Professor Emerita Paola Timiras
Department of Molecular and Cell Biology

“Living Longer and Feeling Younger”
Saturday, September 13, 2003

Paola Timiras, vice-president of UCBEA and Professor Emerita of the Department of Molecular and Cell Biology, will be our guest speaker at the next UCBEA luncheon at The Faculty Club on September 13, at 11 a.m.

After receiving her M.D. degree from the University of Rome (1947) and her Ph.D. from the University of Montreal (1952), Professor Timiras came to Berkeley in 1955. For more than forty years she has had a distinguished career as a researcher and instructor in the Department of Anatomy and Physiology (after 1989, Department of Molecular and Cell Biology). She is the author or co-author of more than 400 publications and has served in numerous capacities as a consultant for U.S. Government agencies which support biomedical research. Her scholarly achievements have been recognized in this country and abroad, by medals and citations from universities in Italy, France, and Venezuela, and by appointments as president of international scientific societies.

Although Professor Timiras has done research on a broad range of subjects in the biological sciences, she has been particularly concerned with the aging process, the subject of many of her research papers and of a book: Physiological Basis of Aging and Geriatrics, Third Edition (2003). She will discuss the aging process in its contemporary context. The title of her talk, “Living Longer and Feeling Younger,” is a topic of abiding interest to the membership. We hope to see you there.

UCBEA Special Event
Friday, October 24, 2003

Professor Richard A. Muller will present his talk “Death of the Dinosaur” at 4 p.m. in The Faculty Club Howard Room. Light refreshments will be served for a modest fee of $5 (See insert for details).

Those attending may wish to make reservations for an “Early Bird” dinner following the event. The cost of a three course meal is $11.95 in the Kerr Dining Room during the hours of 5 p.m – 6:30 p.m. Reservations for the “Early Bird” special should be made directly with The Faculty Club at
No Need to Invent the Wheel - This Research Has Legs!

On Saturday, May 3, Professor Robert J. Full of the Department of Integrative Biology gave UCBEA luncheon attendees a superbly informative and entertaining report of his research on animal locomotion.

Animal evolution did not develop wheels, but legs will do. Whether a creature has 2, 4, 6, 8 or 44 legs, its locomotion is wondrous to see in Professor Full’s videos.

Photographic study of animal movement really began in 1873 when Leland Stanford contended that a running horse simultaneously has all four feet off the ground. Using a camera capable of a rapid succession of photos, the precursor of motion picture cameras, Eadweard Muybridge settled the issue in Stanford’s favor. Today, high-speed digital video cameras used in Professor Full’s Poly-PEDAL laboratory can take up to 50,000 pictures per second.

We were shown a cockroach running freely over terrain with obstacles three times hip height. At high speed the American cockroach rises to an upright bipedal running position, giving the impression of a human sprinter coming out of the starting blocks.

The amazing stability in animal locomotion arises from mechanical principles, not from a complex of sensors and feedback circuits. Recognition and understanding of this self-stabilization is very significant in the design of robots – computer brains are not needed. However, in Full’s group the designers of robots, while inspired by nature, do not imitate it, and in fact may improve desired aspects of performance. Artificial creatures do not have to struggle to survive and reproduce. We were shown robots crawling and swimming over land and water, unfazed by being accidentally inverted.

In a video, two geckos were shown moving equally fast over a flat surface, but one was running on a horizontal surface, and the other on a vertical, molecularly smooth surface. The audience was challenged to tell which was which but could not! How is it possible for these tropical lizards to move rapidly upward against gravity on a smooth surface? The mechanism, Full’s group has discovered, is in the extraordinarily fine hairs on the feet of the gecko which bring the molecules of the surface and of the hairs into such close proximity that very short-range inter-molecular attractive forces, Van der Waals forces, come into action.

Professor Full’s research is striking in its interdisciplinary and collaborative nature. It involves biologists, ecologists, engineers, materials scientists and computer scientists. His approach emphasizes that science and education are social processes. Undergraduates as well as graduates and post docs do research in his lab. He has taught a course in middle school, where he finds the students to be extremely creative – they do not yet know what cannot be done. His openness to collaboration is attractive, and in a gracious note at the beginning of his talk, he recognized the support of campus administrators for his program, particularly acknowledging that of UCBEA President Louise Taylor during the reorganization of biology at Berkeley.

