chancellor Robert Birgeneau received his B.S. in mathematics from the University of Toronto in 1963 and his Ph.D. in physics from Yale University in 1966. He served on the faculty of Yale for one year, spent one year at Oxford University, and was a member of the technical staff at Bell Laboratories from 1968 to 1975. He joined the physics faculty at MIT in 1975 and was named chair of the physics department in 1988 and Dean of School of Science in 1991.

Before coming to Berkeley, Chancellor Birgeneau served four years as president of the University of Toronto. He is a foreign associate of the National Academy of Sciences and has received many awards for teaching and research. He is one of the world’s most cited physicists for his work on the fundamental properties of materials.

Chancellor Birgeneau became the ninth chancellor of the University of California, Berkeley, on Sept. 22, 2004. In addition to his outstanding contributions in physics, he is a recognized leader in higher education and is well known for his commitment to diversity and equity in the academic community.

In 2006, Chancellor Birgeneau received a special Founders Award from the American Academy of Arts and Sciences. President John Hennessy of Stanford University and filmmaker George Lucas also received the Founders Award at the same time. Established in the 225th anniversary year of the Academy, this award honors men, women and institutions that have advanced the ideals and embody the spirit of the Academy founders — a commitment to intellectual inquiry, leadership and active engagement.
Understanding and Exploiting our Microbial Ancestor/Companions

On Saturday, January 27, 2007 Professor Emerita Loy Volkman of the Department of Plant & Microbial Biology addressed the Association on the subject “Life, Viruses and the Molecular Revolution.” She reviewed the evolution of living things, which appeared about a billion years after the birth of the earth, defining living organisms by the presence of ribosomes within their cells. These are organelles that assemble proteins, without which no organism can reproduce itself, a requirement for life.

Microbes (single-celled organisms) have played a major role in the history of the earth and humans. About two billion years ago photosynthetic microbes drastically altered the earth’s atmosphere, giving it abundant oxygen that caused a massive extinction of most of the preexisting anaerobic organisms. The human population has exploded in very recent times, greatly facilitated by the control of pathological microbes, leaving one to wonder what revolutionary events may yet follow from this unprecedented event.

A revolution in biological science has occurred within the adult lifetime of most of Professor Volkman’s gray-haired audience. The rise of molecular biology can be dated from the publication of Crick and Watson’s research on DNA structure in 1953. The DNA molecule, only one nanometer (one millionth of a millimeter) wide but several meters long, present in every cell of living creatures, contains the genetic code defining the nature of the organism. In the 19th century biologists began to assemble diagrams showing the relationship between living things based on their appearance, a practice that continued through the first part of the 20th century. However, comparison of the DNA of organisms gives a far more accurate picture of these relationships. For example, it clearly shows human descent from the microbial world. The ability to identify the sequence of the units of the genetic code was greatly facilitated by the invention in 1983 of Polymer Chain Reaction (PRC), a technique that allows small segments of DNA to be clipped and replicated millions of times in a brief period.

Professor Volkman’s research focus has been on baculoviruses that infect and kill caterpillars. The caterpillars’ vulnerability to these viruses opens the possibility to an environmentally friendly form of pest control. Viruses are not living organisms because they lack ribosomes, and Professor Volkman described them as computer software looking for hardware in the cells of living organisms that will allow them to reproduce. Her research has shown that, if caterpillars are infected with a baculovirus, the most lethal path of infection is in the trachea rather than in the gut of the caterpillar. These viruses do not represent a threat to humans because the hardware in our cells is not compatible with baculoviruses’ software. (Is this not a familiar problem to computer users?)

Unfortunately, biological control of pests does not yet produce the rapid and complete pest eradication that American commercial growers demand, but the course of biological science and environmental concerns would seem to favor its greater adoption in the future.

The stunning pace of progress in biological science in the last 50 years provides the basis of medical, agricultural and environmental technologies that may be only in the early stages of development. But it has also made us increasingly aware of the tremendous significance of the microbial community to which we humans belong. Professor Volkman stated that the number of microbial cells in each of us exceeds by a factor of five the number of our own cells. (Microbes have small cells!)
Announcements from the President

1. Final reminder: Annual dues were due by January 1st. Please check the mailing label on this newsletter for your expiration date. If it is dated 2006, your membership is lapsed and you will be removed from the mailing list before the next newsletter is published. Please send your dues checks of $15 to UCBEA, 2 Boalt Hall #7200, Berkeley. CA 94720-7200.

2. Nominations for membership on the Executive Committee of the Emeriti Association are being solicited. If you know of someone who would like to participate, please send the name to Dick Malkin at the following email address: dickm@nature.berkeley.edu. [While being interviewed about the Emeriti Association, Errol Mauchlan commented the future depends on the vitality of the Board—ed.]

3. The Committee on Research of the Academic Senate does award support for research to emeriti faculty. For further information, you may contact your department chair or go to the Committee website: http://research.chance.berkeley.edu/funding/corgrant.htm.

