

CURRENTS

This issue inaugurates *Biology Currents*, the QC Biology Alumni Newsletter. With our alumni spread across the continent, many may not be in close touch with events in their home department. We hope to bring you news both about our faculty and about fellow alumni. To that end, I hope you will respond with news about your own lives, experiences, and accomplishments. Please write to Uldis Roze, Chair, Biology Department, Queens College, Flushing, NY 11367 uxr\$biol@qc1.qc.edu.



HONORARY DOCTORATE FOR ELIZABETH NEUFELD '48

Under bright skies on June 5, 1996, Queens College held

its 72nd Commencement. Recipient of an honorary doctorate was Elizabeth Fondal Neufeld, a biology alumna of the class of 1948. She graduated *summa cum laude* and was a Queens College Scholar (the 1948 QC equivalent of *Phi Beta Kappa*). Her later honors include membership in the National Academy of Sciences, the Lasker Prize and Wolf Prize in Medicine, and the 1995 President's Medal for Science.

Looking out at the audience, Dr. Neufeld recalled that she spent most of her time on campus in Colwin Building (the former E Building). She observed that institutions of public education, such as Queens College, are society's most admirable achievements, and yet

they are under continuous attack. It is the special duty of the alumni of such institutions to defend them.

Later, Dr. Neufeld joined parents and graduates at a Biology Department reception in the Science Building, where she was presented with a bound collection of reprints produced by the Biology and Biochemistry faculty. Dr. Neufeld spoke of the present as an exciting time to practice biology or biochemistry, because the horizons are wider than they have ever been. To succeed under such conditions, one must strive to be not merely good, but the best in the world. Dr. Neufeld has lived up fully to

her own maxim.

Dr. Neufeld returned to Queens College on October 16, 1996, to give a joint Biology-Biochemistry seminar titled "Lysosomal storage diseases: molecular genetics and prospects for therapy." She spoke with animation and cutting-edge science about a topic close to her life's work. As a special treat, she later entertained questions from a group of graduate students who were starting out on their own intellectual journeys of a sort Dr. Neufeld began here half a century ago.



Elizabeth Neufeld

RETIREMENTS

In the past two years, a wave of retirements has reshaped the department. Since 1995, seven members of the department have retired or left for fresh opportunities:

Sheldon Aaronson, former head of the Microbiology course. Dr. Aaronson's schedule has not gotten much lighter since retirement. He has taught the microbiology course on an adjunct basis, and retains an active role in

Friends of the Library. (Recently, he hired a van to transport a load of donated books for the annual Library book sale.) Since retirement, he has authored two articles in an encyclopedia, and has published an article on *Claviceps* in *Ethnobotany*. He is also offering a challenge grant to establish a lectureship in the Biology Department (story on page 3).

Elizabeth Boylan, former head of the Bio 102-105 course and Assistant Provost. Dr. Boylan is busier than ever—she is now the Provost at Barnard College.

Max Hecht, former longtime chair of the department and lecturer in comparative anatomy and anatomy and physiology. He continues to offer the Comparative Anatomy course on an adjunct basis, and remains editor of *Evolutionary Biology*, a major annual review. He is now working on his 30th volume of the journal.

Martin Kaplan, former QC chapter head of PSC, the faculty union at CUNY. Dr. Kaplan is a frequent guest in the exotic restaurants of Flushing.

Florinda Minutoli, former head of the Bio 105 course and lecturer in histology. Dr. Minutoli has been exploring religious studies and is spending time at her house in Nesconset.

Milton Nathanson, former head of Evening Studies in the department, now divides his time between Queens, where he does summertime adjunct teaching, and St. Petersburg, FL, where he volunteers at the local museum.

Michael Nelson, former senior college laboratory technician. Mr. Nelson continues to live in the Bronx. At the December '96 departmental holiday party, he discussed plans for a skiing trip to the Rockies.

COLWINS RECEIVE HIROHITO VOLUME

Arthur and Laura Colwin, now living in Key Biscayne, FL, received a surprise package last year. Dispatched from Tokyo by "Overseas Courier Service," it contained a scientific treatise by Emperor Hirohito, published posthumously and sent to the Colwins at "the wishes of Emperor Akihito."

The book was volume II of *Hydroids of Sugami Bay*. The Colwins had received Volume I about six months before the death of Emperor Hirohito, an avid marine biologist. The Colwins met the Emperor in 1954, when they spent a sabbatical year at Misaki Marine Station of the University of Tokyo, and had exchanged publications. After they returned home, they were asked if they would like to receive some *Enteropneusta* collected by the Emperor in Sugami Bay, near the Summer Palace.

