I wish everyone the same in their endeavors. Medicine—to treat our patients as individuals. They deserve and require such treatment because each is truly unique. I see a bright future for our enterprise, and the Department of Pharmacology has a stellar year with regard to our research and training endeavors. The dedication and persistence of our faculty and staff has to be admired. The difficulties with NIH funding of research affected our faculty, as well as those in all institutions across the country. The leveling and actual diminution in the NIH budget was clearly an impetus for pruning the weaker elements of the U.S. biomedical research endeavors. On the other hand, the faculty of the Pharmacology Department not only survived, but, in fact, are flourishing with new grants and outstanding research endeavors.

During the difficult period of tight NIH grant funding, the Department renewed its post-doctoral training grant (with Paula Hoffman as PI). As a result of the financial assistance of this grant, several new post-doctoral trainees have recently joined the laboratories of the grant's training faculty. Under the leadership of Nancy Zahniser, the faculty of the Department are already engaged in preparing the renewal application for our pre-doctoral training grant. Although the renewal application is not technically due for one more year, the faculty decided that an early submission would enhance our chances for positive results. Our post-doctoral training grant has the longest, uninterrupted duration of any grant supported by NIGMS, but this year our Program will undergo a name-change in order to describe the gamut of research mentorship available to our PhD candidates more completely. The Program will now be known as the Graduate Training Program in Pharmacology and Systems Biology. This name also does justice to a number of our training faculty members who have primary appointments outside the Department of Pharmacology.

Although the identity of the Department is well-maintained through its research and graduate training programs, the same cannot be said with regard to instruction on pharmacology provided to medical students. The new medical school curriculum has submersed pharmacology within an organ-based schedule. Although our faculty remain sought-after lecturers across the first two years of the medical school curriculum, I personally fear a negative impact of both the reduction in time, and the dispersal of subject matter for pharmacology, on the quality of knowledge being imparted to our future MDs. The annual report that follows this letter is novel for our Department in that it utilizes electronic format to tell much of the story of our endeavors. I hope to receive feedback from the viewers of our report on the utility and impact of this presentation format. I cannot add much in terms of accolades to the honors bestowed on members of the Department of Pharmacology faculty and students during the last couple of years. The accomplishments are in the report, but I will herald some of these with the proviso that the constraints on the length of this note do not allow me to restate the whole report.

Our faculty honors include: Thomas French, Ph.D., UCDCH Outstanding Dental Basic Sciences Instructor, School of Dentistry (2006); UCDCH Outstanding Dalhousie Instructor, Dalhousie hygiene Program (2006); UCDCH Excellence in Teaching Award, School of Medicine Class of 2008 (2006); and UCDCH Excellence in Teaching Award, School of Medicine Class of 2007 (2006). Kim Hendrechen, Ph.D., UCDCH Dean’s Mentoring Award (2006). Lawrence Hunter, Ph.D. and his colleagues, World Champions in BioChem and Bioinformatics competition (2007). Robert Murphy, Ph.D., Outstanding Achievement Award, Ecsinon Research Foundation (2007). William Sorkin, Ph.D., UCDCH Chancellor’s Teaching Recognition Award (2007) and Keith and Eva Killam Memorial Award. The Western Pharmacology Society (2007). Boris Tabakoff, Ph.D., NIH, National Institute on Alcohol Abuse and Alcoholism, Mark Keller Honorary Lecture (2007).

Currently, two faculty members serve on National Advisory Councils: Boris Tabakoff, Ph.D., on the National Institute on Alcohol Abuse and Alcoholism Institute Council, and Nancy Zahniser, Ph.D., on the National Institute on Drug Abuse Institute Council. Fourteen faculty members serve on Study Sections: Ulrich Bayer, Ph.D., AHA (Basic Cell and Molecular Biology 1), Michael Browning, Ph.D, NIH (Neuroendocrinology and Alcohol), Marc Churchill, Ph.D., NSF (Prokaryotic Molecular and Cell Biology, and Microbial Genetics), Mark DellAcqua, Ph.D., NIH (Synapses, Cytoskeleton and Trafficking), Kim Hendrechen, Ph.D., NIH (Neurobiology II); Paula Hoffman, Ph.D., NIH (NIAAA Neuro/G) and DOD (USAMRICR, PRMP), Lawrence Hunter, Ph.D., NIH (Biomedical Library and Informatics), David Jones, Ph.D., NIH (Neurobiology of Development and Aging IRG, Dev-2), Tatiana Kotelnatad, Ph.D., NSF (STC) and AHA (BCMB), James Maller, Ph.D., NIH (Molecular Oncogenetics), David Port, Ph.D., NIH (Vascular Cell and Molecular Biology), William Sather, Ph.D., NIH (Receptors and Receptors & Calcium), Alexander Sorkin, Ph.D., NIH (Tumor Cell Biology), Andrew Thabere, Ph.D., NIH (CAMP IRG).


