

## BSTP Program Faculty

<a href="#">Abbott, Derek</a>	Innate Immune and Inflammatory Signaling
<a href="#">Adams, Drew</a>	Identification and characterization of bioactive small molecules for use in cancer and
<a href="#">Adoro, Stanley</a>	Unfolded protein stress response, hematopoietic stem cells, leukemia, T-cell
<a href="#">Alagramam, Kumar</a>	Genetic basis of hearing loss: Analysis of genes involved in sensory hair cell
<a href="#">Aldred, Micheala</a>	Clinical problems arising from 2q37 deletion syndrome.
<a href="#">Almasan, Alexandru</a>	Mechanisms of cell cycle control and cell death in tumor cells.
<a href="#">Anderson, James</a>	Biocompatibility, immune responses to foreign materials, phagocytosis,
<a href="#">Anthony, Donald</a>	Immunopathogenesis of hepatitis C virus and HIV-hepatitis C virus infection
<a href="#">Baker, Kristian</a>	Regulation of gene expression at the level of RNA transport, translation and
<a href="#">Basch, Martín</a>	Development and regeneration of the inner ear; Molecular causes of congenital
<a href="#">Bergmann, Cornelia</a>	Interaction between the central nervous system and immune responses to microbial
<a href="#">Bonomo, Robert</a>	Structure function studies of Class A beta-lactamases. Understanding enzymological
<a href="#">Boom, Henry</a>	CD4+ T cells, CD8+ T cells, gamma delta T cells, tuberculosis, cytokines, antigen
<a href="#">Boron, Walter</a>	Acid-base homeostasis, Gas channels
<a href="#">Brady-Kalnay, Susann</a>	Receptor protein tyrosine phosphatases, cell adhesion, and signal transduction; PTPs
<a href="#">Broihier, Heather</a>	Genetic and molecular analyses of motor neuron specification and differentiation
<a href="#">Brunengraber, Henri</a>	Metabolic regulation, ketone body metabolism, design and testing of synthetic
<a href="#">Buchner, David</a>	Epigenetics, gene expression, obesity and diabetes, insulin signaling, glucose
<a href="#">Buck, Matthias</a>	Structure/dynamics of protein complexes involved in cancer and in cardiovascular
<a href="#">Canaday, David</a>	Mechanisms of increased pathogenesis during HIV/TB co-infection specifically
<a href="#">Carey, Paul</a>	Enzyme mechanisms, Raman spectroscopy, proteases, physical biochemistry
<a href="#">Carlin, Cathleen</a>	Receptor tyrosine kinase signaling, human adenoviruses, protein sorting
<a href="#">Chakrapani, Sudha</a>	Structural dynamics underlying ligand- and voltage-gated ion channel function. EPR
<a href="#">Chance, Mark</a>	High-throughput structure and systems biology
<a href="#">Chen, Shu</a>	Aging; cell biology; dementia; degenerative disease; neuroscience; prion disease;
<a href="#">Chiel, Hillel</a>	Neural networks, electrophysiology, modeling, Aplysia, biomechanics, feeding
<a href="#">Cobb, Brian</a>	The role of microbial and host glycans on immune regulation and inflammatory
<a href="#">Coller, Jeffery</a>	Regulation of the translation rate of cellular mRNAs. Movement of mRNAs from
<a href="#">Cominelli, Fabio</a>	Crohn's Disease, General GI, Inflammatory Bowel Disease, Ulcerative Colitis
<a href="#">Conlon, Ron</a>	Targeted Mutagenesis in Mice, Gene controlling morphogenesis and pattern formation in mice, New Approaches to Genome Mapping in the Mouse
<a href="#">Cooper, Kevin</a>	Psoriasis; atopic dermatitis; autoimmunity; cutaneous immunobiology; UV and solar effects; immunomodulatory therapy
<a href="#">Croniger, Colleen</a>	Metabolism, CAAT/enhancer binding protein beta (C/EBP beta), transcription, Phosphoenolpyruvate carboxykinase (PEPCK), knockout animal models, perinatal metabolism.
<a href="#">Danielpour, David</a>	Function and regulation of TGF- $\beta$ in the prostate
<a href="#">Dealwis, Chris</a>	To study the structure-function relationship of macromolecules using structural biology and biochemical tools.
