

News from Biochemistry Centres

University of Calgary

Department of Biochemistry & Molecular Biology

Correspondent: Leon W. Browder.

The Department of Biochemistry & Molecular Biology is committed to excellence in research, teaching and service. Over the years the department has received considerable recognition for its achievements in basic research as well as in training of graduate students and postdoctoral fellows. We are a diverse department, with members belonging to eight different interdepartmental Research Groups. At the present time, 36 faculty members hold primary or secondary appointments in the department. There are two Emeritus Professors and 10 adjunct appointees. Our research activities are supported by a number of excellent core facilities, including UCDNA Services, the Protein Sequencing Facility, the Peptide Synthesis Facility, the Embryonic Stem Cell/Targeted Mutagenesis Facility, the Hybridoma Facility, the Microscopy and Imaging Centre and the Bio-NMR facility.

We are poised to add additional research facilities as the result of a number of successful funding initiatives. Key to this is the new Alberta Network for Proteomics Innovation, a joint venture with the universities of Alberta and Lethbridge. As a result of funding that has materialized, we are developing a microarray facility, a mass spectrometry and 2D gel proteome display facility and improving our capabilities in functional genomics. Our transgenic/knockout mouse facilities are being substantially upgraded and enlarged. We are also initiating a complementary program in Bioinformatics

Dr. Raylene Reimer, who will be joining us in May, is the newest member of our department. Raylene's primary appointment is in the Faculty of Kinesiology. Raylene has a PhD from the University of Alberta in nutrition and biochemistry, and she is also a Licensed Clinical Dietician. She recently completed a post-doctoral fellowship at the Nestle Research Centre, Lausanne, Switzerland. Her research currently focuses on nutritional regulation of gene expression in obesity in humans and animal models and nutrient regulation of glucagon-like peptide.

Dr. Gil Schultz returned from a well-deserved sabbatical on January 1. The sabbatical came after five years' service as Head of this department. A portion of his sabbatical was spent pursuing a collaboration with **Dr. Dylan Edwards**, a former member of this department, at the University of East Anglia in Norwich, U.K. Gil was able to pursue his research more vigorously and spend time at the lab bench, which he enjoys very much. Upon his return, Gil jumped back into the administrative fray, this time for a one-year term as Acting Associate Dean (Research).

Dr. Joe Goren is currently on sabbatical in the Joslin Institute at Harvard University. He is using microarray technology to identify and quantify cell specific transcripts that are stimulated or inhibited by insulin stimulation. Upon his return to Calgary, Joe will be able to continue to pursue this research and extend it by using the proteomics facilities to identify insulin-regulated gene products.

Dr. Kostas Iatrou is currently on sabbatical at the Department of Biology, Athens University in Greece. He is collaborating on the molecular biology of insect oogenesis with Rene Lecanidou and reinforcing contacts and collaborations with other colleagues at a number of European universities.

Dr. Marvin Fritzler completed his tenure as Associate Dean (Research) and assumed the prestigious Arthritis Society Chair in Rheumatic Diseases/Rheumatology.

The Department of Biochemistry & Molecular Biology offers graduate training leading to Ph.D. and M.Sc. degrees in Biochemistry and Molecular Biology. We invite potential graduate students and postdocs to give Calgary careful consideration. Members of this department conduct exciting, leading edge research, are well funded by international, national and provincial agencies and publish extensively in the very best journals. More details about the department can be found at <www.ucalgary.ca/bmb>. Not only do we offer excellent training opportunities for young scientists, but the natural beauty surrounding Calgary is breathtaking, providing year-round recreational opportunities. Extraordinary science in an extraordinary location!