The Department enjoys the status of being one of the best Pharmacology Departments in the world. I believe that we have constructed a unique Department of Pharmacology which melds strengths in genetics, functional genomics, proteomics, lipid chemistry, molecular structure determinations, cell, and particularly, neurobiology and visual imaging with electrophysiology, with MBPET imaging in animals and human clinical work to advance the science of pharmacology. The Department is spearheading a new initiative in Personalized Medicine across the University of Colorado system. It is our hope and conviction that the scientific strengths of our Department can complement many other groups within the University in order to speed the creation of a critically important trend in current medicine—to treat our patients as individuals. They deserve and require such treatment because each is truly unique. I see a bright future for our enterprise, and I wish everyone the same in their endeavors.
Department of Pharmacology 2007 Financial Report

Total Annual Departmental Funding: $18,314,997

Annual Variable Funds, 6.2%

Annual General Fund Allocation, 4.8%

Research Grants through Veterans Affairs Medical Center, 0.5%

Individual Training Fellowships, 1.3%

National Research Service Awards (Training Grants), 6.5%

Research Grants, 66.6%

Research Scientist and Research Scientist Development Awards, 0.7%

Non-Federal, 13.4%

Federal, 85.0%

Veterans Affairs, 8.5%

Total 13,860,075

Subtotal $ 1,725,082

National Institutes of Health 13,367,685

Veterans Affairs 110,886

Department of Defense 381,504

National Institutes of Health 13,367,685

Veterans Affairs 110,886

Total 13,860,075

Sponsored Support Funding Details: $16,305,780

National Research Service Awards (Training Grants), 6.5%

Individual Training Fellowships, 1.3%

Research Grants through Veterans Affairs Medical Center, 0.5%

National Research Service Awards (Training Grants), 6.5%

Research Grants, 66.6%

Research Scientist and Research Scientist Development Awards, 0.7%

Non-Federal, 13.4%

Federal, 85.0%

Veterans Affairs, 8.5%
Bada, Michael, Ph.D., Stanford Univ., Stanford, CA, 2003, Chemistry, preceptor: Hunter, Lawrence, Ph.D.
Bains, Davita, Ph.D., Univ. of Texas Health Science Center, San Antonio, San Antonio, TX, 2007, Pharmacology, preceptor: Heidenreich, Kim A., Ph.D.
Baird, Isabelle, Ph.D., Louis Pasteur Univ., Strasbourg, France, 2006, Neurochemistry, preceptor: Rayer, K.U., Ph.D.
Champagne, Karen S., Ph.D., Univ. of Vermont, Burlington, VT, 2005, Microbiology and Molecular Genetics, preceptor: Kutaselade, Tatiana G., Ph.D.
Clapp, Peter A., Ph.D., Univ. of Michigan, Ann Arbor, MI, 2005, Biological Chemistry, preceptor: Hoffman, Paula L., Ph.D.
Coultrop, Steven J., Ph.D., Texas Tech. Univ. HSC, Lubbock, TX, 1998, Pharmacology, preceptor: Browning, Michael D., Ph.D.
Couppis, Maria H., Ph.D., Vanderbilt Univ., Nashville, TN, 2007, Integrative Neuroscience, preceptor: Tabakoff, Boris, Ph.D.
Dues, Jason, Ph.D., Univ. of Iowa, Iowa City, IA, 2004, Molecular Biology, preceptor: Sorkin, Alexander D., Ph.D.
Eckardt, Frank, Ph.D., JW Goethe- Univ., Frankfurt, Germany, 2001, Biology, preceptor: Mallers, James L., Ph.D.
Eckert, Carrie, Ph.D., Univ. of Colorado, UCDHC, Fitzsimons, Aurora, CO, 2006, Molecular Biology, preceptor: Mallers, James L., Ph.D.
Galperin, Emilia, Ph.D., Tel-Aviv Univ., Tel-Aviv, Israel, 2001, Cell Biology, preceptor: Sorkin, Alexander D., Ph.D.
Grimson, Bryn, Ph.D., Univ. of Colorado, Denver, Denver, CO, 2001, Molecular Biology/ Biochemistry, preceptor: Mallers, James L., Ph.D.
He, Ju, Ph.D., Chinese Academy of Sciences, Beijing, China, 2003, Physical Chemistry, preceptor: Kutaselade, Tatiana G., Ph.D.