<a href="#">deBoer, Piet</a>	Bacterial molecular genetics; biochemistry and cell biology; formation of the division of septum and related cell cycle events
<a href="#">Deneris, Evan</a>	Mechanisms of neuronal gene expression, cholinergic and serotonergic transmitter systems.
<a href="#">Difeo, Analisa</a>	Molecular biology of ovarian cancer; identification of genetic aberrations that are critical for the development of drug resistance and metastasis, role of miRNA in ovarian cancer biology, drug discovery

<a href="#">Distelhorst, Clark</a>	Steroid hormone action; programmed cell death; apoptosis.
<a href="#">Driscoll, Donna</a>	RNA editing, translational recoding events, posttranscriptional gene regulation
<a href="#">Drumm, Mitch</a>	Cystic Fibrosis; Site-Directed Mutagenesis; Structure-Function of Ion Channels
<a href="#">Dubyak, George</a>	Signal transduction involving receptors for extracellular ATP; inflammatory signal transduction mechanisms; mechanisms of nucleotide release and extracellular metabolism.
<a href="#">Durand, Dominique</a>	Computational Neuroscience, electrophysiology, hippocampus.
<a href="#">Egelhoff, Thomas</a>	Regulation of cytoskeletal force generation; nonmuscle myosin and actin dynamics, cell migration and cytokinesis; cancer cell migration; skin wound healing
<a href="#">Eng, Charis</a>	Clinical cancer genetics
<a href="#">Fairchild, Robert</a>	Skin disease, Skin and cardiac allograft rejection, T cell recruitment to inflammation in peripheral tissues
<a href="#">Fox, Paul</a>	Regulation of Endothelial Cell Motility, Role of Ceruloplasmin in Inflammation and Atherosclerosis, Iron Homeostasis
<a href="#">Friel, David</a>	Calcium homeostasis, electrophysiology, ion channels, modulation, optical methods for measuring Ca <sup>2+</sup> , modeling.
<a href="#">Gambetti, Pierluigi</a>	Prion disease, neurodegenerative disorders, prion protein, protein conformation, transgenic animals, transfected cells, animal models, cell models, prion protein gene, spongiosis, anatomical-clinical correlation, polymorphism, genotype phenotype correla
<a href="#">Garvin, Jeffrey</a>	Regulation of renal ion transport, hemodynamics and cell signaling, and their roles in blood pressure control
<a href="#">Gerken, Thomas</a>	Protein structure and dynamics; NMR techniques; molecular modeling of glycoproteins and mucins
<a href="#">Gerson, Stanton</a>	Transgenic mice and carcinogenesis, retroviral gene therapy, DNA repair, hematopoietic stem cells
<a href="#">Gott, Jonatha</a>	RNA editing mechanisms, control of gene expression, Physarum genetics
<a href="#">Greenfield, Edward</a>	Osteoporosis, loosening of orthopaedic implants, cytokines, osteoblasts, osteoclasts, bone resorption, cell-cell interactions, osteosarcoma, metastasis
<a href="#">Gupta, Sanjay</a>	Biomarker(s) for early detection and prognosis of prostate cancer; molecular targets for prevention and treatment of prostate cancer; chemoprevention of prostate cancer by dietary agents; epigenetic mechanisms of gene silencing and its reactivation by natural agents
<a href="#">Hamilton, Thomas</a>	Analysis of mechanisms regulating inflammatory gene expression in mononuclear phagocytes. Analysis of stimulus-dependent control of chemokine and cytokine mRNA stability
<a href="#">Harding, Clifford</a>	Immunology, MHC, antigen processing, T cell, phagocytosis, endocytosis, subcellular fractionation, mycobacteria, tumor immunity

<a href="#">Harris, Ann</a>	Tissue-specific and temporal regulation of gene expression in health and disease. Functional genomics of regulatory elements. Transcriptional networks. Chromatin architecture.
<a href="#">Harte, Peter</a>	Transcription Activation; Repression; Chromatin Structure; Homeotic Genes
<a href="#">Hatzoglou, Maria</a>	Molecular mechanisms of the cellular response to stresses, including inflammation and diabetes. Tissue culture and mouse models of stress-induced transcriptional and translational mechanisms under disease conditions
<a href="#">Hazen, Stanley</a>	Biochemical mechanisms of oxidant stress and inflammation in cardiovascular disease and asthma
<a href="#">Hise, Amy</a>	Innate immune responses to microbial pathogens and parasites.
