CHEMISTRY BIOCHEMISTRY

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For past and present students and friends of Chemistry and Biochemistry at California State University, Long Beach • Fall 2000 • Number 25

25th Anniversary

CONTENTS

New Science Building to Rise at CSULB

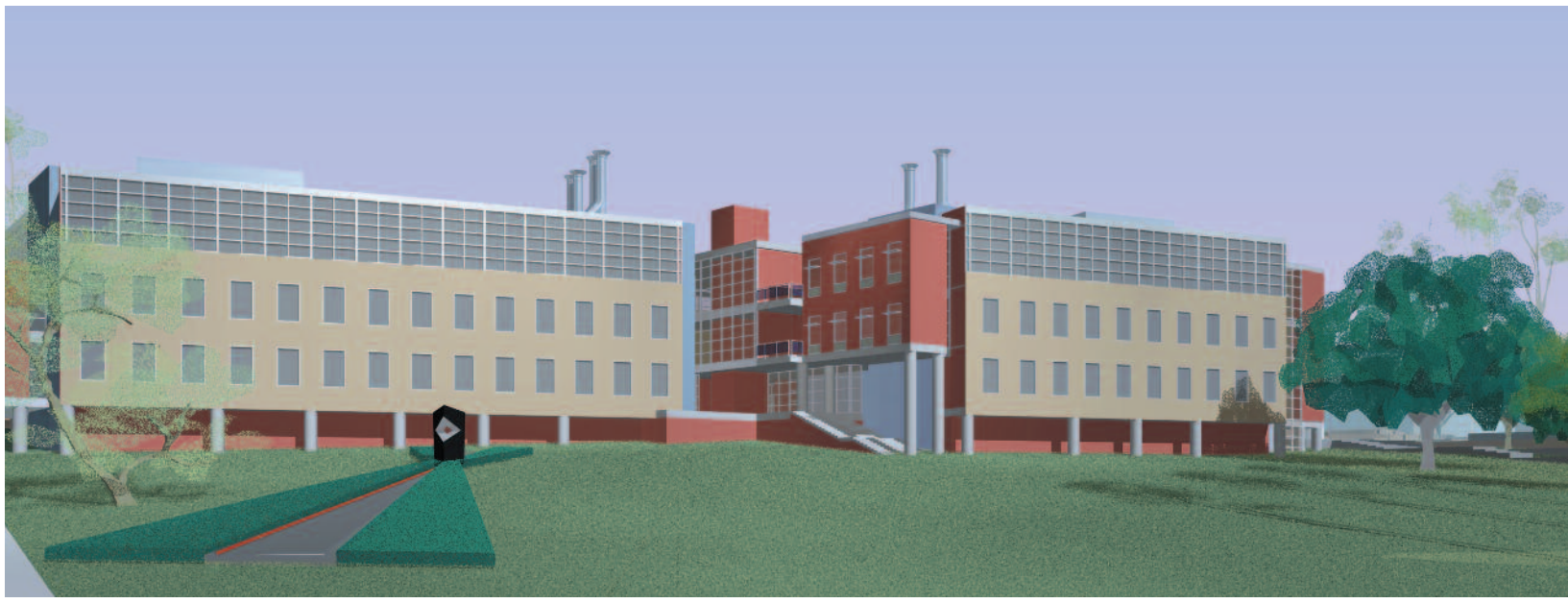
by Glenn Nagel — *Dean • College of Natural Sciences and Mathematics*

We are very pleased to announce that funds for the construction of the long-awaited CSULB Science Building have been included in the 2000–01 State budget. The 80,000 sq. ft.–structure will be placed on a beautiful hillside location just north of Peterson Hall 3 ("Hard Fact Hill"). Fully dedicated to the practice of science, it will provide laboratories for the Departments of Chemistry and Biochemistry and Biological Sciences. The building, designed by A.C. Martin, who also planned the Beckman Institute at Cal Tech, has already won an Honor Award for Excellence in Design from the American Institute of Architects and promises to enhance not only education and research but add significantly to the beauty of our campus as well. Groundbreaking ceremonies are anticipated to take place early next year. We hope that many of our loyal friends and alumni will be able to join us for this very special and exciting event.

In gaining approval of this building, our College owes much to President Maxson and Provost Anatol. Their vision and strong support for science and mathematics have been unwavering through the arduous approval processes on campus, at the Chancellor's Office and in Sacramento. Science is a top priority at CSULB and will continue to grow and thrive with the interest and support of the people of California, including you, the readers of this Newsletter, who are our closest friends.

While the State budget provides $28 million for construction, there are many needs the departments and the College have identified that are still required to achieve the margin of excellence we seek. We strive to integrate research and education and to provide students with a rich background in laboratory work and instrumentation that prepares them for careers in industry, research, medical science and education. There are many opportunities for our supporters to join us in pursuit of these goals through gifts and pledges, large and small. Opportunities range from naming the building and sponsoring specific laboratories, to supporting the purchase of instruments or equipment items. Also, we never lose sight of the human side of science and mathematics and constantly seek ways of supporting students through scholarships and research fellowships and helping to support faculty, including many new assistant professors who are joining us and building their careers on our campus.

If you would like to find out more about our new Science Building (as yet unnamed) and about opportunities to increase its impact on science at Long Beach, I invite you to call 562/985-1521 or send an e-mail to myself: <gnagel@csulb.edu> or to Patricia Maxwell: <pmaxwell@csulb.edu>, our very capable Director of Development. ■



Architect's rendering of new Science Building.

Dr. Bette Korber

Photo by Julie Graber

Alumna Investigates Origin of AIDS

In a paper presented at the seventh Conference on Retroviruses and Opportunistic Infections in San Francisco in February, **Dr. Bette Korber,** a Biochemistry graduate of our department **(BS 1981, PhD Caltech),** reported that the results of her research indicate that the HIV viruses probably passed from chimpanzees to humans in about 1930 as a result of hunting, butchering and eating chimpanzees. This finding challenges previous unsubstantiated assertions that HIV transmission evolved from chimpanzee cells used in testing polio vaccine in Africa in the 1950s. Her computer-based studies compared the composition of the genetic material of many current strains of the virus, extrapolating back to a common origin. Two different statistical investigations both pointed to 1930 as the cross-over date.

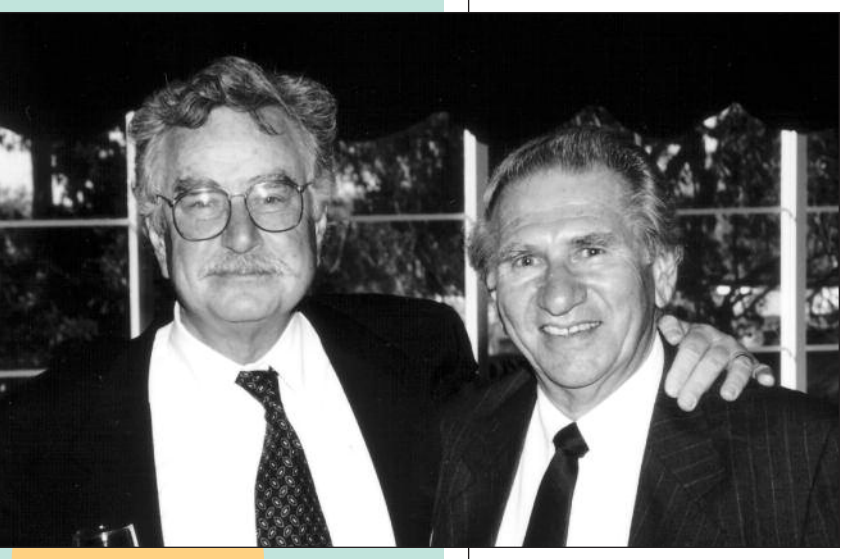
These results were arrived at by the same computational techniques used to identify a common female ancestor of modern humans, termed "Eve," who presumably migrated out of Africa between 100,000 and 200,000 years ago.

The Los Alamos National Laboratory, where Dr. Korber is employed as a geneticist, is the custodian of all the genetic sequence information on HIV reported throughout the world. Notices of her presentation were widely heralded in the popular press, including *Time* magazine (Feb. 14, 2000) and on the front page of the *Los Angeles Times* (Feb. 2, 2000). ■

Remarks by the Chair

Nail M. Senozan

This year we conducted two faculty searches and were able to hire the top candidate in the areas of both organic and analytical chemistry. Dr. Paul Buonora joined us in September as associate professor of organic chemistry and Dr. Krzysztof (Chris) Slowinski will begin as assistant professor of analytical chemistry in January 2001. See more detailed information on these new faculty elsewhere in the Newsletter.



Dr. Nail Senozan (left) and Dr. Ken Marsi celebrate student awardees at Annual Awards Dinner in May.

As we prepare to welcome Drs. Buonora and Slowinski, we are also experiencing the sweet sadness of bidding farewell to Drs. Devore and Wynston. Les Wynston joined the CSULB faculty in 1965, a semester after I had, and taught full time until he entered the Faculty Early Retirement Program in 1998. This spring, after teaching his last two courses, Survey of Biochemistry and Clinical Chemistry, he elected to take full retirement. Les will remain in Orange County and plans to continue his frequent journeys to Europe and Asia with his wife, Anna. Dr. Devore chose not to take advantage of the Faculty Early Retirement Program and retired fully in May.

In March we had the pleasure of welcoming Harvard professor Dudley Herschbach as our 21st Distinguished Lecturer. Dr. Herschbach gave two talks (see an accompanying article) and spent two nights in Long Beach as the department's guest. The students had ample opportunity to interact with him. His dedication to teaching and obvious affection for students helped ease the reluctance felt by many in approaching an eminent scientist, and our students and the winner of the 1986 Nobel Prize were soon like old friends in animated conversation, sharing laughter and jokes. Dr. Herschbach's visit was made possible through a generous gift from Allergan Corporation. Allergan will continue to support our Distinguished Lecturer program. Please check our website <chemistry.natsci.csulb.edu> in February 2001 to find out about next year's plans.

In early May we celebrated the accomplishments of our students at an awards banquet. Gifts from our alumni, friends and corporate supporters now make it possible for us to recognize 15 areas of excellence and offer several scholarships/fellowships. The monetary value of these awards and scholarships exceeds $12,000 a year, and they range from $100 for freshman chemistry to $2,500 for the Monahan Memorial Fellowship and the Lab Support Scholarship. The awards dinner brought together over 70 guests—relatives, friends and faculty—in a formal yet joyous environment. Our new department secretary, Gina DeFinis, and her assistant, Wanda White, organized the dinner and helped make the evening memorable.

This fall the department begins the self-evaluation process. An important component of this activity is an assessment of our programs through the accomplishments and testimony of our alumni. We need your help in confirming our strengths and detecting our weaknesses, in pinpointing what we are doing well and where we can improve. Please send us your comments—a word or two on a piece of paper or e-mailed <nsenozan@csulb.edu> will be invaluable. Thank you and please stay in touch. ■

Dr. Dudley Herschbach: Allergan Distinguished Visiting Lecturer

by Nail M. Senozan

Under the sponsorship of Allergan Corporation, Dr. Dudley Herschbach, Baird Professor of Science at Harvard University and Nobel Laureate, this year was our 21st Distinguished Visiting Lecturer. He presented two talks titled "Sacred and Profane Love: Teaching Science as Human and Divine" and "Maxwell's Demon: Taming Unruly Molecules" on March 24. The background for the title of his first talk, which was aimed at the education community at large and delivered to an overflow crowd of 200 students, faculty and staff, emerged as Professor Herschbach opened his lecture with Sacred and Profane Love, a 16th century painting by Titian. The painting depicts two maidens, one aloof and frowning but opulently gowned, the other holding high a flaming torch but nearly nude. Herschbach suggested these maidens represent how humanists and scientists perceive each other, although which figure represents whom remains unclear. In some cases, however, he noted that humanists do frown on scientists as lacking culture. He told of an English class he had in college, in which the instructor expressed pity for an engineering student who the teacher thought would "spend your career improving adhesive tape." Actually, such engineers had done wonders, improving magnetic tape and computers and thereby, among other things, greatly aiding the composition of English themes!

Herschbach expressed his dismay at the schism between humanities and sciences and quoted I. I. Rabi, one of his scientific ancestors, that "science should not be taught as the geography of the universe uninhabited by humans." One means to achieve this is to "teach by parables," Herschbach said. As an example, he discussed the familiar ideal gas law, PV = nRT, asserting that the usual presentation of it robs "all the romance, all the beauty, all the connections" from an inherently fascinating subject. Herschbach's parable began with Aristotle who, 2,500 years ago, explained the working of a water pump by his famous declaration that nature abhors a vacuum. Yet, "Aristotle must surely have known that a so-called suction pump will not lift water more than 34 feet." This can be seen from ancient Greek art that depicts a series of pumps required to bring water up from a valley. Still, Aristotle's dictum prevailed for over 2,000 years.

> *"Science should not be taught as the geography of the universe uninhabited by humans."...I. I. Rabi*

Galileo revisited the water pump and likewise came up with an inadequate explanation; he thought the failure to raise water above 34 feet might occur because a taller column would break under its own weight. It remained for his student, Torricelli, to realize that the invisible "corpuscles of air"—whose existence had been put forward by Galileo himself—press down and lift water, but only to a height of 34 feet. If that is right, Torricelli thought, the corpuscles will also lift mercury but only to a height one-thirteenth that of water. To test his idea, he built the first barometer, from which stemmed a series of experiments that led to the gas law and much else.

Herschbach described teaching and learning chemistry as being similar to "viewing an impressionist painting. Get too close and you are lost in detail, too far and it is just a blur. At a proper distance, wow, it's awesome."

Level of abstraction—proper viewing distance—is crucial to teaching chemistry. Another essential aspect of teaching first-year chemistry, Herschbach emphasized, is vocabulary building. More new words or new meanings are introduced in beginning chemistry than in a first-year foreign language course, and the methods proven to be successful in language teaching should also be used in chemistry. On a lighter note, he said, when Harvard was founded in 1636, the curriculum offered only three courses: Hebrew, Latin and Greek. Teaching chemistry today is not unlike the early days of Harvard. Chemical kinetics is like Hebrew: down to earth, with limited vocabulary; thermodynamics is like Latin: highbrow with lots of words; and quantum mechanics is Greek.

Beginning students and veteran researchers share a special kinship, Herschbach said. Much of the time, both are confused. That worries the neophyte, but exhilarates the veteran, who relishes the possibility of learning something new. In frontier scientific research, unlike academic exercises, the first concern is not about finding "the right answer." At the outset of research, nobody knows the answer; the concern is to formulate good questions and recognize promising perspectives. Thus, writing poetry has more in common with practicing science than juggling numbers to reach an answer at the end of a textbook. That is why Herschbach asks his chemistry students to write poems. He

> *"Beginning students and veteran researchers share a special kinship...much of the time, both are confused."...D. Herschbach*

See page 3, Dr. Dudley Herschbach

Editorial

Kenneth L. Marsi *Editor*

This edition of the Chemistry & Biochemistry Newsletter represents the 25th consecutive year of its publication. When I became department chair in the fall of 1975, one of my priorities was to establish an alumni newsletter for the growing number of graduates.

