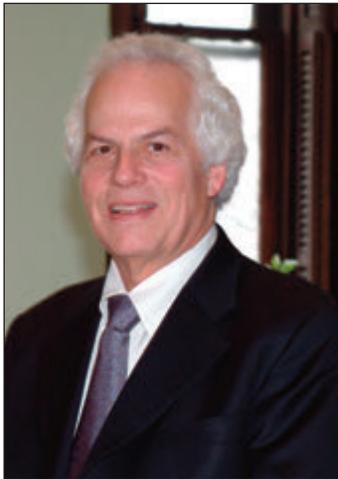


Chestnut Hill College
Department of Biology
Biomedical Lecture Series
Distinguished Speakers
1994 – 2013



Keynote Speaker
10th Anniversary
March 2004
Stanley B. Prusiner, M.D.
Nobel Prize for Medicine
or Physiology



Keynote Speaker
20th Anniversary
September 2013
Michael S. Brown, M.D.
Nobel Prize for Medicine
or Physiology



CHESTNUT
HILL
COLLEGE

GOALS AND VISION

- ❖ To provide a forum at Chestnut Hill College for learning recent advances in biomedical research.
- ❖ To expose our students and faculty to prominent scientific and medical professionals.
- ❖ To foster meaningful interactions and collaboration among our neighboring institutions.
- ❖ To develop new contacts for all our students who are interested in pursuing careers in biotechnology, basic research, health and medicine.
- ❖ To promote a new interest in the field of nanotechnology and nanomedicine.

LAKSHMI ATCHISON, PH.D.

Professor of Biology
Director of Biomedical Lecture Series



Office of the President



Since 1994, Chestnut Hill College has been enhanced and broadened by the Biomedical Seminar Series sponsored by the Biology Department. This series presents students with an opportunity to meet, interact, listen, and learn from some of the most prestigious scientists in the country. Over the years, these encounters have opened the doors of research laboratories to our students to provide them with stellar internships and incomparable mentors. It is no exaggeration to say that through these encounters lives have been changed, careers launched, and horizons expanded.

This program of lectures is genuinely unique; unique because, unlike similar series at large universities, it is neither endowed nor funded by an external source. On the contrary, prominent scientists spend a day of their precious time with Chestnut Hill students out of the generous bounty of their hearts. Among them are Presidents of institutions, two Nobel Laureates, Directors of Centers, Senior Administrators, elected members of the National Academy of Sciences, Department Chairpersons, Distinguished Scholars, and Lasker Award recipients. These women and men, who are among the best in their respective fields, exemplify for students the dedication and tenacity, the determination and perseverance, the innovation and creativity that underlie and vitalize scientific inquiry and research. To have them among the College Community even for a day is both an honor and a privilege.

I would be remiss if I did not acknowledge the superlative contribution of Lakshmi Atchison, Ph.D., Professor of Biology in establishing and continuing to oversee this program. To consistently bring to campus, twice each year, women and men of the caliber of these lecturers is a phenomenal feat that requires not only an enormous commitment of time, but also a dedication to the endeavor that is truly singular. All of us are indebted to Dr. Atchison for her work in founding a seminar series that sets Chestnut Hill College apart from its competitors and offers to students in the sciences an opportunity to learn from some of the finest minds of our time.

While we learn a great deal from textbooks and glean important lessons from experiments, nothing teaches us as well as the example of great teachers who are also great human beings. Chestnut Hill College students touch and are touched by such greatness through this incredibly valuable lecture series. In years to come, many of them will look back and marvel at the people who populated the stage of their undergraduate experience at this liberal arts College on two hills.



Carol Jean Vale, SSJ, Ph.D.
President



This year marks the nineteenth anniversary of the Biomedical Lecture Series. We recognize how vital this series is for our students, faculty and community at-large and how honored we are to bring these outstanding, researchers, scholars and practitioners to Chestnut Hill College. The College has a long history of excellence in educating our students in the natural sciences. The Biomedical Lectures form an important bridge between the academic experience of our students and their understanding of knowledge-in-action through the research and professional practice of our presenters. This year we are delighted to welcome Charles J. Yeo, MD, FACS from Thomas Jefferson University. Dr Yeo is the Samuel D. Gross Professor of Surgery, Chair of Surgery and Co-Director: Jefferson, Pancreas, Biliary and Related Cancer Center. Dr. Yeo is presenting "The New Faces of Pancreatic Cancer Surgery and Treatment." Dr. Yeo lecture is very timely to our community having recently lost our dear colleague, Dr. Stephen Berk to pancreatic cancer. Dr. Yeo joins a distinguished group of presenters and award winners from the past including Noble Laureate, Dr. Stanley Prusiner in 2004.

Experiential learning from scholar practitioners is a cornerstone of holistic and progressive education. As the father of a physician, I know how much my son benefited from the presentations, lectures and mentoring of biomedical experts in the field. While it may be a challenge to precisely measure the influence of role models, we know for certain that we are exposing our students to the very best. Beyond the presentations, the series provides the time for students to meet and talk with the presenters informally. These contacts foster an opportunity to dialogue and network, furthering our students' perspective into the biomedical profession.

We know that producing a series like this does not happen on its own. I wish to extend the College's gratitude and thanks to Dr. Lakshmi Atchison, Professor of Biology for her leadership and tireless effort on behalf of the Biomedical Lecture Series. Dr. Atchison's dedication and success is reflected in the outstanding presenters she has brought to the College and the flawless organization that goes into planning, promoting and delivering these lectures. Dr. Atchison has already secured the commitment of Nobel Laureate, Michael Brown, M.D. for the twentieth anniversary next year.

Steven Guerriero, Ph.D.
Vice President for Academic Affairs and
Dean of the Faculty and the Graduate School

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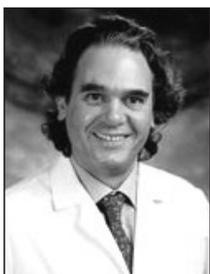
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March 1994 **Opening Speaker**
Carlo M. Croce, M.D.
Director, Kimmel Cancer Center
Kimmel Cancer Institute
Thomas Jefferson University
Elected to the National Academy of Sciences, 1996

Title: **Genetics of Human Cancer**



Dr. Carlo Croce is Director of the Kimmel Cancer Institute and Kimmel Cancer Center at the Thomas Jefferson University in Philadelphia, Pennsylvania and has held this position since 1991. During this same time Dr. Croce has been Professor and Chairman of the Department of Microbiology/Immunology at Thomas Jefferson University. Dr. Croce has been a member of the CorCell Scientific and Medical Advisory Committee since 1996 serving as its first Chairman. Dr. Croce completed his medical training at the

University of Rome, Italy in 1969. In the ten years following, Dr. Croce worked for the Wistar Institute in Philadelphia in the capacities of Associate Scientist and Research Associate, Associate Member and Professor. Following a year sabbatical at the Carnegie Institution in Baltimore, Maryland, Dr. Croce served as a member of the Mammalian Genetics Study Section for four years at the National Institutes of Health. Dr. Croce returned to the Wistar Institute in 1980 as Associate Director and Institute Professor, and served as both the Wistar Professor of Human Genetics and Wistar Professor of Pediatrics at the University of Pennsylvania School of Medicine in Philadelphia until 1991. During this same period Dr. Croce served on the Advisory Committee on Cell and Developmental Biology for the American Cancer Society; as Director of the Fels Institute for Cancer Research and Molecular Biology at the Temple University School of Medicine, Philadelphia; and Professor of Pathology and Medicine at Temple School of Medicine. Dr. Croce is the recipient of numerous awards and honors, including Outstanding Investigator Award, National Cancer Institute from 1985 through 1992; the John Scott Prize; the Pasarow Cancer Award; the CLAS Distinguished Scientist Award; Scientific Excellence in Medicine Award, American Italian Cancer Foundation; the R. Bourguine Award and Gold Medal of Paris in 1999; and the AACR-Pezcoller International Award for Cancer Research in 1999. Dr. Croce served as Editor in Chief of *Cancer Research* from 1990–1999, and is the author or co-author of more than 560 articles and publication.

April 1994 **Anna M. Skalka, Ph.D.**
Scientific Director and Senior Vice President
Institute for Cancer Research
Fox Chase Cancer Center

Title: **Retroviral DNA Integration:**
Anatomy of a Hostile Takeover



Dr. Anna Marie Skalka is Director of the Institute for Cancer Research and Sr. Vice President, Basic Science at the Fox Chase Cancer Center in Philadelphia. She received a Ph.D. degree in Microbiology from New York University Medical School. Dr. Skalka's main research interest is in molecular aspects of the replication of retroviruses. She is internationally recognized for her contributions to our understanding of the biochemical mechanisms by which such viruses (including the AIDS virus) replicate and insert

their genetic material into the host genome. Dr. Skalka has published more than 170 peer-reviewed scientific papers and scholarly reviews, has edited several scientific books, and is the inventor on three U.S. patents. Dr. Skalka has also been deeply involved in state, national, and international activities that impinge on the broader, societal implications of scientific research. She is a member of a number of professional societies and was elected to the American Academy of Arts and Sciences in 1994, to the American Association for the Advancement of Science in 1996, and to the Board of Governors of the American Academy of Microbiology in 1999.

April 1994

Alfred G. Knudson, M.D., Ph.D.
 Elected to the National Academy of Sciences, 1988
 Winner of the Charles S. Mott Prize of the General
 Motors Cancer Research Foundation, 1988
 Winner of the American Cancer Society Medical
 of Honor, 1989
 Winner of Albert Lasker Award, 1998
 Senior Advisor to the President
 Fox Chase Cancer Center

Title: The Human Cancer Gene



Alfred Knudson, M.D., Ph.D., a native Californian, is a Senior Member in the Division of Population Science at the Fox Chase Cancer Center. At the City of Hope National Medical Center he treated children with cancer, and investigated viral and genetic causes of cancer, and wrote a book, *Genetics and Disease*. Later at the M.D. Anderson Cancer Center, he formulated his well known “two-hit” theory of cancer causation, which explained the relationship between the hereditary and non-hereditary forms of cancer, using the childhood tumor retinoblastoma as a model. The two hits were presumed to involve mutation or loss of a retinoblastoma gene. It also predicted the existence of tumor suppressor genes. In fact, the retinoblastoma gene was the first tumor suppressor gene to be cloned (by Weinberg and his colleagues). At Fox Chase Dr. Knudson has studied hereditary cancer in rats, and is currently pursuing the prevention of cancer in humans with hereditary predisposition to the disease. He is a member of the National Academy of Sciences, and has received a Lasker Award and a General Motors Cancer Research Foundation Prize.