The Colwins, who retired in 1975, currently spend their winters in Key Biscayne and their summers in Woods Hole. During their tenure at Queens College, the Woods Hole Marine Biological Station had been their regular weekend destination, as a source of both sea urchin eggs and laboratory facilities. In the years before rapid travel via I-95, the Colwins would leave the College after their Friday afternoon lab, stop for coffee in Providence at midnight, and reach Woods Hole in the early morning hours.

The former E Building, which housed the Colwins' EM facility and still houses the introductory biology labs, was named Laura and Arthur Colwin Hall in May 1993.

MONTAGNIER TO JOIN QC

In late-breaking news, Professor Luc Montagnier, co-discoverer of the AIDS virus and head of the Department of AIDS and Retroviruses at the Pasteur Institute, has accepted a newly endowed professorship at Queens College. He will be a member of the Biology Department and will administer a new institute, called the Center for Molecular and Cellular Biology. The move was made possible by means of an \$4.5 million donation from Dr. Bernard Salick '60. Details will be given in the next issue of this Newsletter.

CHAIRMAN'S CORNER

For the biologist, these are exciting times, when a frontpage article is as likely to discuss a political event as an event from the field or laboratory. In the last few years alone, we have witnessed the sequencing of the first prokaryote genome, then the first eukaryote genome, then the cloning of the first mammal. And we have drastically revised our ideas for the taxonomic scaffolding of all life forms.

For our students to share in this excitement, we need not only an intellectually lively faculty, but a functional infrastructure. One of the unglamorous facts of infrastructure is that our advanced and beginning-level labs all require sterilizers. The three instruments supporting the Biology Department labs are now between 27 and 35 years old; their promised life expectancy was 20 years. At \$65,000 apiece, the Supply Budgets do not permit replacements. If you have access to a replacement source, or if you can make a contribution, please call us.

Uldis Roze

FACULTY PORTRAIT: LESLIE F. MARCUS

This year will be Leslie Marcus's 30th at Queens College. He came to us five years after his Ph.D at U. California-Berkeley, where he received degrees in paleontology and

statistics. The broad themes of paleontology, zoology, and statistics have been interwoven and recombined in a career that has spanned the globe and generated important new insights. Throughout his career, Leslie has shown a remarkable breadth of interest and has collaborated with scientists across a rainbow of disciplines. And instead of slowing down with age, Leslie's career has accelerated. In 1996, he was

the Department's most prolific publisher of scholarly articles.

To develop reliable methods for dating paleontological materials such as the Rancho La Brea fossils of Los Angeles, Leslie co-founded a radiocarbon lab at Queens College with the late Walter Newman of Geology.

As part of his interest in the mining industry, he has developed methods to estimate reserves of rare metals and diamonds, and later developed a computer technique for the simulation of mining exploration. This led to a contract with the Congressional Office of Technology Assessment, and then a three-year contract with the U.S. Geological Survey. Results were published in a 1979 article in *Science* and in a series of geological publications.

Leslie's involvement with geographic patterns in geology and zoology led to his giving the keynote address at an early conference on GIS (Geographic Information Systems).

In 1980, he was a co-recipient (with Nancy Neff of U. Conn.) of a NSF grant to produce a manual on multivariate statistics for systematists. The book, though now out of print, is still frequently cited. As a result of this effort, Leslie became part of a team of scholars who have, in the last seven years, revolutionized the field of morphometrics—the integration of statistics and biology to describe the size and shape of organisms. Applications of these techniques may be found in disciplines as diverse as medicine (to describe changes in the brain shape of schizophrenics), taxonomy (in description of the evolutionary

transformations of vertebrate skulls), and paleontology (shape-based species identification of fossil shark teeth).

In 1993, Leslie directed a NATO Advanced Study Institute to explore and advance the new morphometrics. Results were published in a 1996 NATO Conference volume, of which he was senior editor.

Throughout the years, Leslie has written 69 scientific publications, including three scholarly books and four articles in *Science* and *Nature*, the premier science publications. He has given countless lectures and workshops to scholars across the world—his most recent visit was to Taiwan—and has plans to continue morphometric studies on extinct mammals in the Balearics.

In his teaching career at Queens College, Leslie has been a tolerant and approachable mentor. Students in Biometrics have learned to use computer programs without experiencing computer shock. And approximately 20 graduate students with statistical programs have invited him to be part of their Ph.D. committees.