The first Newsletter.
In 1976 Dr. Robert Henderson and I co-edited the first edition of the Newsletter, a four-page publication. That issue reported the following:

- 356 bachelor's and master's students graduating since the founding of the department in 1958. We now have over 2,000 graduates!
- The establishment of the School of Science with Dr. Roger Bauer as the first dean. Successive deans have been Dr. Fred Shair, Dr. James Jensen and presently, Dr. Glenn Nagel.
- The construction of the Microbiology Building, completed in 1977. That was the last addition to the Science Complex, but we now look forward to the new Science Building scheduled to begin construction early in 2001.
- The visit of Dr. Carl Djerassi of Stanford University as a Distinguished Lecturer, who lectured on "What will human birth control look like in 1985?" (Dr. Djerassi helped develop the first oral contraceptive.) [*Editor's note:* mid-year world populations: 1975, 4.103 billion; 1985, 4.882 billion; 2000; 6.000 billion!]
- The NSF-sponsored department review by Dr. Calvin VanderWerf of the University of Kansas who reported, "The work of the faculty is truly an outstanding—a remarkable—one...achieved with heavy teaching schedules, minimal dollar support, and limited space and facilities." Some would question whether this has changed a great deal!

Gifts to the department.
Elsewhere in this Newsletter is a detailed account of giving to the department during the past fiscal year. I am pleased to report that cash giving reached an all-time high of $42,138. From individual donors the median gift was $100 and the average gift was $236.55. I have been told that the fraction of chemistry/biochemistry alumni who give annually is the highest for any department on campus. Thanks for your loyalty and support!

Student Affiliates of the American Chemical Society.
The CSULB SAACS Chapter was founded in 1959 by Dr. Julie Kierbow and has been a model chapter ever since, winning several national awards. Several alumni have told me how important involvement in SAACS was for them. It gave them leadership experience which benefitted them in their lives after graduation. I would like to mention especially two former students. **Judith Ramillano Jankowski, BS Biochemistry 1994,** as a result of her experience in SAACS (she was president in 1994-95), now works as a program manager with the American Chemical Society in Washington, D.C. Quoting Judith, "I have to say being president of the Student Affiliates of the ACS at CSULB increased my chances of obtaining this position. They have been impressed with our chapter for years. Because of my experience with SAACS, I have creative ideas on how to increase awareness of our program...I'm constantly bragging to the ACS of my positive experience at CSULB and with SAACS." **Jim Brophy, BS Chemistry 1985,** was vice president of SAACS in 1984-85. After a short career as a chemist, Jim entered real estate management and is now owner of Chatz, a coffee house, and Mango Fool, a popular restaurant, both in downtown Long Beach. He is active in the East Village Association and in Long Beach civic affairs in general. He once told me of the importance of his experience with SAACS, especially the leadership conferences which the University sponsored for campus organizations, and how this undergraduate training contributed to his business and leadership accomplishments in the community.

Personal.
This fall I begin my 40th and final year of teaching at CSULB. Including my four years as a teaching assistant in the University of Kansas doctoral program, I will have spent exactly half a century in my chosen profession of chemistry! I have taught approximately 11,000 students, many of whom I clearly remember and some of whom I continue to communicate with. I've always counted it a privilege to teach, and I view with great pleasure the accomplishments of so many of my former students. ■

Editorial box

An annual publication of the Department of Chemistry and Biochemistry for past and present students and friends of the department. News items, feature articles, photos and comments are eagerly invited. All articles not signed in this issue of the Newsletter were researched and written by the Editor. The Newsletter and other departmental news and information may be accessed on the Internet at the following address:

http://
www.chemistry.natsci.csulb.edu

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Dr. Dudley Herschbach:

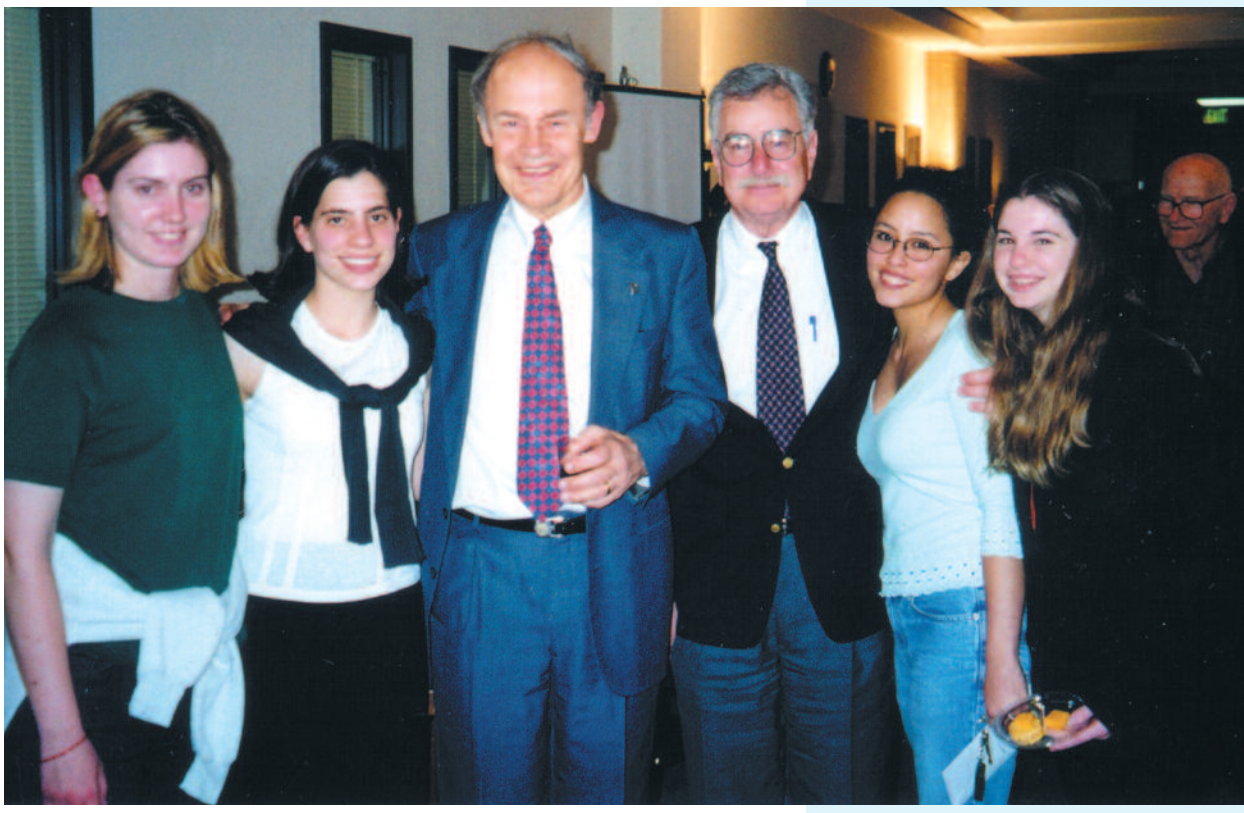
quoted from a student poem, "Chaos, Keep it Coming" that drove home the elusive subject of entropy: "Can you imagine how life would be/If there were no entropy?/Or, making matters even worse,/The laws of entropy were reversed?/Books would get straighter on their shelves,/And children's rooms would clean themselves!/..." Herschbach added that the author, once an English major, is now getting her PhD in physical chemistry.

"The single most satisfying thing I experience in teaching freshman chemistry," Herschbach said, "is when students from other disciplines come and ask for permission to attend my class—students who have heard that this guy who teaches Chem Zen [Chem 10] will talk about some topic that interests them. It is what I call the 'virus theory' of education," he continued as he emphasized the need to "infect" humanities and arts with the science virus.

"Teaching humanities...without proper recognition of science is often downright fraudulent." ...D. Herschbach

He hoped the students who sought his classes would work as agents of science and carry it to humanities. "Teaching humanities such as history without proper recognition of science is often downright fraudulent," Herschbach declared. He cited polymer synthesis, although not mentioned in history books, as the single most decisive factor in the outcome of World War II. The Japanese attack on Pearl Harbor was much less disastrous than the fall of Singapore three months later. That deprived the United States and its allies of virtually their sole supply of rubber, the most critical of strategic materials. The success of a crash program to build synthetic rubber plants stemmed, in turn, from the discovery of nylon. That resulted from a quest for artificial silk undertaken years before the start of the war; without it, we would have lacked a corps of polymer chemists and engineers capable of building the rubber plants on such an urgent time scale.

In his afternoon talk, aimed at a science audience, Herschbach described a method to produce a beam of molecules at very cold temperatures without refrigerants. He had, in fact, created a Maxwell's Demon in the laboratory to select some slowly moving molecules and let others go, an ordering process that had long been deemed impossible. This opens up the prospect of attaining conditions in which molecules will interact as waves rather than particles. Professor Herschbach's genius that had won him the 1986 Nobel Prize in Chemistry emerged once again as he viewed the impressionistic tableau of chemistry and brought into focus previously unrecognized aspects. ■



From left to right: Caroline Carter, Sotiria Contos, Allergan Distinguished Visiting Lecturer and Nobel Laureate Dr. Dudley Herschbach, Dr. Nail Senozan, Diana Fernandez, Jennifer Guzzo, Dr. Darwin Mayfield.

Reports from FACULTY &

Dr. Paul Buonora: New Organic Chemist

Dr. Paul Buonora, previously a faculty member at the University of Scranton in Scranton, Penn., began his duties as associate professor of chemistry in our department in the fall semester of this year. Dr. Buonora received his BS and MS degrees from Indiana University of Pennsylvania and his PhD from the University of Virginia where he worked under the direction of Dr. G. J. McGarvey. He spent two years as a postdoctoral fellow in the Department of Chemistry at Colorado State University, Fort Collins, Colo., where he was associated with Dr. A. I. Meyers. He subsequently joined the chemistry faculty at Lamar University, Beaumont, Texas, where he served as assistant professor of chemistry until his move to the University of Scranton.

His research interests include asymmetric organic synthesis and synthetic methods development. His recent work has focused on chiral *gamma*-dicarbonyl systems, including pyridazine pharmaceutical compounds. His additional interests include the history of chemistry and chemical technology.

Concerning his move to CSULB, Dr. Buonora stated, "I was looking for a university and department with a faculty who as a community are dedicated to the long-term future of the students. Given my interest in both laboratory research and pedagogy, I also want to be able to balance these areas. After researching the programs and visiting the department, I am very happy to join a department that fits the ideal of what I was looking for."

Dr. Buonora has a web page which may be visited at <http://xylene.chem.uofs.edu/~buonora/>.

Left to right: Morton Bongaard, Dr. Annie Bianchino, Dr. Roger Acey, Rick van Minkelen.

Roger Acey. I extended my sabbatical and spent the fall semester of 1999 in Germany. While in Europe, I was fortunate to make contact with two students who wanted to come to the States to work in my lab. Morton Bongaard, a PhD student from Denmark, joined the lab in March and is working on cloning the gene for metallothionein from crab. Morton's wife, Elsebet, and young daughter, Johanne, are also here in Long Beach. Rick van Minkelen, an undergraduate from the Netherlands, spent the fall semester working with Dr. Martin Jadus on a joint project at the Veterans Administration Medical Center in Long Beach. The spring semester and summer were spent in my lab helping us purify proteins from plants.

Markus Sack, a PhD student from Germany, spent three weeks with us teaching students how to transform plants and use them as hosts to produce proteins. The lab definitely took on an international flavor.

Two undergraduate students joined the lab this summer, Jennifer Castellana and Bertha Macias; both undergraduate students. Jennifer is a member of the NSF Scholars Program and Bertha is an MBRS Scholar. Working with tobacco plants and bacteria, Jennifer and Bertha are finding the optimum conditions for expressing *Artemia* metallothionein.

Jeff Selander, BS Biochemistry 1997, spent the summer working on purifying a cholinesterase from *Artemia.* He has since entered a PhD program at UCLA.

Monty Badger, Tom Kelly and Hong Ma have completed their degrees and are gainfully employed. Jason Atalla, Jenny Hong and Eric Stevens are in the process of writing their theses.

Fortunately, the lab is well funded; we have grants from the NIH AREA and VA Minority Initiative programs with Dr. Martin Jadus at the VA. As part of a collaborative effort with Dr. Zed Mason for Biological Sciences and Dr. Feimeng Zhou from CSU Los Angeles, we were able to secure a NSF grant for over $1million. The focus of the grant is to study the mechanism of metal transfer from metallothionein to apo-proteins. Ten students are supported by the grant.

I'm sure most everyone associated with the department in recent years knows Mike Mustillo. He is a local high school teacher who works with us as a part-time research associate.

Dennis Anjo. I have a great group of students this year! Paul Sierocki, a graduate student, is working on pH buffers for electrochemistry at carbon electrodes. Ed Flores is investigating the background signal observed with activated carbon electrodes as a function of pH. Jared Ashcroft is researching surface modifications of carbon electrodes in non-aqueous solutions. Ryan Meacham and Tomo Sakurai are developing a polymer-based carbon electrode. Ed Flores will be working on an undergraduate thesis for the University Scholars Program. Some of the old students will graduate: Tomo Sakurai is planning on graduate school and Ryan Meacham will be teaching next semester.

I have participated in the recruitment of a new analytical chemist for next year, Dr. Chris Slowinski. Dr. Slowinski is interested in electrochemical kinetics and theory, and he will be taking on research students when he arrives.

Peter Baine has been appointed Assistant Department Chair. He was voted Mayfield Outstanding Lecturer by the students of the College of Natural Sciences and Mathematics during the spring semester. In addition, he received the 1999 Agnes Ann Green Distinguished Service Award from the Southern California Section of the ACS. Quoting from the citation published in the September 1999 issue of SCALACS, the section publication, "Dr. Baine's more than a quarter-century of involvement and achievement in ACS affairs at all levels—local, regional and national—certainly qualifies him for this special recognition." In addition to his membership on various sectional committees, he served as chair of the section in 1993. He is currently Councilor to the national ACS.

Jeff Cohlberg. I'm taking a one-semester sabbatical leave in the lab of Dr. Tony Fink at UC Santa Cruz. Tony is an expert on the study of protein folding by biophysical techniques, and I'll be studying the misfolding of the protein *alpha*-synuclein and its role in Parkinson's disease.

Last year was a busy one in the lab. Three students are finishing their MS degrees this summer. Frank Le successfully completed a project involving the construction of chimeric neurofilament protein rod domains and began UCLA Dental School this fall. Gene Rozumov isolated and characterized a number of chimeric NF proteins; Gene will begin a PhD program in organic chemistry in the fall at UCLA. Paula Spencer is finishing some work on the lamprey neurofilament protein and plans to work for a biotech company. Undergraduate Kareem Morgan purified and characterized tailless NF-M protein; Kareem spent the summer doing research at UCSF. Dr. Beth DeBeus, the Dreyfus postdoctoral fellow who has been doing immunofluorescence studies of neurofilament protein assembly, moved to Phoenix with her family.