October 1994

Robert P. Perry, Ph.D.
 Elected to the National Academy of Sciences, 1977
 Senior Member, Fox Chase Cancer Center

Title: Regulation of Ribosome Biosynthesis



Robert P. Perry received a Ph.D. in biophysics at the University of Chicago in 1956 and currently holds the Stanley P. Reimann Endowed Chair in Research at the Fox Chase Cancer Center. For more than 40 years, Dr. Perry has carried out fundamental research at Fox Chase aimed at understanding how the structural and functional characteristics of living cells are determined by the information encoded in their genes. Key discoveries that Perry has made have helped explain how the genetic blueprint is translated into the active cell products—enzymes, antibodies and other proteins—that carry out the cell’s functions. His early achievements were recognized nationally in 1977 when he was elected to the prestigious National Academy of Sciences. He has served on the Academy’s Committee on Human Rights and was one of a three-person delegation that went on a 1978 fact-finding mission to Buenos Aires, Argentina and Montevideo, Uruguay. He has served as President of the Unesco-based International Cell Research Organization, and in 1983 received a Docteur Honoris Causa from the University of Paris.

November 1994 E. Premkumar Reddy, Ph.D.
 Professor of Biochemistry
 Chairman, Department of Biochemistry
 Director, Fels Research Institute

Title: "Myb" Gene Family: Structure and Function



In 1992 **E. Premkumar Reddy, Ph.D.** was appointed as the Director of the Fels Institute for Cancer Research and Molecular Biology, which is affiliated with Temple University. Dr. Reddy served as a member of the Board of Directors of NIEHS from 1990–1995. Along with Dr. Jenkins, he founded the international cancer journal *Oncogene* in 1986, for which he is currently the Editor. In 1993, he was awarded the Scientific achievement award by the American Cancer Society. Dr. Reddy has published

over 200 papers. The most notable of his findings are the molecular cloning and sequence determination of a number of oncogenes, which include, *mos*, *myb*, *myc*, *abl*, *fgf* and *sis*. In collaboration with Dr. Mariano Barbacid, he was also one of the first to demonstrate that *ras* genes are activated in human cancers by point mutations. His most recent findings include the generation of A-*myb* and CDK4 null mutant mice and delineation of the apoptotic mechanisms associated with hematopoietic cell death. His recent work centers around the role of cell cycle and apoptotic genes in cancer progression and as targets for the development of novel cancer drugs. This work has led to the development of novel therapeutic agents that can differentially induce apoptosis in tumor cells and spare normal cells. According to the data published in the year 2000 by the Institute of Scientific Information, which compiled the list of most highly cited authors, Dr. Reddy was amongst the top 50 percent of the most highly cited authors in the world.

February 1995 Kay Huebner, Ph.D.
 Basic Science Director, Kimmel Cancer Center
 Professor, Microbiology and Immunology
 Thomas Jefferson University

Title: Kidney Tumor Suppressor Genes



Kay Huebner, Ph.D. is a member of the Kimmel Cancer Institute and Center and Professor in the Department of Microbiology and Immunology of Thomas Jefferson University. She graduated with an A.B. in Liberal Arts/Philosophy from St. Johns College, Annapolis, "The Great Books" school, and obtained a Ph.D. degree in Microbiology from the University of Pennsylvania (1974). After postdoctoral work in virology and genetics at the Wistar Institute, an affiliate of the University of

Pennsylvania, she joined the Faculty of the Wistar Institute. She moved to the Fels Institute for Cancer Research at Temple University School of Medicine in 1987 and to Thomas Jefferson University in 1991.

April 1995 James Wilson, M.D., Ph.D.
 John Herr Musser Professor of Research Medicine
 Chair, Gene Therapy Program
 University of Pennsylvania School of Medicine

Title: The Prospects for Human Gene Therapy



Dr. James Wilson is a Professor of Medicine (Medical Genetics Division) and the John Herr Musser Chair of the Department of Research Medicine at the University of Pennsylvania. He is also a Professor at The Wistar Institute. Dr. Wilson received his M.D. and Ph.D. from the University of Michigan in 1984, focusing his research on the study of inborn errors of purine metabolism. Following residency training in Internal Medicine at the Massachusetts General Hospital, he moved to the Whitehead Institute of the Massachusetts Institute of Technology where he pursued postdoctoral training with Richard Mulligan in the area of retroviral vectors and gene therapy. In 1988, he joined the faculty at the University of Michigan where he began his independent career, relocating to the University of Pennsylvania to assume his current positions in 1993. Dr. Wilson's research accomplishments have been in the area of CF disease pathogenesis, biology of vectors, and early applications of gene therapy in humans. He is the former President of the American Society of Gene Therapy.

April 1995 Robert L. Comis, M.D.
 Clinical Director and Professor of Medicine
 Jefferson Cancer Institute
 Thomas Jefferson University
 Professor of Medicine and Director
 Drexel University

Title: The Biology of Lung Cancer



Robert L. Comis, M.D., President and Chairman of the Coalition of National Cancer Cooperative Groups, Inc. is Professor of Medicine and Director of the Drexel University Clinical Trials Research Center, Philadelphia, and the Group Chair of the Eastern Cooperative Oncology Group (ECOG). A leader in national clinical trials research since 1977, Dr. Comis has been actively involved in raising the awareness of the pivotal role cancer clinical trials has in cancer treatment. Dr. Comis was elected to the Board of Directors of the American Society of Clinical Oncology, National Coalition for Cancer Research and the American Radium Society. He has served on the Editorial Board of the *Journal of Clinical Oncology*, *Cancer Research* and *Clinical Cancer Research*. He is the Chair of the Subcommittee on Clinical Trials of the National Dialogue on Cancer (C-CHANGE). He has served ASCO in a variety of capacities including Chair of the Program, Nominating and Audit Committees, as well as a member of the Executive Committee. A graduate of Fordham University in New York City, he received his medical degree from SUNY Health Science Center School of Medicine in Syracuse, New York, where he also completed his medical internship and medical residency. He served as a Staff Associate at the National Cancer Institute, Bethesda, Maryland and completed a Medical Oncology Fellowship at The Sidney Farber Cancer Center at Harvard Medical School in Boston, Massachusetts. Dr. Comis is a Diplomat of the American Board of Internal Medicine, and a member of the American College of Physicians — American Society of Internal Medicine.

October 1995 **Timothy R. Tomlinson**
Associate Director, Morris Arboretum
The University of Pennsylvania

Title: **Botanic Gardens and Contemporary Research**
in Plants as Medicine



Timothy R. Tomlinson, Associate Director of Morris Arboretum, was Director of Public Programs, including special exhibits and marketing. He ran education programs and developed curriculum for the Arboretum school programs. He was liaison to universities for risk management and legal affairs, as well as other cultural institutions for collaborative activities. Tim was Project Director for four NEH implementation grants and two planning grants, including exhibits at the Philadelphia Flower Show and Chelsea Flower Show, London in 1982 and 1987. His activities included project director for outdoor exhibits on “Healing Trees, Plants as Medicine Across Time and Cultures” on an NEH grant, co-chaired the Organizing Committee for the International Symposia on the Utilization of Medicinal Plants, in collaboration with the World Health Organization; co-editor, with Dr. Olayiwola Akerele, formerly of the WHO, of *Promoting the World Wide Use of Medicinal* plants. He was project director for the Gardens Collaborative Project from 1990–1992 and again from 1993–1995. Mr. Tomlinson was project representative for University and NEH to the 450th Anniversary Celebration of the Founding of the Botanic Garden, University of Padova, Padova, Italy, June 1995 (“Healing Plants” presented to conferees). Mr. Tomlinson is a member of the American Association of Botanic Gardens and Arboreta and the American Educational Research Association.

October 1995 **Rick Lewandowski**
Director of Horticulture, Morris Arboretum
The University of Pennsylvania

Title: **Botanic Gardens and Contemporary Research**
in Plants as Medicine



Rick Lewandowski has been the director of Mt. Cuba Center, Inc. in Greenville, Delaware since 1999. He oversees planning and program development for the 630 acre property that became a public institution in 2001. From 1982 through 1998, Rick was on staff at the Morris Arboretum of the University of Pennsylvania, the last eight years as Director of Horticulture and Curator of the Living Collection. Rick has participated in numerous U.S. and international plant exploration trips, collaborative projects, and staff exchanges during his career. He is an active member of the American Association of Botanic Gardens and Arboreta (AABGA), serving as the chair of the North American Plant Collections Consortium (NAPCC), which cooperates with the USDA crop germplasm system on the preservation of plant genetic diversity. While at the Morris Arboretum, Rick conducted research with the Philadelphia-based pharmaceutical company, Smith, Kline and Beecham to sample temperate plant species for new plant-based medicines. Additionally, he conducted tissue culture and field production research with *Camptotheca acuminata*, a Chinese tree species containing valuable anti-cancer compounds. Rick received his bachelor of science degree in horticulture from Kansas State University in 1980 and a masters degree in horticulture from the University of Maryland in 1982.

November 1995 Shirley M. Tilghman, Ph.D.
 Howard A. Prior Professor, Princeton University
 Howard Hughes Institute's Distinguished Scholar
 Elected to the National Academy of Sciences, 1996
 19th President of Princeton University

Title: The Importance of Genomic Imprinting for
 Mammalian Growth and Development



Shirley M. Caldwell Tilghman is Princeton University's 19th president. Since 1986, Dr. Tilghman was the Howard A. Prior Professor of the Life Sciences at Princeton University. In 1968, she received her B.Sc. with honors in Chemistry and Biochemistry from Queen's University in Kingston, Canada, and her Ph.D. in biochemistry from Temple University in Philadelphia in 1975. She has taught secondary school in West Africa, been a Fogarty International Fellow at the National Institutes of Health and has held professorships at

Temple University School of Medicine and the University of Pennsylvania. She is currently an adjunct professor in the Department of Biochemistry at University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School and an Investigator of the Howard Hughes Medical Institute. Since 1993, Dr. Tilghman has chaired the Council on Science and Technology at Princeton University, a committee that was established in 1989 to enable Princeton to offer more opportunities for non-science students to learn about science and technology. The Council's activities include the renovation of existing courses and the development of new courses within Princeton's curriculum, as well as the sponsoring of distinguished scientists to offer special one-time course addressing topics of current interest. In addition, the Council sponsors a yearly lecture series on scientific topics of interest to the student body and the general public, a seminar series on pedagogical issues related to teaching science to non-majors, and various events linking the arts and the sciences designed to bridge the gap between the two cultures on campus. Dr. Tilghman has served on several scientific advisory boards, including the Scientific Advisory Board at the Whitehead Institute for Biomedical Sciences, the Fred Hutchison Cancer Research Center, the Board of Governing Trustees of the Jackson Laboratory, the Board of Trustees of Cold Spring Harbor Laboratory and the National Advisory Council at the National Center for Human Genome Research, among others. Dr. Tilghman is currently on the editorial board of *Genes and Development*, and has been an editor for *Molecular and Cellular Biology*, *Journal of Cell Biology*, and *Nucleic Acids Research*. Her lab studies mechanisms underlying mammalian development.

