

December 2002

To: Worldwide members of the OSU Biochemistry and Biophysics Community
From: P. Shing Ho, Chairman

Dear Friends and Colleagues:

Happy Holidays to all. It is with great pleasure that I send my first Holiday greeting as the Chair of the Department of Biochemistry and Biophysics. The theme for this year's letter can be best summarized as "*changes*". Everything must change at some point and, as most of you already know, **Christopher K. Mathews** retired as the Chair of the department in June of this year. It is perhaps an understatement to say that the Department, and all of molecular biology at Oregon State University, has been shaped by nearly a quarter century of leadership under Chris. The shoes that I was elected to fill are both literally and figuratively very large, and I hope to continue to guide the growth of the department as an outstanding research and instructional unit on campus. **Kevin Ahern** and **Gary Merrill**, with help from **Kate Mathews**, organized a truly wonderful symposium to celebrate Chris' release from servitude (more on this later).

We welcome the arrival of **Dr. Chrissa Kioussi** and the return of **Dr. Michael Gross** (Gary Merrill's very first Ph.D. student) as Assistant Professors in the Department. Dr. Kioussi received her Ph.D. in 1992 from the Hellenic Pasteur Institute in Athens Greece. She then continued her training as a postdoc at the Max Plank Institute in Göttingen Germany, then as a Senior Research Associate at the Scripps Institute in La Jolla, CA, and most recently as the Assistant Project Scientist with Michael Rosenfeld in the Howard Hughes Medical Institute at the University of California, San Diego. After completing his Ph.D. with Gary in 1988, Michael Gross was a postdoc at the Max Plank Institute in Göttingen Germany, a visiting Scientist at the EMBL in Heidelberg, Germany, and finally a Research Associate with Martyn Goulding at the Salk Institute in La Jolla, CA, before accepting his current position in the Department. Both of our new faculty members use transgenic mice to study mammalian development—Chrissa has published a number of outstanding papers from her postdoctoral work on left-right asymmetry particularly as they pertain to cardiac development, while Michael's work has centered on transcriptional control during neural-crest development. It may also be obvious from their mutual paths to Corvallis that, besides having similar research interests, Michael and Chrissa are husband and wife. We are very excited by the new research directions that these two new faculty members bring to the Department.

The administration at the University level will also change. Dr. Paul Risser has decided to leave OSU in January to assume the position of Chancellor of the state university system in Oklahoma. The current Provost (Tim White) will fill the position temporarily until a permanent replacement can be found. As a result, we have seen a "bumping" phenomenon, where administrators are being bumped up a level, in sort-of a reverse domino effect. This comes just as the ideas from the "OSU 2007" redesign effort start to emerge.

After just barely one year as the Ava Helen Pauling Professor in the Department and the Linus Pauling Institute, **Joe Beckman** was, in addition, selected as the Director of the Environmental Health Sciences Center at OSU. Joe continues the tradition of strong and creative Center Directors who run very active and recognized research programs.

The department was saddened by the sudden passing of **Dr. Kathleen McGaughey**. Kate completed her Ph.D. with Chris Mathews this past year, and stayed in Corvallis in a brief stint as a postdoc with Andy Karplus and, most recently, to rewrite the instruction manual for the Department's Fall term laboratory course. We are grateful to **Marilyn Walsh** for arranging a memorial service that was well attended by Kate's friends and colleagues in Corvallis.

A number of events were held in the department this year. The main event, of course was the Christopher K. Mathews Symposium in May. The lecture series drew a very large crowd of past and present Mathews alumni and collaborators. Lectures were given by **David Epel** from the Hopkins Marine Station at Stanford University, **Jim Karam** from the Department of Biochemistry at Tulane University, **Myron Goodman**, the E. M. Dornsife Chair at the University of Southern California, **Britt-Marie Sjöberg**, a long time collaborator from Stockholm University, and Chris himself. After the serious stuff came the evening dinner and roast, with Chris' good friend, **Myron Goodman**, serving as the Master of Ceremonies ("we do not come to bury Chris Mathews...— or maybe we did"), and a very warm and personal tribute from Chris' sister.

Phil McFadden hosted a summer workshop ("Oregon Biotox") on using biosensors to detect potential bioterrorism agents. This very timely workshop drew participants from around the world to showcase devices based on enzymes to cells to entire organisms to serve as "canaries in the coal mines". The cytosensors being developed by Phil's interdepartmental/intercollege research team performed extremely well, and drew significant interest for commercial development. In the area of interdepartmental research, **Andy Karplus** has a collaborative project with Lynda Ciuffetti to determine the structure of a fungal plant toxin. His graduate student, Ganapathy Sarma was able to grow beautiful crystals within just a week's time (quite a feat in crystallography). I had the pleasure of presenting our laboratory's work on DNA structures as the Researcher of the Year seminar, sponsored by the OSU chapter of *Sigma Xi*. This was in anticipation of the 50th anniversary next year of the landmark discovery of the DNA double-helix structure by Watson and Crick.