I have continued working with molecular modeling in our Chem 441AB biochemistry course. Beginning fall 2001 every student taking biochemistry will learn to download protein and nucleic acid structures from the databases and display and explore them with molecular modeling software. We are also looking forward to the new four-unit version of the Chem 443 lab course, which will have an expanded lecture component beginning spring 2001.

I'm writing this after my first week in Santa Cruz. My daily routine consists of riding my bike to the bus stop at the campus entrance, getting a lift up through oak-studded grasslands to the upper campus in the redwood forest, working in a lab with a view of redwood trees outside, and coasting home past a 180-degree view of Monterey Bay. I sure miss that view of the loading dock area from my office window in Peterson Hall!

Gina DeFinis is our new Administrative Coordinator for the Department of Chemistry and Biochemistry. Gina is originally from Bakersfield and was employed by Bakersfield College for six and a half years. In January 1999 she moved to Southern California to work for the dean of Extension Services at CSULB, Dr. Robert Behm. "I use my lunch hours to attend CSULB part time. Outside my work I coach youth cheerleading and am a professional Polynesian entertainer. I have been dancing for 27 years, and I had my own Polynesian dance group in Bakersfield, but now belong to a Polynesian group in Huntington Beach called 'Westwind Productions.'"

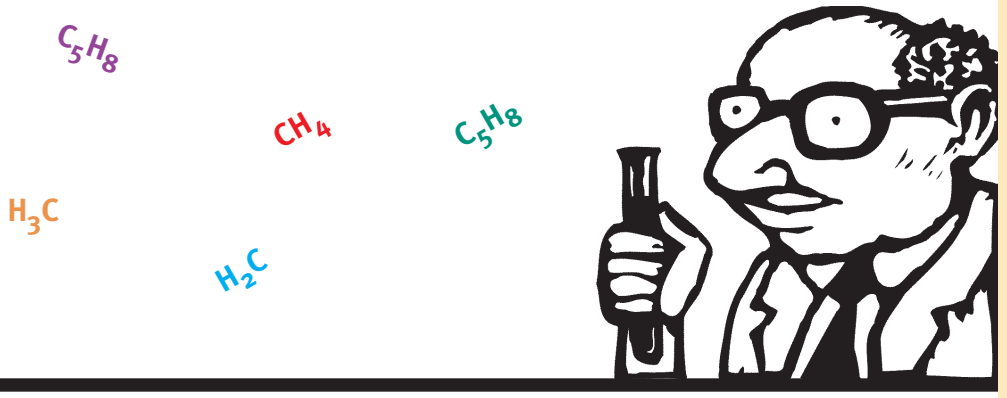
Gina DeFinis, Administrative Coordinator

Jerry Devore retired at the end of the spring 2000 semester. He and his wife, Anna, will move to Oroville, an old gold mining town north of

Joyce Kunishima presents a farewell cake at a retirement reception for Dr. Jerry Devore and wife, Anna.

Continued on page 5

STAFF



Sacramento, where he will be tending his 10 acres of land and orchards and continuing his studies on theoretical chemistry.

Dorothy Goldish. Although many of the long-time faculty members have now retired, I am still teaching at CSULB. I continue to serve as undergraduate advising coordinator for the department. My husband and I recently visited Ohio State University, where our son, Matt, now teaches history, and to see Matt's family (including three children). Daughter, Judy, is an engineer at Boeing, working at Huntington Beach on the space shuttle.

Lijuan Li. The new inorganic laboratory experiments, developed by Dr. Peter Baine and myself, have been added to Physical Chemistry Laboratory, Chem 373, and were offered for the first time in the spring of 2000. All were successful and students enjoyed making those colorful inorganic compounds and measuring their physical properties.

Mohammed Shaaban from UC Irvine joined my group in January. Jennifer Dulalia and Maria Matutina worked with me for their undergraduate research experience and have completed the BS in Biochemistry. They presented their research at the Southern California Section ACS Undergraduate Conference at Occidental College in April, 2000. My graduate student, John Liarakos, presented his work at the National ACS meeting in San Francisco in March, 2000. We have had two papers published, which brings to a total of four refereed publications in 1999. Part of Dmitry Pervitsky's work was published in *J. Amer. Chem. Soc.* 1999, 121, 10217.

Marco Lopez. Members of my research group, the "Heme Team," who are finishing their MS degrees, are Danny Ponce and Phat Hoang. In addition, Richard Newton graduated. New to the Heme Team this last year are undergraduates Jennifer Hines and Juan Lopez and graduate student Kian Kani. Continuing master's students are Jing Leng and Vipal Patel who are both working to complete their theses in late summer or fall. James Stinnett will likely finish in the fall or winter. Continuing undergraduates are Alex Nunez and Jose Pena. For this summer Jose was awarded a MIRT fellowship to study at the Cambridge University in England. There was a need for a faculty member to act as chaperone for the five MIRT students from Southern California. I was asked if I would be willing to go in July and August and I consented. I spent 10 weeks in Cambridge during the summer of 1997. This year I returned to study with Dr. Sir Tom Blundell, head of the Department of Biochemistry, and will continue to learn about molecular modeling of proteins.

Last summer I joined with some 10 faculty in formulating ideas and writing a grant application to the Howard Hughes Medical Institute, and we were recently notified that it was funded. Dr. Merryfield is the program director and is busy getting the program in motion.

In November 2000, Dr. Roger Bauer, Dr. Henry Fung and I accompanied some 10 MBRS and MARC students to the National Minorities Programs Symposium in Phoenix, Ariz. The students had a good time, and their poster presentations were all done quite professionally.

Under the leadership of Dr. Laura Kingsford, chair of the Department of Biological Sciences, eight faculty from Chemistry and Biochemistry and the Biological Sciences, including myself, wrote a SCORE grant application. Each faculty subproject was a full-blown 20-25 page NIH grant application. Each of us sent our proposals for external review with leading scientists in our fields. A few of us have established collaborations as a result of this external review. The expert in my field is Dr. John Olson of Rice University who has characterized the ligand binding behavior of dozens of site-specific mutants of sperm whale myoglobin through equilibrium and rapid-kinetic techniques.

Tom Maricich. I have returned to teaching the Chem 320 lecture sequence, including 48 students in 320A during the summer session. My research group consists of undergraduates Hiral Patel, Eric Churchill, Mike Eagan and graduate student Andrea Chen.

I have been in touch with Dr. M. H. Khalil, a former post-doc from my group in the late '70s. He has developed a new, over-the-counter antiviral treatment for cold sores, which has been approved by the FDA and assigned to Avanir Pharmaceuticals in San Diego. The active compound is docosanol, a 22 carbon straight-chain alcohol derived from beeswax.

Ken Marsi. Refer to the Editorial in this Newsletter.

Douglas McAbee. The 1999-2000 academic year saw a considerable expansion in the number of lab members. Graduate students George Liarakos, Pat Pierce, Daekeun Joo and Thanh Nguyen, are nearing completion of their thesis work; all plan to finish by the end of this summer. Daekeun is getting married this summer, then entering medical school at the University of Cincinnati in August. Thanh has taken a job with Allergan Corporation in Irvine. Pat will return as a lecturer in the department this fall.

Two new graduate students are Cathy Overstreet and Vincent Yee. Cathy is bringing her enthusiasm and work ethic to focus on structure-function analysis of the hepatocyte-binding domain of lactoferrin. She is working to introduce various mutations into a bovine lactoferrin cDNA for subsequent expression and functional analysis. Vincent has chosen to expand on our previous work examining the effects of transition metal overloading of hepatocytes on the dynamics of the asialoglycoprotein receptor.

Three undergraduates entered the lab during the summer of 1999. Sonia Botero and Karina del Toro joined the lab as participants in the college BRIDGES program, both working on making lactoferrin cDNA/plasmid constructs for subsequent mutagenesis. Karina transferred to UCLA in the fall, and Sonia has stayed on in the lab throughout the year as an MBRS fellowship recipient. Kevin Walsh, an undergraduate, also joined the lab last summer, initially studying the calcium and pH requirements for lactoferrin's interaction with asialoglycoprotein receptors. Sonia and Kevin have joined Cynthia Vetting-Kidder and Sergio Lopez as undergraduate research assistants. Cynthia has continued her work on preparing lacatoferrin cDNA/plasmid constructs, and Sergio has begun a project to isolate lactoferrin mRNA from rat premyeloid tissues in an effort to clone the rat lactoferrin gene.

We have published one manuscript (McAbee, D.D., Jiang, X., and Walsh, K. B. 2000; "Lactoferrin binding to the rat asialoglycoprotein receptor requires the receptor's lectin properties." *Biochem. J.,* in press). An invited review on lactoferrin is currently in press (McAbee, D.D. 2000; "Lactoferrin," in *Encyclopedia of Molecular Medicine,* Wiley). We were awarded a grant ($50,289) from Research Corporation to fund our structure-function analysis of lactoferrin. I'm in the process of writing a competitive renewal of my NIH grant.

I prepared and used Websites: <http://www.chemistry.natsci.csulb.edu/441A; http://www.chemistry.natsci.csulb.edu/chem441B> for my undergraduate biochemistry courses.

I've been designated interim director for the biochemistry graduate program in the last half of 2000, filling in for Dr. Jeff Cohlberg who is on sabbatical leave.

Margaret Merryfield. In May I concluded my final term as chair of the Planning and Educational Policies Council. The day of the final meeting was the day I heard that the grant from the Howard Hughes Medical Institute (described elsewhere in the Newsletter) had been funded. I immediately found myself with a new challenge—running the Honors in Biological Science program.

I have continued to serve as coordinator for General Education Implementation. What this mostly entails is doing, as Garrison Keillor says, what has to be done; in particular, I run lots of workshops, give lots of presentations, answer lots of questions and try to spot problems before they become crises.

Congratulations to Keynes Tong, who finished his MS thesis this year and is working in San Diego. Currently in the lab are new graduate students Cathy Barra and Mike McAllister; undergraduate Kristi Fox; and soon-to-be-finished graduate student Takayuki Mizutani. Taka and I had adventures this year attempting to learn a few things about plant enzymology. Kristi, a 49er softball player, had a more exciting summer than I; she was invited to spend several weeks in Canada as part of an all-star team playing various national teams. As for me, I continue to collaborate with Tom Ma at the V.A. Medical Center, looking at phosphorylation in the regulation of tight junctions, and am a co-author on two papers from his group this year.

As for the young Merryfields, James graduated from Long Beach Poly High School and is attending Berkeley this fall. This year he started doing research with Jim Stein in the CSULB Department of Mathematics; the two of them are revising one paper and getting a second one ready to go out. Unfortunately, it's beyond my comprehension. James gave a seminar at Caltech on the work this spring. Laura, who is now 10, wants to be a writer but has also discovered the Internet. To see what design principles appeal to 10-year-olds, check out <http://ww.geocities.com/l_merryfield/index.html>.

See page 6, Staff & Faculty

Dr. Krzysztof Slowinski Joins Analytical Faculty

Dr. Krzysztof "Chris" Slowinski, currently a postdoctoral associate of Dr. Marcin Majda at UC Berkeley, will become assistant professor in the Chemistry and Biochemistry Department in the spring semester of 2001.

Dr. Slowinski received his MS and PhD degrees (highest honors) from the Department of Chemistry, Warsaw University, Poland, where he studied electrochemical and spectroscopic characterization of binuclear polyazamacrocyclic complexes of copper and the dynamics of long-range electron transfer in model systems. In 1995, two years prior to receiving his PhD, he was recipient of the NATO Grant Award and was selected to attend the NATO Summer School of Supramolecular Chemistry. In 1995-96 he was Visiting Scholar at UC Berkeley.

He has published 11 papers in leading scientific journals and is an author of a general chemistry textbook in Polish for high school students.

His research plans at CSULB include investigating electric conductivity of single molecules wrapped between two metallic contacts with particular emphasis on π-conjugated molecular wire candidates, tunneling-spectroscopy of metal and semiconductor nanocrystals, and properties of phospholipid monolayers and bilayers.

Commenting on his faculty status in our department he states, "At CSULB I have found the rare coexistence of quality teaching and research programs. I was especially impressed with the quality of undergraduate research and the large number of undergraduate students involved in faculty research projects." His wife, Katarzyna, is a graduate student at UC Berkeley.

WHERE ARE THEY NOW?

We have been fortunate to have had the services of so many persons who made important contributions to our department over the years, but who, for various reasons, chose to continue their careers elsewhere or have retired. We remember some of them in this column. We would like to hear from others as well.

Dr. J. Kenneth Bartlett (professor 1954-56), the first faculty member in the chemistry program at what was then Long Beach State College, has retired from Southern Oregon State College in Ashland, Ore. where he was professor of chemistry and chair of the department. "I'm still alive and kicking, albeit with reduced speed, here in Oregon. Fishing is still good nearby."

Dr. Annie Bianchino (lecturer 1981-84, 1988-92), now professor of chemistry at Fullerton College, spent her sabbatical leave in Dr. Roger Acey's lab at CSULB, learning techniques in biotechnology and applying them to plants.

Dr. Ephraim Ben-Zvi (lecturer 1984-91), retired and living in San Marino, Calif., sends his best wishes to the faculty and staff.

Dr. Michael Block, former member of the Chemistry and Bioichemistry Advisory Council representing Unocal, is editor of the ACS publication, *Chemical Innovation,* successor to CHEMTECH.

Dora J. Henderson (Mrs. Robert B. Henderson) has moved from Los Altos to San Jose, Calif. to be near her daughter, Katie, and two grandchildren, Dorothy and Edith.

Dr. Margaret "Peggy" Kline (lecturer 1984-88), professor of chemistry at Santa Monica College, reports "Our new sciences building is finally finished! Please come for a visit and a tour."

Dr. Darwin Mayfield (professor of Chemistry 1956-1990; Emeritus 1990) continues to enjoy the weekly interpretive talks he has been giving as an education volunteer at the Long Beach Aquarium of the Pacific since it opened two years ago. He has learned to identify most of the 200 varieties of multicolored fish that inhabit the 340,000-gallon tropical reef exhibit. The weekly Chemistry and Biochemistry seminars help to acquaint him with the many advances made during the 10 years since he retired. Last April, Darwin teamed with Ken Nakayama of the department to write questions, check lab procedures and supervise two groups of high school students who had advanced to the State Finals of the National Science Olympiad.

Dr. Steve McDowell (assistant professor 1985-1990) is associate professor and chair of the Department of Chemistry and Chemical Engineering at South Dakota School of Mines and Technology in Rapid City. "I am overseeing and administering development of a new biotechnology curriculum supported by the Cargill Company and involving three programs: Chemistry, Biology and Chemical Engineering." If former students or faculty would like to contact him, his e-mail address is: <smcdowel@silver.sdsmt.edu>.