<a href="#">Hodges, Craig</a>	Reduced growth and intestinal manifestations of Cystic Fibrosis; creation of mouse models; modifier genes
<a href="#">Huang, Alex</a>	Regulation between immune activation and tolerance is crucial in the pathogenesis of cancer.
<a href="#">Imanishi, Yoshikazu</a>	Localization of proteins and chemical intermediates involved in phototransduction and the visual cycle.
<a href="#">Iyengar, Sudha</a>	Molecular and statistical genetic dissection of multifactorial diseases; common chronic diseases of the eye and the kidney; speech sound disorder
<a href="#">Jackson, Mark</a>	Genetic events that contribute to breast hyperplasia
<a href="#">Jankowsky, Eckhard</a>	Single molecule enzymology (RNA helicases) & single molecule studies of ribonucleoprotein machinery (HCV replication and pre-mRNA splicing)
<a href="#">Jastrzebska, Beata</a>	Signaling complexes of rhodopsin and the role of rhodopsin oligomeric organization in signal transduction. Molecular bases of light-induced retinal degeneration. Therapeutic potential of chromophore analogs in mouse models of retinal degenerative diseases.
<a href="#">Jin, Fulai</a>	3D genome architecture; transcription regulation; genetics of human diseases
<a href="#">Jones, Stephen</a>	Voltage dependent ion channels, electrophysiology, patch clamp, Ca <sup>2+</sup> currents, K <sup>+</sup> currents.
<a href="#">Kao, Hung-Ying</a>	Regulation of Gene Expression. Signaling pathways controlled by transcription co-repressors and histone deacetylases
<a href="#">Karn, Jonathan</a>	HIV, AIDS, transcription, chromatin, retroviral vectors
<a href="#">Katz, David</a>	Regulatory interactions in development of the nervous system, neurotransmitter phenotypes, neural growth factors.
<a href="#">Kazura, James</a>	Immunoregulatory mechanisms of pathogenesis; acquired resistance to infection; malaria
<a href="#">Kelley, Thomas</a>	Inflammatory processes in cystic fibrosis lung disease, inflammatory cell signaling mechanisms
<a href="#">Keri, Ruth</a>	Hormonal control of mammary gland development and construction of transgenic mouse models of breast cancer; functional genomics of mammary gland development and cancer.

<a href="#">Kern, Timothy</a>	Pathogenesis and prevention of retinopathy and other complications of diabetes; vascular cell apoptosis.
<a href="#">Khalil, Ahmad</a>	Functional genomics of large non-coding RNAs, RNA-mediated epigenetic regulation
<a href="#">King, Christopher</a>	T cell differentiation, malaria, schistosomiasis, filariasis, neonatal immunity, IgE regulation, mechanisms of acquired immunity
<a href="#">Kirwan, John</a>	Nutrient metabolism, insulin action, body composition, and physical activity. Effects of age, exercise, and diet on glucose-lipid metabolism and growth regulation in pregnancy.
<a href="#">Kong, Qingzhong</a>	Molecular pathology of neurodegenerative diseases, inducible/conditional transgenic/knockout animal model systems
<a href="#">Koyuturk, Mehmet</a>	Analysis of high-throughput biological data, algorithmic and analytical methods in systems/network biology, algorithms for data mining and analysis, parallel computing, algorithms for distributed systems, optimization problems in scientific computing
<a href="#">Kunze, Diana</a>	Ion channels, neural electrophysiology.
<a href="#">LaFramboise, Thomas</a>	Developing and applying computational tools to identify molecular variants that contribute to cancer and related diseases in humans.