Biochemistry Division, University of Calgary

Correspondent: Susan Lees-Miller

The Biochemistry Division at the Department of Biological Sciences of the University of Calgary is composed of 7 Faculty members and two Instructors. The past few years have seen many changes in the Division, with the retirements of Drs **Ken Stevenson**, and **Maurice Gaucher**, and the hiring of four new Faculty members (Drs **Greg Moorhead**, **Les Tari**, **Barry Phipps** and **Ray Turner**). The research interests within the Division range from NMR and crystallography to enzymology and signal transduction. The Biochemistry Division is actively involved in undergraduate and graduate teaching, offering 15 half-courses of formal instruction. In 1999, 41 students graduated from the Biochemistry undergraduate program, 17 with honours or distinction. The undergraduate curriculum is currently under redesign

and Drs **Elke Lohmeier-Vogel** and **Rob Edwards** were awarded funds to redesign the teaching laboratories to incorporate more "inquiry-based" learning.

The Biochemistry Division is also home to 23 graduate students, 8 post-doctoral fellows and research assistants and 22 summer students. Research in the Division is well funded by NSERC, Alberta Heritage Foundation for Medical Research, the National Cancer Institute of Canada and the Medical Research Council. Highlights of the past year include the annual Biochemistry retreat, held in beautiful Kananaskis country, which was attended by all graduate students, Faculty and post-docs. Other highlights include the awarding, in August, 1999, of the Waksman Outstanding Educator Award of the Society of Industrial Microbiology to Dr. **Maurice Gaucher**. More information about the Division can be found at <www.acs.ucalgary.ca/~leesmill/bchem>.

Dalhousie University

Department of Biochemistry & Molecular Biology

Correspondent: Dr. Catherine Lazier

The new department name is now official but the job of changing the name on stationary and in handbooks and calendars is still ongoing. And it still is simpler to answer the phone with the old name.

We have been fortunate in the past year to hire two new assistant professors. **Andrew Roger** returns to us after post-doctoral work in Mitch Sogin's lab in Wood's Hole. Andrew did his Ph.D. here with Ford Doolittle and was the winner of the Syd Patrick prize for his graduate work on evolution of early eukaryotes. Andrew has initial funding from an NSERC genomics grant and joins the Canadian Institute for Advanced Research Group on Evolutionary Biology in the department where he contributes to our growing expertise in genomics. The evolutionary biologists at Dalhousie are all very pleased to hear that Genome Canada has approved in principle the establishment of the Atlantic Genomics Centre here in Atlantic Canada.

The second new appointee is **Doug Hogue**, presently at the BC Cancer Agency in Vic Ling's lab. Doug's main interests are in intracellular trafficking and the nuclear receptor superfamily. Many of us are looking forward to collaboration with him

when he arrives in September.

Some of us are involved in the IUBMB meeting coming up in July in Birmingham. **Peter Dolphin** and **Fred Palmer** will be delegates. Peter is also on the Steering Committee for the 2003 IUBMB meeting in Toronto. Peter was the president of the CSBMCB who won the bid to have the 2003 meeting in Toronto and Fred will be organizing the Young Scientist Symposium for this meeting. Peter also has recently become Secretary General of the Pan American Association for Biochemistry and Molecular Biology (PABMB) and is very pleased that this will require some trips to Latin America. He also keeps himself busy as the local MRC Regional Director.

We have had record numbers of undergraduate students in honours and major biochemistry and molecular biology courses over the past 3 years. We also do a lot of teaching in the professional faculties and have been very fortunate to have retired colleagues to do some of this teaching. Doug Russell, who joined the department in 1966, did a wonderful job teaching pharmacy students. His sudden death last June was a terribly sad loss to us all. We are establishing a prize in his name for Biochem 2200, an introductory course that he founded in the 80's. It started off with a few dozen students and now has 135. If any reader would like to send a donation to Doug's memorial prize, please send a cheque to Dalhousie University c/o Fred Palmer.