November 1995 Beverly S. Emanuel, Ph.D.
 Chief, Division of Human Genetics and
 Molecular Biology
 The Charles E. Upham Professor of Pediatrics
 University of Pennsylvania School of Medicine

Title: Human Genome Initiative:
 Chromosome 22 as a Model



Beverly S. Emanuel received a B.A. degree in Biology with honors (Phi Beta Kappa) and a Ph.D. degree, majoring in microbiology, from the University of Pennsylvania. She completed postdoctoral fellowships in Human Genetics at the University of Pennsylvania and the Children's Hospital of Philadelphia. In 1978 Dr. Emanuel joined the faculty of the University of Pennsylvania School of Medicine where she currently holds appointments as the Charles Upham Professor of Pediatrics and Genetics. She

is Chief of Human Genetics at the Children's Hospital of Philadelphia and Director of the Center for Human Genetics in the School of Medicine. She is well known for her research regarding chromosome 22. As a major participant in the human genome initiative, Dr. Emanuel selected the "Philadelphia chromosome" (chromosome 22) as her model. Her research accomplishments include localization of many loci and the development of techniques that expedited the sequencing of chromosome 22. This includes the publication of a physical map of the chromosome and extensive research on the chromosome 22q.11.2 deletion syndrome, which affects one in 4,000 children. Her team was responsible for developing the diagnostic laboratory test used to detect this disorder worldwide.

April 1996 Alan M. Kelly, B.V.Sc., M.R.C.V.S., Ph.D.
 The Gilbert S. Kahn Dean of Veterinary Medicine
 Professor, Department of Pathobiology
 School of Veterinary Medicine
 The University of Pennsylvania

Title: The Opportunities for the Veterinarian in Basic
 Research and in Clinical Medicine



Born in Scotland, **Alan M. Kelly** received his veterinary education (B.V.Sc.) at the University of Bristol, Bristol, England, and his Ph.D. in Pathology at the University of Pennsylvania Graduate School of Arts and Sciences, Philadelphia, Pa. A professor of pathology, Dr. Kelly is now The Gilbert S. Kahn Dean of Veterinary Medicine at the School of Veterinary Medicine. He became Dean in January 1995, the only dean in the United States to hold an endowed deanship chair; he was Acting Dean for a year prior. In his career at Penn he has served on myriad committees, and Chair of the Department of Pathobiology, Head of the Laboratory of Pathology, Chair of the Graduate Group of Pathology and Comparative Medical Sciences and has published over 60 papers in scientific journals and contributed chapters to 12 books before assuming the deanship. His research has concentrated in neuromuscular development, particularly in the evolution of fiber diversity in mammalian muscle, researching forms of myosin in evolving muscle and the influence of the endocrine and nervous systems in regulating myosin isozymes during myogenesis. Since the outbreak of mad cow and foot and mouth disease in the U.K., Dr. Kelly has concentrated his efforts on epidemiology, public health and food safety in the U.S. These concerns are increased in light of the current threats of bio-terrorism. Dr. Kelly was a principal organizer and speaker for a three day conference by the Association of American Veterinary Medical Colleges in Washington, D.C. Recent events have made it clear that veterinarians play a critical role in the nation's defense against a possible biologic attack. Their expertise can strengthen disease surveillance systems and offer the latest techniques to protect livestock and food supplies. The topic of the conference was "The Agenda for Action: Veterinary Medicine's Role in Bio-Defense and Public Health." Dr. Kelly presented "The Evolution of the Bio-Defense Market" at Philadelphia's Conference on Homeland Security in Philadelphia. He also was the co-chair of Governor-Elect Rendell's Transition Team for the Commonwealth of Agriculture.

October 1996 Arthur C. Upton, M.D.
 Former Director of National Cancer Institute
 Director and Clinical Professor
 Robert Wood Johnson Medical School, NJ

Title: Radiation, Genes and Cancer:
 Issues in Risk Assessment



Dr. Arthur Upton, currently a Clinical Professor of Environmental and Community Medicine at the University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School, received his M.D. degree and training in pathology from the University of Michigan Medical School, after which he served successively as Chief of the Pathology-Physiology Section, Oak Ridge National Laboratory; Chairman of the Pathology Department and Dean of the School of Basic Health Sciences, State University of New York at Stony Brook; Director of the National Cancer Institute; Chairman of the Department of Environmental Medicine, New York University School of Medicine; and Clinical Professor of Pathology and Radiology, University of New Mexico Medical School. In the course of his career, he has published more than 380 scientific articles, books, book chapters, and other reports, most of which have dealt in one way or another with the health effects of ionizing radiation and other environmental agents.

February 1997 Marilyn J. Manco-Johnson, M.D.
 Professor of Pediatrics and Director Hemophilia
 Treatment Program
 University of Colorado School of Medicine

Title: Perspectives on Hemophilia Research from
 the Gene to the Clinical Application



Marilyn J. Manco-Johnson, M.D. is Professor of Pediatrics, Director, Mountain States Regional Hemophilia Center, and Director, Colorado State Hemophilia Treatment program. Dr. Manco-Johnson's clinical interests include Coagulation and Thrombosis, Pediatric Hematology, Hemophilia and Pediatric Aids. Dr. Manco-Johnson received her bachelor's degree from Penn State University and her M.D. in 1974 from Thomas Jefferson University. Subsequently she did her residency and fellowship at University of Colorado. She is board certified in Pediatric Hematology/Oncology.

Dr. Manco-Johnson has received major grants from NIH, CDC and March of Dimes. She is also National merit scholar, winner of Dean Marie Banes award for pediatrics, University of Colorado sixth annual award for excellence, and winner of the best doctors award in 1994. She is an author of number of publications and many book chapters. Her major research interests include: Neonatal and pediatric thrombosis, studying the development of the protein C system, mothers with diabetes mellitus, children with bone marrow transplantation and hemophilia, prevention of joint disease and other transfusion acquired infections.

October 1997 David Kritchevsky, Ph.D.
 Professor and Caspar Wistar Scholar
 The Wistar Institute

Title: Diet and Atherosclerosis: Everything Counts



Dr. David Kritchevsky is Associate Director of the Wistar Institute of Anatomy and Biology, where he specializes in lipid biochemistry and atherosclerosis. He is also affiliated with the University of Pennsylvania in several capacities: as Wistar Professor of Biochemistry at the School of Veterinary Medicine; as Professor of Biochemistry in Surgery at the School of Medicine; and as Chairman, Graduate Group on Molecular Biology, Graduate School of Arts and Sciences. Dr. Kritchevsky earned his B.A. in Chemistry in 1939 and M.A. in Organic Chemistry in 1942 from the University of Chicago, and his Ph.D. from Northwestern University in 1948. He joined Wistar Institute in 1957 and is active as an executive and committee member in many professional societies.

April 1998

Alumna Stephanie A. King, M.D.
Associate Professor, OBGYN Control
Drexel University

Title: Diagnosis and Treatment of Gynecological
Malignancies



Stephanie A. King, M.D. is an Associate Professor at Drexel University College of Medicine and practices as a gynecologic oncologist at Hahnemann University Hospital in Philadelphia. She received her B.S. (*Summa cum Laude*) from Chestnut Hill College. Dr. King's medical degree was completed at the University of Pennsylvania's Medical School. Her residency for Obstetrics and Gynecology was at the Hospital of the University of Pennsylvania, where she also did her Clinical Fellowship

in Gynecologic Oncology. Dr. King is board certified in Gynecologic Oncology by the American Board of Obstetrics and Gynecology. Dr. King is a member of the American College of Obstetricians and Gynecologists, Society of Gynecologic Oncologists, the Philadelphia Obstetrical Society and the Gynecologic Oncology Group. She was named among the Best of Philadelphia Doctors for Women for 2000 and 2002. Dr. King is married to Dr. Paul G. Curcillo, II, and they have three children.

November 1998

Robert F. Ozols, M.D., Ph.D.
Senior Vice President for Medical Sciences
Fox Chase Cancer Center

Title: The Biology and Treatment of Ovarian Cancer



Robert F. Ozols, M.D., Ph.D. is Senior Vice President, Medical Science, and Medical Director at Fox Chase Cancer Center in Philadelphia, Pennsylvania. He also is Professor of Medicine at Temple University, an Associate Dean, and Director of the Fox Chase Cancer Center/Temple University Cancer Program. Dr. Ozols' research is focused on developing new treatments for ovarian cancer, including pharmacologic techniques to reverse drug resistance and the design of new combination chemotherapy regimens.

He has published over 300 original papers, book chapters, and reviews. He has been active in numerous professional organizations, including the FDA's Oncologic Drugs Advisory Committee (ODAC); the Board of Directors of the American Society of Clinical Oncology; and the International Gynecologic Cancer Society, serving as Vice President. He has received several awards, including the Claude Jacquillat Award and the Bristol-Myers Squibb Award for Distinguished Achievement in Cancer Research.

April 1999 **Vincent J. Cristofalo, Ph.D.**
**President, Lankenau Institute for Medical
 Research and Professor of Pathology, Anatomy
 and Cell Biology, Thomas Jefferson University**

Title: **Journeys in Cellular Aging**



Before coming to the Lankenau Institute for Medical Research, **Vincent J. Cristofalo, Ph.D.** was Audrey Meyer Mars Professor of Gerontology and Professor of Pathology and Laboratory Medicine and of Biochemistry at Allegheny University of the Health Sciences in Philadelphia. An internationally recognized leader in aging research, he also was director of the Allegheny System's Center for Gerontological Research at the MCP Hahnemann School of Medicine and of the statewide AHERF Institute on Aging. He was founding director of the

Center for the Study of Aging at the University of Pennsylvania. He currently is Professor Emeritus at the University of Pennsylvania and at the Wistar Institute. Dr. Cristofalo's research on the dynamics and regulation of cell replication in the aging process has earned him awards from The Gerontological Society of America (1982, 1989), the Samuel Roberts Noble Foundation (1991), the University of Pisa (1991) and the American Aging Association Award, (1997). His other honors include designation as a fellow of the American Association for the Advancement of Science (1986) and election to the Academy of Science and Arts of Volterra, Italy (1993). The author of more than 232 full-length publications, he has served as editor of the *Journal of Gerontology: Biological Sciences* (1988–1990), and is on the editorial board of numerous journals. He has served as President of the Gerontological Society of America, and the American Federation for Aging Research.