<a href="#">Lederman, Michael</a>	Immune mechanisms and immune restoration in HIV infection
<a href="#">Lee, Irene</a>	Biochemistry, Bio-Organic Chemistry, Medicinal Chemistry
<a href="#">Lefebvre, Veronique</a>	Transcriptional control of cell fate and differentiation
<a href="#">Letterio, John</a>	TGF- $\beta$ in immune cell development and function
<a href="#">Levine, Alan</a>	Intestinal Host Defense: Immune tolerance, immune protection, and HIV infection
<a href="#">Li, Xiaoxia</a>	Signal transduction in innate and adaptive immunity
<a href="#">Li, Yan</a>	The functions of non-coding cis-regulatory elements in development and complex diseases; functional characterization of non-coding GWAS SNPs in diabetic conditions; 3D genome organization
<a href="#">Licatalosi, Donny</a>	Gene expression, alternative RNA regulation, protein-RNA interactions, mammalian germ cell biology
<a href="#">Lodowski, David</a>	X-ray and electron microscopic structural studies of the macromolecular complexes that underlie the activation of G protein-coupled receptors and G proteins
<a href="#">Lou, Hua</a>	Alternative RNA processing and its role in cancer development
<a href="#">Luo, Agnes</a>	Neurodegeneration and neuroregeneration in the brain; neurogenesis and gliogenesis after stroke and other CNS injury; translational research to improve the self repair of the brain after stroke; improving the survival of transplanted neurons in Parkinson's disease.
<a href="#">Luo, Guangbin</a>	Mouse models for RecQ DNA helicase diseases and transposon-tagged mutagenesis in mice
<a href="#">Luse, Donal</a>	Eukaryotic gene transcription and RNA polymerase

<a href="#">MacDonald, Paul</a>	Vitamin D and vitamin D receptor-mediated gene expression, nuclear receptor coactivators, nuclear receptors and mechanisms of transcriptional regulation
<a href="#">Maciejewski, Jaroslaw</a>	Hematology and pathophysiology of hematologic diseases including bone marrow failure syndromes (BMFS)
<a href="#">Manor, Danny</a>	Signal transduction pathways that regulate normal cell growth and that are disrupted by oncogenic mutations. Molecular mechanisms by which some chemopreventative agents, such as vitamin E, offer protection from cancer.
<a href="#">Markowitz, Sanford</a>	Molecular biology of colon cancer; functional influence of oncogenes and suppressor genes on transformation, metastasis, and response to therapies
<a href="#">Matsuyama, Shigemi</a>	Cancer Cell Biology, Cell Death Regulation, Cell Penetrating Peptide
<a href="#">McDermott, Brian</a>	Neurobiology of the auditory hair cell: From functional analyses of mechanotransduction and synaptic transmission to its development and its role in deafness using the zebrafish model system
<a href="#">McIntyre, Thomas</a>	Role of signaling molecules, particularly lipids, that control and modulate rapid cellular interactions and intracellular functions in human inflammation. Enzymes that make and inactivate lipid signaling molecules, and their roles in human disease.
<a href="#">Mears, Jason</a>	Structure and function of eukaryotic proteins that regulate mitochondrial dynamics. Cryo-electron microscopy, biochemical and computational methods
<a href="#">Medof, M. Edward</a>	T cell immunology, autoimmunity, and T regulatory function; cancer immunogens; growth factors and apoptosis; ocular immunology; the connection between complement and neurobiology
<a href="#">Merrick, William</a>	Mechanism and regulation of eukaryotic protein biosynthesis
<a href="#">Mieyal, John</a>	Enzymatic reaction mechanisms involved in intracellular sulfhydryl homeostasis and redox signaling pertinent to diseases involving oxidative stress and inflammation, including cardiovascular and neurodegenerative diseases and cancer
<a href="#">Min, Booki</a>	Homeostatic regulation of T lymphocytes
<a href="#">Moiseenkova-Bell, Vera</a>	Molecular mechanisms and structural basis of pain and temperature sensation (structure-functional analysis of TRP and 2PK channels). Cryo-electron microscopy and X-ray crystallography.
<a href="#">Monnier, Vincent</a>	Molecular mechanisms of protein aging, oxidative stress, complications of diabetes and aging, cataractogenesis, microbial enzyme technology
<a href="#">Montano, Monica</a>	Mechanism of action of estrogens and antiestrogens in cancer.
<a href="#">Morton, Richard</a>	Lipid and lipoprotein metabolism, cholesterol homeostasis, regulation of adipocyte lipid storage
<a href="#">Mu, Tingwei</a>	Molecular mechanism of ion channel folding, trafficking, and function. Ion channel misfolding disease. Idiopathic epilepsy. Long QT syndrome.