Herman, Jacob, Ph.D., Washington State Univ, Pullman, WA, 2004, Microbiology, preceptor: Churchill, Marc A. E., Ph.D.
Horne, Eric A., Ph.D., Univ of Colorado Health Sciences Center, 2007, Pharmacology, preceptor: Mayer, K.U., Ph.D.
Lee, Yong-Hun, Ph.D., Univ. of Tennessee, Knoxville, TN, 2005, Microbiology, preceptor: Schemman, William P., Ph.D.
Liu, Junjun, Ph.D., Univ. of Melbourne, Melbourne, Australia, 1999, Biochemistry/Molecular Biology, preceptor: Mallers, James L., Ph.D.
Magnani, Maria E., Ph.D., Univ. of Milan, Milan, Italy, 2005, Pharmacotaxonomic and Pharmacocinetic Sciences, preceptor: Tabakoff, Boris, Ph.D.
Musselman, Catherine, Ph.D., Univ. of Michigan, Ann Arbor, MI, 2007, Chemistry, preceptor: Kutaselade, Tatiana G., Ph.D.
Pascua, Gaeten, Ph.D., Univ. of Rennes I, Rennes, France, 2004, Biology, preceptor: Mallers, James L., Ph.D.
Peng, Anmin, Ph.D., Univ. of Texas HSC, San Antonio/Austin, San Antonio, TX, 2004, Molecular Medicine, preceptor: Mallers, James L., Ph.D.
Popega, Magdalena C., Ph.D., Ohio State Univ., Columbus, OH, 2003, Biochemistry, preceptor: Sikela, James M., Ph.D.
Price, David A., Ph.D., Univ. of Texas Health Science Center, San Antonio, San Antonio, TX, 2007, Pharmacology, preceptor: Zahniser, Nancy R., Ph.D.
Pranko, Sergey, Ph.D., Godo- State Medical Univ., Godo, Belar, 2004, Biochemistry, preceptor: Tabakoff, Boris, Ph.D.
Rector, Christopher L., Ph.D., Vanderbilt Univ., Nashville, TN, 2007, Organic Chemistry, preceptor: Murphy, Robert C., Ph.D.
Ren, Wenhuai, Ph.D., Fudan Univ., Shanghai, P.R. China, 2007, Neurobiology, preceptor: Tabakoff, Boris, Ph.D.
Richards, Walter, T., Ph.D., Univ. of Kansas Medical Center, Kansas City, KS, 2006, Pharmacology, preceptor: Zahniser, Nancy R., Ph.D.
Roemer, Sarah C., Ph.D., Univ. of Colorado, UCDHC, Fitzsimons, Aurora, CO, 2005, Molecular Biology, preceptor: Churchill, Marc A. E., Ph.D.
Speers, Anna E., Ph.D., The Scripps Research Institute, La Jolla, CA, 2006, Chemistry, preceptor: Wu, Christine C., Ph.D.
Tian, Maoshen, Ph.D., Univ. of Wyoming, Laramie, WY, 2005, Molecular Biology, preceptor: Schemman, William P., Ph.D.
Tipney, Hannah, Ph.D., Univ. of Manchester, Manchester, UK, 2005, Bioinformatics, preceptor: Hunter, Lawrence, Ph.D.
Wendt, Michael K., Ph.D., Medical Coll. of Wisconsin, Milwaukee, WI, 2007, Microbiology and Molecular Genetics, preceptor: Schemman, William P., Ph.D.
Yamamoto, Tomomi, Ph.D., Tokyo Institute of Technology, Tokyo, Japan, 2004, Biological Information, preceptor: Mallers, James L., Ph.D.
McShan, Daniel B.S., Engineering, Univ. of Michigan, Ann Arbor, MI, 1994, preceptor: Hunter, Lawrence; program: Bioinformatics
Oliveira, Seth, B.S., Biology, Linfield College, McMinnville, OR, 2001, preceptor: Sather, William A.; program: Neuroscience
佐藤水, B.A., Structural Biophysics, Point Loma Nazarene Univ., San Diego, CA, 2001, preceptor: Hodges, Robert S.; program: Molecular Biology

Class entering in 2003
Kamptopoulou-Ard, Anis, M.S., Mathematics/Computer Science, Univ. of Colorado, Denver, CO, 1983, preceptor: Hunter, Lawrence; program: Bioinformatics
Stadinski, Brian, B.S., Cell Biology/Chemistry, Bucknell Univ., Lewisburg, PA, 2002, preceptor: Kappeler, John W.; program: Immunology
Stadinski, Krzysztof, B.A., Biology and Chemistry, Rhode Island College, Providence, RI, 2002, preceptor: Jones, David N. M.; program: Biophysical Structure
Thode, Anna B.A., Genetics, Univ. of California, Davis, Davis, CA, 2000, preceptor: Jones, David N. M.; program: Biophysical Structure
Wang, Ying-B., Fudan Univ., P.R. China, 1998, preceptor: Kappeler, John W.; program: Immunology