October 1999 **Peter C. Nowell, M.D.**
**Professor, Department of Pathology
 and Laboratory Medicine**
Director, Cytogenetic Laboratory
University of Pennsylvania Cancer Center
Elected to the National Academy of Sciences, 1976
Winner of Albert Lasker Award, 1998
**Winner of Benjamin Franklin Medal in
 Life Sciences, 2010**
Gaylord P. and Mary Louise Harnwell Professor

Title: **Cancer Research: Promise and Paradox**



Dr. Peter C. Nowell, M'52, professor of pathology and laboratory medicine, was recognized by the trustees of the University of Pennsylvania. "For over 40 years he has contributed to the well-being of the Medical Center and Health System, the University, and the community, and his constant efforts and extraordinary commitment have enhanced science and medicine with local, national, and international impact." Dr. Nowell has made many significant contributions to science throughout his long and

distinguished career, most notably in his discovery of the Philadelphia chromosome, the first human gene linked to cancer. As a result of his distinguished career, Dr. Nowell was selected to receive the 1998 Albert Lasker Award for Clinical Medical Research from the Albert and Mary Lasker Foundation. "These awards, chosen by a jury of the world's top scientists, are the nation's most prestigious honor for medical research and represent the highest possible recognition for a career of exceptional work—they are, indeed, considered 'America's Nobels'."

April 2000 Michael L. Atchison, Ph.D.
 Professor of Biochemistry and Director
 of Combined Degree (VMD/Ph.D.) Program
 The University of Pennsylvania

Title: Genetic Testing for Diseases:
 A Judeo-Christian Perspective



Dr. Michael Atchison is Professor of Biochemistry and Director of the VMD/Ph.D. Combined Degree Program at the University of Pennsylvania. He is also Director of the NIH/Merial Veterinary Scholars Program at the University of Pennsylvania School of Veterinary Medicine. He did his graduate studies at New York University School of Medicine and postdoctoral training at Fox Chase Cancer Center. Previously, Dr. Atchison also served as Head of Biochemistry at the School of Veterinary Medicine and as Associate Director for Basic Science for the Marie Lowe Center for Comparative Oncology. Dr. Atchison is recipient of the Smith-Kline Beecham Award for Research Excellence, the Dean's Award for Outstanding Leadership in Basic Science Education, and the Lindback Award for distinguished teaching. His research focuses on mechanisms of transcriptional regulation, development, and growth control in mammalian species. Dr. Atchison has published numerous peer-reviewed articles in these fields in leading journals and has been an invited speaker at both national and international venues. He is currently a Principal Investigator on three NIH research grants and three NIH training grants. Dr. Atchison has trained over 50 postdoctoral fellows, graduate, veterinary, undergraduate, and high school students in his laboratory. He is a frequent reviewer of manuscripts for many leading scientific journals, and often serves as grant reviewer for a variety of agencies including the National Institutes of Health, the National Science Foundation, and the American Cancer Society. He is an avid reader, a runner, and in his spare time, Dr. Atchison plays guitar in the rock/blues band "TRIAGE" along with his son Alan. Dr. Atchison is committed to his church and actively participates in short-term mission trips to India with his church family.

October 2000 Robert C. Young, M.D.
 President, Fox Chase Cancer Center

Title: Cancer Medicine in the 21st Century



Robert C. Young, M.D. is President of Fox Chase Cancer Center in Philadelphia, which includes one of the nation's largest hospitals dedicated solely to cancer and the first such hospital in the country. He is internationally known for his work in the treatment of lymphoma and ovarian cancer. He is a past-president of the American Cancer Society, American Society of Clinical Oncology (ASCO), and the International Gynecologic Cancer Society. Young is co-recipient of the 2002 Bristol-Myers Squibb Award for Distinguished Achievement in Cancer Research for his research in ovarian cancer. A medical oncologist, Young is the author of more than 400 peer-reviewed publications. Dr. Young serves on the National Cancer Policy Board at the Institute of Medicine and the Board of Scientific Advisors of the National Cancer Institute, and served as Chairman of the Board of the National Comprehensive Cancer Network.

April 2001 **Mary B. Daly, M.D., Ph.D.**
Director, Cancer Control Science Program
and Margaret Dyson Family Risk
Assessment Program
Fox Chase Cancer Center

Title: **Breast Cancer: Moving Toward Prevention**



Dr. Mary B. Daly is a medical oncologist and epidemiologist specializing in breast cancer. She is the director of the Margaret Dyson Family Risk Assessment Program at Fox Chase Cancer Center in Philadelphia. This program, one of the first of its kind when it opened in 1991, is a prevention and early-detection program for women with a hereditary or genetic risk of breast or ovarian cancer. It deals with all aspects of cancer risk and includes research in molecular genetics, cancer-risk counseling, screening methods and the psychological consequences of cancer-risk notification. Daly came to Fox Chase in 1989 from Wilford Hall Medical Center, Lackland (Texas) Air Force Base, where she held the rank of Lieutenant Colonel. As chief of hematology and medical oncology there, Daly helped develop the first bone-marrow transplant program operated by the Department of Defense. Born in Bridgeport, Conn., Daly earned her B.A. in biology at New York's College of New Rochelle. She received her M.S. in public health, Ph.D. in epidemiology and M.D. from University of North Carolina at Chapel Hill. She received all of her internal medicine and medical oncology training at the University of Texas Health Science Center in San Antonio.

October 2001 **Thomas W. London, M.D.**
Senior Member, Division of Population Science
Fox Chase Cancer Center
Professor of Epidemiology, Center for Clinical
Epidemiology and Biostatistics
The University of Pennsylvania School of Medicine

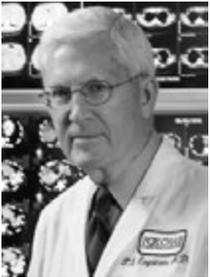
Title: **The Global Health Crisis**



Thomas W. London, M.D. is a Senior Member in the Division of Population Science at the Fox Chase Cancer Center (FCCC) and an Adjunct Professor of Epidemiology and Biostatistics at the University of Pennsylvania School of Medicine. He has had a leading role in epidemiological, clinical, and virological studies of hepatitis B virus and hepatocellular carcinoma (HCC). At FCCC, Dr. London is the Director of the Liver Cancer Prevention Program, which monitors Asian-American hepatitis B carriers for early detection of liver cancer. He is the chairman of the FCCC Institutional Review Board.

February 2002 Paul F. Engstrom, M.D.
 Medical Director for Fox Chase Network Hospitals
 Senior Vice President, Population Science
 Fox Chase Cancer Center

Title: Cancer Chemoprevention:
 Is it Ready for Prime Time?



Dr. Paul F. Engstrom is Senior Vice President for Population Science, overseeing Fox Chase programs in behavioral research, human genetics, epidemiologic research, and cancer prevention research. He is also Medical Director of Fox Chase Network, a select group of nearly 21 Pennsylvania and New Jersey community Hospitals affiliated with Fox Chase, and the Medical Director for International Programs for Fox Chase Cancer Center. A medical oncologist specializing in gastrointestinal cancers, Engstrom joined Fox Chase in 1970 after three years of military service as Chief of Hematology and Oncology at Tripler General Hospital in Honolulu. He headed Fox Chase's medical oncology department from 1972 to 1984 and served as Vice President for Cancer Control from 1984–1988 when the divisions of Cancer Control and Population Oncology merged to form the Population Science Division. A member of the editorial board of *Cancer Epidemiology Biomarkers and Prevention*, *Journal of Cancer Prevention*, *Journal of Clinical Oncology* and *Cancer Research, Therapy and Control*, Dr. Engstrom is the author or co-author of several texts and book chapters on cancer control and medical oncology. He also has published scientific papers that address the risk factors, survival, prevention and treatment of various cancers.

April 2002 Kelly A. Robinson, M.D., F.A.A.E.M.
 Medical Director and Chairman
 Department of Emergency Medicine
 Jeannes Hospital, Philadelphia

Title: Emergency Treatment of Cerebrovascular
 Accidents and Other New Medical Procedures



Dr. Kelly A. Robinson was a Medical Director and Chairman for the Department of Emergency Medicine at Jeannes Hospital in 2002. He was also a Senior partner at Central Avenue Office of Emergency Physicians. From 1998 to 2001 he worked as Medical Director of the Emergency Department at Lakeland Medical, and during 1996–1998 was Associate Director of West Jersey Camden Emergency Department. In 1992–1993 he worked as Assistant Professor of Emergency Medicine for the Department of Emergency Medicine at Kings County Medical Center in Brooklyn, New York. Dr. Robinson is board certified by the American Board of Internal Medicine since 1990, the American Board of Emergency Medicine through 2004, a ACLS Instructor and PALS Instructor. He is a Fellow of American Academy of Emergency Physicians and author of several publications. Dr. Robinson's special interests include: Reperfusion strategies in ischemic stroke and coronary artery disease, promoting the growth of democratic emergency physician owned and operated practices throughout the United States, and strategies for shortening the length of stay for patients in the Emergency Department thereby improving overall patient satisfaction.

March 2003

Michael J. Behe, Ph.D.
 Professor of Biochemistry
 Lehigh University
 Author of *Darwin's Black Box*

Title: Evidence of Design in Biochemistry



Michael J. Behe, Ph.D. is a Professor of Biochemistry at Lehigh University. Dr. Behe is the author of the instant best seller *Darwin's Black Box*. This book is recognized as one of the 20th century's top 100 books. Dr. Behe graduated from Drexel University, Philadelphia with a Bachelor of Science degree in Chemistry. He did his graduate studies in biochemistry at the University of Pennsylvania and earned his Ph.D. in 1978 for his dissertation research on sickle-cell disease. From 1978–1982 he did postdoctoral work on

DNA structure at the National Institutes of Health. From 1982–1985 he was Assistant Professor of Chemistry at Queens College in New York City, where he met his wife. In 1985 he moved to Lehigh University where he is currently Professor of Biochemistry. In his career he has authored over 40 technical papers and one book, *Darwin's Black Box: The Biochemical Challenge to Evolution*, which argues that living systems at the molecular level are best explained as being the result of deliberate intelligent design. *Darwin's Black Box* has been reviewed by the *New York Times*, *Nature*, *Philosophy of Science*, *Christianity Today*, and over one hundred other periodicals. He and his wife reside near Bethlehem, Pennsylvania with their nine children.

October 2003

Robert L. Quigley, M.D., Ph.D., F.A.C.S.
 Chairman, Division of Cardiothoracic Surgery
 Albert Einstein Medical Center
 System Professor of Surgery, Jefferson Health

Title: How Do You Mend a Broken Heart?