Spotlight on board member Errol Mauchlan

It’s guid to support [California’s] cause,
And bide by the [gold] and the blue!
Robert Burns

Errol Mauchlan was brought up in the south of Scotland, where he and his mother, a widow, lived in several small towns and villages while he was growing up. The most memorable of these were Earlston, where he began elementary school, and North Berwick, where he attended high school.

He graduated from high school in June 1940, immediately following the fall of France and the evacuation of the British Expeditionary Force from Dunkirk, France. He joined the Fleet Air Arm of the Royal Navy soon thereafter and served as an observer in Swordfish torpedo-bombers on the aircraft carrier H.M.S. Illustrious in the Indian Ocean; as a navigator-minelayer in four-engine Halifax bombers with Bomber Command of the Royal Air Force, flying from Breighton in Yorkshire to lay mines in Nazi naval harbors on the German and Vichy French coasts; and in Barracuda torpedo-bombers on the aircraft carrier H.M.S. Glory in the Pacific, where he witnessed the eventual surrender to Australia of the Japanese South-East Asia army.

In 1946 Errol was admitted to Edinburgh University where he took an M.A. degree in honors English Language and Literature. He worked for six years for the British government, both in Edinburgh and in London, before emigrating to North America with his wife, Margaret, in 1956.

He joined the Berkeley campus in 1957, and in 1958 was hired by then-Chancellor Glenn Seaborg as his Budget Assistant. He remained in the Chancellor’s Office to the end of his career in 1991, serving five Chancellors — Seaborg, Strong, Heyns, Bowker and Heyman — ending as Assistant Chancellor — Budget and Planning. He says, “Obviously, I was the least mobile of Californians!”
New Humanities Forum

The Doreen B. Townsend Center for the Humanities celebrates its 20th anniversary with a new forum “Humanities and the Public World.” Anthony Cascardi, the Center’s new director says, “the forum is designed to underscore the crucial importance of the humanities in an increasingly complex and troubling world. It is up to humanists to raise questions about the values we hold, both as individuals and as a society. The forum will provide a much needed opportunity for the public to re-engage with the humanities as they are practiced today.” Series participants and topics include:

Robert Reich, professor at UC Berkeley’s Goldman School of Public Policy, “The Four Narratives of American Public Life,” 5pm, Wednesday, February 21, Room 315 Wheeler Hall.

Robert Post, David Boies Professor of Law, Yale University, “Religion and Freedom of Speech: Cartoons and Controversies,” 7:30pm, Tuesday, March 13, Lipman Room, Barrows Hall.

Alfred Brendel, pianist, essayist and poet, with Cascardi as moderator, 5pm, Friday, March 16, Great Hall, Bancroft Hotel, 2680 Bancroft Way, Berkeley.

Philip Kan Gotanda and Carey Perloff. A panel discussion presented in association with the American Conservatory Theater production of After the War, a play about the internment of Japanese–Americans from San Francisco’s Japanese district. In addition to playwright Gotanda and ACT’s Artistic Director Perloff, panel participants include Duncan Williams, UC Berkeley Professor of East Asian Languages and Cultures and Colleen Lye, UC Berkeley English professor. 7pm, Tuesday, April 3, ACT 415 Geary Street, San Francisco, and 5pm, Monday, April 9, Townsend Center. 220 Stephens Hall, UC Berkeley.

New Theater Piece

Set in Ireland during World War II, Dolly West’s Kitchen is the gripping and blisteringly funny story of a close-knit Irish family struggling to come to terms not only with the effects of war on their country but also with one another, as issues of love, sex, jealousy, adultery, homosexuality, and divided loyalties come to the fore. Directed by Christine Nicholson, this production will be performed on the following dates: March 2, 3, 9, 10 at 8pm. March 4, 11 at 2pm. Tickets: $14 general admission, $10 UC faculty/staff, $8 students/seniors. For more information, email tdps@theater.berkeley.edu or call 510-642-9925.

Berkeley Dance Project 2007

The Reception, a cross-disciplinary performance piece utilizing dance choreography and tele-immersion technology to explore a re-visioning of cyber culture and corporeal presence anchors this program, which also features new choreographic works by Tammy Cheney, Robert Moses, Carol Murota, and Ellis Wood. Co-directed by Lisa Wymore and Ruzena Bajcsy. April 20, 21, 27, 28 at 8pm; April 22, 29 at 2pm. Zellerbach Playhouse.