Class entering in 2004
Reuveni, Manueek E., B.A., Psychology/French & Francophone Studies, Univ. of Massachusetts, Amherst, MA, 2003, preceptor: Krushel, Leslie A.; program: Neuroscience
Crowell, Christopher B., B.S., Biology, Univ. of California, Santa Barbara, Santa Barbara, CA, 1997, preceptor: Scheinman, Robert I.; program: Pharmaceutical Sciences
Deslens, Anthony B.S., Univ. of Minnesota, Minneapolis, MN, 2000, preceptor: Kappeler, John W.; program: Immunology
Gangeltfroth, Todd B.S., Molecular Biology, Univ. of Arizona, Tempe, AR, 2001, preceptor: Churchill, Mair E. A.; program: Molecular Biology
Mace, Kimberly S., Biological Sciences, Colorado State Univ., Fort Collins, CO, 1999, preceptor: Riches, David W. H.; program: Immunology
Pink, Matthew D., B.S., Biology/Neuroscience, Univ. of Wisconsin, Madison, Madison, WI, 2004, preceptor: DelFicqca, Mark L.; program: Neuroscience
Redette, Elizabeth B.A., Biology/Chemistry, Baylor College of Medicine, Houston, TX, 2003, preceptor: Malkinson, Alvin M.; program: Toxicology
Stephens, Holly M., B.S., Texas A&M Univ., College Station, TX, 2003, preceptor: Leonard, Sherry S.; program: Human Medical Genetics

Class entering in 2005
Dumas, Laura B.A., Biology, Carroll College, Helena, MT, 2001, preceptor: Sikela, James M.; program: Human Medical Genetics
Gibson, Todd A., B.S., Computer Science, Univ. of Colorado, Denver, Denver, CO, 2004, preceptor: Goldberg, Debra S.; program: Bioinformatics
Hidikin, Tianna R., B.S., Molecular Biology, Univ. of Colorado, Fort Collins, CO, 2004, preceptor: Browning, Michael D.; program: Neurosciences
Rappoport, Kevin J., Ph.D., Univ. of Maryland, College Park, MD, 1999, preceptor: Hunter, Lawrence; program: Bioinformatics
Reser, James B., Physiology, Michigan State Univ., East Lansing, MI, 2004, preceptor: Peterson, Dennis R.; program: Toxicology
Stewart, Benjamin B., Molecular Biology, Brigham Young Univ., Provo, UT, 2002, preceptor: Peterson, Dennis R.; program: Toxicology
Wynalda, Kelly, B.S., Chemistry/Biochemistry, Univ. of Colorado, Denver, Denver, CO, 2002, preceptor: Murphy, Robert C.; program: Toxicology

Class entering in 2006
Fitz, Jason B.A., Chemistry, Univ. of Denver, Denver, CO, 2005, preceptor: Malkinson, Alvin M.; program: Toxicology
Goh, Kai Xuan, B.S., Biomedicine, Universiti Sains Malaysia, Kelantan, Malaysia, 2005, preceptor: Sorokin, Alexander D.; program: Cell and Developmental Biology
Vina, Anna, M.S., Experimental Biology, Univ. of Barcelona, Barcelona, Spain, 2005, preceptor: Sorokin, Alexander D.; program: Physiology/Univ. of Barcelona, Spain

Class entering in 2007
Ogden, Philip W., B.S., Mathematics, Harding Univ., Searcy, AR, 1997, preceptor: Hunter, Lawrence; program: Bioinformatics

