

ALUMNI NEWS

We heard from several folks recently including Lois M. Cudmore (BA 1938), Harold Minshull

50 years ago Walter Lewis (MA) and Job Kuijt (BSc.Hons) were among the graduating class.

Lyn Baldwin (Bradfield) has been appointed as an Assistant Professor at University College of the Cariboo

Mary Ellard (Douglas) is an Associate Professor, Pacific Lutheran University, Tacoma, Washington

Paul J. Harrison (Professor of Botany and Earth & Ocean Sciences, 1975-2002) is Professor and Director of the Atmospheric, Marine and Coastal Environment Program, Hong Kong University of Science and Technology.

Eduardo Jovel (Towers) has been appointed Assistant Professor, Faculty of Agricultural Sciences the first Director of the UBC Institute for Aboriginal Health.

Christopher Lortie (Turkington) has been appointed as an Assistant Professor at York University, Toronto.

Ken Marr (Ganders) is working at the BC Provincial Museum in Victoria.

Martha Nelson (Green) is spending a year in South Africa as a volunteer with the Kalahari Meerkat Project.

Jim Pojar left the Ministry of Forests and now works for Parks Canada in Whitehorse

Nishanta Rajakaruna (Bohm, Glass, Whitton) has been appointed as an Assistant Professor at the College of the Atlantic, Maine, USA

Ricardo Scrosati (DeWreede) has been appointed to a Canada Research Chair in Aquatic Ecology at Saint Francis Xavier University

Roy Taylor (Faculty 1968-85) and Janet Stein (Faculty 1959-85) are retired (sort of) and living in Lantzville, near Nanaimo.

Tamera Western (Haughn) has been appointed as an Assistant Professor in Biology at McGill University, starting September 1, 2003.

Mark Wilkinson, (Ph.D., Haughn) is an Assistant Professor, Department of Medical Genetics, UBC and a Principle Investigator, at the iCAPTURE Centre, St. Paul's Hospital.

November 2004



UBC Department of Botany Newsletter



WELCOME

Welcome to the first issue of the UBC Botany Department Alumni and Friends Newsletter. Our goal is to enhance contact with graduates, former faculty and staff, and other friends of the department, to tell you about how your department is changing and evolving as Biology and UBC change, to share news about each other, and to provide ways and means of keeping in touch.

The Department's home page, <http://www.botany.ubc.ca>, will give you the current details of our academic programs and people. I hope that we can add a section on alumnae that you can add to or use to track down each other. This newsletter will bring you regular (at least annual) summaries of Botany for you to check on news and events. Please take every chance you can to send us information so that we can strengthen the links between the past and the present of Botany at UBC. For this purpose, we have established an email address to send your news and comments: alumni@mail.botany.ubc.ca

- Iain Taylor, Editor; Professor Emeritus

HEAD'S MESSAGE

I have had the pleasure to serve as Department of Botany Head since 1999 (taking over from Iain Taylor), with a one-year sabbatical interlude spent in Vienna. It is gratifying to see how our department has grown over that time, and how faculty, staff, and students have collectively met the challenges of faculty renewal, ever increasing enrollment in the Biology Undergraduate Program, uncertain budgets, and the need to maintain high standards in research. We have moved into new strategic areas of research and teaching, with new strengths in protistology, cell biology and genetics, conservation biology, and evolutionary biology. In 2004, the department is vibrant and exciting, and we feel is one of the strongest in Canada if not North America. Faculty, staff, students, postdoctoral fellows and visitors all contribute to the excitement of the department, but undergraduate and graduate students hold a special place. More undergraduates than ever are doing research projects in faculty labs, and our plant biology courses are full. Our graduate program is growing, with the largest

incoming group of Ph.D. and M.Sc. students in 2004 for several years.

I hope you enjoy this snapshot of the department, and let us hear from you.

- Carl Douglas, Professor and Head

DEPARTMENT NEWS

From its one faculty and two staff (John Davidson, his assistant Miss Guchy, and one technician), the UBC Botany Department has grown by the year 2004 to a department with a research and teaching faculty of 32 (several of whom are cross appointed to other departments), 37 post-docs, 15 staff, and 57 graduate students. Just as we were in the late 60s when I arrived, we are going through a phase of faculty "renewal", with a bulge of retirements and new appointments. Coupled with the opportunities for hiring new faculty in the federal Canada Research Chairs (CRC) program, and other opportunities such as NSERC University Faculty Awards, the face of our department is rapidly changing.