University of Guelph

The Guelph-Waterloo Centre for Graduate Work in Chemistry and Biochemistry

Correspondent: Frances J. Sharom

Congratulations are in order for Dr. **Fred Brauer**, who was recently awarded a grant from the NIH to investigate changes in hepatic oxygenation in chronic ethanol-treated rats. He is the first Canadian researcher at the University of Guelph to have ever been awarded an NIH grant. Dr. Brauer will study the role of tissue hypoxia in alcohol-related liver damage in moderate drinkers, using functional magnetic resonance imaging (fMRI). fMRI is a new technique in which changes in the oxygenation of a tissue within a subject can be detected non-invasively, and has generated great excitement in the CNS community, since regions of the brain involved in a specific task show measurable changes on oxygenation. Dr. Brauer's group will be the first to apply this technique to study changes in the liver of rats. These experiments will lay the groundwork for simple non-invasive diagnostic tests to evaluate liver oxygenation status in human patients as a possible early predictor of subsequent alcoholic liver disease. Two faculty members were also successful in obtaining new operating grant funding in recent MRC competitions. Dr. **Dev Mangroo** was awarded a grant to work on the function and mechanism of nuclear t-RNA export receptors, and Dr. **David Josephy** received a grant to implement the use of cells from transgenic rodents in assays for mammalian cell. The goal of the project is develop a new method for mutation analysis, by culturing epithelial cells from transgenic mice and rats bearing bacterial target genes. This system should be a sensitive, rapid, and biologically relevant new test for chemical mutagens. Dr. **Rod Merrill** was promoted to full Professor, effective July 1 1999. Dr. Merrill's group is studying the structure and function of the *E. coli* colicin channel (funded by NSERC), as well as working on an MRC-supported project to determine the catalytic mechanism of *Pseudomonas aeruginosa* exotoxin A, and a CF Foundation project to develop peptide-based inhibitors of the toxin. Dr. **Frances Sharom** attended a CIHR planning workshop in Banff last Fall which led to the founding of the Canadian Membrane Consortium. It is hoped that this organization will act as a "con-

ductor" for researchers across Canada who are studying many different aspects of membrane proteins and lipids.

The Department of Chemistry and Biochemistry at the University of Guelph is currently seeking a faculty member in the area of biochemistry at the Assistant Professor level. For more details, check the department's web page at <www.chembio.uoguelph.ca>.

The University of Guelph has recently been awarded funding from the CFI program for several state-of-the art equipment facilities of importance to biochemists, including 500 and 600 MHz NMR instruments and a steady-state luminescence spectrometer (part of the Centre for Food and Soft Materials), as well as a surface plasmon resonance instrument and a MALDI-TOF mass spectrometer.

University of Waterloo:

Dr. **Scott Taylor** recently joined the Chemistry Department at the University of Waterloo from University of Toronto (Erindale) and is continuing his research in the areas of enzyme inhibitors and catalytic antibodies. Dr. **Guy Guillemette** has been promoted to Associate Professor, effective July 1, 2000. Dr. Guillemette's research involves structure-function studies on iron metalloenzymes in the areas of nitric oxide synthase and cytochrome c electron-transfer reactions. Dr. **Elizabeth Meiering's** group is conducting research on the folding, structure and dynamics of medically and biologically important proteins. Dr. **Gary Dmitrienko's** research group is involved in the design, synthesis and enzymology of inhibitors of bacterial zinc-dependent beta-lactamases as well as the development of new structural classes of HIV-1 reverse transcriptase inhibitors. Dr. **John Honek** has been promoted to full Professor, effective July 1, 2000. Dr. Honek's group is involved in the area of mechanistic enzymology of metalloenzymes of the isomerase class as well as the structure-function of enzymes involved in methionine biochemistry and methylation. Dr. **Susan Mikkelsen** is interested in biosensors and bioassays. Her group invented the world's first voltammetric sensor for DNA sequence detection, and is now actively developing a new electrochemical antibiotic susceptibility assay for microorganisms; technology available includes screen-printing for disposable sensor design and atomic force microscopy for surface characterization.

The department received major funding for sophisticated instrumentation from the Canadian Foundation for Innovation program. Key for bio-

chemists are a new 600 MHz NMR spectrometer and enhancement of existing mid- and high-field NMR spectrometers, as well as a new MALDI-TOF mass spectrometer, which will be acquired in 2000.