Hunter, Lawrence, Associate Professor, Ph.D., 1989, Yale Univ.
Pharmacology, Preventive Medicine and Biometrics, Computer Science, Biology, BMSC, BMST, HWMG, UCCC
Computational biology, bioinformatics, gene expression array analysis, natural language processing, biomedical ontologies, machine learning
Jones, David N. M., Associate Professor, Ph.D., 1989, Univ. of Cambridge
Pharmacology, BMSC, BMST, MOLB, MSTP, UCCC
Molecular mechanisms of alcohol and anesthetic actions; structure and function of biomolecules; NMR spectroscopy, x-ray crystallography, biophysics and molecular biology
Kappeler, John W., Professor*, Ph.D., 1970, Brandeis Univ.
Integrated Immunology, BMSC, MSTP
The study of the interaction between the T cell receptor and its signal ligands
Krushel, Leslie A., Assistant Professor*, Ph.D., 1990, Univ. of Toronto
Biochemistry and Molecular Genetics, Pharmacology, MRDORC, BMSC, MOLB, NEUR
Mechanisms and regulation of protein synthesis in the nervous system with a focus on the understanding of translation in learning and memory disease processes
Kutateladze, Tatiana G., Assistant Professor, Ph.D., 1988, Moscow State Univ.
Pharmacology, BMSC, BMST, MOLB, MSTP, UCCC
Biochemistry and structural biology, NMR and crystal structures of proteins implicated in cancer, structure based drug design
Langan, Thomas A., Professor Emeritus, Ph.D., 1959, Johns Hopkins Univ.
Pharmacology
Role of protein phosphorylation in the control of cell division, nuclear function and chromatin structure; Mathematical modeling of biological systems
Leonard, Sherry S., Professor*, Ph.D., 1986, Univ. of Colorado, UCDHSC
Psychiatry, Pharmacology, MRDORC, BMSC, HWMG, NEUR, UCCC
Molecular neurobiology of nicotine addiction in mental illness
Leslie, Christina C., Professor*, Ph.D., 1975, Univ. of Georgia
Pediatrics, Pathology, Pharmacology
Signal transduction mechanisms regulating phospholipase A2 activation and the production of lipid mediators of inflammation
Li, Chuan-Yuan, Professor and Director*, Ph.D., 1993, Harvard Univ.
Radiation Oncology, Pharmacology, BMSC, MOLB, UCCC
Molecular mechanisms of tumor response to therapy; Roles of stem cells in tumor response to therapy
Malkinson, Alvin M., Professor*, Ph.D., 1968, Johns Hopkins Univ.
Pharmacology, BMSC, MOLB, UCCC
Genetics of susceptibility to lung tumors in mice; mechanisms of lung tumor promotion; signal transduction
Maller, James L., Professor, Ph.D., 1974, Univ. of California, Berkeley
Pharmacology, Howard Hughes Investigator, BMSC, MOLB, MSTP, UCCC
Biochemistry of cell division and early development; cell cycle control, protein phosphorylation and oncogenic action
Manchester, David, Professor 1, M.D., 1972, Univ. of California, San Francisco
Pediatrics, Pharmacology
Toxicology (the study of abnormal development), mutagenesis, and genetic toxicity
Murphy, Robert C., Professor, Ph.D., 1970, Massachusetts Institute of Technology
Pharmacology, BMSC, BMST, MOLB, NEUR, UCCC
Pharmacology and biochemistry of leukotrienes and bioactive lipids, lipid mediators of cellular response using biochemical mass spectrometry
Medicine, Pharmacology, BMSC, UCCC
Signaling pathways controlling growth and differentiation of vascular smooth muscle cells; Role of eicosanoids in lung cancer
Petersen, Dennis R., Professor*, Ph.D., 1974, Univ. of Wyoming
Pharmaceutical Sciences, Medicine, Pharmacology, IBG
Molecular mechanisms of chemical and drug toxicity
Port, J. David, Professor*, Ph.D., 1989, Univ. of Utah
Medicine, Pharmacology, BMSC, MSTP, UCCC, G-protein linked receptors and their regulation; regulation of mRNA stability
Riches, David W. H., Professor 1, Ph.D., 1979, Univ. of Birmingham
Critical Care Medicine, Integrated Immunology, Biochemistry and Molecular Genetics, Medicine, Pharmacology, BMSC
Signal transduction by TNF receptor family members and their involvement in macrophage development; Regulation of myeloid and macrophage apoptosis and survival in pulmonary illness and cystic fibrosis
Saba, Laura, Instructor, Ph.D., 2007, Univ. of Colorado Denver, School of Medicine
Pharmacology
Statistical genetics and gene expression regulation
Sather, William A., Associate Professor, Ph.D., 1988, Univ. of Washington
Pharmacology, Physiology and Biophysics., BMSC, MSTP, NEUR
Structural basis of calcium channel function, including selectivity and permeability and neuromodulation of channel gating

Scheinmann, Robert L., Associate Research Professor II, Ph.D., 1990, Univ. of Washington
Pharmacological Sciences, Pharmacology, BMSC, DERC, UCCC
Regulation of gene expression focusing on basic mechanisms or transcription, apoptosis, immune tolerance, inflammatory diseases, and autoimmunity

Scheimann, William P., Associate Professor, Ph.D., 1996, Univ. of Washington
Pharmacology, BMSC, CANB, MSTP, RPSC, UCCC
Mechanisms of TGF-b-mediated tumor suppression and tumor promotion, cloning and characterization of TGF-beta-regulated signaling molecules and secretory proteins, expression proteomics and genomics, biochemistry, and cell biology

Serkova, Natalie J., Associate Professor*, Ph.D., 1996, Univ. of Bremen
Anesthesiology, Radiology, Pharmacology, UCCC
Magnetic Resonance Spectroscopy (MRS) based metabolomics; Magnetic Resonance Imaging (MRI); immunosuppressive drug toxicodynamics and toxicokinetics; ischemia/reperfusion in transplantation; MR/IVRS in oncology