Plans are moving ahead to construct a Biodiversity Research Centre building, which will include a new location for the university Herbarium and zoological collections as well as research space for Botany and Zoology faculty, on the site of the old huts (B5, B6, B8) immediately to the south of the Biosciences complex. Botany faculty members of the Michael Smith Laboratories (formerly the Biotechnology Lab) are moving into the new Michael Smith Building (between Biosciences and Wesbrook Mall. The BioImaging facility, directed by Elaine Humphrey, was the recipient of a Canada Foundation for Innovation infrastructure grant and has expanded in the basement of the North Wing. Botany links with the Botanical Garden (a unit within Agricultural Sciences) have been strengthened in recent years, as a new Director (Quentin Cronk) with strong research interests in plant evolution and development was recruited, along with two junior faculty members in the Botanical Garden and Centre for Plant Research (BGCP) in plant biodiversity and evolutionary genomics, who have cross appointments to Botany.

The Department's office and management team, lead by Elaine Simons (Administrative Manager) and Lebbay

Balakshin (Head Secretary and Graduate Secretary) continues the tradition of John Thorpe, Win Hunter, Pat Harrison and others in providing critical support to faculty, staff and students.

AWARDS

Following are some of the awards recently received by Department members:

Patrick Keeling: NSERC Steacie Fellowship.

Reinhard Jetter, Geoff Wasteneys, and Wayne Maddison: Canada Research Chairs.

Joerg Bohlmann, Patrick Keeling, and Philippe Tortell: UBC Scholar Awards

Brian Leander: CIAR Scholar

Tony Glass, Neil Towers, Paul J. Harrison and David Turpin: Among the top Canadians on the ISI Highly Cited Scientist list.

Jennifer Klenz: Killam Teaching Award for 2003-04 in the Faculty of Science.

Mary Berbee: Weston Award for Teaching from the Mycological Society of America. This the highest honor bestowed for teaching by the MSA.

Philippe Tortell: Early Career Scholar, Peter Wall Inst. for Advanced Studies, UBC

Paul J Harrison: Phycology Society of America (PSA) Award of Excellence

Naomi Fast: NSERC University Faculty Award (UFA)

Beverley Green and Shona Ellis were two of 20 women recognized for their leadership roles as Women in Science by the Society of Canadian Women in Science and Technology (SCWIST)

2002/03 Faculty of Science Achievement Awards: Tony Glass and Max Taylor (Teaching), Iain Taylor, Fred Ganders and Lebbay Balakshin (Service), Nora Houlihan (Kunst Lab) (Student Service).

2003/04 Faculty of Science Achievement Awards: Joerg Bohlman (Leadership), Lacey Samuels (Teaching).

Kathy Nomme: Sustainability Award for her proposal to maintain compost bins to raise red wigglers for classroom use and compost for teaching gardens.

Kella Sadler (Bradfield lab), Linda Jennings (Whitton lab), Andrew MacDougall (Turkington lab), Lyn Baldwin (Bradfield lab): students who were awarded

PLEASE HELP US TO CONTACT YOUR FORMER COLLEAGUES

Please send us any news, personal or professional, as well as news of other alumni and friends of the department with whom you are in touch, especially those who graduated in the pre- and immediate post-WWII eras. In particular we need addresses so that we can recover contacts that have been lost over the years. You can contact us at:

ALUMNI@mail.botany.ubc.ca

We regret to announce the death of Dr. G.H. Neil Towers on November 15th, 2004.

A full obituary will be included in the next newsletter

“best poster” or “best paper” prizes at conferences:

Shona Ellis, Paul G. Harrison, Lacey Samuels: AMS Just Desserts Awards.

SPOTLIGHT ON BOTANY RESEARCH

Assistant Professors *Lacey Samuels* (Ph.D. 1989 [Bisalputra]) and *Reinhard Jetter*, together with Associate Professor *Ljerka Kunst*, have teamed up to study the genetics, cell biology, and chemistry of the plant cuticle and wax secretion. Their labs' recent work in *Arabidopsis*, demonstrate that a so-called ABC transporter, one of a large family of such membrane transporters found in all eukaryotes, is localized to the plasma membrane of *Arabidopsis* epidermal cells, and is required for wax secretion to leaf and stem surfaces. This work is in *Science* (Pighin et al. Vol. 306:702-704), and paves the way to a better understanding of this key plant surface. Ljerka, Reinhard, and Lacey were recently awarded a joint NSERC Special Opportunities Grant to further pursue this work in the department.

Professor emerita *Beverley Green* has been active in analysis of the complete genome of the diatom *Thalassiosira pseudonana*, ecologically important in ocean ecosystems. Beverly is a co-author on the paper describing the sequence and its analysis (Armbrust et al. 2004. *Science* 306: 79-86), and has been interviewed on several occasions by the media on this subject.