Dr. Robert Quigley is a *Cum Laude* graduate of the University of Toronto. He completed his General and Thoracic Surgery Training at Duke University Medical Center. His surgical training was interrupted to complete a Ph.D. in Transplant Immunology at Oxford University. He is Board Certified in three specialties including General Surgery, Critical Care, and Thoracic Surgery. He is the Chairman of Cardiothoracic Surgery at Albert Einstein Medical Center and is a Professor of Surgery at Jefferson

Medical College. The author of more than 80 manuscripts, Dr. Quigley is considered a pioneer in both valvular heart disease treatment, as well as, beating heart surgery.



OFFICE OF ACADEMIC AFFAIRS

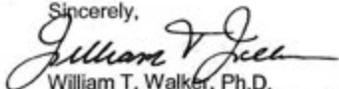
March 16, 2004

The Chestnut Hill College Community enthusiastically welcomes Nobel Laureate Dr. Stanley B. Prusiner as our speaker marking the Tenth Anniversary of the Biomedical Lecture Series. It has been our honor to offer this series of lectures by outstanding biomedical researchers and educators during the past ten years and to have Dr. Prusiner with us today at Chestnut Hill College as we celebrate this most significant milestone.

Historically, the natural sciences have been premier programs of Chestnut Hill College. Approximately twenty-six percent (26%) of the College's 8000 graduates have degrees in undergraduate sciences and thirteen percent (13%) of the 8000 have graduated from medical, dental, and veterinary schools or have earned master's or doctoral degrees in the sciences. Chestnut Hill College alumnae are on the faculties of medical schools, colleges, universities as well as serving in industry, business, and government. They are individuals who have made an impact both by their professional competence and their personal integrity.

Sir Peter Brian Medawar, in his book *The Art of the Soluble* (1967) wrote: "The scientist values research by the size of its contribution to that huge, logically articulated structure of ideas which is already, though not yet half built, the most glorious accomplishment of mankind." For ten years, we have had the privilege of meeting and learning from scientists whose work has made a difference in improving the quality of life. At Chestnut Hill College we are committed to academic excellence and to educating students who will also make a 'difference' in their professional work -- hopefully, by continuing to discover new ideas, new processes and procedures that will improve the lives of all. Our speakers in the Biomedical Lecture Series have shared their thoughts, their enthusiasm for research, and their ideals with our students. For all of this, we are most grateful.

I wish to thank Dr. Lakshmi Atchison, Chair, Division of Natural Sciences, and Professor of Biology, for her leadership and management of the Chestnut Hill College Biomedical Lecture Series during the past ten years. As an outstanding educator, Dr. Atchison recognizes the importance of quality undergraduate research and the need to provide students with access to the leaders in their field.

Sincerely,

 William T. Walker, Ph.D.
 Vice President for Academic Affairs
 and Dean of the Faculty



March 2004

Stanley B. Prusiner, M.D.
 Elected to the National Academy of Sciences,
 1992
 Nobel Laureate in Medicine, 1997
 Director, Institute for Neurodegenerative
 Diseases and Professor of Neurology
 and Biochemistry
 University of California, San Francisco

Title:

The Mad Cows that Changed America



Stanley B. Prusiner, M.D. is Director of the Institute for Neurodegenerative Diseases and Professor of Neurology and Biochemistry at the University of California, San Francisco. He received his undergraduate and medical training at the University of Pennsylvania and his postgraduate clinical training at UCSF. From 1969–1972, he served in the U.S. Public Health Service at the National Institutes of Health. Editor of 12 books and author of over 330 research articles, Prusiner's contributions to scientific research have been internationally recognized. He is a member of the National Academy of Sciences, the Institute of Medicine, the American Academy of Arts and Sciences, the American Philosophical Society, and is a foreign member of the Royal Society, London. He is the recipient of numerous prizes, including the Potamkin Prize for Alzheimer's Disease Research from the American Academy of Neurology (1991); the Richard Lounsbery Award for Extraordinary Scientific Research in Biology and Medicine from the National Academy of Sciences (1993); the Gairdner Foundation International Award (1993); the Albert Lasker Award for Basic Medical Research (1994); the Paul Ehrlich Prize from the Federal Republic of Germany (1995); the Wolf Prize in Medicine from the State of Israel (1996); the Keio International Award for Medical Science (1996); the Louisa Gross Horwitz Prize from Columbia University (1997); and the Nobel Prize in Physiology or Medicine (1997).

Tenth Anniversary Celebrations with 1997 Nobel Laureate
 Dr. Stanley Prusiner
 Awarded Nobel Prize in Physiology or Medicine

November 2004 Eric Lee Vey, M.D.
 Forensic Pathologist, Fairview, Pennsylvania
 Medical Laboratory Director
 Erie County Department of Juvenile Probation

Title: Forensic Pathology: A "Dead" Science



Dr. Eric Vey is a forensic pathologist based in the Erie County Medical examiner's office, which serves eleven counties in northwestern Pennsylvania. He is also the autopsy service provider for the Commonwealth of Pennsylvania, Department of Public Welfare, and the medical laboratory director of the Urine Toxicology Screening Laboratory, Erie County Department of Juvenile Probation. Dr. Vey, a graduate of the University of Pittsburgh School of Medicine, earned his B.S. at the

University of Notre Dame and an M.S. in physiology at Georgetown University. He was a fellow in forensic pathology for the Allegheny County (Pittsburgh) coroner's office and is a guest lecturer at Mercyhurst College and Gannon University in Erie, Pennsylvania. Dr. Vey is board-certified in both anatomic pathology and forensic pathology.

April 2005 Marcia Boraas, M.D.
 Surgeon and Associate Professor of Surgery
 University of Pennsylvania

Title: Evolution of Breast Surgery



Marcia Boraas, M.D. received her undergraduate education from Princeton University and Medical Degree from the University of Pennsylvania with specialty Certification in American Board of Surgery. Currently Dr. Boraas is working as Clinical Associate Professor of Surgery in the Division of Surgical Oncology at the University of Pennsylvania School of Medicine. She has been in practice since 1983. Dr. Boraas is a Fellow of the American College of Surgeons, Member of the American Medical Women's Association,

and Association of Women Surgeons. Her practice is affiliated with the Fox Chase Cancer Center (FCCC). Her current clinical responsibilities encompass all aspects of screening, diagnosis, and surgical therapy of breast malignancy, with a lesser emphasis on benign breast conditions. Interaction with surgical residents from Temple University and surgical oncology fellows (from FCCC) occurs primarily in the context of educational conferences and during surgery and the perioperative management of surgical inpatients. Her clinical offices are at the Rena Rowan Breast Cancer Center, where the focus of her practice is the clinical care of patients with breast disease, primarily breast cancer.

November 2005 Gary Smith, M.A., M.S., D.Phil.
 Chief of Epidemiology and Public Health
 School of Veterinarian Medicine
 University of Pennsylvania

Title: Foot and Mouth Disease: Catastrophic Infectious
 Disease Epidemics in Domesticated Animals



Originally from Britain, **Gary Smith, M.A., M.S., D.Phil.**, received his degrees from the Universities of Oxford, Cambridge and York. His research deals with the epidemiology and population dynamics of infectious disease. A Standing Member of the Microbiology and Infectious Disease Review Committee for the National Institutes of Health, Dr. Smith has been a specialist editor for over half a dozen scientific journals and serves on the editorial review board for the *International Journal of Applied Research in Veterinary Medicine*. He is the author of over a hundred scientific articles, reviews, book chapters and books.

In recent years, Dr. Smith has given more than thirty plenary or invited lectures at national and international venues on topics as diverse as Avian Influenza, Foot and Mouth Disease, Lyme Disease, Bioterrorism, Agroterrorism, and the ecology of disease in animals and humans. As a consultant, he is currently involved in a research program at John's Hopkins University to create a realistic, simulated bioterrorist attack on the city of Baltimore. Dr. Smith has served in numerous committees. He served as member of a European Union Expert Committee on Bovine Spongiform Encephalopathy (Mad Cow Disease) risk; testified twice before the Pennsylvania House Agriculture and Rural Affairs Committee on Foot and Mouth Disease, and on Agroterrorism; served as Whitehouse Blue Ribbon Panel on Agroterrorism for the Federal Office of Science and Technology Policy.

April 2006 Joan C. Hendricks, VMD, Ph.D.
 The Gilbert S. Kahn Dean of School of Veterinary
 Medicine, University of Pennsylvania

Title: Lessons from Many Species About
 How and Why We Sleep



Joan C. Hendricks, VMD, Ph.D. became the twelfth Dean of the Gilbert S. Kahn School of Veterinary Medicine at University of Pennsylvania on January 1, 2006 succeeding Dr. Alan M. Kelly, who was dean for more than 11 years. Joan has served on the faculty of the school for more than 20 years. In 2001 she became the first woman to hold an endowed professorship at the school when she was named the Henry and Corinne R. Bower Professor of Small Animal Medicine. In addition to serving as Chief of Critical

Care in the Department of Clinical Studies at Philadelphia, Joan is founding director of the Veterinary Clinical Investigation Center and holds a secondary appointment as professor in the Department of Medicine at Penn's School of Medicine. In the area of critical care, Joan has played a key role in enhancing teaching and patient care. With colleagues at the Matthew J. Ryan Veterinary Hospital, she was instrumental in establishing a Center for Critical Care at the Hospital, which brought the Emergency Service, Intensive Care Unit and the Anesthesia Service together into a single section. Joan has significantly advanced the stature and importance of the school's clinical investigation capabilities by successfully recruiting highly regarded tenure-track faculty in the Department of Clinical Studies, and by establishing an innovative partnership with Pfizer Animal Health to support clinical trials. Joan's work has been widely published in peer-reviewed journals, including the *Journal of the American Veterinary Medical Association* and the *Journal of Applied Physiology*, and she is frequently invited to lecture at major conferences around the world. During her recent sabbatical year, she chose to investigate how molecular biology could be applied to neuroscience, specifically to the field of sleep and sleep disorders, in which Joan is a recognized expert. She has studied bulldogs extensively and recently published pioneering studies on the sleep patterns of fruit flies in the high-impact journals *Nature Neuroscience* and *Neuron*. In 1979 and 1980, Joan earned her VMD and Ph.D. from the school. She also carried out her residency and postdoctoral fellowship at Penn. She has a B.S. in biology and psychology from Yale University.