Sikela, James M., Professor, Ph.D., 1983, Case Western Reserve Univ.
Pharmacology, BMSC, HMG, MSTP, NEUR, CCP, BG
Neurogenetics; disease gene discovery; human genome evolution and variation

Sorkin, Alexander D., Professor, Ph.D., 1985, Institute of Cytology, Academy of Sciences of the USSR.
Pharmacology, Pharmacology, BMSC, CANB, MSTP, NEUR, UCCC
Endocytosis, intracellular trafficking and signaling of growth factor receptors, dopamine transporter, dopaminergic neurons

Szezfer, Stanley J., Professor t, M.D., 1975, State Univ. of New York Pediatrics, Pharmacology
Clinical pharmacology of glucocorticoids and immunosuppressants; therapy of childhood asthma

Thorburn, Andrew M., Professor and Vice Chair, D.Phil., 1990, Univ. of Oxford
Pharmacology, Craniofacial Biology, BMSC, MOUL, MSTP, UCCC
Understanding the signaling mechanisms that control apoptosis in cancer development and during the response of tumor cells to cancer therapies

Traystman, Richard J. and Peter Payne, Professor and Vice Chancellor for Research, Univ. of Colorado Denver, Ph.D., 1971, Johns Hopkins Univ. Pharmacology
Neuroscience, cerebrovascular physiology, stroke, cardiac arrest/CPR, respiration, cardiopulmonary physiology

Weiner, Norman, Professor Emeritus, M.D., 1953, Harvard Univ. Pharmacology
Neuropharmacology; neurochemistry; regulation of the synthetic, release and metabolism of neurotransmitters; drug distribution and metabolism

Wu, Christine C., Assistant Professor, Ph.D., 2001, Univ. of Colorado, UCSCIHS Pharmacology, BMSC, BMST, MSTP
Proteomic analysis of membrane proteins from complex biological samples using mass spectrometry; molecular mechanisms of intracellular trafficking and organellar biogenesis

Zahniser, Nancy R., Professor, Ph.D., 1977, Univ. of Pittsburgh Pharmacology, BMSC, MSTP, NEUR
Regulation of dopamine transporters; mechanisms underlying cocaine's actions; neurotransmitter receptors and release in brain

Zhang, Gongyi, Associate Professor I, Ph.D., 1993, Institute of Biophysics, Academia Sinica
Integrated Immunology, Integrated Immunology, Pharmacology, BMST
Structure and function of biologically important proteins

* Faculty Member with a secondary appointment in Pharmacology, and a member of the Pharmacology Graduate Training Program

**Member of the Pharmacology Graduate Training Program, but with no appointment in the Department of Pharmacology

†Faculty Member with a secondary appointment in Pharmacology, but not a member of the Pharmacology Graduate Training Program

---

**Pharmacology, Physiology and Biophysics, BMSC, MSTP, NEUR**

**Structural basis of calcium channel function, including selectivity and permeability and neuromodulation of channel gating**

**Associate Professor, Ph.D., 1990, Univ. of Washington**

**Pharmacological Sciences, Pharmacology, BMSC, DERC, UCCC**

**Regulation of gene expression focusing on basic mechanisms or transcription, apoptosis, immune tolerance, inflammatory diseases, and autoimmunity**

**Mechanisms of TGF-b-mediated tumor suppression and tumor promotion, cloning and characterization of TGF-beta-regulated signaling molecules and secretory proteins, expression proteomics and genomics, biochemistry, and cell biology**

**Associate Professor*, Ph.D., 1996, Univ. of Bremen**

**Anesthesiology, Radiology, Pharmacology, UCCC**

**Magnetic Resonance Spectroscopy (MRS) based metabolomics; Magnetic Resonance Imaging (MRI); immunosuppressive drug toxicodynamics and toxicokinetics; ischemia/reperfusion in transplantation; MR/IVRS in oncology**

**James M., Professor, Ph.D., 1983, Case Western Reserve Univ.**

**Pharmacology, BMSC, HMG, MSTP, NEUR, CCP, BG**

**Neurogenetics; disease gene discovery; human genome evolution and variation**

**Professor, Ph.D., 1985, Institute of Cytology, Academy of Sciences of the USSR.**

**Pharmacology, Pharmacology, BMSC, CANB, MSTP, NEUR, UCCC**

**Endocytosis, intracellular trafficking and signaling of growth factor receptors, dopamine transporter, dopaminergic neurons**

**Professor, Ph.D., 1975, State Univ. of New York Pediatrics, Pharmacology**

**Clinical pharmacology of glucocorticoids and immunosuppressants; therapy of childhood asthma**

**Andrew M., Professor and Vice Chair, D.Phil., 1990, Univ. of Oxford**

**Pharmacology, Craniofacial Biology, BMSC, MOUL, MSTP, UCCC**

**Understanding the signaling mechanisms that control apoptosis in cancer development and during the response of tumor cells to cancer therapies**