SPOTLIGHT ON BOTANY TEACHING

Shona Ellis (B.Sc, 1985; MSc. 1993 [Towers]) was appointed as an Instructor in the Department in 2002. Shona has played a leadership role in the teaching of organismal plant biology (Vascular and Non-Vascular Plant labs; Taxonomy labs; Bryology; Plants and People) and has a loyal following of undergraduate student fans (Faculty of Science Killam Teaching Prize; two AMS “Just Desserts” awards). *Jennifer Klenz*, a 12-month lecturer in Botany and Zoology, teaches in the re-structured Genetics Laboratory course (BIOL 337), which covers the latest genetic approaches in both *Arabidopsis* and *C. elegans*. Her students obviously appreciate her enthusiastic hands-on approach to teaching and her mentoring of budding biologists: Jennifer won the Faculty of Science Killam Teaching Prize in 2004 and used the prize money to travel to southern Italy and volunteer on an organic farm.

MOMENTOUS MOMENTS AND NEWS

Do you remember the western red cedar trunk in the display case outside Bio 2000? Well it and the lecture hall were both restored recently. The trunk, affectionately known as 'Stumpy', was expertly sectioned and remounted as the entrance highlight outside Bio 2000. Thanks to Gary Bradfield and his collaborators and to John Gourlay who supervised the remounting. The lecture hall was gutted and fully renovated, with new seats, computer projection system, and ventilation.

New buildings and have sprung like mushrooms throughout the campus (if you haven't been on campus recently, bring a compass, or a GPS device for your next visit). Most controversial is the impending redevelopment of the campus core around the bus loop to create a “University Town”.

The Herbarium has been active in fundraising and public outreach. It held a very successful social/fund-raising event in April.

Students in the Botany Department organize a very successful Bonspiel each winter, which draws participants from Zoology, the Botanical Garden, and the Michael Smith labs as well as Botany. The Botany graduate students also continue the tradition of the Botany Christmas Party.

COMINGS AND GOINGS

The following faculty members have joined the department in the last two years: Naomi Fast (molecular protistology), Reinhard Jetter (CRC in biological chemistry, joint appointment with Chemistry), Brian Leander (CIAR Scholar in eukaryotic microbial diversity; joint with Zoology), Xin Li (plant molecular genetics and plant pathogen interactions; Michael Smith Labs), Wayne Maddison (CRC in phylogenetics and evolution; joint with Zoology), Philippe Tortell (biological oceanography; joint with EOS), Geoff Wasteneys (CRC, in plant cell biology), Jin-Gui Chen (molecular plant physiology), Sean Graham (molecular systematics; joint with BGCP), Keith Adams (evolutionary genomics; joint with BGCP)

Neil Towers, Bob Bandoni, Jack Maze and Wilf Schofield are all active, and we occasionally have news of Bob Scagel, Gil Hughes and Glenn Rouse.

Recent retirements

Beverley Green, who retired at the end of June 2003 is a UBC Chemistry grad and has a Ph.D. from U. Washington. She joined the Department in 1967 and taught all manner of cell biology courses in addition to having a very well known research program on chloroplast molecular / genetics and biochemistry, with recent interests in early eukaryotic cell evolution and diatom genomics. She still has an active lab.

Tony Glass also retired at the end of June. Grad students in the late 60s will remember him doing his Ph.D. with Bruce Bohm. After a 5 year stint in New Zealand, Tony joined the Botany Faculty in 1976 and became the pillar of plant physiology. He never lost his drive for teaching excellence and made major contributions to introductory biochemistry as well as giving 25 years of inspired teaching to plant physiology. Tony was Department Head from 1985-90. He continues an active research program, in addition to serious excursions back into music (who remembers his jazz band?) as a flute player.

Iain Taylor joined the Department in 1968, specifically to teach 1st year biology. Advised never to become involved in writing or physics, he found himself working as a journal editor and a researcher in plant cell wall biophysics. He too served as Department Head. In the last 9 years, he has become much involved in science ethics and retirement has led him to become Research Director at the Botanical Garden and Department of Botany historian and archivist.

Obituaries

We are sad to report the deaths in 2003 of Katherine Beamish and Kathleen Cole.

Dr Katherine I. Beamish



Katherine Beamish was born in Winnipeg, Manitoba, on June 25th, 1912. She finished grade eleven in Burnaby, graduated from normal school in 1930, and

taught for 12 years. In June 1943 she joined the R.C.A.F., trained Ottawa then went to Halifax and to Gander, Newfoundland. In March 1946 she came back to Vancouver, resigned from the Burnaby school and came to UBC where she earned both Bachelor's and Master's degrees in Science and Agriculture. She completed a Ph.D. (Genetics and Botany) at the University of Wisconsin, Madison in June 1954 and taught at UBC in 1977. She continued to work in the Herbarium. Kay was a stalwart in the Vancouver Natural History Society.