Heather Montgomery, a graduate student who works in **Guy Guillemette's** lab, was awarded graduate student travel awards from the Pan-American Association for Biochemistry and Molecular Biology as well as the Merck-Frosst-Canadian Society of Biochemistry, Molecular and Cellular Biology. These awards allowed her to attend the 1999 Joint Meeting of the ASBMB, CSBMCB and PABMB in San Francisco. She presented a poster and a talk on her research entitled "The effects of a putative inhibitory domain on the binding of calmodulin to the rat neuronal nitric oxide synthase reductase domain. A number of other graduate students were recipients of both internal and external awards for biochemistry. **Susan Clugston** (supervisor: **J. Honek**) was awarded the Merck-Frosst Biochemistry Award in GWC2B and an ASBMB Graduate Student Travel Award to attend the ASBMB/CSBMCB San Francisco conference, **Amanda Doherty-Kirby** (supervisor: **G. Lajoie**) was awarded the David Holden Memorial Scholarship, **Mark Vaughan** (supervisor: **J. Honek**) was awarded an ASBMB Graduate Student Travel Award. **Peter Ertl** (supervisor **S. Mikkelsen**) received the Gold Medal in the graduate student poster competition at the 1999 Ottawa Life Sciences Conference.

The University of Lethbridge

Department of Biological Sciences
and Department of Chemistry and
Biochemistry

Correspondent: Marc Roussel

1999 saw the opening of a new plant biotechnology research building on the campus of the University of Lethbridge. Hepler Hall is a 760 square metre facility with three greenhouses and a bank of growth chambers. The building was named for the late Loren G. Hepler, an early member of the Department of Chemistry. Dr Hepler, a solution thermodynamicist, helped shape the University as an institution where teaching and research of the

highest caliber go hand in hand.

Four research groups now call Hepler Hall their home. **Barry Micallef's** work focuses on the regulation of photosynthesis and on the possibility of enhancing photosynthetic yields by genetic manipulation. **Stewart Rood** and his group are pursuing two distinct but complementary lines of research, one concerned with physiological studies of gibberellins, the other with the ecology of river valley cottonwoods. **Elizabeth Schultz's** laboratory uses genetic analysis to dissect the molecular mechanisms that control leaf vascular tissue development and leaf shape. **Kevin Smith** studies the natural antimicrobial compounds produced during a plant's immune response. Barry, Stewart and Elizabeth are members of the Department of Biological Sciences while Kevin is a member of the Department of Chemistry and Biochemistry.

McMaster University

Department of Biochemistry

Correspondent: Vettai Ananthanarayanan

Three young scientists joined the Department in 1999. This raises the total new recruit count in the last two years to five, a substantial boost to our research and teaching activities. The newcomers are:

Ray Truant: Ray did his undergraduate and postgraduate work at the University of Toronto obtaining his Ph.D. from the Department of Medical Genetics in 1996. He won a postdoctoral fellowship from the Howard Hughes Medical Institute to study HIV-1 protein nuclear import and export mechanisms at Duke University from 1996-1999. He joined us in July 1999 and is continuing his research on the pathways for protein nuclear import in mammalian cells.

Yingfu Li: Li came to us last fall after his postdoctoral stint at Yale in Dr. Braker's laboratory on an MRC fellowship. He got his Ph.D. from Simon Fraser in 1997 under Dr. Dipankar Sen and received the NSERC doctoral prize in 1998. His current research interests lie in chemical biology dealing, particularly, with in vitro evolution of catalytic DNA and RNA and DNA-drug interaction.

Paul Berti: Paul joined us in 1999 as a joint appointee in our Department and the Chemistry Department. He did his Ph.D. on cysteine proteases at McGill under Dr. Storer. He used his NSERC

postdoctoral fellowship at the Albert Einstein College of Medicine in New York where later he worked as an instructor during 1998-1999. His research interest lies in understanding enzyme mechanism using kinetic isotope effects.