Dr. Larry Schaleger (visiting professor 1975-76) has retired from full-time employment and lives in Oakland, Calif. "I am starting my own financial planning business and making plans for part-time teaching in the fall. Marjorie has been teaching high school English and continues to do free-lance writing for magazines and such. All three kids have found themselves in the computer/software business and seem to be prospering." ■

Faculty E-mail Addresses

Should you wish to correspond with Chemistry/Biochemistry faculty, their e-mail addresses are listed for your use. They would be happy to hear from you.

Roger Acey . . . . . racey@csulb.edu
Dennis Anjo . . . . . danjo@csulb.edu
Peter Baine . . . . . pbaine@csulb.edu
Roger Bauer . . . . . rbauer@csulb.edu
Stuart Berryhill . . . . . sberryhi@csulb.edu
Paul Buonora . . . . . pbuonora@csulb.edu
Jeffrey Cohlberg . . . . . cohlberg@csulb.edu
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Margaret Merryfield . . . . . mmerry@csulb.edu
Henry Po . . . . . hppo@csulb.edu
Nail Senozan . . . . . nsenozan@csulb.edu

Faculty and Staff

Henry Po. While on sabbatical leave in the fall of 1999, I continued to carry out research in computational chemistry to study the rotational energy barriers of small molecules. I have always wanted to do research in computational chemistry and this sabbatical leave gave me the time and opportunity to explore a new area. Two papers from my research group have been accepted for publication. They will appear in the *Journal of Coordination Chemistry* and the *Journal of Structural Chemistry* (THEOCHEM) this summer.

Janet Hunting and Monica Weiss graduated last year. Janet went to Cornell to pursue her PhD, and she is presently in Professor di Salvo's research group. Monica is an analytical chemist in a biotech company in Orange County.

Dr. Senozan and I are collaborating on an article on the history and limitations of the Henderson-Hasselbalch equation. We are having fun reading early papers and doing calculations. We plan to send this paper to the *Journal of Chemical Education.*

I have received many e-mail messages from past students in Kuala Lumpur, Jakarta, Hong Kong and Taiwan. It is definitely wonderful to hear from all of you and thank you for writing.

Wanda White, our new departmental secretary, is a former employee of the Geography Department and International Studies Program. She transferred to our department in October of 1999 as our administrative support assistant II. Wanda is a full-time employee, full-time parent and part-time student majoring in business administration. Hobbies include drawing, painting, weight training, writing songs and shopping.

Wanda White, departmental secretary

Leslie Wynston. After 35 years of teaching at CSULB, I retired at the end of the spring 2000 semester. I remember fondly a lot of the biochemistry students I've taught, and I hope they all have had successful careers. As Anna and I love to travel, we will be increasing the number of trips, both abroad and to parts of the United States we've not seen before. ■

Some faculty at Annual Awards Dinner. Left to right: Dr. Robert Loeschen, associate dean, College of Natural Sciences & Mathematics; Emeriti Professors: Dr. Ed Harris, Dr. Van Lieu, Dr. Gene Kalbus.

New Appointments to the Chemistry & Biochemistry Advisory Council

Affiliated with our department is an active group of about 30 scientists and business persons who help us forge a link with the chemically related community in the area. It is a mutual support group. Members of the Advisory Council help us place our graduates, are available for technical advice and help provide resources for the maintenance of our educational programs. We in turn refer potential employees to them and offer our help in other ways; for example, use of our technical library and occasional instrumental and consulting services. New representatives joining the council in the past year:

Jean Kigozi, Advisory Council representative from Lab Support.

Jean Kigozi. Ms. Kigozi has a BS degree in food science and technology from Bristol University in England and an MS in Nutrition from the University of New Haven. Her employment history includes nine years' experience in the food industry in various roles such as microbiologist, research and development technologist and quality assurance manager. She has been account manager for the past year at Lab Support and most recently was a part-time lecturer at CSU Los Angeles, teaching nutrition computing skills and cultural foods. She represents Lab Support on the Advisory Council and has been instrumental in securing funding from her company for the annual Lab Support Scholarship.

Denise Lutz. Ms. Lutz earned a degree in biology from UC Davis, with an emphasis in molecular and cellular biology and a minor in English. At UC Davis during and after graduation she was an assistant consulting toxicologist in projects relating to chemical exposure, toxicity, new drug applications, environmental litigation, and environmental testing. She worked for Advanced Sterilization Products, a Johnson & Johnson company, through Kelly Scientific Resources as a senior research technician in the R&D department and from that experience was appointed a scientific recruiter with Kelly Scientific Resources. She is a co-Advisory Council member, together with Eman Talei, representing Kelly Scientific Resources. See photo below.

Dr. Wayne K. Stuckey represents Aerospace Corporation on our Advisory Council, replacing Dr. Seymour Feuerstein who served with distinction on the council for several years. Dr. Stuckey received his AB and MS degrees from Pittsburg Kansas State University and his PhD in chemistry from Kansas State University. He joined the Materials Sciences Laboratory of the Aerospace Corporation in 1966 and became successively manager of the Analytical Methods Section, head of the Materials Analysis Department, research scientist and senior scientist in the Mechanics and Materials Technology Center. In 1999 he was named Distinguished Scientist of the Space Materials Laboratory at Aerospace Corporation in El Segundo. His interests include materials characterization, space environmental effects on materials, spacecraft contamination and durability of materials for space.

Eman Talei, initially a scientific recruiter with Kelly Scientific Resources (KSR), was recently promoted to sales manager. Prior to joining KSR he worked for a biotech company in Thousand Oaks as a research associate and also has had two years of experience in a clinical laboratory as a laboratory assistant, performing HIV quantification assays. He has a BS degree in microbiology and molecular genetics from UCLA. As a student, Eman worked for UCLA's Immunology Department, researching protein binding affinities. He is a co-Advisory Council member with Denise Lutz, who together are responsible for obtaining funds for the Kelly Scientific Resources Awards for Excellence in Chemistry and Biochemistry. ■

Kelly Scientific Resources representatives at May Awards Dinner. Left to right: Nancy Dunn, District Manager, and Advisory Council Members Eman Talei and Denise Lutz.

New Chemistry Computer Lab

by Bob Soukup, Instrument Technician

As many of you may have read in the 1999 Newsletter, the department was in the planning stages for construction of a computer laboratory dedicated to chemistry. Well, the plans have been implemented and now the department has a fully functional computer laboratory with 23 workstations!

Peterson Hall 2, Room 221, was chosen for the new lab. The old counter tops, utility trays and cabinets were removed. Beige and white floor tiles were installed in a computer-generated pattern and the room was repainted. Cabinetry from another room was modified and refinished before being recycled into the new lab, plus new counter tops were fabricated on site and installed. Most of the above was performed by our very talented College of Natural Sciences and Mathematics shop personnel, Jim McKibbon and John McIlrath.

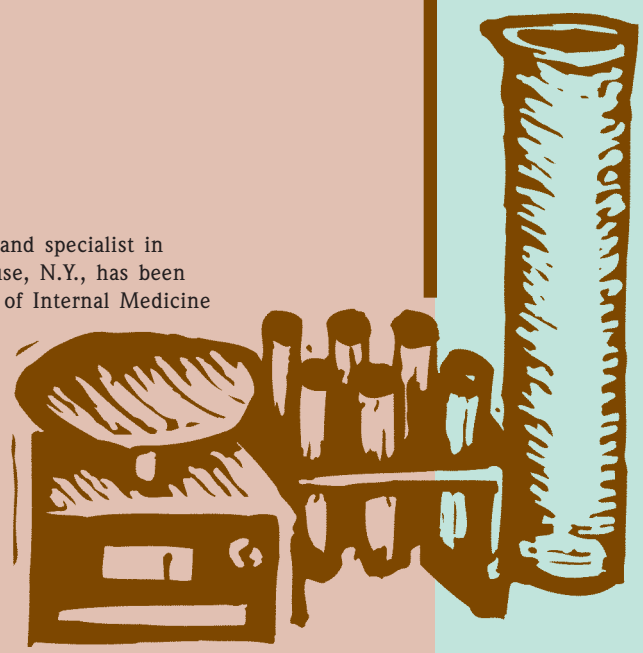
The installation and configuration of all the computers fell on my shoulders. Ray Grace, Chemistry Stockroom technician, and I set up an assembly line for installing the operating systems on the computers and configuring the software. I decided to set the computers up in a "dual boot" configuration so that the users would have the option of running "Windows" or the new Unix-like "Linux" operating system.

The lab was completed during the spring 2000 semester, so fall 2000 is the first full semester where the lab is available. I expect usage of the facility to grow as the faculty write more computer-related exercises and assignments into the curriculum.

Dr. Theresa Rohr-Kirchgraber
Elected Fellow: American College of Physicians

Theresa Rohr-Kirchgraber, BA 1984, MD Cornell University, an internist and specialist in adolescent medicine at SUNY Upstate Medical University Hospital, Syracuse, N.Y., has been elected a Fellow of the American College of Physicians-American Society of Internal Medicine (ACP-ASIM), the society of internists. This distinction recognizes her achievements in internal medicine, the specialty of adult medical care. Dr. Rohr-Kirchgraber was elected upon the recommendation of peers and the review of ACP-ASIM's credentials subcommittee.

The American College of Physicians-American Society of Internal Medicine is the nation's largest medical specialty organization.



Student Affiliates of the American Chemical Society

by Sotiria Contos — President, 1999-2000

A holiday canned food drive, a trip to U.S. Borax, National Chemistry Week, San Francisco...the list this year is long! Our goal for 1999-2000: to implement community service with our responsibilities as Student Affiliates of the ACS.

Left to right: Sotiria Contos, president of SAACS 1999-2000; Dr. Peter Baine, advisor; Maria Matutina; Andrew Castanellos; Claribell Cendana; Noel Rodriguez.

We started off in October with a trip to the ACS regional meeting in Ontario, Calif. After an undergraduate poster session and a few speakers, we ended the day with dinner.

During November and December, SAACS sponsored a canned food drive. A beautifully decorated box was placed outside the chemistry stockroom where everyone from the department had an opportunity to make their contributions. Members Dmitry Pervitsky and Maria Matutina helped deliver the box of canned goods to a church in Long Beach for distribution to the needy.

Our fall semester field trip led us to U.S. Borax laboratories. Our tour guide gave us an extensive history of the mining of boron and its application in today's world.

On Nov. 6, SAACS assisted with National Chemistry Week on campus. Students from local high schools came to hear our faculty speak on majoring in the sciences at CSULB. The Student Affiliates assisted with registration.

We ended the fall semester with a holiday dinner party for the Long Beach Boys' Youth Home. SAACS teamed up with Tau Beta Pi engineering honor society and Mortar Board senior honor society to donate food for 40 boys. Chemists do make good cooks!

The spring semester proved even more eventful! On March 24, we were honored to help host our Distinguished Visiting Lecturer and Nobel Laureate, Dr. Dudley Herschbach from Harvard University. Members helped promote Dr. Herschbach's visit and donated the food for a breakfast reception.

Also in March the Student Affiliates attended the ACS 2000 national meeting in San Francisco. We met chemists from all over the world, attended student poster sessions where our own department graduate student, John Liarakos, presented a poster. We heard several speakers on topics ranging from new methods in organic synthesis to the human genome project. We ended the weekend with Irish coffee at the famous Buena Vista!

On April 5 the Student Affiliates arranged a question and answer session on the health professions, with Dr. Les Wynston as the resource person. Several students attended and the session proved a success.

Our major project for the spring semester was to renew our hallway display cases. Every member put in several hours of hard work cleaning, restoring and redecorating. SAACS plans to make this a yearly project so that our cases always look attractive. We managed to place second in the College of Natural Sciences and Mathematics competition for the most informative display cases.

Our last project for the year combined science and community service. Members volunteered for Career Day at Hill Middle School in Long Beach. With the help of Tom Gufrey, we presented a chemistry magic show and answered students' questions about careers in science.

The Student Affiliates have enjoyed a busy and exciting 1999-2000. Next year, SAACS will surely accomplish even more under the strong leadership of incoming president Jennifer Guzzo, a biochemistry/music major. ■

CSULB Enrollment Exceeds 30,000

Student enrollment during the fall semester of 1999 reached 30,011 according to the Office of Institutional Research. This represents a 4% increase over the previous year. The number of high school graduates entering the university was reported to be 3,483, a 24% increase over the previous fall semester. More than 425 of entering high school students received Advanced Placement credit. Cal State Long Beach ranks second in total student population among the California State University system's 23 campuses. San Diego State, with an enrollment of 31,413, is the most populous campus.

In Memoriam

Dr. Julie Parker Kierbow

Dr. Julie Parker Kierbow, a member of our faculty for 20 years prior to her retirement in 1977, passed away suddenly at her home in Sun City, Ariz. on Aug. 29, 1999. Dr. Kierbow, a native of Fayetteville, Ala., received her BA degree from Ohio State and her MS degree from the University of Hawaii, both in chemistry. Her PhD in inorganic chemistry was obtained from the University of Colorado.

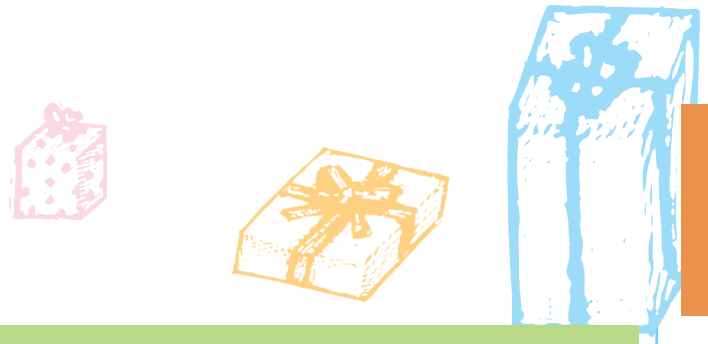
Prior to joining our faculty in 1957, she was employed as a scientist at Oak Ridge National Laboratories. Her teaching assignments in our department included courses in general chemistry, inorganic chemistry and radiochemistry. When Peterson Hall 3 was opened in 1962, it boasted a state-of-the-art radiochemistry laboratory which was designed by Dr. Kierbow and used by her for a course in radiochemistry. She also taught the second semester of general chemistry on a regular basis and introduced radiochemical experiments into the laboratory curriculum.

Through her efforts, a chapter of the Student Affiliates of the American Chemical Society was established in 1959 with Dr. Kierbow as the first faculty advisor. SAACS has had a continuous record of service to the department and its students ever since. She was known in our department for her humorous crusade to "stamp out NH_4OH," a misleading formulation often found in textbooks at the time.

Dr. Kierbow remained active in her retirement, reading textbooks for the blind. She was preceded in death by her husband David Kierbow and leaves no close relatives.