To his friends, Leslie has been a fearless pioneer in exploring the varied cuisines of Flushing and Manhattan. In a *dim sum* restaurant on Main Street, he has introduced skeptical colleagues to glazed chicken feet and pastries with yellow sauce. But always, Leslie brings to the table a civilized conversation, which ranges with amusement and delight over the changing intellectual spectacle.

AARONSON CHALLENGE GRANT FOR LECTURESHIP

Dr. Sheldon Aaronson, who retired in 1995, is offering a \$2500 matching grant to establish a Biology Department lectureship in Microbiology. This would finance an annual lecture named the Sheldon Aaronson Lecture in Microbiology. Biology alumni who wish to contribute to the fund should make out their checks to the Queens College Foundation, indicating "Aaronson lectureship" on the check. Contributions may be addressed to the Alumni Association, Queens College, c/o Renée Zarin, or to Uldis Roze, Chair, Biology Department, Queens College, Flushing, New York 11367.



The QC Biology Department (front row, I-r): Robert Francis, Jeanne Szalay, Jared Rifkin, Harold Magazine, Corinne Michels, Paul Mundinger, and Uldis Roze; (back row): Jessie Lawrence, Eileen Peers, Chris San Giovanni, Roberta Koepfer, Zahra Zakeri, David Alsop, Jon Sperling, Andrew Greller, Tim Short, and Marvin Wasserman. Not shown: Peter Chabora, Robert Calhoon, and Leslie Marcus. (Photo: Michael Schulman)

CURRENT FULL-TIME BIOLOGY FACULTY

David Alsop Robert Calhoon Peter Chabora Andrew Greller Roberta Koepfer Harold Magazine Leslie Marcus Corinne Michels Paul Mundinger Jared Rifkin Uldis Roze Tim Short Jon Sperling Jeanne Szalay Marvin Wasserman Zahra Zakeri

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ALUMNI VOICES

John C. Morris '78 attended Queens College as a SEEK student and graduated with Honors in Biology. In 1982 he received an M.D. degree, *magna cum laude*, from the Upstate Medical Center in Syracuse (SUNY), followed by a residency in internal medicine at Mt. Sinai and a fellowship in oncology at the same institution. Since 1991, he has been Assistant Professor of Medicine in the Mt. Sinai Department of Neoplastic Diseases.

John is currently on leave from clinical duties to serve as visiting scientist in Clinical Gene Therapy at NIH. He reports finding bench research an extraordinarily stimulating experience.

He married Laura Bernard-Morris at Syracuse University and has two children: Caroline Ann (7) and Brian John (3).

Many of John's fondest memories are of the time spent at the Biology Department. He recalls the extraordinary teaching of Professor Giles Macintyre, and sadly notes his passing.

FOGEL ENDOWMENT FUND

by Corinne Michels

Dr. Seymour Fogel '41 passed away in September 1993. We are very honored that he so generously remembered his educational origins and the Queens College Biology Department with a bequest of \$130,000 "to further and enhance genetic research at the faculty or PhD-level in

fungal genetics." Sy was the archetype of the teacher-scholar. He was an internationally renowned geneticist known for his research on DNA repair and recombination in *Saccharomyces* yeast, and he was an honored professor who taught about the powers of genetic analysis, thereby stimulating a large cadre of students to enter the field.

After receiving his B.A. from Queens College in 1941, Sy started his career as a corn geneticist working with Lewis J. Stadler at the University of Missouri, where he received his Ph.D. in 1946. From 1946-47 he returned to Queens College as a teaching assistant in botany; he was the first QC graduate to teach at the College. He joined the faculty of the Brooklyn College Biology Department in

1948, serving as Chair for many years and also as Associate Dean of the CUNY Graduate School. It was here that he switched from corn to yeast. As the story goes, he returned to his office after a long absence to find that the corn field where he had carried out his genetic crosses had been paved over and converted into a parking lot.

After a sabbatical spent with Herschel Roman at the University of Washington in Seattle, Sy decided to switch experimental organisms to one more amenable to urban-based research efforts. It was Sy, Herschel Roman, and a few other American and European colleagues who established *Saccharomyces* as the model genetic system for the study of cell biology, thereby initiating a revolution in eukaryote genetics. In the early 1970s Sy moved to the prestigious Department of Genetics at U. California-Berkeley, again serving as Chair for many years. At the time of his death at age 70, Sy Fogel was maintaining an active and

federally funded research program that utilized the tools of molecular genetic analysis that he had helped develop. He was a true scholar who continued to learn, teach, and add to the body of knowledge in his field to the very end.