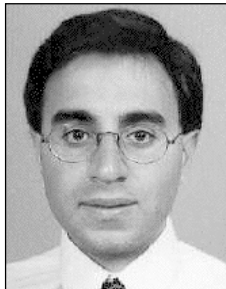
In other news, **Gerry Wright's** work on antibiotic drug resistance has won him one of the eleven Premier's Research Excellence awards in 1999. **Richard Epand** won the prestigious Avanti Award from the Biophysical Society for his contributions to membrane research. He participated in a symposium on X-ray diffraction of lipids held in honour of Dr. V. Luzzati, Paris. Richard has also been presenting his work at other institutions. He was invited to give a talk at the Biothermodynamics Symposium in honour of Dr. Julian Sturtevant at Yale. He made a lecture tour of China and Japan giving talks at several places in these countries. In addition, he has recently been invited to join the editorial board of *Biochimica Biophysica Acta's*



Craig Smibert



Grant Brown



Walid Houry



Alan Davidson

University of Toronto

Department of Biochemistry

Correspondent: David Williams

Faculty News

The Department was delighted to welcome two new Faculty members in 1999. **Craig Smibert** (Stanford) joined us in May as an Assistant Professor. His research interest is in molecular mechanisms that underlie translational control of gene expression using posterior body patterning in *Drosophila melanogaster* as a model system. **Grant Brown** (Johns Hopkins) arrived in September as an Assistant Professor and he is studying regulation of the G1 to S phase of the cell cycle in the fission yeast *Schizosaccharomyces pombe*.

The Department is also pleased to announce the recruitment of **Walid Houry** from the Max-Planck-Institute for Biochemistry. Walid will be joining us in April, 2000 as an Assistant Professor. He is interested in the roles that molecular chaperones play in protein biosynthesis and degradation, with particular emphasis on identifying in vivo substrates for various chaperones. Walid was recruited as part of the new Multi-Department Program in Proteomics and Bioinformatics. We are also happy to report that **Alan Davidson**, previously on a contractual appointment, has accepted a

Biomembrane section and has been elected Chairman of the subgroup on Membrane Structure and Assembly of the Biophysical Society. **Hara Ghosh** spent part of his research leave in Tokyo in the laboratory of Dr. Takao Sekiya to study the genomics of human oncogenes. **Vettai Ananthanarayanan** spent part of his research leave in the laboratory of Dr. Elaine Davis at the University of Texas Southwestern Medical School to work on an elastin chaperone protein and the other part in Dr. Barbara Brodsky's laboratory at the University of Medicine and Dentistry of New Jersey where he worked on protein folding. He was selected as one of the two Canadian delegates to the General Assembly of the International Union of Pure and Applied Biophysics in New Delhi where he also participated in the 13th International Biophysics Congress.

Finally, the Department wants to congratulate our former graduate student **Michael Tyers** on receiving the 1999 Michael Smith Award.

tenure-track position in the Proteomics and Bioinformatics Program. Alan will continue to wear two hats as a joint member of the Department of Molecular & Medical Genetics and the Department of Biochemistry. As many of you know, Alan's research is focussed on understanding protein folding and protein-protein interactions in detail from both structural and thermodynamic perspectives.

To date four of ten tenure-track positions have been filled in the Multi-Department Program in Proteomics and Bioinformatics which involves the Banting and Best Department of Medical Research, Biochemistry, Laboratory Medicine and Pathobiology, Molecular & Medical Genetics, Medical Biophysics, Medicine and three affiliated Research Institutes. The search for individuals to fill the remaining positions is ongoing and we look forward to the prospect of further faculty recruitment.

Several of our Faculty were honoured with awards in the 1999-2000 academic year. Senior Lecturer **Pat Bronskill** was awarded a Faculty of Medicine Aikins award for excellence in teaching in our third and fourth year biochemistry lab courses, BCH 320, BCH 321, and BCH 471. This is the Faculty's most prestigious award for commitment and excellence in undergraduate education. Pat is now part of a very impressive group of Aikins Award recipients from our Department over the past four years (**Roy Baker, Norman Camerman,**

Charles Deber, David Isenman, Bob Murray and Dorothy Painter). **Charles Deber** has been awarded the 2000 Vincent duVigneaud Award in Peptide Chemistry & Biology, given by the American Peptide Society. This award recognizes career-long excellence in peptide-related research. Charlie will receive the award, and give a lecture at the "Peptides" Gordon Conference this February in Ventura, CA. We were also pleased to learn that **Lewis Kay** continues to be honoured for excellence in research. Having won the 1998 McLean Award from the University of Toronto, he recently received the prestigious Steacie Prize for 1999. The award is named in memory of E.W.R. Steacie, a physical chemist and former President of the National Research Council of Canada. This national prize is awarded once a year to a scientist or engineer of 40 years of age or less for outstanding scientific work.