In a very informal survey of research efforts in the department, we found that the research enterprise in the department remains strong. The total funding for faculty research this year alone was over \$5 million. This was helped in part by new grants awarded to our young faculty, including an NIH grant to **Jeff Greenwood**, and the renewal of the long standing Program Project Grant to investigators in the EHSC, including **Joe Beckman** and **Michael Schimerlik** in our department.

Chris Stoner, one of **Gary Merrill's** graduate students, received the Department's inaugural Graduate Research Award. The award is intended to provide continuing support to the research efforts of outstanding graduate students. This award will allow Chris to complete his studies on the contribution of thiol oxidation to transactivation of the p53 gene.

We now list 10 emeriti faculty, all of whom are still active one way or the other, and who wish to extend their greetings to you all. **Don MacDonald** turned 80 in November and keeps occupied with family, birding, and the MacDonald undergrad scholarship. **Dave Loomis'** health is a problem, but we do see him occasionally. **Curt Johnson** is cleaning up his research, enjoying his '53 MG and will be working on the second edition of the Principles of Physical Biochemistry textbook with Ken van Holde and Shing Ho; **Henry Schaup** on the recreation side sails; **Derek Baisted** golfs all over the world. **Ken van Holde** has survived and is recovering from a hard-to-diagnose, but fortunately reversible autoimmune condition, keeping up with his writing and editing right through

the ordeal. **Bob Becker** continues his work with the American Heart Association, the anti-smoking forces, and faculty and retirees' organizations. **Wil Gamble** still advises loads of students (and faculty and others) and continues research on bears. He goes to the library each day and keeps us all on our toes. **Don Reed** is as busy as always, but claims to be going only at half speed. **Chris Mathews** (the newest addition to this august group) has not slowed down visibly and, to add to his research and other work is about to start work on a fourth edition of the Mathews and van Holde text with Dave Fahrney of Colorado State.

In addition to the two new faculty members, the department saw two new additions to faculty families. **Jeff and Angie Greenwood** added another son (Salomon Luke, born April 3) to their growing family of boys. Soon afterwards, **Phil and Helen McFadden** welcomed a daughter (Jenna Ann, born May 30) to their family.

After 15 years of service at OSU (8 in the English department and 7 in the Department of Biochemistry and Biophysics) **Anterra** will be retiring from the Office in December, and plans to move out to Coos Bay.

Undergraduate and Graduate Class of 2002

We congratulate all of the students who earned their Biochemistry and Biophysics degrees this year. Those who received a Bachelor's of Science degrees include **Debra Adam** (now a technician at AVI Biopharma), **Simeon Andrews**, **(Robert) Jason Brown**, **David Dalby** (a commissioned Marine officer after graduating from the ROTC), **Cameron Derbyshire**, **Steve Full**, **Keith Hazleton** (currently a technician at Rockefeller Institute in NY after spending time in Europe, and teaches LindyHop dancing in places as diverse as the Czech Republic and Sweden), **Susan Kamman** (planning a career in science education), **Tasha Ludwick** (expected to start osteopathic school in Maine for fall, 2003), **Rob Melton** (attending OHSU med school), **Leif Meyers** (attending med school at Michigan State), **Tim Park** (graduate student in Toxicology at OSU), **Morgan Parker** (a technician with Mark Zabriskie and applying to the OSU Pharmacy program), **Denise Ptacek**, **Annie Staten** (graduate student at U. Wisconsin), **Stuart Endo-Streeter** (a technician position at Brandeis University), **Tim Thauland** (graduate student at OHSU), and **Jackie Wirz** (also a graduate student at OHSU).

The department had a banner year in conferring graduate degrees, with 4 students receiving MS and 6 receiving Ph.D. degrees. **Anja Bauman** (MS, Whanger) returned to Norway, **Andrew Bernards** (MS, Wong) is currently working as a technician at OHSU, and **Terry Tijerina** (MS, Frei) returned to her home in Texas, and **Shiau-Yin Wu** (MS, Hays) who is planning to work in industry. Of the Ph.D. students, **Kogan Bao** (Ph.D., Wong) has accepted a postdoctoral position at Stanford with Dan Herschlag, **Stella Martomo** (Ph.D., Mathews) is a postdoc at the National Institute of Aging at the NIH, **Ryan Preston** (Ph.D., McFadden) has remained at OSU as a postdoc with Prof. Max Deinzer, **Alisa Vangnai** (Ph.D., Arp), and **Jeffrey Vargason** (PhD, Ho) is a postdoc with Tracy Hall at the National Institute of Environmental Health Sciences. In addition, three students from other departments completed their Ph.D.s with faculty members in the Department of Biochemistry and Biophysics. **Korakod Chimpoy** (Ph.D. Genetics, Mathews) is currently a research scientist at the Chulabhorn Research Institute in her native Thailand, **Ahmet Koç** (Ph.D. Genetics, Merrill) is a postdoc with Vadim Gladyshev in the Department of Biochemistry at the

University of Nebraska, and Mary Lynn Tassotto (Ph.D. Molecular and Cellular Biology, Mathews) is a postdoc at the Ontario Cancer Research Institute.