The Queens College Biology Department established the Seymour Fogel Endowment Fund in 1996. Interest earned on the Endowment is used to support departmental efforts consistent with the terms of the bequest, with an elected faculty committee overseeing the Fund's various

projects. A library reading room has been set up in the Science Building; it houses research journals that regularly publish articles in the field of fungal research. Faculty research awards (2 awarded for 1997), PhD student travel awards (5 awarded in 1996), and honoraria for seminar speakers (2 awarded in 1996) are available for individuals doing fungal genetic research or using fungal genetic systems. The Fogel Endowment Fund also supports honoraria and travel for Biology Colloquium speakers on topics in fungal genetics. Dr. James Konopka of SUNY-Stony Brook Department of Microbiology, Dr. Mark Johnston of Washington University Medical School, and Dr. James Broach of Princeton Univer-

sity were chosen for the 1996-97 academic year.



Queens College and the Department can now be accessed on the Web at http://www.qc.edu. The Biology Department was one of the first at the College with their own home page. Here you will find information about courses, faculty, and the Department. In addition, links are provided to connect you to other addresses of biological interest, including biology departments and institutes across the world. The Biology home page was set up by Seril Wijesundara, a graduate student from Sri Lanka who is studying forest ordination with Dr. Andrew Greller. Funds for the project were provided by the Biology Alumni Fund.

BIOLOGY ALUMNI FUND

In Fall 1993, the Queens College Alumni Office offered the option of having alumni donations credited to home departments. Biology alumni have responded generously and at an increasing pace. Between November 1993 and January 1997, they have donated \$14,668:

1993	302
1994	2,060
1995	4,916
1996	6,255
1997 (Jan)	1,135
total	\$14,668

Many of you have also continued to support the College at large. We are enormously grateful to you. At a time when the State budget process has been delivering steadily smaller support packages to our College, while raising tuition for students, your donations are heartwarming. The Department has formed a Committee to establish guidelines for disbursement of the funds, and has decided to support five categories of expenditure:

- 1. Student travel to present original research at scientific meetings.
- 2. Faculty research support, not to exceed \$500 per faculty per year.
- 3. Student research support.
- 4. Departmental enhancement.
- 5. Curricular development.

List of Donors, 1993 - January 1997

\$1,000-2000

Drs. Barbara + Harry Filner '62 Dr. Ira Spar '64

\$500-999

Judith Klein '61 Andrea Scheidt '62

\$200-499

Dr. Jay Berman '73 Dr. Alan H. Beyer '72 Dr. Marc D. Citrin '77 Roz E. Cohen '68 Dr. Arthur D. Kay '74 Paula M. Kreitzer '78 Evelyn Yonkus Link '55 Howard S. Malamood '77 Dr. Bruce R. Malen '69 Dr. Julius Mendel '52 Dr. Catherine A. Monteleone '79 Dr. John C. Morris '78 Richard J. Nattis '76 Samuel M. Paskin '68 Jack A. Schmetterling '79 Dr. Janet Schneller '75 Dr. Alexander E. Weingarten '76

\$100-199

Gloria Brady Balaban '44 Andrea Wirtzer Cassidy '71 Dr. Octavio G. Choy '66 Linda Dollard '66 David L. Drucker '53 Anna Moehle Ferrara '63 Jordan S. Fersel '80 Phillip Fyman '71 Dr. Robert A. Ginsberg '70 Carol Smith Gohari '64 Dr. Leslie B. Goldfarb '88 Michael + Joan B. Gottlieb '65/'72 Drs. Lloyd E. and Linda Yeres Granat '67/'68 Dr. Robert S. Hilfer '54 Dr. Arlene F. Hoffman '62 Martin E. Kessler '76 Michael S. Komarow '67 Otto E. Landman '47 Mannie Levi '75 Joseph D. Levin '41 Dr. Michael Levine '64 Lynn Mark '77 Dr. Corinne Anthony Michels '63 Eileen Peers '75 Ronald Pross '70 Hilda Abrahams Satran '50

Dr. Gilbert R. Scalone '62
Dr. Lowell E. Schnipper '66
Dr. Eric T. Skolnick '76
Alexander K.D. Sosiak '86
Dr. Steven M. Steinberg '64
Marie Trentadue Tangredi '53
Ephraim Zackson '44
Dr. Bruce Zik '78 and Jessica
Schwartz
Dr. Anthony Zollo '77