October 2006 Carole Muto, R.N., B.S.N., C.P.A.N.
 Chair, Staff Nurse Council, Staff Nurse
 PACU/Jefferson Hospital
 for Neuroscience, Philadelphia

Title: Perioperative Nursing Care of Patients
 Undergoing Neurosurgical Procedure



As a licensed registered nurse with over 30 years of hospital-based experience, **Carole Muto** has practiced in a variety of clinical settings throughout the Philadelphia area. In 1991 she accepted a position in the Post Anesthesia Care Unit (PACU) at Wills Eye Hospital, which in 2000 became Jefferson Hospital for Neuroscience (JHN). Nursing at JHN affords Carole the opportunity to apply her nursing experience in a busy academic neurosurgical setting offering comprehensive management for patients with neurological diseases affecting the brain and spine. Learning also occurs every day in the PACU and Carole recognizes that a strong nursing team and collegiality with anesthesiologists and neurosurgeons make for a gratifying work experience. Most importantly they contribute to optimal patient outcomes and satisfaction. The exciting JHN environment, coupled with the nursing department's on-going pursuit of excellence and best practice, has inspired Carole to share her knowledge and expertise. Carole serves as chair of the Staff Nurse Council (SNC) at Thomas Jefferson University Hospital (TJUH). The council is comprised of nurses from each patient care unit at TJUH and JHN, both located in Center City Philadelphia and Methodist Campus in South Philadelphia. The SNC strives to advance nursing practice by promoting communication, reinforcing a professional image of nursing, serving as educators and providing community service. Carole hopes that through her presentation the audience will not only learn about the many advanced and exciting neurosurgical services offered at JHN, but will also gain a greater understanding of today's professional nursing practice and the role of the nurse as a vital part of the health care delivery team.

March 2007 Richard D. Lackman, M.D., F.A.C.S.
 Surgeon and Chair, Department of Orthopedic
 Surgery, Pennsylvania Hospital,
 Penn Orthopedic Institute, Philadelphia

Title: Design Evolution in Orthopedic Devices



Dr. Richard D. Lackman is a distinguished Orthopaedic Surgeon recognized for the last 21 years as one of the "Top Docs" by the *Philadelphia Magazine*. He is also a recipient of numerous honors and awards in the field of Orthopaedic Medicine since 1982. Dr. Lackman currently holds an endowed Chair position at the University of Pennsylvania, where he completed his residency in Orthopaedic Surgery. He received his fellowship training in Orthopaedic Tumor Surgery and an additional year of special training at the prestigious Mayo Clinic in Minnesota in the treatment of orthopaedic tumors. He then returned to Philadelphia in 1983 as the first Orthopaedic Tumor surgeon to practice in this area. Since that time Dr. Lackman's team has developed one of the largest practices in the country and they currently have three Orthopaedic Tumor surgeons in their practice of the roughly 120 in the entire country. Dr. Lackman's practice concentrates on benign and malignant tumors of the musculoskeletal system, which includes bone and soft tissues. His team performs mainly limb preserving surgery, which has largely replaced amputation for these problems. Chestnut Hill College and the Biology Department are very honored and appreciate Dr. Lackman for his participation in this lecture series. Please join us in welcoming Dr. Richard Lackman, recognized by *Best Doctors in America* 2005–2006.

September 2007 Sheldon L. Gerstenfeld, VMD
 Veterinary Hospital Owner, Author, Columnist,
 Host of Radio and Television Shows, Inventor,
 and Entrepreneur, Philadelphia

Title: How to Balance Your Life for Physical and Mental
 Health—A Veterinarian's Journey



Dr. Sheldon Gerstenfeld's message is to enjoy what you are doing and that more than one career path in a lifetime is possible and may be necessary for some individuals. He'll give you inside information on companion animal health, the publishing, radio, and television industries, getting a literary agent, and being an entrepreneur. He'll share anecdotes about his different careers and his time spent with such people as Bob Dylan, Astrid Gilberto, Muhammed Ali, Curt and Shonda Schilling, and Katie

Couric. He'll never forget the kindness of the late Grover Washington who lived in Mount Airy. Dr. Gerstenfeld is a 1968 graduate of the University of Pennsylvania Veterinary School. He is the founder and owner of Chestnut Hill Veterinary Hospital in Erdenheim, Pennsylvania. His hospital includes special species, birds, fish, and complementary medicine in its care. He is the author of eight books including *The Dog Care Book* (Perseus), *The Cat Care Book* (Perseus), *The Bird Care Book* (Perseus), *Zoo Clues* (Viking), *The Aquarium Take-Along Book* (Viking), *My Book About My Dog* (HarperCollins), *My Book About My Cat* (HarperCollins), and *The ASPCA Book of Dogs* (Chronicle). He was a contributing editor of *Parents* magazine for 21 years and wrote a monthly column. He has appeared on the Today Show with Katie Couric and on other national shows. He has hosted his own television and radio shows and has done segments that appear on Animal Planet. He was a consultant for UPS and was a co-inventor of a double-gimble box that was used for shipping flowers by UPS. Dr. Gerstenfeld was honored by *Philadelphia Magazine* as one of "23 Great Vets." Dr. Gerstenfeld is the co-founder with his son of a new venture that will launch in September.

April 2008 Dean W. Richardson, DVM, Ph.D.
 Surgeon to Kentucky Derby Winner Barbaro
 Chief, Section of Surgery Charles W. Raker
 Professor of Equine Surgery
 The University of Pennsylvania

Title: Mechanical and Biological Challenges
 in Equine Orthopedics



Dean W. Richardson, DVM, is the Charles W. Raker Professor of Equine Surgery and the Chief of Large Animal Surgery at the University of Pennsylvania's George D. Widener Hospital at New Bolton Center. This large animal hospital, located on a 700-acre campus in Kennett Square, Pennsylvania, complements the School of Veterinary Medicine's companion animal hospital in Philadelphia. Widener provides services that range from primary care through the most complicated and sophisticated medical and surgical techniques in use today.

Dr. Richardson is an internationally recognized orthopaedic surgeon whose clinical research has focused on new techniques for fracture repair in horses. He also runs a basic research laboratory investigating the genetic regulation of important genes of cartilage. Current work includes studies with gene therapy and the manipulation of equine mesenchymal stem cells. In his career Dr. Richardson has received the Pfizer Award for Excellence in Research (1997), the Norden Distinguished Teaching Award (2000), the Class of 2004 and the Class of 2005 Distinguished Teaching Awards, the Ohio State Distinguished Alumni Award (2005) and the University of Pennsylvania Veterinary Alumni Distinguished Teaching Award (2006). This fall he received the National Turf Writers' Joe Palmer Award and Commendation from the American Association of Equine Practitioners for his outstanding work with Barbaro. He also received the Turf Publicists of America Big Sport of Turfdom Award in 2006 and a special Eclipse award.

Dr. Richardson is the author of numerous peer-reviewed publications and chapters in all major equine orthopaedic textbooks. He has given invited lectures on equine orthopaedics throughout the world and regularly teaches the major international continuing education courses on fracture repair in horses. He has served on all of the major equine scientific advisory boards.

Dr. Richardson graduated with an A.B. from Dartmouth College in 1974, earned his DVM (*summa cum laude*) from The Ohio State University in 1979, and joined the Widener Hospital as an intern that same year. He continued as a surgical resident and lecturer before joining the faculty in 1985.

September 2008 Alumna Anna C. O'Riordan, M.D.
Department of Pediatric Cardiology
St. Christopher Hospital, Philadelphia

Title: Pediatric Cardiology 1960–2008



The summer after ninth grade **Dr. Ann C. O'Riordan** started to work as a nurse's aid at a local hospital. At first she thought of studying nursing, but soon felt there was more of an intellectual challenge in medicine. Prior to that, Dr. O'Riordan thought that some day she would write the great American novel or be an architect, but got hooked on medicine reading the stories of Elizabeth Blackwell and other pioneering women physicians. Dr. O'Riordan received her Bachelor's degree in Chemistry from Chestnut

Hill College, Masters in Pediatrics from Temple University, and an M.D. from Hahnemann University. She then did her internship at Nazareth Hospital and her pediatric residency and cardiology fellowship at St. Christopher's Hospital for Children.

Dr. O'Riordan started her fellowship in Pediatric Cardiology in 1960. Pediatric Cardiology was in its infancy at that time. The American Sub Board of Pediatric Cardiology was not formed until 1962. The diagnostic tools and surgical techniques available then were very primitive to the myriad of highly technical sophisticated studies and complicated surgeries available today.

She is Board Certified from the American Board of Pediatrics and Pediatric Cardiology and a licensure of State of Pennsylvania, State of New Jersey and Territory of Guam. She is also a Fellow of American College of Cardiology, American Academy of Pediatrics and a Member of Irish and American Pediatric Society.

For more than 25 years, American Heart Association has honored Dr. O'Riordan with certificate as "Advanced Life Support Experience Provider/Instructor." Additional honors and awards include: elected to AOA Hahnemann Chapter; Philadelphia, Woman Medical Student of the Year; and International Who's Who in Community Service. Dr. O'Riordan's' topic of today will focus on the developments in the area of "Pediatric Cardiology 1960–2008." She will outline the advancements that the field has taken from the start of her career to the present day in pediatric cardiology. It is a great honor to have our 15th annual biomedical speaker return back to her alma mater.

March 2009 Randall W. Culp, M.D.
Professor of Orthopaedic Hand and Microsurgery
Jefferson Medical College
Thomas Jefferson University, Philadelphia

Title: Hand Surgery Challenges in 2009



In June 1996 *Philadelphia Magazine* singled out **Dr. Randall W. Culp** as one of the region's "Top Doctors" and a "Rising Star" in the field of Hand Surgery. Born in Wheeling, West Virginia, Dr. Culp attended the College of William and Mary before receiving his M.D. from Penn State University. At the University of Pennsylvania, Dr. Culp was selected for a Surgical Internship, Residencies in Orthopedic Surgical Research and Orthopedic Surgery, and a Post-Residency Hand Surgery Fellowship.

Awards he has received include: the George B. Archer Award (top chemistry student at William and Mary); the Upjohn Award (excellence in creative scholarship at Penn State); the Resident/Fellow Scholar Award (excellence in research); the Deforest Willard Award (University of Pennsylvania, for outstanding performance); the Meyerding Award (excellence in fracture care); the Navy Achievement Medal (service in the Persian Gulf War); and the Humanitarian Service Medal (service during the San Francisco Earthquake).

He has held positions in Orthopedic Surgery, Hand Surgery and Microsurgery at the Naval Hospital in Oakland, CA and in Hand Surgery at Letterman Army Medical Center in San Francisco, CA. Dr. Culp is a Professor of Orthopedic, Hand and Microsurgery at Thomas Jefferson University and a board member of the Hand Rehabilitation Foundation. In addition, he is currently the hand and wrist consultant to Major League Baseball's Philadelphia Phillies. Dr. Culp is integrally involved in breakthrough research, and has shared his findings through numerous publications and presentations. Dr. Culp joined The Hand Centers in 1992, where he continues to improve upon and deliver state-of-the-art medical care for the hand, wrist, elbow and arm.