Alumni News

In addition to the ten former Mathews students at the symposium, a number of former van Holde alumni also visited the department. **Philippe Georgel** (Ph.D., van Holde) visited during the Mathews-Fest and told us that he has accepted a faculty position at Marshall University in West Virginia. **Cynthia McMurray** (Ph.D., van Holde,) presented a very impressive seminar outlining her work at the Mayo Clinic to develop treatments for Huntington's and other related diseases, starting with models for how unusual DNA structures lead to expansion of trinucleotide repeats. **Barbara Shaw** (postdoc, van Holde, currently a Professor in the Department of Chemistry, Duke) stopped by long enough on her way to the annual chromatin meeting in Asilomar, CA to chat about her work on boronated oligonucleotides.

We continue to receive news of great accomplishments from former graduates from the BB department. **David Brown** (Ph.D., Small) is now Chair of the Dept. of Environmental Health, Molecular and Clinical Sciences at Florida Gulf Coast University, **Nancy Ray** (Ph.D., Mathews) is currently a Research Assistant Professor in the Pathology Department at the University of Iowa, and is funded by an NIH K01 grant, **Ed Schmidt** (Ph.D., Merrill, Assistant Professor at Montana State University) had a paper featured on the cover of *Cell*, **Michael Smerdon** (Ph.D., Isenberg, E. R. Meyer Distinguished Prof., Washington State University) received a MERIT award from the NIEHS this year, and **Cynthia Thompson** (Ph.D., Schaup) tells us that she is now working at PR Pharmaceuticals in Colorado. **Nerida Ellerton** (postdoc, Isenberg) has taken an appointment at Illinois State University but, sadly, has announced that her husband **Hugh David Ellerton** (postdoc, van Holde) has recently passed away. In the area of life-style changes, **Brandt Eichman** (Ph.D., Ho) announced that he and Jessica are expecting (best wishes to both, or all three), while **Todd Kagawa** (Ph.D., Ho), after several years dodging sheep and volcanoes in New Zealand, is considering a move back to the states and the colder climes of Montana. **Don Jacobsen** (Ph.D., Reed) tells us that he is recovering well after by-pass surgery (best wishes for a full recovery). **Sherlock Lam** (postdoc, Hsu) announced the birth of their daughter Mimi. **Sanford Leuba** (Ph.D., van Holde) and **Jordanka Zlatanova** (Res Professor, van Holde) continue as the dynamic duo, editing a book titled *Biology at the Single Molecule Level* and organized a meeting at the NIH on chromatin structure and dynamics: state-of-the-art. **Darin Weber** (Ph.D., McFadden) had a particularly busy year, serving as Acting Chief of the Cellular Therapy Branch for the U.S. Food and Drug Administration (FDA), Center for Biologics Evaluation and Research, was deployed in response to the Sept. 11 attacks, supported the security measures at the 2002 Winter Olympics, received the U.S. Public Health Service Commissioned Corps Young Scientist of the Year Award in 2001, and had a new daughter born in 2002. **Zac Wood** (Ph.D., Karplus) defected from the Beavers and accepted a postdoctoral position with Brian Matthews at the University of Oregon.

Sonya Baker King (B.S., 95) just moved back to Oregon from Pennsylvania with her husband, and is currently living in Portland and working at OHSU (ran the Portland Marathon this fall); **Stacy Boyd** (B.S., 93) moved her medical practice from Corvallis to Portland when her husband accepted employment in the Silicon Forest. **Michelle Hartmann** (B.S., 95) is still in San Diego, is getting married and hoping to get into UCSD to work on a masters degree; and **Jill Mooney** (B.S., 2000) passed her prelim qualifying exam at U.T. Southwestern Med Center in Dallas. **Marguerite Strobel**

(B.S., 98) has been accepted into the biotechnology MS program at Columbia University, while **Melinda Woods** (B.S., 93) tells us that she is pursuing an MS in geology at Portland State University. **Jeffrey Watson** (B.S., 95) has returned to OSU as a postdoc in my laboratory, and joins his wife **Christy** (B.S., 95) who returned last year as an Associate Professor/Faculty Research Assistant in Soil Science.

Development Efforts in the Department of Biochemistry and Biophysics

Our most ambitious development goals in the department for the coming years will be the establishment of a transgenic mouse facility to support the research efforts of Drs. Kioussi and Gross, as well as others in the BB department and around the OSU campus. In addition, we are reaching the goal of establishing the Christopher Mathews Seminar fund as an endowed series, thanks in large part to the generous donations from Chris' former and present students, colleagues, and friends. Finally, the ever tumbling stock market has taken a toll on all accounts in the OSU Foundation, and is currently threatening the viability of some of our undergraduate scholarship funds; thus, I see an immediate need to shore-up these funds in order to insure that all deserving students can continue their education in the department.

In closing, on behalf of the faculty, staff and students in the Department, I would like to extend to you and yours a wonderful Holiday Season, and best wishes for the New Year. As always, our doors are open to welcome your visit, and our ears attentive to news of your well being, wherever you may reside.

Yours warmly,

P. Shing Ho

P.S., With my very poor abilities to remember names and people, this letter could not have been completed without significant contributions and editorial help from Chris Mathews, Robert Becker, and Barbara Hanson.