Kay's best known graduate student, Jim Pojar, wrote: "Dr. Katherine Beamish.... made an immediate favourable impression on me, and has had a lasting effect on my life. I very soon realized she was a real botanist, and was a kind but no-nonsense person who I instinctively knew I must not disappoint. She became my supervisor, and guided me through the unpredictable academic terrain with care and skill. Every Friday, for three years, she sat down with me and discussed what I had been working on that week, what progress I had made on the thesis. Few Ph.D. supervisors spend that much time with their grad students; these days some students count themselves lucky to have more than one or two substantive meetings per year with their high-powered professors. Her diligence with me was especially noteworthy because I wasn't working on any of her favourite projects or species, nor did my research directly benefit her program. She was also remarkably tolerant of my headstrong and at times stubborn and smart-alecky behaviour. No doubt she had seen that sort of thing before. Looking back on those days, I recall that there was often a glint of amusement in her eyes, at some of my antics.

"It was Kay Beamish who first took me to Lighthouse Park, to Ladner Marsh, Camosun Bog, Burns Bog, Mill Hill, Thetis Lake Park, Long Beach, Liumchen Ridge, Blackwall Meadows and Mt. Frosty in Manning Park, among others. These trips and these places had a profound effect on me, a Minnesota boy new to mountains and the sea. I was also mightily impressed that this woman over twice my age could go uphill like a mountain goat.

"She was a kind, generous, and good-humoured person who spoke no ill even of unpleasant people; at most she would grimace and shudder with exasperation. I am thankful that I met her, became her student and friend, was inspired by her, and settled in her beautiful province and country".

Kay died peacefully on February 4th, 2003. We all miss her.
(with thanks to Kay's family and Jim Pojar)

Dr. Kathleen Margaret Cole



Kay Cole (July 12, 1924 – Apr. 12, 2003) spent part of her early childhood in Wells, B. C. where she received her early schooling and graduated from West Vancouver High School. She completed her B.A. and M.A. at U.B.C. in the Department of Biology and Botany. She and Bob Scagel were contemporaries at U.B.C. and during their Honours and graduate years, shared an office and served as teaching assistants in several courses, one of these was in histology and Kay Beamish was a student in the laboratory. Kathleen obtained her doctorate in Plant Genetics at Smith College, Massachusetts then returned to UBC in 1952 where served for 35 years on the Faculty of the Department of Botany. Her first research was on alfalfa, but Bob Scagel persuaded her to turn attention to cytology and genetics of marine red algae. With the development of electron microscopy and the acquisition of the first electron microscope in the Department (jointly with Zoology) she embraced this new field of application in her research studies. She became internationally known and respected for her numerous research contributions and the calibre of her numerous graduate students. Her distinguished career included 107 published papers, proceedings, and chapters, co-editorship of the book *Biology of the Red Algae*, editorship of *Phycologia* (1971-7), Killam Senior Fellowship (1972-3), chair of the Natural Sciences and Engineering Research Council of Canada (NSERC) Plant Biology Selection Committee (1984-5), and the George Lawson Medal of the Canadian Botanical Association (1998). The Lawson Medal was awarded "in recognition of her cumulative, distinguished contributions as a senior teacher, researcher and scientist who has worked in Canada for most of her career and contributed notably to the advancement of Canadian botany". Kay advised 15 Masters students, 11 PhDs and 4 postdoctoral fellows, a number of whom have gone on to prominent careers in phycology.

Kay was also an accomplished mezzo-soprano soloist who had given recitals in Canada and the USA.

A memorial was held in May 2003 at which we were reminded that we will miss the charm, cheerfulness and presence of a truly gentlewoman.
(with thanks to Bob Scagel and Bob Sheath)

RECENT GRADUATES

PhD:

Lyn Baldwin (Bradfield)
Len Dyck (DeWreede)
Sumin Han (Sanfacon)
Tanya Hooker (Kunst)
Patrik Inderbitzin (Berbee)
Anshuman Kumar (Glass)
Andrés López (Towers)
Andrew MacDougall (Turkington)
Diane Martin (Bohlmann)
Joseph Needoba (PJ Harrison)
Nishi Rajakaruna (Whitton)
Sherri Rodgers (DeWreede)
Juan Saldarriaga (FJR Taylor/Keeling)
Steven Short (Suttle),
Robert Francis Strzepak (PJ Harrison)
Aleksandra Virag (Griffiths),
Qing Wang (Douglas lab)

MSc:

Sean Bridgen (Suttle)
Sarah Carty (DeWreede)
Brian Hillhouse (Towers)
Martha Nelson (Green)
Jamie Pighin (Samuels)
Heather Toews (PJ Harrison)

BSc in Plant Biology:

Honours:

Solveig Adair Ryan Phillippe

Gina Choe
Robin Dhaliwal
Nicole A Haddad
Alvin TY Yang
Heather Esson
Wndy CT Ho
Kimberley Irwin
Sarah Martz
James Whalen
Roxanne Chow
Darren Low
Jennifer Sarchuk
Geoffrey Bradley
Jeeyan B Chan
Hao-Chang Chen
Sara Hyslop
Kristin Greenough