\$10-99

Nankishore Archer '44 Kenneth Blumberg '77 Mary Alice Filsinger Costello '55 Dr. Frank Cotty '69 Dr. Christopher M. Criscuolo '79 Joan Prisinzano Dioguardi '60 Howard J. Edenberg '68 Dr. Jack Egnatinsky '61 Robert E. Ettlinger '68 Sheldon Paul Feit '80 Marjorie Spier Freeman '42 Dr. Martin J. Greenwald '52 Dr. Raziel Hakim '67 Susan Baratt Imberman '76 Steven Kaminsky '76 Phil Kapp '55 Laurence Marc Karpel '80/'93 Dr. Stanley Klapper '58 Barbara Bernstein Koch '48 Dr. Arthur H. Kopelman '75 Dr. Lester J. Krasnogar '59 Diana Kreutzer '81 Ruth L. Kurland '44 Karen Shiffman Lateiner '69 Ted E. Listokin '87 Irene H. Ludwig '75 Edward J. Marcin '57 Dr. Olivia Masry '71 Joan Stern Mazza '63 Dr. Alan R. Mensch '67 David Milman Jeffrey Ray Mollin '87 Lisa Moskowitz '82 Joseph N. Muzio '55 Peter N. North Dr. Mark D. Rubin '67 Karen Rullo '88 Jane Sharpe Sander '45 Richard L. Schechtman '80

Dr. Karen Schneider '76
Dr. Roni Ann Schnell '77
Dr. Marian G. Schwartz '75
Ruth Berkowicz Segal '48
Dewy Sehring + Dorothy Graz '50
Dr. Paul + Carol Shaman '69
Dr. Leslie N. Simon
Barbara Berkowicz Soloway '53
Shirley Chassin Tabenkin '41
Dorina Lacino Tan '73
Gustavo A. Victoria '89
Richard West
Anne Sheila Zeger '64
Naida Zucker '67



1996 BIOLOGY GRADUATES

Between September 1995 and June 1996, the Department graduated 57 majors. Within the class of '95-'96, 25 (44%) won Biology Honors and 20 (35%) won collegewide honors, as compared with 15% in the Queens College population at large. We wish them bright horizons.

Radni Ashirzadeh Evangelia Atsidaftos Susan Barborini Iris Barzily Tamar Bazak - Biology Honors; summa cum laude Gita Bhairam Ravindra Bhati - Biology Honors; cum laude Pouya Bral - Biology Honors Patricio Bruno - Biology Honors; Colwin Prize Erika Caviedes - Biology Honors; cum laude Caroline Chi Peiman Darvishzadeh Mahalia Desruisseux Rosemarie Fullerton -**Biology Honors** Diana Garcia Patrick Gerdes - Biology Honors Howard Globus - Biology Honors

Gloria Gonzalez Lloyd Goodman Sameer Hajee Gail Haves - Biology Honors Gina Hutchinson -**Biology Honors** Chun Jung - Biology Honors; magna cum laude Harmit Kalia - Biology Honors Samar Khan - Biology Honors; cum laude Nanami King Koyona Langley Maureen Levine - Biology Honors Alan Lewis - Biology Honors Stephen Lynch - Biology Honors; Darwin Prize; summa cum laude; Phi Beta Kappa; Lucile Lindberg Scholarship Michelle Medina Annabelle Menzies - Jonas Salk Award Hon, Mention Wavne Miller Florence Mimy - Biology Honors; Jules Scholarship; cum laude John Moreno Khadijeh Mozaffari Maria Nikmanesh -**Biology Honors** Diane O'Connell Galo Ortiz Mark Pakayanev - magna cum laude Daniel Pilosov - Biology Honors George Psevdos - Biology Honors; magna cum laude; Charles S. Colden Award Anat Raz Ronald Rodriguez Christine Roldan Waleska Santiago Deirdre Schueler Alexander Shiferson - Biology Honors; Lancefield Prize; cum laude Vitaliy Shlez - magna cum laude Amar Singh - Biology Honors; magna cum laude: Donald Kirkpatrick Award; Jonas Salk Award; Phi Beta Kappa (graduating Sept. 1997) Shari Stillman - Biology Honors; Darwin Prize; summa cum laude Virginia Summerville - Biology Honors; Darwin Prize; summa cum laude; Sunny Budow Scholarship Eliho Swery Arash Tehrani Peter Theodores Adey Tsegaye - Biology Honors

Katayut Viriyanont

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