In his younger days, Professor Full aspired to be a major league baseball player and was good enough to try out for the Pittsburgh Pirates. However, injury ended that possibility. Pittsburgh’s loss is Berkeley’s gain, and Professor
Ask Adrian

Adrian Harris, UCLA Vice Chancellor-Planning, Emeritus, has, since his retirement, chaired the systemwide Council of University of California Retiree Associations (CUCRA) and the Joint Benefits Committee which raises issues with the UC Office of the President on protecting and enhancing benefits to UC annuitants. He also served as CUCRA representative to the UCRS Advisory Board which advises the President on retirement issues.

Recently, Adrian has begun a Q and A column for the UCLA emeriti and retiree newsletters, covering issues such as funds available in tax-deferred plans offered by the Regents, benefits to surviving spouses and benefits to a second spouse. You may receive this same advice—individualized—by contacting him at harris@ucla.edu. If you do not have email, contact the Center (510/642-5461), and they will set up a telephone appointment for you.

Reduce Unwanted Phone Calls and Email

If you have not registered for the National “Do Not Call” list you can do so by calling 888/382-1222, or you can register online at www.donotcall.gov. Registrations is free and active for five years. Telemarketers must stop calling, and you can file a complaint, three months after your registration date.

If you register before August 31, you can expect the following:

September 2003 – Telemarketers must remove “Do Not Call” numbers from marketing lists. They have thirty days to remove names and phone numbers once you register.

October 2003 – Unwanted calls must stop.

Telemarketers can be fined up to $11,000 for each call.

Do not be fooled into paying fraudulent service companies offering this same service. Many are identity thieves trying to steal your personal information.

Tips for reducing junk email (Spam)

Keep your email address private, and ask your friends and family to keep your address private, as well.

Avoid submitting a friend’s email address in an online form. Send your friend the web address.

Use a free email account (Hotmail, Yahoo, etc.) for making online purchases and for completing Internet request forms, subscriptions, etc. – many online

Satisfactory Services

New Recommendations

September and October on Campus

Wednesday Noon Concerts, Chevron Auditorium (I-House)

September 3
Tiffany Shiau, Piano

September 10
Hannah Son, soprano: Korean songs, Stephen Higa, voice, guitarrasaracenica and percussion

September 17
Mozart Clarinet Quintet, K. 581

September 24
University Symphony Orchestra

October 1
Cary Koh, violin and Miles Graber, piano

October 8
Robert Calonico, clarinet
Jacqueline Chew, piano

Alexandra Roedder, cello, Adam Scow, violin, Tiffany Shiau, piano

October 3 – 19
Foe

Zellerbach Playhouse, $8-$14

World premiere of Foe (J.M. Coetzee), adapted and directed by Assistant Professor Peter Glazer, presents a provocative and political rereading of Daniel Defoe’s Robinson Crusoe, told from the point of view of a female castaway.

Tuesday, October 21, Noon

Morrison Library

Berkeley Writers at Work

Linguistics Professor John McWhorter – author of The
Fall Exhibits: Berkeley Art Museum

**JAPANESE FIGURE STYLE**

Now - October 26, 2003

A new selection of paintings in the museum’s Asian Galleries surveys some of the appealing figure styles available to artists working in Japan’s long and prosperous Edo period (1615–1868). These paintings artfully blend styles first developed during the classic Heian period of the eleventh and twelfth centuries – the colorful and elegant art of the court and the informal, caricature-like ink painting of Zen Buddhist priests. Added later were elements drawn from the brash genre style of urban artists, the vibrant simplicity of folk paintings, and the technical novelty of newly imported

**GENE(SIS): CONTEMPORARY ART EXPLORES HUMAN GENOMICS**

August 27, 2003 - December 7, 2003

From glowing bacteria to transgenic mice and “manimals,” Gene(sis) presents artists’ visions of a post-genomic future. Featuring nearly one hundred works by renowned and emerging contemporary artists, this exhibition was coproduced by the Henry Art Gallery at the University of Washington and BAM/PFA.

Gene(sis) takes its name from a 1999 work by conceptual artist Eduardo Kac, Genesis, in which he investigates the philosophical and political dimensions of communication and biotechnology. A free docent-led tour takes place on Friday, September 26, at 11am. Call the Center for reservations.