Harry Schachter has had a busy year giving five invited lectures in Japan and one in Belgium. **Hue Sun Chan** was invited to give four lectures in the "Advanced School on Protein" sponsored by the National Center for Theoretical Sciences, the National Center for High-Performance Computing, and the National Central University in Taiwan.

Jacqueline Segall has assumed the role of graduate coordinator. Jacqueline succeeds **Anders Bennick** who served with distinction in this role for the past two years.

Appointments

Régis Pomés, a new Scientist in the Division of Structural Biology and Biochemistry in the Research Institute at the Hospital for Sick Children, has been appointed to the Department of Biochemistry as an Assistant Professor. Régis is a computational chemist interested in the application of theoretical methods including molecular dynamics, free energy and quantum mechanical calculations to the structure, function and dynamics of biological macromolecules. He has a special interest in proton transport across membranes.

Morris Manolson has accepted an Assistant Professor position at the Faculty of Dentistry and is now a cross-appointed member of our Department. Morris works on the assembly, targeting, and regulation of proton-pumping vacuolar ATPases.

Two of our Faculty members have taken up positions in other institutions. **Choy Hew** has accepted the Chair of Biological Sciences at the National University of Singapore and **Inka Brockhausen** has moved to Queen's University to

take a position as an Associate Professor in the Department of Medicine, Division of Rheumatology. We wish them well in their new endeavours.

Events

Our most notable event during the past year was a reception and dinner held in honour of our colleagues who recently became Professors Emeriti. The gala event took place on June 14, 1999 at the Faculty Club and highlighted the exceptional careers of **Rashid Anwar, Byron Lane, Robert Murray, Marian Packham, Robert Painter, and Ron Williams**. In his welcoming address, Chair **Peter Lewis** noted that "this is a most impressive group of Professors. Collectively they have mentored 38 Doctoral students and 37 Masters students and have taught many thousands of undergraduates in Medicine and Arts and Science. They have contributed very significantly to medical research in a diverse range of areas including elastin structure and function, protein synthesis, glycolipids, blood platelets, immunoglobulins and complement, bioenergetics and environmental biochemistry. As well they have contributed in many administrative posts at our University serving for example as Principal of Scarborough College, Provost of Trinity College, Acting Dean of SGS, Chair, Acting Chair & Graduate and Undergraduate Secretary".

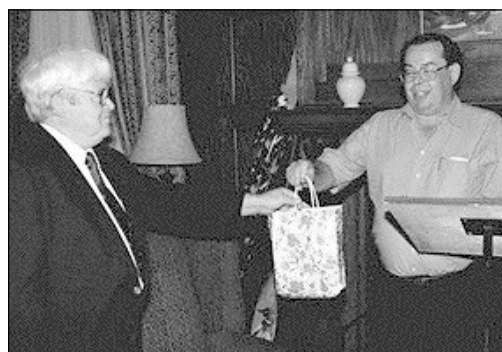
We heard many warm



Rashid Anwar



Byron Lane



Robert Murray and Ian Taylor



David Isenman and Robert Painter



Marian Packham



G. Ronald Williams



David Scott Winner
Michael DiDonato



Michael Leach receiving Bradley Pett award
from Grad. Coordinator Anders Bennick

tributes from colleagues, friends, and past students, several of whom travelled some distance for the occasion including Shelagh Ferguson-Miller from Ann Arbor, Gerhard Gerber from Hamilton, Mohammad Rasouli Rashti from Montreal, and Gene Tustanoff from London. We had an most enjoyable evening honouring our colleagues.