Stanley R. Davis

Word has been received from his family of the passing of Stanley R. Davis, BS, 1971. Stanley was a member of Dr. Henry Po's research group while a student at CSULB.



Gifts by Individuals

During the 1999-2000 fiscal year the department received gifts totalling ***$47,152.*** *Of this amount, $28,818 was given by individuals: $25,074 in cash and $3,744 in in-kind gifts. The faculty, staff and students of our department are very grateful for your generosity.*

Cash gifts received are used for scholarships, awards, the seminar program and purchase of supplies and equipment for which there is not adequate state funding. Also, the costs of publishing the Chemistry & Biochemistry Department Newsletter are met with private giving. You may give an income-tax-deductible gift directly to the department by making a check to:

CSULB Foundation/Chemistry Fund
Department of Chemistry & Biochemistry
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-3903

The Office of University Relations and Development is informed of all gifts, and you will receive a personal letter of acknowledgement from the department. You might investigate the possibility that your company matches employee gifts. In that way, the value of your gift to the department is multiplied.

If you are contacted through the Phonathon program and a gift is requested, please specify the Chemistry and Biochemistry Department as the recipient of your gift, if that is your intention.

Thank you!

Corporate Gifts to the Department

The total value of gifts to the department, in-kind and cash, during the fiscal year ending June 30, 2000 was ***$47,152.*** *Gifts from business and industry amounted to $17,064 in cash and $1,270 in in-kind gifts.*

We wish to acknowledge the help of the following persons in assisting us in securing gifts for the department: Nancy Dunn, Jean Kigozi, Joyce Kunishima, Denise Lutz, Dr. Ray Maddalone, Dr. Ken Marsi, Patricia Maxwell, Dr. Steve Ruckmick, James Richards, Eman Talei, Dr. Ercan Unver.

Companies and foundations contributing in-kind and/or cash gifts are listed:

Allergan, Inc.*
ARCO Corp.*
Boeing Co.*
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CSULB Alumni Association
Diagnostic Products Corporation*
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Hypercube, Inc.
IBM
Kelly Scientific Resources*
Lab Support*
Merck & Co.
National Starch and Chemical Foundation (Ablestik Labs.)*
TRW: Industrial Affiliates Program*

Matching gifts were received from the following companies (employees whose gifts were matched are given in parentheses):

ARCO* (Gary Tietavainen)
Boeing* (Dr. Norman Byrd and Dr. Arie Passchier)
IBM (Dr. Elizabeth Brinkman)
U.S. Borax* (Robert Deal)

*Companies are members of the Chemistry and Biochemistry Advisory Council

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Plans of Some of Our 1999-2000 Graduates

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MS Biochemistry
Dow Agriscience, San Diego

Alma Cortez
BA Chemistry
Physician Assistant Program

Daekeun Joo
MS Biochemistry
Medical School
University of Cincinnati

Thomas Kelly
MS Biochemistry
Bausch & Lomb

Tong Keynes
MS Biochemistry
Biotech, San Diego

Frank le
MS Biochemistry
Dental School, UCLA

Hong Ma
MS Biochemistry
Biotech, San Diego

Maria Matutina
BS Biochemistry
Harbor-UCLA Research Institute

Michael McAllister
BS Biochemistry
MS Program, CSULB

Ryan Meacham
BA Chemistry
Teacher, Los Angeles Unified

Kareem Morgan
BS Chemistry & Biochemistry
Law School

Christopher Nguyen
BS Biochemistry &
BA Chemistry
Dental School, USC

Thanh Nguyen
MS Biochemistry
Allergan Corporation

Kevin Phillips
BS Biochemistry
PhD Program, Harvard U

Pat Pierce
MS Biochemistry
Instructor, CSULB

Eugene Razumov
MS Biochemistry
PhD Program, UCLA

Tomo Sakurai
BS Chemistry
Graduate School, Japan

Paula Spencer
MS Biochemistry
Amgen, Thousand Oaks, Calif.

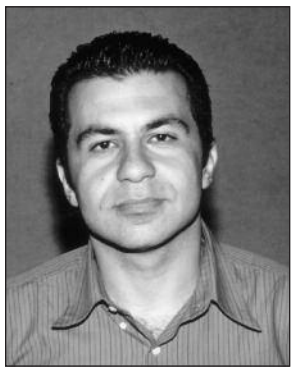
AWARDS & GRANTS

Kelly Scientific Resources Awards

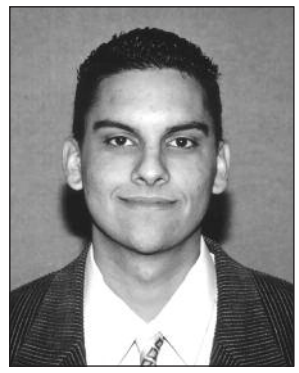
Through the efforts of Eman Talei and Denise Lutz, members of our Advisory Council representing Kelly Scientific Resources, and Nancy Dunn, district manager of Kelly Scientific Resources, the department is the recipient of $2,500 for five $500 individual awards to students who have accomplished outstanding work in the major areas of chemistry. It is proposed that these awards will continue in future years. Awards were presented to five students at the department's annual Awards Reception and Dinner on May 11 on campus. We are grateful for Kelly Scientific Resources participation in this recognition ceremony. Areas of excellence and awardees are:

Analytical Chemistry.
Lan Nguyen.
Biochemistry.

Biochemistry.
Michael Eagan and **Maziar Nabavi.** Both students will graduate in May 2001. Michael plans to enter medical school and Maziar will apply for MD/PhD programs. Both are biochemistry majors.



Inorganic Chemistry.
Yvonne Burns. Yvonne is a candidate for the BS degrees in Chemistry and also Biochemistry. Following completion of her undergraduate work this fall, she plans to enter graduate school.



Organic Chemistry.
Matthew Harris. Matt is a junior biochemistry major and plans to attend medical school following graduation.

Endowed Awards

ROBERT B. HENDERSON AWARD

The Robert B. Henderson Award was established by Dr. Henderson's family, colleagues and friends to honor his memory. Dr. Henderson was a member of the Chemistry and Biochemistry Department from 1955-1983 and a distinguished scientist and teacher of organic and general chemistry. Recipients for this award are chosen from among bachelor's and master's graduates as those best exemplifying Dr. Henderson's scholarship and commitment to the profession of chemistry. This year's award of $1,000 was presented to **Kevin Phillips.**

Kevin is a May 2000 *summa cum laude* graduate with a BS degree in biochemistry who will enter the PhD program in chemistry this fall at Harvard University.

KENNETH L. MARSI SCHOLARSHIP

This $1,000 scholarship, established by faculty, staff, family, friends and former students on the occasion of Dr. Ken Marsi's retirement, is used to defray registration fees of outstanding junior and senior chemistry or biochemistry majors.

This year's scholar is **Sotiria Contos** who will be a senior this fall. She plans on continuing for her PhD in organic chemistry after graduation in May 2001. Sotiria also received the Toni Horalek Award for departmental service for her leadership as president of the Student Affiliates of the American Chemical Society.

MICHAEL MONAHAN FELLOWSHIP

The Monahan Award was established through a generous bequest of Dr. Michael Monahan, an alumnus of our department who received his BS in chemistry in 1963 and his PhD in 1968 at UC San Diego in physical organic chemistry. While an undergraduate he was a research student of Dr. Robert Henderson. He was a distinguished scientist and a member of the faculty at the Salk Institute and subsequently a senior research scientist with Beckman Instruments. Dr. Monahan was also the founder and president of California Medicinal Chemistry Corporation. In 1985-87, following his retirement, he served as a lecturer in our department. According to his will, the income from his bequest is to be used to support student research in our department. This is the third year this $2,500 award has been given.

Dmitry Pervitsky, this year's Monahan Fellow, a native of Belarus where he received a degree in chemical engineering, is a master's student of Dr. Lijuan Li. In addition to the Monahan Fellowship, he also this year received the Hypercube Award for academic excellence. Dmitry is studying metal nitrosyl interactions with imidazole-based ligands using UV-vis spectroscopy. Dmitry was also last year's recipient of this award.

SPYROS PATHOS IV AWARD

The Spyros Pathos IV Award is presented annually to a student excelling in the second semester of general chemistry, Chemistry 111B. This year is the fourth year that the Pathos Award has been granted. The award is made possible by friends of Spyros Pathos IV, who was an undergraduate chemistry major in our department at the time of his death in 1993.

Jennifer Kauk and **Eva Morlok** are this year's awardees. Jennifer, a biology major with an option in cellular and molecular biology and genetics, is a junior who is interested eventually in a career in research or teaching. Eva is a biochemistry major who plans to attend graduate school and then become a college teacher of chemistry. She is a junior and an undergraduate research student of Dr. McAbee.

DAVID L. SCOGGINS AWARDS

This award memorializes David L. Scoggins, a 1968 BS chemistry graduate of CSULB and a graduate student and teaching assistant in the Department of Chemistry at the time of his death in 1969. This award recognizes outstanding scholarship and promise by a graduating chemistry or biochemistry student who intends to pursue a career in one of the health-related professions.

The Scoggins scholar this year is **Veronica Armandarez,** who spent the summer in a research program in the Dominican Republic.

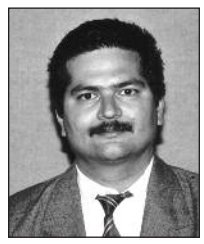
JOHN H. STERN AWARD

The Stern Award, consisting of a cash prize, is given in memory of Dr. John H. Stern, internationally known for his work in solution thermodynamics and author of many publications in that field. The award was established by colleagues, former students and friends of Dr. Stern, who was a member of our faculty from 1958-1984 and a distinguished teacher of physical and general chemistry.

Kevin Phillips, also the Henderson Scholar, and a recipient of four other department and college awards this year, was named as the Stern awardee for 2000. ■

◄ *Kevin Phillips, Henderson awardee and Stern awardee. (Also American Institute of Chemists baccalaureate awardee, departmental honors at graduation, Khalil Salem awardee, and Robert B. Rhodes awardee.)*

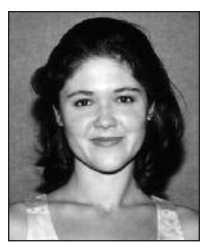
◄ *Sotiria Contos, Marsi Scholar and Horalek awardee.*



◄ *Dmitry Pervitsky, Monahan Fellow and Diagnostic Products Corporation Scholar.*

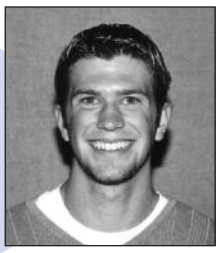
Eva Morlok, Pathos awardee. ►

▲ *Jennifer Kauk, Pathos awardee.*

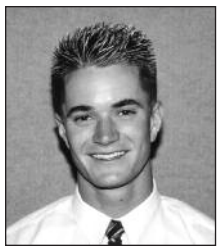


Veronica Armandarez, Scoggins awardee. ►

Awards to Chemistry/ Biochemistry Students



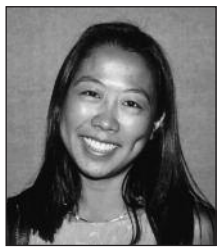
Hadjh Ahrns, Freshman Chemistry awardee.



Eric Sundberg, Freshman Chemistry awardee.

Antonio Duran, Merck awardee in Organic Chemistry.

Andrea Chen, Hypercube awardee.



Helene Pao, Diagnostic Products awardee.

SUBJECT AREA AWARDS

Freshman Chemistry Award:
Hadjh Ahrns & Eric Sundberg

Spyros Pathos Memorial Award:
Jennifer Kauk & Eva Morlok

American Chemical Society Polymer Chemistry Award:
Shauna Prescott

Merck Award in Organic Chemistry:
Antonio Duran

Kelly Scientific Resources Award in Analytical Chemistry:
Lan Nguyen

Kelly Scientific Resources Award in Biochemistry:
Michael Eagan & Maziar Nabavi

Kelly Scientific Resources Award in Inorganic Chemistry:
Yvonne Burns

Kelly Scientific Resources Award in Organic Chemistry:
Matthew Harris

John H. Stern Award in Physical Chemistry:
Kevin Phillips

SPECIAL DEPARTMENT AWARDS

American Institute of Chemists Baccalaureate Award:
Kevin Phillips

American Institute of Chemists Graduate Award:
Monica Weiss

David Scoggins Memorial Award:
Veronica Armandarez

Departmental Honors at Graduation:
Kevin Phillips & Christopher Nguyen

Diagnostic Products Corporation Scholarship:
Dmitry Pervitsky & Helene Pao

Horalek Award for Departmental Service:
Sotiria Contos

Hypercube Award:
Andrea Chen

Kenneth L. Marsi Scholarship:
Sotiria Contos

Lab Support Scholarship:
Tina Chambers (Cerritos College)

Michael Monahan Memorial Summer Research Fellowship:
Dmitry Pervitsky

Robert B. Henderson Memorial Scholarship:
Kevin Phillips

COLLEGE OF NATURAL SCIENCES & MATHEMATICS AWARDS

Khalil Salem Award:
Kevin Phillips

Robert B. Rhodes Award:
Kevin Phillips

$1.6 Million Grant for Honors in Biological Sciences, Biochemistry and Chemistry

by Margaret Merryfield — *Director*

The College of Natural Sciences and Mathematics has just received a major grant from the Howard Hughes Medical Institute (HHMI) to create an "Honors in Biological Sciences" program. The grant will bring in $400,000 per year for four years. In addition to providing summer stipends and academic-year support for 20 to 30 undergraduate students annually, the program also will support the creation of an honors curriculum for students majoring in biological sciences, biochemistry, chemistry and related areas. As evidence of the strength of the proposal, the level of funding actually exceeded the original request.

The project will involve faculty from the Department of Chemistry and Biochemistry as well as from the Department of Biological Sciences. Dr. Margaret Merryfield will serve as project director, Dr. Doug McAbee will coordinate the student research program, and Dr. Marco Lopez will coordinate the component focused on increasing access to science. Other members of the HHMI team include Drs. Laura Kingsford, Zed Mason, Antonia Wijte and Jim Archie, all from the Department of Biological Sciences.

The proposed honors curriculum was developed in a series of weekly afternoon meetings organized by Dean Glenn Nagel in the summer of 1999. Faculty from the two departments considered the strengths and weaknesses of our undergraduate programs. Several points of consensus existed: undergraduate research as the highest priority, concern over students' communication and critical thinking skills, and a desire to retain talented students in the major. Participants also saw an opportunity to introduce the emerging field of bioinformatics into the undergraduate curriculum.

The result of these discussions is a curriculum that builds on both the general education program and the major. New first-year courses to be created include "Ideas in Biological Sciences," a seminar for incoming freshmen that will introduce the program, research opportunities and key ideas and developments in the biological sciences, and a critical thinking course for science majors. The "Bioinformatics" course will be designed for second-year students. In the junior year, students will select a research supervisor and take a course in "Research Design and Scientific Methods." Typically, students will do research in the summer before the senior year and continue the project through the senior year. At that time they will enroll in "Senior Thesis." In addition to writing a thesis, students will be expected to give a public presentation of their research, either at a regional or national meeting or at a local venue. Seniors will have the option of taking a general education capstone course, "Scientific Literacy," which will include a service-learning component, such as working with college outreach programs or working as a peer mentor.