October 2009 **C. Lowell Parsons, M.D.**
Professor of Surgery
Urology Division of the University of California
San Diego School of Medicine

Title: **From Basic Laboratory Research to the Patient:
 One Physician's Search for Answers to
 Bladder Disease**



Dr. C. Lowell Parsons is currently a Professor of Surgery/Urology in the School of Medicine at the University of California at San Diego. Throughout his career he has performed research on the urinary bladder in terms of how it protects itself from urine. For 30 years he has been doing clinical, basic and translational research on Interstitial Cystitis (IC). His research discoveries have lead to better understanding of the causes and frequency of the disease. A new treatment was discovered and now is on the market in the U.S. to treat IC. Dr. Parsons's research team is currently studying the urinary factors that injure the bladder epithelium, the root cause of IC. Dr. Parsons is board certified from the American Board of Urology, and has published hundreds of research publications in peer reviewed journals. In addition, he is the principle investigator of many research grants, has served in many professional societies, and holds many editorial positions. Throughout his career he has received several honors and awards, including the Pfizer Scholars in Urology for Research, for outstanding achievement in the advancement of urological science at the University of California, San Diego, and UCSD Chancellor's award as innovator in Technology. Chestnut Hill College and the Biology Department are much honored and deeply appreciate Dr. Parsons for his participation in the 16th Annual Biomedical Lecture Series.

April 2010 **Alumna Mary E. Brandt, Ph.D.**
Chief, Mycotic Diseases Branch, Division of
Foodborne, Bacterial and Mycotic Diseases
National Center for Emerging and Zoonotic
Infectious Diseases
Centers for Disease Control, Atlanta, GA

Title: **The Fungus Among Us: An Introduction
 to Public Health Mycology**



Dr. Mary Brandt, a native of Philadelphia, received her B.S. from Chestnut Hill College in 1976, a M.S. in clinical microbiology from Thomas Jefferson University in 1984, and a Ph.D. in microbiology and immunology from Temple University School of Medicine in 1988, where she was mentored by Drs. Kenneth and Dianne Soprano. After a postdoctoral fellowship, she joined the Centers for Disease Control and Prevention in 1991, where she introduced DNA-based methods for detecting and identifying medically important fungi and performed applied research in molecular epidemiology. In 2006 she was appointed Chief of the Mycotic Diseases Branch, where today she directs 20 staff and 10 fellows in a program dedicated to the prevention and control of fungal infections. She still tries to spend time in the fungus identification laboratory, and also reviews and edits scientific papers, journals and textbooks related to medical mycology. In this talk, several prominent medically important fungi will be introduced and the role of the CDC in prevention and control of their associated diseases will be discussed.

The mission of the U.S. Centers for Disease Control and Prevention is to detect, identify, control, and prevent these infections in the United States and around the world.

October 2010



Thomas W. Yun, M.D.
 Director of Medical Foreign Service
 Medical Director for the Department of State,
 Washington, DC
 Medical Advisor to Secretary of State,
 Hillary Rodham Clinton
 Term of Appointment: April 2008 to present

Title: Medicine in the Foreign Service



Dr. Thomas W. Yun, a member of the Senior Foreign Service, was appointed Medical Director of the Office of Medical Services in April, 2008. As the senior medical officer for the Department and medical advisor to the Secretary, Hillary Rodham Clinton, he is responsible for promoting the health and well being of the American diplomatic community. Prior to assuming his current position, he was the Deputy Medical Director from August 2006. He joined the Foreign Service in 1990 and served as the Regional Medical Officer in Dhaka, Beijing, Jakarta, London, and Singapore. At the last two posts he oversaw medevac operations. Prior to joining the Foreign Service, he served overseas in Japan and Turkey as a U.S. Air Force officer. Dr. Yun graduated from University of Virginia, has a Masters from University of Georgia, and a M.D. from Eastern Virginia Medical School. He is board certified in Family Practice and completed his family practice residency in Anderson, South Carolina.

April 2011

Anthony P. Green, Ph.D.
 Vice President, Technology Commercialization
 Group: Life Sciences
 Ben Franklin Director, The Nanotechnology and
 Energy Commercialization Institutes

Title: The Nanotechnology Institute:
 Accelerating Innovation and Entrepreneurship
 Through Technology Commercialization



Anthony P. Green, Ph.D. is Vice President, Technology Commercialization Group: Life Sciences for Ben Franklin Technology Partners of Southeastern PA (BFTP/SEP) and Ben Franklin Director of The Nanotechnology Institute™ (NTI) and Energy Commercialization Institute. Dr. Green is also Visiting Research Professor, School of Biomedical Engineering, Drexel University.

At BFTP/SEP, Dr. Green is focused on Ben Franklin's larger and region-wide technology partnerships and major initiatives, include the NTI, the Energy Commercialization Institute (ECI) the Mid-Atlantic Nanotechnology Alliance (MANA®), and the Greater Philadelphia Innovation Cluster. He is also focused on new and evolving life sciences initiatives, including the IP Donation Program, university/industry partnerships in advanced textiles and water and the development and implementation new commercialization models. Dr. Green serves on the advisory boards of numerous regional translational research programs, including the Coulter Foundation Translational Research Partnership program at Drexel University, Fox Chase Cancer Center's Innovator's Fund and the University City Science Center's QED program. Dr. Green has over 30 years experience in the biotechnology industry, with a specialization in the research, development and commercialization of cutting-edge technologies primarily in small, emerging companies, including Centocor and Puresyn. Dr. Green earned his Bachelor of Science degree in Immunology, with Honors, from Brown University, in Providence, Rhode Island and his Ph.D. from Temple University School of Medicine, in Microbiology and Immunology.

September 2011 Michael V. Seiden, M.D., Ph.D.
President and Chief Executive Office
Fox Chase Cancer Center

Title: The Evolution of Cancer Care: Past, Present
and Future



Michael V. Seiden, M.D., Ph.D., earned his undergraduate degree at Oberlin College and graduated magna cum laude in Chemistry. He subsequently completed an M.D. and Ph.D. in 1986 with his principal area of research in the field of immunology. He completed his medical internship, residency, and chief residency at the Massachusetts General Hospital followed by clinical oncology training at the Dana Farber Cancer Institute. Once completing his clinical training he worked as a postdoctoral fellow in the laboratory of Dr. Jeffrey Sklar in the Department of Pathology at Brigham and Women's Hospital working on topics in molecular diagnostics.

From 1994 to 2007 he served on the faculty of the Massachusetts General Hospital, the Dana Farber Cancer Institute, and the Harvard Medical School serving in a variety of capacities in training, research, clinical care, and research administration. His research interests at MGH included translational research in gynecologic malignancies with a focus on ovarian cancer.

In June 2007, he assumed the position of President and Chief Executive Officer of the Fox Chase Cancer Center. As President, Dr. Seiden has the responsibility for all strategic planning, finances and operations within the Center and serves as the Principal Investigator for the NCI-sponsored Comprehensive Cancer Center grant. He also serves as the current principal investigator for the NCI-funded ovarian SPORE grant.

February 2012 Dawn Bonnell, Ph.D.
Trustee Professor of Materials Science at the
University of Pennsylvania and the Director of the
Nano/Bio Interface Center

Title: Probing BioSystems at the Nanoscale



Dr. Dawn Bonnell received her PhD from the University of Michigan and was a Fulbright scholar to the Max-Planck-Institute in Stuttgart, Germany, after which she worked at IBM Thomas Watson Research Center. Professor Bonnell serves on many editorial boards, national and international advisory committees, is a past president of AVS, served on the governing board of the American Institute of Physics, and is a past vice president of the American Ceramic Society. She is a fellow of the Am. Cer.

Soc, the American Association for the Advancement of Science, and the AVS. She is the founding Director of the Nano/Bio Interface Center, which is a cross disciplinary organization that involves faculty from the School of Engineering and Applied Science, the School of Arts and Sciences, the School of Medicine, Wharton, and the Graduate School of Education.

The research in the Bonnell group focuses on atomic processes at surfaces. The group is known for the first imaging of atoms on oxide surfaces, a result that generated a new field involving groups around the world and impacting catalysis, nanofabrication and materials growth technology sectors. More recently her group developed a new paradigm for fabricating nanostructured devices, Ferroelectric Nanolithography, and discovered a new mechanism for harvesting light energy. An additional outcome of this research program has been the invention of new probes that reveal the behavior of small structures.

Prof. Bonnell has authored or coauthored over 200 papers, edited several books. Her work has been recognized by the Presidential Young Investigators Award, the Ross Coffin Purdy Award, the Staudinger/Durrer Medal from ETH Zurich, the Heilmeyer Faculty Research Award and several distinguished lectureships. As the founding director of the Nano/Bio Interface Center, Dr. Bonnell generated new research programs that cross disciplinary boundaries, linking engineering and life science in a two-way exchange that advances our understanding of interactions at the interface of physical and biological systems.

October 2012

Charles J. Yeo, M.D., F.A.C.S.
 Samuel D. Gross Professor of Surgery
 Chair, Department of Surgery
 Co-Director: Jefferson, Pancreas, Biliary
 and Related Cancer Center
 Thomas Jefferson University
 Member, Kimmel Cancer Center

Title: The New Faces of Pancreatic Cancer Surgery
 and Treatment



Dr. Yeo joined the faculty of the Johns Hopkins University in the Department of Surgery in 1985, and rose to the rank of Professor of Surgery in 1996 and Professor of Oncology in 1997. Dr. Yeo directed the Pancreatic Cancer Interdisciplinary Working Group at Johns Hopkins. Dr. Yeo was honored with two endowed positions. In 2002, Dr. Yeo became the John L. Cameron M.D. Professor for Alimentary Tract Diseases, and in 2005 he was named the 8th Samuel D. Gross Professor and chairman of Surgery at Jefferson Medical College of

Thomas Jefferson University in Philadelphia.

Dr. Yeo was the co-editor of the highly successful five-volume encyclopedic *Shackelford's Surgery of the Alimentary Tract*, in 2005, and served as the editor-in-chief of the 6th edition, published in 2007. He has authored over 465 peer reviewed scientific papers, numerous abstracts, and over 105 book chapters. Dr. Yeo's primary interests and research have been in the fields of hepatopancreaticobiliary surgery—the evaluation of patients with pancreatic cancer, the management of patients with unusual pancreatic neoplasms, as well as acute or chronic pancreatitis. He also maintains an interest in complex abdominal surgery of the stomach, liver, biliary tree and intestines, and the history of surgery. He has personally performed over 1137 Whipple procedures, and cared for over 2000 patients with pancreatic tumors. He is a Principal Investigator for many NIH funded research in the field of pancreatic cancer since 1991 and continues as a leader of the research team. His design and completion of numerous prospective randomized clinical trials have dramatically impacted the field of pancreatic surgery—particularly the most difficult of all pancreatic procedures, the pancreaticoduodenectomy. Additionally, his leadership of large teams of physicians and scientists (at both Johns Hopkins and Thomas Jefferson) dedicated to a better understanding of pancreatic neoplasia, has generated a plethora of new knowledge relevant to the early detection, screening, categorization, and therapy of pancreatic and related types of cancer.