**Richard J. and Peter Payne, Professor and Vice Chancellor for Research, Univ. of Colorado Denver, Ph.D., 1971, Johns Hopkins Univ. Pharmacology**

**Neuroscience, cerebrovascular physiology, stroke, cardiac arrest/CPR, respiration, cardiopulmonary physiology**

**Emeritus, M.D., 1953, Harvard Univ. Pharmacology**

**Neuropharmacology; neurochemistry; regulation of the synthetic, release and metabolism of neurotransmitters; drug distribution and metabolism**

**Assistant Professor, Ph.D., 2001, Univ. of Colorado, UCSCIHS Pharmacology, BMSC, BMST, MSTP**

**Proteomic analysis of membrane proteins from complex biological samples using mass spectrometry; molecular mechanisms of intracellular trafficking and organellar biogenesis**

**Professor, Ph.D., 1977, Univ. of Pittsburgh Pharmacology, BMSC, MSTP, NEUR**

**Regulation of dopamine transporters; mechanisms underlying cocaine's actions; neurotransmitter receptors and release in brain**

**Associate Professor I, Ph.D., 1993, Institute of Biophysics, Academia Sinica**

**Integrated Immunology, Integrated Immunology, Pharmacology, BMST**

**Structure and function of biologically important proteins**

---

---
Pre-doctoral Accomplishments 2004-2007

American Society for Mass Spectrometry invited speaker, presentation title: “Complementing Profile Based Proteomics using uLC-SRM-MS”
2007 Kline, Kelli G.
Compact for Faculty Diversity, 14th Annual Institute on Teaching and Mentoring
2007 PaVA, Pedro V.
Department of Pharmacology Graduate Training Committee Travel Award
2007 Grant, Kathleen J.
2007 Hurta, Henrik N.
2007 Kline, Kelli G.
2007 Robertson, Holly R.
2007 Ziemba, Brian
2006 Neil, Jason R. L.
2005 Stubelfeld, Elizabeth A.
2004 Davies, Kurtis D.
2004 Hu, Wei
2004 Neil, Jason R. L.
2004 Precht, Thomas A.
2004 Robertson, Holly R.
Front Range Neuroscience Group Meeting Student Poster Award
2005 Precht, Thomas A.
Her Laboratory Travel Award
2007 Ziemba, Brian

Keystone Symposia (Chemical Senses - From Genes to Perception) invited speaker, presentation title: “The structural basis of pheromone recognition in Drosophila”
2007 Laughrin, John D.
2007 McVey, Brian H.
American Society for Mass Spectrometry (ASMS) invited speaker, presentation title: “A Shotgun Proteomic Method for the identification of transmembrane domains.”
2007 PaVA, Pedro V.
Keystone Meeting (Role of Microenvironment on Tumor Induction and Progression) Poster Presentation Award
2005 Neil, Jason R. L.

Faculty Accomplishments 2004-2007

Over the past three years, after settling at the newly-constructed Anschutz Medical Campus in Aurora, Colorado, our department faculty members continue to be extraordinarily productive and successful. Over the past three years the members of our faculty have submitted 237 competing grant applications, published 215 papers in peer reviewed journals, and received 18 teaching and research awards. Our current funding dollars (which includes non-federal sources and Howard Hughes Medical Institute (HHMI) is $18,314,997. Our Departmental teaching in the graduate, medical and dental schools has been outstanding and our faculty members are currently pursuing additional ideas for graduate school electives to be offered in the future curriculum.

The department continues their success with three Institutional National Research Service Award Grants (Post-doctoral/Pre-doctoral/undergraduate), six individual Pre-doctoral and Post-doctoral National Research Service Awards and two non-federal fellowship grants to our trainees. Currently the department faculty mentor 27 Pharmacology pre-doctoral trainees, 35 post-doctoral fellows and 20 graduate students from other programs doing their thesis training with Pharmacology faculty.

I continue to be impressed with our group of dedicated individuals that make this Department successful, prominent and respected by their peers in the scientific community.
2007 Annual Report of Discipline

Selected special Faculty Honors

Churchill, Mair A.
2006 Molecular Endocrinology/Structure of the Progestrone Receptor-Deoxyuridinucleic Acid Complex: Novel Interactions Required for Binding to Half-Site Response Elements (Journal Cover for Dec.)