To make this happen, the grant provides support for course development as well as faculty development in such areas as how to assist students in improving their writing and speaking skills or how to be an effective mentor. Support for travel is also available. Funds are provided for a staff member to assist students and faculty in preparing manuscripts and presentations and for research equipment for new faculty as well.

With the proposal now funded, the hard work of realizing these goals begins. We are recruiting the first group of pioneers to the freshman seminar; later in the year, we will recruit a group of advanced students willing to commit to a senior thesis as well as a research experience. Down the road, we hope the curriculum will be self-sustaining and will attract students in several of the other sponsored programs that support undergraduate research. ■

Lab Support Scholarship Awarded to Cerritos College Student

Tina Chambers, Lab Support Scholar.

Lab Support, a division of On Assignment, Inc., an agency which provides temporary professional assignments in laboratories, has established a $2,500 scholarship for area community college transfer students who intend to major in chemistry or biochemistry at CSULB. This is the sixth consecutive year in which this award has been conferred. Previous awardees have transferred to CSULB from Cypress College, Citrus College, Mount San Antonio College, Irvine Valley College and Long Beach City College.

The awardee for 2000-2001 is Tina Chambers of Lakewood, a transfer student from Cerritos College, who intends to continue on to graduate school after receiving a BS degree in biochemistry. Tina looks forward to a career in pharmaceutical research and development. Her GPA at Cerritos College is 3.96, and she was a recipient of the Academic Excellence Award this year at Cerritos College.

The purpose of the Lab Support Scholarship is to identify and encourage outstanding community college transfer students to enter our chemistry and biochemistry programs as majors and to foster closer relationships with nearby community colleges.

The department would like to express its gratitude to Jean Kigozi, account manager with Lab Support's Carson office, for facilitating this scholarship. She is a member of our Chemistry Advisory Council.

CHEMISTRY/ BIOCHEMISTRY ALUMNI NEWS

We very much appreciate the time you have taken to inform us about yourselves, and we always enjoy hearing from you. The information which you send us about your careers is often shared with students who are considering professions in chemistry, biochemistry, medicine, dentistry, pharmacy, law, etc. All degrees noted are in chemistry unless otherwise specified. Alumni having both bachelor's and master's degrees from our department are listed under the year they received their bachelor's degree. To communicate about the Newsletter or to send information, write to: Dr. Ken Marsi; Department of Chemistry/ Biochemistry, California State University, Long Beach; Long Beach, CA 90840. FAX: 562/985-8557. E-mail: kmarsi@csulb.edu.

1958-1969

Paul Battaglia

Graduate Student 1964, took early retirement from Hughes Electronics in October of 1999 after 21 years of employment. He was previously employed for 12 years with Douglas Aircraft. "I made a very good living through chemistry!" He plans to do part-time teaching in science and math. Paul is trips chairperson for the Long Beach Ski Club, and took groups of skiers to Sun Valley, Idaho and Jackson Hole, Wyo.

Gene Berg

MS 1966, has been teaching chemistry at Moorpark College for 30 years and "loving every minute of it. I feel that Dr. Kalbus [thesis advisor] set me in the right direction."

Per Christiansen

BA 1964, and Mrs. Christiansen have moved back to California from Illinois. They live in El Dorado Hills near Sacramento. "I took an early retirement from Nalco and bought a software company together with my oldest son, Mike. It is turning out to be fun and rewarding. Linda and I really love to be near our three kids and three grandkids." Per was named University Outstanding Alumnus in 1995.

Dr. Roger T. Clark

BS 1966, MS 1970, PhD U of Utah, is principal scientist with Elf Atochem, a French-owned chemical company in King of Prussia, Penn. Roger's and Carol's two sons, Jim and Bill, were married last year. Both Jim and Bill are engineers. Carol keeps busy with her art work and designing their new home, and Roger and she enjoy rock climbing with French students who intern at his company.

Frank Colonna

BS Zoology and Chemistry Minor 1966, MS Health Science (CSU Northridge), is a real estate broker in Long Beach and is a member of the Long Beach City Council, elected in 1998.

Alan Di Stefano

BS 1968, MBA UC Irvine, is director, Global Trade and Investment for the Commission on Economic Development, State of Nevada. "I currently serve on the Environmental Technologies Trade Advisory Committee, U.S. Department of Commerce. I also serve on the Boards of the Nevada World Trade Council, the Nevada District Export Council and the International Resource Center of Northern Nevada."

Dr. Fred Dorer

BS 1961, PhD U of Washington, retired provost and academic vice president at CSU Bakersfield, assists the president with fundraising and University reaccreditation. He and Marilyn continue to live in Bakersfield, and "I am trying to learn golf."

Dr. David R. Fagerburg

BS 1976, PhD U of Washington, retired from Eastman Chemical Company in December 1999 and is now a full-time professor of chemistry (organic and polymer chemistry) at Northeastern State Technical Community College in Blountville, Tenn.

Donald J. Ferm

BS 1968, is employed as senior research chemist in the Technology Department of U.S. Borax, Inc. in Valencia, Calif. "I am in my 36th year at U.S. Borax and currently involved in product application research relative to the plastics industry, and primarily for flame-retardant application." Chemistry graduates, Jan Schrick Copeland and Robert Deal, are also employed with U.S. Borax.

Dr. Gary Hathaway

BS 1964, PhD UC San Diego, is the director of the Protein Analytical Laboratory at Caltech. "We published two papers concerning new methodologies in mass spectrometry. Son, Allen, has finished high school and has been accepted at UC San Diego. Son, Sean, was married and daughter, Helena, bought a new BMW!"

Dr. Norman Hester

BS 1968, MS and PhD UC Riverside, is technical director at Truesdail Laboratories in Tustin, Calif. His daughter began college in the spring of 2000. Chemistry graduate, Joe Bramblett, is also employed with Truesdail Laboratories.

Fredrick W. Howe

BS General Science and Life Science 1954, is now retired after careers as a high school science teacher and contractor. Fred received his degree with a concentration in chemistry from CSULB four years prior to the institution of the first chemistry degree in 1958.

Joanne Ehteshamzadeh Myers

BS 1963, MS 1967, is associate industrial hygienist with the State Compensation Insurance Fund in San Francisco. "Younger son, Raymond, and wife Jaqueline were married in January. They are both music majors. Older son, Robert, is a computer programmer, and his wife is an environmental studies master's candidate currently working as an industrial hygienist for Federal OSHA. They live in New York."

John Nelson

BS 1969, JD Loyola Law School, an attorney and partner at Nelson & Nelson in Orange and a member of the Chemistry & Biochemistry Advisory Council at CSULB, made a presentation to the council and chemistry faculty and students in the fall semester of 1999 on "Science and the Law," with particular reference to the Dow-Corning breast-implant litigation.

Raymond E. Ouellette

BS 1968, is associate environmental scientist with Kennedy/Jenks Consultants in Irvine, Calif. "I provide assistance to companies with environmental permitting and compliance problems. I work with clients to identify specific regulations that are applicable to their operations and help them come into compliance." Ray is active in the Orange County Section of the American Chemical Society.

Dr. Arie Passchier

BS 1961, PhD U of Washington, is manager of the Materials and Processes Laboratory with Boeing in Anaheim, Calif. He has worked with Rockwell and its successor, Boeing, for 32 years. "Son, Jason, was married to a Japanese girl, and we attended two ceremonies: one in Anaheim in March and later in Japan where they were married again in a Buddhist ceremony."

Dr. Arie Passchier (left) with family at son Jason's wedding.

Burton "Ron" Rawding

BS 1969, MBA 1980, is national sales manager, North America Fabric Care, with Goldschmidt Chemical Corporation. The Rawdings have five grandchildren.

Harry Schmus

BS 1968, is senior scientist with Hitachi Instruments in Danbury, Conn. "I provide technical support nationwide for analytical instruments such as HPLC, spectroscopy and fluorescence."

Dr. James R. Scott

BS 1968, DDS USC, is a clinical staff dentist with United Health Centers of the San Joaquin Valley, Inc. "I continue to work in the agricultural community of Orange Cove, Calif. We serve the underprivileged people of Fresno and Tulare counties; many of our patients are migrant farm workers. My wife, Michele, graduated from dental hygiene school, passed her State Boards and is now practicing dental hygiene in Fresno. I was diagnosed with atypical non-Hodgkins lymphoma in 1995. After months of chemotherapy, I was told I would die, but with natural (nutritional mainly) therapies I'm happier and healthier than I was before the cancer." He is happy to share his experiences with cancer patients and those interested in avoiding cancer at 559/453-2550.

Dr. William Thomasson

MS 1966, PhD Caltech, is a self-employed science and medical writer. He and wife, Penny (Heine), BS 1966, live in Oak Park, Ill.

Dennis H. Van Westerhuyzen

BS 1966, is technical manager with Raytheon Systems Company in El Segundo. Dennis represents Raytheon on our department's Chemistry & Biochemistry Advisory Council.

1970–1979

Chris Appleton

BS 1972, is Director of Systems Development and Supply Chain Management with McDonald's Corporation in Oak Brook, Ill. Chris was an examiner for the Malcolm Baldrige National Quality Award during 1997-1999. Many of you may have had a course in physics at CSULB from his late father, Dr. George Appleton.

Dr. Ted A. Bailey

BA 1973, BS Visual Science, OD Optometry, is an optometrist with Stephen D. Placer, MD in Santa Cruz. He works with cataract, glaucoma and laser vision correction patients. He volunteers with The Flying Samaritans and is a sailing and horseback riding enthusiast.

Prabha Bhalla

MS Biochemistry 1975. "I have just learned how to use e-mail and planning to learn more about computers. My daughter, Kiran, is at Boston U, planning to major in International Studies; my son, Asheesh, is in high school and has dreams of becoming a space engineer and designing space aircraft." Prabha's husband, Jagminder, is an MD who practices in Anaheim.

Dr. Betty Jane Burri

MS Biochemistry 1978, PhD UC San Diego, is research chemist with the Western Human Nutrition Research Center of the U.S. Department of Agriculture. "My husband, Kurt Annweiler, and I celebrated our 15th anniversary this year. My research in carotenoids (plant pigments that might delay cancer) has been going well. I've been invited to give talks at the International Vitamin A Consultative Group meeting in Durban, South Africa and the International Carotenoid meeting in Cairns, Australia.

Dr. Betty Jane Burri and husband, Kurt Annweiler, in Egypt.

James E. DeOlden

MS Biochemistry 1972, is president of Mediatech, Inc., located in Hemdon, Va. After working with Allergan, Abbott and other companies, he earned an MBA from the U of Maryland with a major in finance. He and a partner then founded Mediatech, Inc. "It has been a long 15 years with many ups and downs but during the last several years it has been consistently up. The main products of our company are tissue culture media products. The background that I received at CSULB has been instrumental in some of the achievements of Mediatech." Mediatech has an interesting and informative Web site at <www.cellgro.com> which describes the company and its many products.

Gregory Dorsman

BS 1977, MS 1983, works with Danville Materials. "Danville provides innovative products to dental professionals. My job is to build a development lab and production facility in Orange County." He is also a consultant to CoCensys, helping the company transfer operations to Purdue Pharma, the company which purchased CoCensys last September. His son, Nick, continues as a chemistry major at Cal Poly San Luis Obispo. His girls all play AYSO soccer, and Greg referees several games each week.

Rick Goyt

BA 1977. "I have worked for Dow Chemical, 3M, Syva and now for myself. I was in marketing and sales and helped start the drug detection business (both illegal and therapeutic)." In recent years he has been a director in senior housing facilities. This past summer he opened a new assisted living facility, "The Manse on Marsh," located in San Luis Obispo. He is executive director of the home. Information about this facility can be obtained at <www.themanse.net>. "You would think that a chemistry degree and elder care don't go together. The discipline and knowledge I learned from my major are assets; I understand the medical side, including pharmaceuticals, as well as anyone in the field."

Rick Goyt.

Tom Johnson

BS 1978, MS U Washington, is a professional photographer in Hollywood and had an exhibit of some of his work at the Market Gallery in Los Angeles on April 28 of this year.

Continued on page 13

Dr. Marina Larson
BA Biology and Minor in Chemistry 1974, PhD USC, JD, is a patent attorney with Oppedahl and Larson LLP in Silverthorne, Colo. "Writing patents high in the mountains is a dream come true."

Cornelia B. Lupash
MS Biochemistry 1974, is Assistant Professor of Chemistry at Long Beach City College.

Dr. Marianne Marsi
BS 1978, is research and development manager in Central Research at DuPont in Wilmington, Del., and lives in West Chester, Penn. "Our daughter, Teresa (12), gets "A's" in science!"

Gary Martin
BA 1973, JD, is senior partner and litigator for the law firm of Martin, Menicucci & Graham in Anaheim. "I devote most of my time to representing commercial entities in business litigation matters ranging from merger and acquisitions to wrongful termination lawsuits." His daughter, Hilary, is currently a student at CSULB.

Patrick McKay
MS 1979, recently celebrated his 20th year at Genentech. "I'm still in the Department of Recovery Sciences, and am involved with Process Development. I finished my teaching assignment at Skyline College in May and am anxious for the next semester to begin. Wife, Mary, is co-leader of Allison's Girl Scout troop. Allison just graduated from elementary school, earning an academic achievement award. She was a student tutor and was involved with the music program. Brian just finished his freshman year in high school with a 4.0 in his second semester."

Richard McKee
MS 1972, was recently the subject of a lengthy article in the *Los Angeles Times.* Rich is professor of chemistry at Pasadena City College. The California First Amendment Coalition, a nonprofit legal group that advocates open government, gave him the Torchbearer Award for his work as a public agency "watchdog." The 1953 California Brown Act requires public agencies to conduct business in public and provide detailed agendas. Among his victories were a suit filed against the Chino Unified School District which fired its superintendent behind closed doors, and proceedings to make secret deliberations of the sabbatical review panel at Pasadena City College open to the public. Rich was quoted as saying, "There are many politicians out there trying to hide their mistakes from the bright lights of public scrutiny. I make sure they wash their dirty laundry in public." Rich received his MS degree in chemistry under the direction of Dr. Robert Loeschen of our department.

Sandy Engstrom Nelson
BS 1990, is employed by Prandium, Inc., in Irvine, Calif.

Stuart Nowinski
BS 1975, MS 1987, is chairman of the Physical Sciences Division at Glendale Community College. He reports, "Donations and government funding for the Science Center have reached $5 million. We will begin construction in June 2000 with completion set for fall of 2001. We have another $5 million to remodel our present science facilities, with construction to commence at the same time as the Science Center. These are exciting times!"