Graduate Studies

The Department held its annual graduate student poster day on June 1, 1999. The poster day took place in conjunction with the annual Theo Hofmann Lecture which was presented this year by **Dr. David Andrews** of the Department of Biochemistry, McMaster University. Dr. Andrews' lecture was entitled: "If the translocon is required to insert proteins into membranes, then how is this transmembrane protein transporter assembled in the first place?"

Dr. Andrews kindly agreed to do double duty as one of the poster judges. As usual the judges faced a difficult task given the high quality of the graduate student posters. After prolonged debate the following winners (who receive cash awards) emerged:

Winners in the Ph.D. category were: **FIRST, Tony Harris** (Siu): "Proteomic and Biochemical Analyses of Dictyostelium Contact Regions: gp80 Clustering Organizes an Adhesion Complex With Properties of Membrane Rafts"; **SECOND, John Vince** (Reithmeier): "Molecular Determinants of Carbonic Anhydrase II binding to Cl⁻/HCO₃⁻ Anion Exchangers"; **THIRD, Pamela Plant** (Rotin): "Apical Membrane Localization of Nedd4 is Mediated by an Association of its C2 Domain with Annexin XIIIb".

Winners in the M.Sc. category were: category were: **FIRST, Julian Northey** (Davidson): "Towards the Elucidation of the Folding Nucleus of the Fyn SH3 Domain"; **SECOND, Chen Wang** (Deber): "Reductionist Approach to the Analysis of Tertiary Interactions in the TM Domain: Conservation of M13 Coat Protein Dimerization Motif in a Peptide System"; **THIRD, Andy Jankowski** (Grinstein): "A Non-Invasive Fluorimetric Procedure for Measurement of Membrane Potential: Quantification of the NADPH Oxidase-Induced Depolarization Inactivated Neutrophils".

Additional graduate awards:

The annual David Scott prize for outstanding all-round graduate student was awarded this year to **Michael DiDonato** (Sarkar).

Michael Leach (Williams) was awarded the annual Bradley Pett Prize for outstanding academic achievement.

Congratulations to all winners for their achievements.

The University of Western Ontario

Department of Biochemistry

Correspondent: Eric H. Ball

This year the Department is delighted to welcome three new members. **Marie Fraser** joins us from the University of Alberta, where she was a research associate in the lab of Michael James. Marie is an X-ray crystallographer with an extensive interest in succinyl CoA synthetase. She is the recipient of an NSERC University Faculty Award. **Shun-Cheng Li** will be arriving this summer after his postdoctoral work in the lab of Dr. Tony Pawson at the Lunenfeld Institute in Toronto. Dr. Li has extensively studied the structure of protein modules involved in signal transduction and was the recent recipient of an MRC Centennial Fellowship. Dr. **Gilles Lajoie** will join the Department as a full professor, moving from the University of Waterloo in July, 2000. Dr. Lajoie is an expert in mass spectrometry of proteins and peptides. We look forward to a stronger structural component in the

Department and new directions of research.

A major development for the Department and the Faculty has been the initiative to establish an Advanced Biotechnology Research Centre under the leadership of Dr. **Stan Dunn** and Dr. **Gary Shaw**. Funding of several million dollars for the centre from the CFI, Ontario Innovation Trust, and the University allowed the purchase of major equipment, ranging from a circular dichroism spectropolarimeter, to mass and NMR spectrometers. The centre provides up-to-date tools for analysis and structural determination of micro-scale amounts of macromolecules.

Among faculty news, **Susan Meakin** has been promoted to Associate Professor. Susan works on the trk receptor and signalling pathways. **Stan Dunn** received the Faculty of Medicine and Dentistry Award of Excellence for his studies of the structure of ATP synthase. **David Litchfield** was awarded a Premiers Research Excellence Award for his work on casein kinase II structure and function. **George Chaconas** has been on sabbatical at the NIH Rocky Mountain laboratory in Montana, working on the molecular biology of *B. burgdorferi*, the causative agent of lyme disease.