March 2013

M. Celeste Simon, Ph.D.
 Scientific Director and Investigator, Abramson
 Family Cancer Research Institute
 Investigator, Howard Hughes Medical Institute
 Professor, Cell and Developmental Biology
 University of Pennsylvania Perelman School
 of Medicine

Title: Hypoxia, Hypoxia Inducible Factors
 and Tumor Progression



M. Celeste Simon, Ph.D. is the Scientific Director of the Abramson Family Cancer Research Institute at the Perelman School of Medicine at the University of Pennsylvania. She is also an Investigator of the Howard Hughes Medical Institute. She received her bachelor's degree from Miami University and completed a Ph.D. in biochemistry at Rockefeller University in 1985. She conducted postdoctoral research with Joseph Nevins at Rockefeller and then with Stuart Orkin at Harvard Medical School. She became an

Assistant Professor of Medicine and Molecular Genetics and Cell Biology at the University of Chicago in 1992. In a National Competition, she was named an Assistant Investigator of the Howard Hughes Medical Institute in 1994.

In 1999, she moved to the University of Pennsylvania School of Medicine and was one of the founding laboratories of the newly formed Abramson Family Cancer Research Institute (AFCRI) there. She was promoted to Associate Professor in 1999, and full Professor in 2006. In 2007, she became the Scientific Director of the AFCRI. Dr. Simon's research is focused on how cells sense and respond to changes in the availability of molecular oxygen. This impacts normal development, physiology, and numerous diseases, such as the growth of solid tumors. The Simon Laboratory is studying how O₂ sensing impacts tumor angiogenesis, tumor metastasis, and disease progression. She is studying both animal models and cancer patients with the overall goal of developing novel strategies to treat tumors such as soft tissue sarcoma, colorectal cancer, and lung adenocarcinoma. Dr. Simon currently directs a laboratory of 20 individuals, including graduate students, postdoctoral fellows, clinical fellows, and research technicians. The AFCRI employs 400 researchers working in roughly 30 independent laboratories. Dr. Simon has received numerous awards recognizing her research, such as the Stanley N. Cohen Award for Biomedical Research and the Elliot Osserman Award from the Israel Cancer Research Fund.

September 2013 **Michael S. Brown, M.D.**
Endowed Title: W.A. (Monty) Moncrief
Distinguished Chair in Cholesterol and
Arteriosclerosis Research
Regental Professor, Paul J. Thomas Chair
in Medicine
Director of the Jonsson Center for Molecular
Genetics
The University of Texas Southwestern Medical
School, Dallas, Texas



Michael S. Brown received an M.D. degree in 1966 from the University of Pennsylvania. He was a resident at the Massachusetts General Hospital, and a post doctoral fellow with Earl Stadtman at the National Institutes of Health. He is currently Director of the Jonsson Center for Molecular Genetics at the University of Texas Southwestern Medical School in Dallas. Dr. Brown and his colleague, Dr. Joseph L. Goldstein, discovered the low density lipoprotein (LDL) receptor, which controls cholesterol in blood. They showed that mutations in this receptor cause Familial Hypercholesterolemia, a disorder that leads to premature heart attacks. Their work laid the groundwork for drugs called statins that lower blood cholesterol and prevent heart attacks. Statins are taken daily by more than 20 million people worldwide. Brown and Goldstein shared many awards for this work, including the U.S. National Medal of Science and the Nobel Prize for Medicine or Physiology.

Twentieth Anniversary Celebrations with 1985 Nobel Laureate
Michael S. Brown, M.D.
Awarded Nobel Prize in Physiology or Medicine



Kenneth J. Soprano, Ph.D.
 VICE PRESIDENT FOR ACADEMIC AFFAIRS
 and DEAN OF THE FACULTY



Chestnut Hill College is a small, Catholic, liberal arts college which takes pride in offering its students many opportunities to learn both inside and outside the classroom. As such it is not unusual for our students, like those at many other small liberal arts colleges, to be exposed to a wide range of opportunities such as guest lectures, panel discussions by external speakers, performances, and symposiums. It is rare, however, for students at an institution such as ours to have the privilege of meeting and interacting with the number and type of distinguished scientists that the Biomedical Lecture Series has brought to campus. Included in the list of 49 speakers who have participated in this series are two Nobel Prize winners in Medicine, six members elected to the National Academy of Sciences, two Lasker Award winners, a Benjamin Franklin Medal in Life Sciences winner and a General Motors Cancer Research Foundation awardee. Our students have also heard lectures from a variety of Deans, Section Chiefs, Department Chairs and Institute Presidents, Vice Presidents and Directors. The topics discussed have always been at the forefront of science and medicine and have included basic science investigation of the origins of human cancers, the mechanism of action of oncogenes and tumor suppressors, the discovery of prions, latest developments for the diagnosis and treatment of a variety of human illnesses and diseases, to name a few. Moreover, this seminar series has provided our students with the opportunity to personally meet, talk and share a meal with these distinguished scientists. During these small group sessions, the speakers have shared their life stories, their enthusiasm and their visions of the future of their fields. They have also provided opportunities for "hands-on" experience and internships. No doubt, such interactions have influenced the ultimate decisions of many of our science majors over the past 19 years to pursue careers in the fields of clinical medicine, dentistry, veterinary medicine, and basic science research.

I wish to express my heartfelt gratitude to Dr. Lakshmi Atchison, Professor of Biology, for her efforts in initiating the Chestnut Hill College Biomedical Lecture Series in 1994 and in continuing to identify and invite outstanding speakers each year for the past nineteen years. The organization of a seminar series of this caliber represents a very significant contribution to the science education of all of our students. I look forward to future presentations and know that the topics discussed will always be at the forefront of modern science.

Kenneth J. Soprano, Ph.D.
 Vice President for Academic Affairs and
 Dean of the Faculty

1994– Lakshmi Atchison, Ph.D.
 Professor of Biology
 Director of Biomedical Lecture Series
 Chestnut Hill College



Dr. Lakshmi Atchison teaches various biological and biomedical subjects at this institution, and was the Chair of the Department of Biology and the Division of Natural Science for eight years.

Dr. Atchison has great passion for teaching and encourages her students to **think outside the box**. One way to expand their horizons was to introduce the Distinguished Biomedical Lecture Series, which exposes students to prominent professionals in science and medicine. The lecture series has been an important avenue for connecting students to internationally renowned professionals, and for placing them in biomedical and basic research laboratories. In 2003, Dr. Atchison was the National Conference Coordinator and Chair of the Speakers for the Human Anatomy and Physiology Society (HAPS) at the Wyndham Philadelphia. Many prominent professionals gave their seminars at this conference, and Chestnut Hill College (CHC) was the host institution where hundreds of workshops took place, thereby providing national exposure to CHC. Dr. Atchison received the 2009 Lindback Award for Distinguished Teaching, and was a speaker at the fall 2009 opening convocation where she spoke on “Nanotechnology: One Science Fits All.” This area fascinates her due to its applicability to numerous fields.

Dr. Atchison’s recent publication entitled *Cancer Biology Basics* (McGraw Hill 2nd edition, 2011) co-authored with her husband, Dr. Michael Atchison (University of Pennsylvania) provides practical information for all who are interested in cell and cancer medicine. She has published a number of peer reviewed journal articles in cell and molecular biology including a pocket guide on “Eight Cancers that Can Affect High School and College Age Students: Prevention is the Best Medicine.” Dr. Atchison recently developed a visual blood cell model, an educational tool to instantly grasp the normal and abnormal blood cells during pathological conditions. The model can be used at all levels from high school, college, medical schools, in doctor’s offices, and by healthcare professionals to explain many kinds of leukemia and blood cell disorders. The Patent for the blood cell model has been recently approved and confirmed by the United States Patent and Trademark Office.

Acknowledgements with Gratitude

- On behalf of the Biology Department, Dr. Atchison is very grateful to President Carol Jean Vale, SSJ, Ph.D., Dr. Steve Guerriero, Vice President for Academic Affairs and Dean of the Faculty, Dr. Kenneth Soprano and Dr. William Walker (former VPAA’s), to the College administration, staff and all the faculty members for their unfailing support over the years in enabling great success of this series. Great appreciation goes to the Office of Vice President for Institutional Advancement Kenneth Hicks, MBA and his entire staff for their steadfast support and encouragement throughout these years.
- A great debt of gratitude and heart-felt appreciation goes to all the distinguished biomedical speakers who are listed in this book. They have graciously accepted the invitation to participate in this series and have generously given their professional time meeting with the students, faculty, chief administrators, and offering their seminars without an honorarium thus bringing tremendous prestige to this biomedical lecture series. For this, we are truly grateful.
- Sincere appreciation goes to all the staff in the Office of Public Relations under the leadership of Kathleen Spigelmyer, and to Lisa Mixon and Ryan Daugherty who have been supporting this series by bringing publicity through articles in college magazines, local newspapers, press releases, newsletters, posters and personal interviews, thereby bringing the biomedical lecture series to the forefront.
- Nothing would be possible without the outstanding help from facilities staff, and state-of-the-art technology support from the helpdesk and the computer department. A special debt of gratitude goes to Don Visher, Greg Gorski and Debesai Solomon, and all the staff for their audiovisual and technical support.
- Finally we thank the whole college community for your greetings, smiles and warmth of friendship from all corners of the institution that resonates in creating a welcoming spirit to our distinguished speakers. This is truly appreciated.
- The Biology Department faculty sincerely wishes to thank Mrs. Barbara Crawford, Administrative Assistant for the Office of Academic Affairs, for her diligent work in compiling and formatting this biomedical distinguished series booklet and adding it to the college website. Her talent, expertise and patience are greatly appreciated. The department is also grateful to Ms. Michele Harvey and Ms. Denise Merritt for their contributions to the success of this project.

Biology Faculty

Dr. Kenneth Soprano, Dr. Joseph Kulkosky, Dr. Robert Meyer, Dr. Lisa McKernan, Dr. Barbara Giuliano, Dr. Lisa Domico, Dr. Elias Argyris, and Dr. Lakshmi Atchison.

College website: <http://www.chc.edu/biomedbook/>