Dr. David R. Oliver
BS 1977, MS 1979, is professor of chemistry at Ventura Community College. "I wrote a successful NSF grant to computerize chemistry labs and am currently developing computer assisted data collection and analysis for the general chemistry labs. Son, Michael, will be a senior and daughter, Janine, will be a sophomore at Camarillo High. Karen and I celebrated our 21st wedding anniversary."

Melanie Grady Patterson
BS 1978. "After a 21-year career as a chemist and Laboratory Information Management Systems specialist, I have retired to stay home and take care of my four children, ages 7, 8, 14 and 17. I run a part-time consulting business from home for LIMS implementation and validation."

Dr. Joshua D. Prager
BS 1978; BS Visual Science and OD, Southern California College of Optometry. "I am currently working at Kaiser Permanente Medical Center in Riverside as an optometrist and see low vision patients, people with a variety of eye diseases where glasses do not help any longer. We work with different types of optical and non-optical devices to help patients make the most of the vision they have. We have a 5-year-old daughter, Kristen, who started kindergarten this fall. My wife, Cindi, works at Kaiser also as a senior area recruiter and interviewer in Human Resources. We have started a home-based business developing a case to hold materials for rubber stampers/scrapbookers, which we are currently marketing."

Dr. Joseph R. Reeve, Jr.
MS 1972, PhD UCLA, is professor of biochemistry at the UCLA CURE Digestive Diseases Research Center, continuing his research on cholecystokinin and other gastrointestinal peptide hormones. "After a 30-year marriage with Claudia, we are proud parents of seven children (three natural and four adopted) and foster parents of many more."

Wendy Robbins
BA 1979. "Following 20 years in the high tech industry, I left to spend more time with my family. Daryl and I celebrated 23 years of marriage in June. Daryl is a full-time, freelance musician in the Boston area. We have two daughters, 11 and 8, who both love science, math and music. Currently I'm in my fifth year running my own home-based business in art rubber stamps." The Robbins live in Natick, Mass.

Dr. Kenneth Yamaguchi
BS 1979, MS 1980, PhD UC Riverside, is assistant professor of chemistry at New Jersey City University in Jersey City. "We just bought a home in the country; it's nice to see animals. I have been active in the New York and North Jersey ACS, but I'm proudest of being able to obtain a substantial amount of instrumentation for our department. I've tried to stay active and have a small research group which I hope to expand."

1980–1984

Robin Bjorgan
MS Biochemistry 1982, is involved with genomic research at Affymetrix in San Francisco and is supervisor of Technical Publications.

Dr. Susan Torian Brentnall
BA 1980, PharmD UC San Francisco, has been employed at College Hospital in Cerritos for the past 13 years. "My husband, Tom, an engineer with Walt Disney Imagineering, and I are going to Tokyo where he will help install the rides and movies in the new theme park next to Tokyo Disneyland. It will be called Tokyo Disney Sea and will open the fall of 2001."

Dr. Lori Jo Childres
BA 1984, DMD Washington U School of Dentistry, is a self-employed dentist in Redding, Calif.

Jocelyn N. De Lestang
BA 1981, BSc Civil Engineering U of Florida, completed her engineering degree in 1996 and is a professional engineer with Agnou, Barber, Brundage, Inc. in Naples, Fla. She is married with three children.

Eric Derbyshire
BA 1984, MBA U of Phoenix, is sales and marketing manager for Watlow Polymer Technologies in Winona, Minn. "I've been with Watlow for five years, but just recently moved to Watlow's newest start-up business: Polymer Technologies. We develop, manufacture and market polymeric resistance heaters for industrial, commercial and consumer use." The Derbyshires have two children.

Brian Dubow
BS 1980, is program manager, Military Programs with GKN Aerospace in El Cajon, Calif. "I have been manager of military programs for three years at San Diego's largest remaining aerospace company. Jacque and I have been married 16 years and have a 6-year-old son and a 6-month-old daughter."

Leslie J. Gilpin
BS Zoology and Chemistry Minor 1980, MS Educational Counseling. "I am working at a 40% position this year as a vocational counselor with the Long Beach Unified School District and spending time with our 2-year-old son, Jeffrey. Husband, Steve, teaches at Millikan High School in Long Beach."

Dr. Ken Ishida
BS Microbiology and Chemistry Minor 1983, PhD Analytical Chemistry UC Riverside, works with the Orange County Water District in Fountain Valley, Calif.

Dr. Larry V. Manes
BA 1981, PhD UC Santa Cruz, is director of Contract Manufacturing for Gilead Sciences in Foster City, Calif. "Son, Nicolas, is now 3, and wife, Cristine, is filming with National Geographic in Indonesia this year."

Dr. Joel S. McPherson
BS 1987, received his DDS at USC.

Sharareh N. Moaddeli
BS 1980, MS 1984. "I am working for Sempra Energy, the parent company of Southern California Gas Company. Sempra Energy was formed last year from the merger of the parent companies of SoCalGas and San Diego Gas and Electric. I have two children now; my daughter is a very energetic 8-year-old, and my son is a very energetic 10-month-old."

Dr. Kirk M. Morgan
BA 1980, MD Case Western Reserve, is a retina surgeon and director of Retina-Vitreous Surgery at the Park Nicollet Medical Center in Minneapolis, Minn. "I will never forget organic chemistry with Maricich and physical chemistry with Senozan."

Dr. Craig Owens
BA 1984, MD USC. "I am currently working as a general surgeon in Richmond, Va., in an 11-person group practice. I love being a surgeon. I miss California and am grateful for an excellent education at CSULB!"

Dr. Stephen Pentoney
BS 1983, PhD UC Riverside, is a scientist with Beckman-Coulter in Fullerton, Calif. He was recently inducted into his company's Patent Hall of Fame for his work on chemical instrumentation. Beckman-Coulter is now marketing the DNA sequencer which Steve developed. The Pentoneys have three children: Christopher (13), Amber (11) and Jennifer (10).

Karen M. Rogers
BA 1980, BS Criminalistics 1979, is employed as vice president for Technical Services with SSI Food Services and lives in Stanton, Calif.

Dr. Theresa Rohr-Kirchgraber
BA 1984, MD Cornell U Medical College, has an appointment as associate director, State University of New York Ambulatory Medicine Associates at SUNY Upstate Medical University where she specializes in internal and adolescent medicine. "I love being a mom and a physician. For all of the current pre-meds at CSULB—stick it out! All the hard work is worth it! I'm having a great time teaching students and residents, taking care of patients and running to my three children's events!" (Cf. an article about Theresa elsewhere in the Newsletter.)

Dr. Clayton R. Shepard
BA 1981, DDS U of Minnesota School of Dentistry, is a general dentist with Shepard Family Dentistry, Coon Rapids, Minn. "I built a state-of-the-art dental clinic across from Mercy Hospital in March 1999. I have a wonderful staff of five professional dental team members. My interests include flying single engine aircraft, motorcycles, professional boxing, travelling, photography, running and physical fitness."

1985–1989

Dr. Elizabeth Brinkman
BS 1986, MS 1987, PhD Stanford U, is employed as an engineer in Analytical Chemistry/Material Science at IBM Corporation in San Jose. "I have been working at IBM for about four years now; this is in the division which makes disk drives. My work involves quantitating metals contamination in solutions and solids using laser ablation ICPMS. I have been married for about eight years to Greg Scott, whom I met when we

Dr. Elizabeth Brinkman, husband Dr. Greg Scott, and children, Andrew and Daniel.

were students at Stanford. We now have two boys, Andrew (5) and Daniel (2). My mom has been a student at CSULB in the Art Department for the last several years and finally graduated this summer with a bachelor's degree."

Dr. Hugh Cecil
BS Biology and Chemistry Minor 1988, MD UC Davis, is in medical practice in Kalispell, Mont. "I am involved with a variety of hospital ventures including building a new hospital wing and an outpatient imaging center. Wife Denise teaches at a local college as a part-time instructor and keeps her hand in research." The Cecils have two children, Julia (4) and Anna (1).

Robert Curiale
BS 1987, MS U of Nevada, Las Vegas, is an environmental consultant and regulatory specialist with IT Group in Las Vegas.

Dr. Kerry DeGroot
BS Biochemistry, MD Georgetown U, is assistant professor at Georgetown University Medical School where he teaches cardiac physiology and cardiac anesthesiology to medical students. He recently received an $80,000 research grant from the American Heart Association to study the role of estrogen and homocysteine in heart disease.

Dr. Peter Farrell
BS Biology and Chemistry Minor 1988, OD California College of Osteopathy, is completing his residency and fellowship in child psychiatry. "I am officially a board-certified child psychiatrist, and I still use a lot of the chemistry I learned."

Dr. Dwayne Gergens
BS 1987, PhD UCI, associate professor in the Department of Chemistry at San Diego Mesa College, earned tenure in the fall of 1999. "I have been at Mesa since the fall of 1995 teaching fundamentals, and first and second semester organic chemistry lecture and laboratory. I live on the beach and plan to live and die in San Diego."

Dr. Denis Guttridge
MS Biochemistry 1988, PhD UC Irvine, is a post-doctoral associate at the Lineberger Cancer Center at the University of North Carolina, Chapel Hill.

Dr. Randy Jensen
BA 1987, MA and PhD Philosophy UC Los Angeles, is assistant professor of philosophy at Northwestern College in Orange City, Iowa. "My wife Darlene and I have been married for 10 years and have a daughter, Emma, who is 4 years old." Randy's father, Dr. James Jensen, was professor of chemistry and dean of the College of Natural Sciences and Mathematics at CSULB before his death in 1995.

Monica Keindl
MS 1985, works as Stability Supervisor with Perrico in Allegan, Mich.

Kathy Christopherson Kurjan
BS 1986, is employed as a scientist with Allergan in Irvine. "I am still at the same company (14 years) and am happi-

Continued on page 14

ly married with two cats. My husband and I both work at Allergan. I am proud to say I still work with chemistry and that my degree has served me well!" Other CSULB chemistry graduates employed at Allergan are Gary Beck, Stan Huth, Carl Martin and Thao Tran.

Dr. Larry Matsumoto

Dr. Larry Matsumoto, wife Susan, and children, Meghan, Daniel and Joseph.

BS 1987, MD Creighton U, having completed his fellowship at UC San Diego, has accepted a position with a medical group in Plano, Texas where he, Susan and children, Meghan, Daniel and Joseph, have relocated in June of this year. Larry is the senior author of two recent publications: "Anion gap determination in preeclampsia," *Obstetrics & Gynecology,* 1998;90:379-382 and "Effect of esophageal ligation on amniotic fluid volume and urinary flow rate in fetal sheep," *American Journal of Obstetrics & Gynecology,* 2000;182:699-705.

Dr. David Maynard

MS 1988, PhD UC Riverside, is chair of the Department of Chemistry at CSU San Bernardino.

M. Anthony Moone

MS 1987, is employed by ALH & Company, a Division of the Exesis Group in Fountain Valley.

Thomas Murphy

BS 1987, is chief chemist with Coatings Resource Corporation in Huntington Beach working with industrial coatings chemistry. He reports that CSULB chemistry graduate, Phuong "Christy" Nguyen, also works with his company.

Chris R. Nanney

BS Biochemistry 1998, is employed as a water quality chemist with the Marin Municipal Water District in Corte Madera, Calif.

Richard Nighswonger

BA 1987, works with Loctite as an industrial distributor specialist. He and wife, Tish, have three children: Russell (7), William (3) and newly born Tate Katherine.

Dr. David E. Tast

BS Biochemistry 1989, PhD USC, graduated from the USC School of Medicine, Department of Pathology: Children's Hospital, Los Angeles. His research was in the area of tumor cell biology and molecular genetics of pediatric sarcomas. David is employed as a field application specialist with Promega Corporation, lives in Long Beach and has two children.

Dr. Gerald Uyesato

BA 1987, PharmD UC San Francisco, is employed as an inpatient pharmacist specialist with Kaiser Permanente in West Los Angeles.

Karen Watson

BS 1989, works for Pyramid Labs in Costa Mesa as the senior chemist.

1990–1994

Nina Bao

MS 1994. "I worked as a chemist for five years in the nutritional supplements industry. Now that my son is finishing his last semester of the academic portion of the pharmacy program at University of the Pacific, I have decided to teach high school science and math and will enroll in the credential program this fall at CSULB."

Oren Beske

BS Biochemistry 1994. "My work is now focused on the cell biology of poliovirus infection. I have been working on making movies, time lapsed video microscopy, of certain organelles inside the cell and watching them as the virus replicates. I've presented many papers at meetings, and plan to complete my PhD within a year." He and Michelle Shaw will be married in October.

Delina Brassard

BS Biochemistry 1994, BSB Accounting 2000, is an associate tax accountant with Toro in Bloomington, Minn. and planning to take her CPA exam later this year.

Dr. Brian Culligan

BA 1993, DO Southern California College of Optometry, is Tohatchi Health Center Eye Clinic chief with the Indian Health Service in New Mexico.

Dr. Marcel Goldberg

BS Biochemistry 1990, MD U of Kansas 1994, is a family physician with Family Health Care Medical Group—Las Posas. "I moved into private practice in March of this year and live and work in Camarillo. Wife, Judy, and sons, Tommy (4 1/2) and Nicholas (2), are all happy and healthy."

Dr. Alexander Greer

MS 1993, PhD U of Wyoming, is assistant professor in the Department of Chemistry at Brooklyn College of the City University of New York. "I have one graduate and five undergraduate students working in my lab. Our Petroleum Research Fund Type G proposal was accepted for funding. I have served on two master's thesis committees and presented a poster at the Oxygen Society meeting in New Orleans last November. The poster was titled, 'Neighboring group participation in the DNA-cleaving antitumor antibiotic Leinamycin. Studies on the intramolecular non-bonding S-O interaction.'"

Dr. John Hecht

BS Chemical Engineering 1994 and Chemistry Minor, PhD UC Berkeley, is employed as a drying/particle formation specialist with Procter & Gamble in West Chester, Ohio. "I am an in-house consultant for a variety of consumer products, including laundry detergent (Tide), paper towels (Bounty) toilet paper, instant coffee, denture adhesive and more."

Judith Ramillano Jankowski

BS Biochemistry 1994. "I am now working at the ACS in the Department of Career Services in Washington, D.C., specifically as program manager, Local Section Career Programs. My department helps chemists with resume writing, interviewing tips, and career transitioning by providing workshops and seminars. I do anything from marketing the program to giving presentations (training workshops, speaking to undergrads about career options in chemistry, career counseling, etc). I'll be travelling once a month to national, regional and local conferences as well as the seminars and workshops that I organize. I have to say being president of the Student Affiliates of the ACS at CSULB increased my chances of obtaining this position. They have been impressed with our chapter for years.

Judith Jankowski and husband, Matt.

Because of my experience with SAACS, I have creative ideas on how to increase awareness of our program. I am in the process of applying for my MBA at Johns Hopkins. My husband, Matt, flys for the Navy."