French, Thomas A.
2005 UCDHSC Class of 2007 Excellence in Teaching Award (School of Medicine)
2006 UCDHSC Outstanding Dental Basic Sciences Instructor (School of Dentistry)
2006 UCDHSC Outstanding Didactic Instructor (Dental Hygiene Program)
2006 UCDHSC Class of 2008 Excellence in Teaching Award (School of Medicine)
2006 UCDHSC Class of 2009 Excellence in Teaching Award (School of Medicine)

Heidenreich, Kim A.
2006 UCDHSC Dean's Mentoring Award

Hunter, Lawrence

Jones, David N.
2007 Article in UCD View "Stopping the Most Dangerous Animal on the Planet" http://www.ucdenver.edu/ucd/

Murphy, Robert C.
2007 Outstanding Achievement Award, Ecsenius Research Foundation 2007 Journal of the American Society for Mass Spectrometry "Sublimation as a Method of Matrix Application for Mass Spectrometric Imaging" (Journal Cover for Sept.)

Port, David
2007 Article in Denver Post "Businesses Rely on Phase Value" http://www.denverpost.com/search/ci_6209345

Schiemann, William P.
2007 UCDHSC Chancellor’s Teaching Recognition Award
2007 Keith and Eva Killam Memorial Award, The Western Pharmacology Society

Sikela, James M.
2007 "Science: Evolutionary and Biomedical Insights from the Rhesus Macaque Genome" (Journal Cover for April 11)

Tabakoff, Boris
2007 NIH, National Institute on Alcohol Abuse and Alcoholism, Mark Keller Honorary Lecture Award

Thorburn, Andrew

Pharmacology Current Predoctoral Trainees
Fall 2007/2008

Class entering in 2002
Wei Hu, B.M., Medicine, Zhejiang Univ. Med School, Hangzhou, P.R. China, 1993 Preceptor: Tabakoff, Boris
Jason R. Neil, B.Sc., Zoology/Biomedical Science, Univ. of Guelph, Guelph, Ontario, Canada, 2000 Preceptor: Schiemann, William P.
Thomas A. Precht, B.A., Biochemistry, Western State College, Gunnison, CO, 2002 Preceptor: Heidenreich, Kim A.
Elizabeth A. Stubblefield, B.S., Biophysics, Centenary College of Louisiana, Shreveport, LA, 2000 Preceptor: Tabakoff, Boris

Class entering in 2003
Kurtis D. Davies, B.A., Molecular, Cellular, Developmental Biology, Univ. of Colorado, Boulder, Boulder, CO, 2003 Preceptor: Browning, Michael D.
Douglas C. Donham, B.S., Chemical Engineering, Univ. of Arkansas, Fayetteville, AR, 2002 Preceptor: Churchill, Mair A.
Holly R. Robertson, B.S., Microbiology, Auburn Univ., Auburn, AL, 2000 Preceptor: DeFilippis, Mark A.

Class entering in 2004
Kathleen J. Grant, B.S., Zoology, Michigan State Univ. East Lansing, MI, 2000 Preceptor: Wu, Christine C.
John D. Laughlin, B.S., Biochemistry, Mississippi State Univ., Mississippi State, MI, 2002 Preceptor: Jones, David N. M.
Bruce H. Mandt, B.A., Psychology, Univ. of Wisconsin, Madison, Madison, WI, 2001 Preceptor: Zahniser, Nancy R.

Class entering in 2005
Robert A. Hom, B.S., Biochemistry, Univ. of Colorado, UCDHSC, Denver, CO, 2005 Preceptor: Kutateladze, Tatiana G.
Henrick N. Horita, B.S., Biology, Univ. of Washington, Seattle, WA, 2004 Preceptor: Wu, Christine C.
Kelli G. Kline, B.S., Biochemistry, Univ. of Puget Sound, Tacoma, WA, 2005 Preceptor: Wu, Christine C.
Pedro V. Peña, B.S., Biochemistry, Old Dominin Univ., Norfolk, VA, 2003 Preceptor: Kutateladze, Tatiana G.
Aaron Ransome, B.A., Neuroscience, Colorado College, Colorado Springs, CO, 2003 Preceptor: Murphy, Robert C.

Rebekah S. Vest, M.S., Zoology, Brigham Young Univ., Provo, UT, 2003 Preceptor: Bayer, K. Ulrich
Brian Ziemba, B.S., Medical Technology, Oregon Health & Science Univ., Portland, OR, 2000 Preceptor: Jones, David N. M.

Class entering in 2006
Tressa M. Allingon, B.S., Chemical Engineering, Iowa State Univ. of Science and Technology, Ames, IA, 2004 Preceptor: Schiemann, William P.
Kyle M. Johnson, Pharm D. Pharmacy, Butler Univ., Indianapolis, IN, 2006 Preceptor: Murphy, Robert C.
Anna M. Nelson, B.A., Psychology, Boston College, Chestnut Hill, MA, 2003 Preceptor: Zahniser, Nancy R.
Dorothy J. Yamamoto, B.A., Psychology, Univ. of Colorado at Denver, Denver, CO, 2006 Preceptor: Zahniser, Nancy R.