Lunch Poems in 10th Year

Meeting in Morrison Room at noon on the first Thursday of each month, the following carries us through the end of the semester:

March 1 Myung Mi Kim

Born in Seoul, Korea, Kim is the author of four books of poetry, including Commons and Under Flag, and is the winner of the 1991 Multicultural Publishers Book Award. April 5 Joanne Kyger

Kyger’s works often echo her practice of Zen Buddhism and her ties to the 1950 rebel poets of Black Mountain, the San Francisco Renaissance and the Beat generation. Her latest collection, About Now: Collected Poems, is forthcoming from the National Poetry Foundation. She frequently teaches at New College of California in San Francisco and the Jack Kerouac School of Disembodied Poetics at Naropa University in Boulder, Colorado. May 3 Student Reading

The annual student reading features winners of the following prizes: Academy of American Poets, Cook, Rosenberg and Yang. It also includes students nominated by UC Berkeley’s creative writing faculty, Lunch Poem volunteers, and representatives from student publications.
Two New Indian Exhibitions — On Campus and Off

From the Land of the Rajas: Creativity in Rajasthan, a new exhibition at the Phoebe Hearst Museum of Anthropology explores a northwestern Indian state famed for its princely rulers’ enthusiasm for a wide range of colorful and distinctive art styles. Some 150 objects to be on display through December 21 include domestic crafts, wedding textiles, festival material, puppets and theatrical costumes, ritual masks, musical instruments, paintings for traveling storytellers, temple sculptures and paintings, and paintings made for tourists.

One dramatic display features a 30-foot painted scroll depicting the epic of Pabuji, a semi-divine folk hero. Traditionally the Pabuji tale is recounted in a 36-hour performance by professional storytellers. One large and impressive temple hanging features the Hindu god Krishna surrounded by beautiful milkmaids or “ghopis.” Many of the Rajasthan pieces are uncommon in American museum collections because of their large size and rare glimpses into Rajasthan ritual arts.

Joanna Williams, UC Professor of art history and an authority on the art of India and Southeast Asia, helped advise on this exhibit as well as on Princes, Palaces and Passions at the Asian Art Museum in San Francisco. Princes, Palaces and Passions closes April 20, 2007. The two exhibitions should spur Bay Area interest in Indian art, drawing visitors to each locale. Admission to the Hearst Museum is free.

Faculty Nightstand

Before school starts, all UC Berkeley freshman are sent the annual Summer Reading List, an eclectic collection of literary recommendations from people all over campus. Inspired by this, the UC Berkeley NewsCenter has invited a rotating cast of Faculty to share what they’re reading—and why. This is the first Faculty Nightstand series of recommendations:

The People’s Act of Love, James Meek, 2005

Scott Saul, associate professor of English: “From one angle it’s Anna Karenina meets The Silence of the Lambs—a wealthy Russian woman seduced into adultery by a mastermind who may also be a cannibal. From another it’s Red Cavalry meets American Pastoral—an intellectual Jewish soldier meditating on the ethics of bomb-throwing in a revolutionary age…It’s] a novel that grabs you by the lapels and won’t let go. It’s intellectually meaty and completely riveting…”

The Innocent Man, John Grisham, 2006

Julia F. Hastings, assistant professor, School of Social Welfare: “I’m a Grisham fanatic and have read every book he’s written. His latest is his first work of nonfiction, and it covers a sad tale of the Oklahoma penal system and how easily wrongful convictions can occur under tremendous public pressure to convict…Compared to previous…books this one was just chilling because I knew it was reality…I would recommend this…whether you’re for or against the death penalty…”


David Presti, senior lecturer of neurobiology: “Wilson’ is Woodrow Wilson, president of the United States during and immediately after World War I, who advocated a non-vengeful peace treaty to end that war and a powerful multilateral League of Nations to preserve the peace. Both goals failed, and the 20th century went on to be by far the bloodiest in human history…This book puts forth a plan of wise action to reduce future conflict among people, a plan grounded in three imperatives: reducing human killing, cooperating multilaterally, and developing empathy for adversaries…”

(adapted from Berkleyan article written by Bonnie Azab Powell; for complete article see http://www.berkeley.edu/news/media/releases/2007/01/26_nightstand.shtml)
Free Noon Concerts - Hertz Concert Hall
Wednesdays - 12:15 - 1:00 pm

February 28 - Tony Lin, piano
Shostakovich, Tchaikovsky, Stravinsky, Prokofiev

March 7 - String Quartet
April Paik, violin
Melisa Lin, violin
Jeff Kuo, viola
Ting Chin, cello
Mendelssohn, String Quartet No. 2 in A minor, op. 13 “Ist es wahr?”

March 14 - Jessie Lee, piano & fortepiano
Mozart, Liszt, David Del Tredici

March 21 - Jorge Liderman & Duo 46
Beth Ilana Schneider, violin & Matt Gould, guitar
Selections from Jorge Liderman, Aires de Sefarad, 46 Spanish Folk Songs

April 4 - Contemporary Music for Piano & Electronic Tape
Mei-Fang Lin, piano
Mario Davidovsky, Jonathan Harvey,
Mei-Fang Lin, and a new work by Jean Ahn

Wednesday, April 11 - The Elizabeth Elkus Memorial Noon Concert
University Symphony Orchestra
David Milnes, conductor
Shostakovich, Violin Concerto No. 1 with soloist Marina Sharifi