Noucha Meallet Jasanis

BA 1992, formerly with Boeing, now works with Hughes Electronic in El Segundo. She was married to Patrick Jasanis last year; Patrick is an aerospace engineer also. Her brother, Mario Meallett, BA Biology 1994, is in his second year of residency at USC's School of Ophthalmology.

Michael Muegge

BS Biochemistry, 1991, is validation specialist in therapuetic manufacturing with Bayer Corporation in Berkeley, Calif.

Ron Ortiz

BS 1992, is a research chemist with Schumacher; a unit of Air Products & Chemicals, in Carlsbad, Calif. "I perform analytical research on next-generation materials used for semiconductor manufacturing. I use quadrupole and high-resolution mass spectrometers to analyze in the ppt and ppq range, and do most of my work in a class-100 clean room."

Dr. David Porzio

BS Biochemistry 1990, MD UC Irvine, is a cardiology fellow-in-training at the University of Massachusetts Medical School in Worcester, Mass. "I am entering my third and final year of a cardiology fellowship and plan to return to the Long Beach area upon completion in the summer/fall of 2001. My wife, Pam Garcia, BS Anatomy and Physiology 1990, is expecting our first child this fall. She continues to work as an emergency medicine physician."

Dr. Stacey Robinson

BS Biochemistry 1991, MD Tulane U, practices family medicine in St. Petersburg, Fla. "I work with the military at MacDill Air Force Base and am looking forward to civilian service in four years." Her husband, David, works with a small anesthesiology group in St. Petersburg.

Dr. Robert Rzasa

Dr. Robert Rzasa and wife, Rhonda.

BS 1993, PhD Texas A&M, accepted a position as a research chemist with Amgen in Thousand Oaks in April after completing a postdoctoral position at the University of Pennsylvania. He and wife, Rhonda, live in Ventura. Rhonda is a legal assistant in Santa Barbara.

Robert D. Smith

BA 1993, is full-time manager at the Grill on the Alley Restaurant in San Jose, Calif., a sister to the well-known restaurant of the same name in Beverly Hills, website <www.thegrill.com>.

Robert Stevens

BS Biochem 1993, is a law student at Northwestern School of Law of Lewis and Clark College in Oregon. "This summer [2000] I will be interning at an international environmental public interest firm based at the University of London, the Foundation for International Environmental Development. They do a lot of policy work for the UN and developing nations. I think my Peace Corps experience really helped me get the position because FIELD works with the Alliance of Small Island States and the South Pacific Regional Environmental Program which I was associated with while in Tonga."

Kiana Tabibzadeh

BA 1990, MS 1994, is professor of chemistry and chair for the School of Physical Sciences and Technologies at Irvine Valley College and recently purchased her first home in Irvine.

Char Taylor

BA 1991, is physician assistant and medical officer with the Peace Corps. "I am completing my third year here in Armenia and it looks as though I will stay another year. Armenia is a fascinating and beautiful mountainous country with an interesting yet tragic history."

Leonard Van Wijk

BS 1992, is an enviromental chemist/technical sales representative with North State Environmental in Long Beach. "I have been in the environmental field for eight years. My wife, Gina Good-Van Wijk, is a chemistry major at CSULB. We bought a home in Duarte two years ago."

Leonard Van Wijk and wife, Gina Good.

Stephen Westerhout

BA 1994, MD Loma Linda U, has completed his internship in surgery at the University of Hawaii and has taken a residency in anethesiology at Oregon Health Sciences University in Portland.

Dr. Gregory Whitaker

BS Biochem 1990, DPM Scholl College of Podiatric Medicine, is a fourth-year student at Nova Southeastern University College of Osteopathic Medicine in Ft. Lauderdale, Fla. "I will graduate from Nova in May 2001 and plan to complete my transitional year at Walter Reed Army Medical Center and then begin my residency in anesthesiology. Upon completion of my residency I will work as a staff anesthesiologist for the Army for four years."

1995–1999

Silverio P. Arano

BS Biochemistry 1996, is a fourth-year medical student at UC Davis.

Aaron Bakly

BS 1998, is a research assistant at the Uniformed Medical School in Bethesda, MD. He assists Dr. H. Pylori in finding a cure for ulcers. "I use Taqman, PCR, ELISA, and other techniques in my research. I am very excited to do basic research at this university."

Daniel Booker

BS 1997, is quality control chemist and plant supervisor for Chem-Mex Industries, Inc. in South Gate. He formerly worked with Applied Power Concepts in Orange, Calif. Chem-Mex specializes in the tortilla industry.

Thang Dinh

BS 1995, MS UC Irvine, is employed as a synthetic organic chemist with IDUN Pharmaceutical in La Jolla. He was

recently promoted from assistant research scientist to associate research scientist. According to IDUN's director, "Thang's contribution to the inflammation program has been invaluable. His work on scaling up the IDUN lead inflamation compounds, as well as his work on both diastereomers of the prodrug "warhead" are keys to IDUN's success in this area."

May Eldanaf

BA Chemistry, BS Biochemistry 1999, is a graduate student in the School of Pharmacy at USC. "I'm now in my second year and doing very well; thanks for the great education I received at CSULB."

Marjan Faridpak

BS Biochemistry 1997, is a high school chemistry and physical science teacher at Mission Viejo High School.

Daniel Farney

BS Biochem 1996, is completing his studies for the PharmD at the University of Maryland School of Pharmacy in Baltimore.

Kyle Findly

BA 1998, has completed his first year of dental school at Boston University's Goldman School of Dental Medicine. "I am now on a four-month Applied Professional Experience rotation where I gain hands-on experience working as a dental assistant. I'm having the time of my life working toward my dental career in Boston, but I sure do miss sunny California. Thanks CSULB for all the support and great memories."

Kyle Findly and girlfriend, Melissa Uribe.

Nancy Gardner

MS 1998, is a part-time lecturer in the Department of Chemistry and Biochemistry at CSULB. "I enjoy teaching freshman chemistry and working with students."

Dr. Dana Anne Haley

BS Biochemistry 1995, PhD UC Los Angeles, received her PhD in molecular/medical phamacology earlier this year. She has taken a position as a protein bioinformatics scientist with Hyseq, Inc. in Sunnyvale, Calif. She is author of a publication appearing in *J. of Molecular Biology,* v298, 261-72 (2000).

Michael Hall

BA 1995, is training supervisor for Pacific Maritime Associates in Wilmington, Calif. "I'm continuing to work for the PMA in the Ports of Los Angeles/Long Beach, along with my work in the U.S. Coast Guard Reserve."

Jason Haughton

BS Biochem 1995, was married to Vondalee Smith on July 8 of this year. Jason works with American Training Resources. "We are producers and

Continued on page 15

distributors of employee training videos. I spend my days on the telephone calling human resources and safety directors of companies. The greatest frustration in my life is now the game of golf. I started about seven months ago with a set of clubs I bought for $10 at a yard sale. I have since put about $400 into new equipment and am no better than when I first started!"

Thach Son Ho
BS 1995, MS 1997, is a lecturer in the Department of Chemistry and Biochemistry at CSULB.

Huy Hoang
BS Biochemistry 1999, is a student in Arnold & Maime Schwartz College of Pharmacy of Long Island University where he has completed his first year of studies.

Janet Hunting
BS 1999, has completed her first year of studies toward the PhD in Chemistry at Cornell University. "Because of my fortunate reception of the Cornell Fellowship for this first year, I have had the opportunity to begin research with Professor Frank DiSalvo."

Mirta Gaus Katnich
BS Biochemistry 1998, is quality assurance specialist/chemist with Bachem Inc. in Torrance, Calif. "Lee Katnich and I were married on July 3, 1999, and I moved to San Pedro shortly thereafter. We are expecting our first child in November, 2000." Chemistry graduate, Karen Laurence, is also employed with Bachem.

Mathew R. Koutroulis
BA 1996, MS UC Irvine, has completed his master's degree in chemistry with Dr. James Nowick at UC Irvine.

Dr. Simon Kung
Student 1996, MD Mayo Clinic, has completed his MD and plans to remain at Mayo for a three-year internal medicine training program.

Jennifer Lee
BS Biochemistry 1995, works at Croda as a technical sales representative, covering pharmaceutical and cosmetic companies throughout the Western United States.

Andra Lewis
BA Chemistry, BS Biochemistry, 1998, MS Forensic Science, U of New Haven, is a criminalist in the Breath Alcohol Program with the Washoe County Sheriffs Office, Division of Forensic Science, in Reno, Nev.

George Liarakos
BS Biochemistry 1996, is a master's student in biochemistry at CSULB, working with Dr. Douglas McAbee on characterization and identification of the iron-dependent lactoferrin receptor in liver cells (hepatocytes) and will be completing his thesis this year.

John Liarakos
BS Biochemistry 1996, will be completing his MS degree in chemistry with Dr. Lijuan Li at CSULB.

Phillip D. Marchis
BS 1998, is staff research associate II radiochemist in the Department of Molecular and Medical Pharmacology at UC Los Angeles. "I work at a cyclotron facility where I synthesize short-lived radiopharmaceuticals used for Positron Emission Tomography (PET)."

Naomi-Trang Nguyen
BS Biochemistry 1998, is working for Novocell, a diabetes research company.

Torey Payne
BS Biochemistry 1998, is employed as technical sales representative for Mallinckrodt Baker, Inc. and lives in Long Beach. "I cover Los Angeles, Ventura and Santa Barbara counties. We cover all areas of industry, but our focus is heaviest on manufacturing chemicals. I get to call on scientists at all the major biopharmaceutical accounts." He is married to Gina, and they have an 8-year-old son. Gina is completing her teaching credential at CSULB.

Ana Perez
BS Microbiology and Chemistry Minor 1997, is studying for her PhD in bacteriology at UC San Diego. "I joined a *Bacillus subtilis* lab. I started out working on a protein hypothesized to be involved in thinning of peptidoglycan. I'm also working on another project concerned with the regulation responsible for initiation of sporulation as well as collaborating with another lab at Scripps Research Institute. She is the co-author of a recently published paper appearing in *J. Bacteriology* 182:1096-1108 [Feb. 2000].

Lori Snyder
Student 1995, has completed her MFA at USC and is now teaching fourth grade in Pacific Palisades

Jeff Suri
BS 1998, is a PhD student at UC Santa Cruz and has completed his first year. He is involved in research in organoborane chemistry.

Neill White
BS Chemistry and Computer Engineering 1995, MS Applied Mathematics San Diego State U, is a scientific programmer with Incyte Genomics in Palo Alto, Calif.

Vincent Yee
BS Biochemistry 1997, is a graduate student in biochemistry and a graduate assistant in the Department of Chemistry and Biochemistry at CSULB.

James Zarrinnegar
BS Biochemistry 1996, has completed his first year of dental school at New York University College of Dentistry. ■

Alumni Response

Dear CSULB Chemistry Alumnus:

The faculty hope that you have enjoyed reading our 25th annual Newsletter and will take time to send us information about yourself for the next edition. Feature articles of interest to chemistry alumni are also solicited, as are photos. We would also appreciate any comments you might wish to offer about the Newsletter—what you enjoy reading, and what you would like to see that has not been included.

Contributions to the Chemistry and Biochemistry Department Alumni Fund are invited. The CSULB alumni office will be informed of any gift, and contributions will be acknowledged in alumni publications. Money which is received is used for the publication of the Newsletter, Chemistry Alumni Scholarships and Awards and miscellaneous projects which help maintain the quality of our department. You will receive a personal letter of appreciation for gifts in any amount. If you wish to contribute, make your check payable to:

Department of Chemistry/Biochemistry and send to:

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and Biochemistry
California State University,
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Name ..... Date .....

Address .....

City ..... State ..... Zip .....

Home Phone ( ) ..... Home e-mail address .....

CSULB Degree(s) and Year(s) .....

Other Degree(s) • Year(s) • School(s) .....

Occupation ..... Job Title .....

Employer .....

Employer's Address .....

Business Phone ( ) ..... Business e-mail address.....

❶ Please give us information about yourself (job, further education, family, scientific achievements, etc.) which you would like included in next year's Newsletter. Photos for publication are also welcome. (Please continue comments on an additional page if needed.)

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❷ If you have enclosed a contribution, please enter the amount [ ]. You may choose a fund to support:

❑ Discretionary Fund, ❑ Henderson Memorial Fund, ❑ Marsi Scholarship Fund, ❑ Monahan Memorial Fund,

❑ Pathos Memorial Fund, ❑ Scoggins Memorial Fund, ❑ Stern Memorial Fund.

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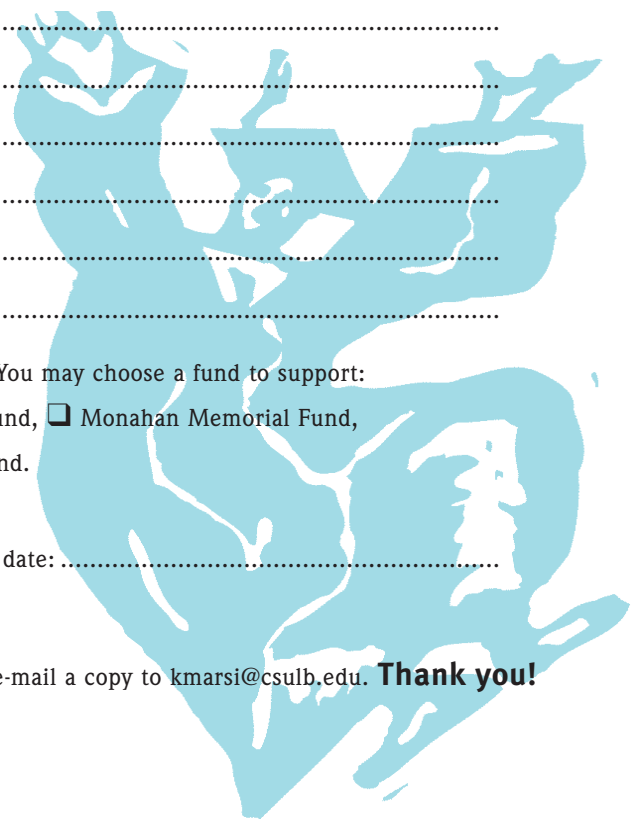

Some members of the 1999-2000 graduating class. Row 1 (left to right): Dr. Robert Loeschen, Sadaf Ursani, Maria Matutina, Hiral Patel, Phuong Anh Hoang. Row 2 (left to right): Allison Dinh, Dr. Nail Senozan, Thu Huong Tran, Tiffany Phung, Ying-Li Pao, Gina Suh, Tom Hall, David Moatazedi, Tomo Sakurai, Jennifer Dulalia, Melissa Gillis. Row 3 (left to right): Bruce Gormley, Luke DeSelm, Johnny Salazar, Yvonne Burns, Jimmy John, Jentry Kear, Symar Uppal. Row 4 (left to right): Todd Takasaki, Mahnaz Roshanai, Gail Chris, Roy Varughese, David Thong.

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