<a href="#">Nagy, Laura</a>	Basic and translational research in the role of innate immunity in liver disease; adipose/liver/gut interactions in liver injury

<a href="#">Narla, Goutham</a>	Transcriptional regulation of oncogene signaling; mouse models of cancer metastasis; small molecule based drug discovery; alternative RNA splicing in cancer metastasis; signal transduction and the role of transcription factors and protein phosphatases in oncogene signaling
<a href="#">Nguyen, Liem</a>	Interactions of pathogenic mycobacteria with host immune systems. Antibiotic resistance, pathogenesis, cell wall assembly and cell division control in Mycobacterium tuberculosis
<a href="#">Nieman, Marvin</a>	Mouse models of thrombosis, platelet signaling, protease-activated receptors
<a href="#">Nilsen, Timothy</a>	RNA processing and transcription in nematodes. Homologous cell free systems are used to dissect in detail the mechanisms of cis- and trans-splicing as well as the transcription of UsnRNA genes
<a href="#">Nock, Nora</a>	
<a href="#">Ogino, Tomoaki</a>	Molecular mechanisms of RNA viral gene expression in eukaryotic cells; viral RNA-dependent RNA polymerase and RNA processing enzymes; antiviral drug discovery
<a href="#">Oleinick, Nancy</a>	Ionizing, radiation damage, chromatin structure, nuclear matrix of photosensitization-induced apoptosis, signal transduction, photodynamic therapy
<a href="#">Palczewski, Krzysztof</a>	Mechanism of rhodopsin functions, rods and cones in the eye, phototransduction
<a href="#">Park, Paul</a>	Mechanism of action of rhodopsin and other G protein-coupled receptors
<a href="#">Pehek, Elizabeth</a>	Neuropharmacology and neurochemistry of brain pathways implicated in the regulation of mood, cognition, and reward.
<a href="#">Philippidou, Polyxeni (Pola)</a>	Molecular mechanisms of neural circuit assembly during development, genetic control of phrenic motor neuron identity; synaptic specificity in respiratory circuits; Hox genes
<a href="#">Pikuleva, Irina</a>	Cholesterol metabolism; Alzheimer's disease; age-related macular degeneration; biochemical, structural, mass-spectrometry, and in vivo studies of cholesterol-metabolizing cytochromes P450
<a href="#">Popkin, Daniel</a>	Viral Immunology; mouse models, HIV & HCV pathogenesis, skin inflammation
<a href="#">Qi, Xin</a>	Mitochondrial quality control, Huntington's disease, Parkinson's disease, development of therapeutics for these diseases
<a href="#">Ramachandran, Rajesh</a>	Molecular mechanisms of membrane remodeling, fission and fusion in synaptic vesicle endocytosis and mitochondrial dynamics
<a href="#">Ramakrishnan, Parameswaran</a>	Regulation of signal transduction in health and disease: autoimmune diabetes, inflammatory diseases and cancer.
<a href="#">Ramirez-Bergeron, Diana</a>	Cardiovascular stem cells and development
<a href="#">Rietsch, Arne</a>	Bacterial pathogenesis; virulence gene regulation and structure-function analysis of toxin secretion systems in Pseudomonas aeruginosa
<a href="#">Ritzmann, Roy</a>	Sensory-motor integration, cockroach, electrophysiology, modeling.

<a href="#">Romani, Andrea</a>	Hormonal regulation of cellular magnesium homeostasis and transport in liver cells under physiological conditions and in pathological diseases including diabetes and alcoholism
<a href="#">Runge, Kurt</a>	Regulation of the length of telomere repeats and their role in cell physiology; Genetic pathways controlling gene silencing and cell aging.
<a href="#">Safar, Jiri</a>	Protein misfolding, structure-function correlations, amyloid immunochemistry, age-related neurodegeneration, transgenic mice therapeutics, translational medicine, prion diseases, Alzheimer's disease
<a href="#">Salz, Helen</a>	Regulation of RNA Splicing; Drosophila Sex Determination
<a href="#">Scacheri, Peter</a>	Genomics of cancer and other genetic diseases with underlying defects in chromatin structure and function
<a href="#">Schaffer, Ashleigh</a>	Genetics of neurodevelopmental disorders and pediatric-onset neurodegeneration. Tissue-specific requirements of ubiquitously expressed proteins in development and disease.
<a href="#">Schiemann, William</a>	Role of TGF- $\beta$ signaling, epithelial plasticity, and mechanotransduction in regulating breast cancer development and metastatic progression
<a href="#">Schilling, William</a>	Molecular mechanisms associated with agonist-induced Ca <sup>2+</sup> signaling in mammalian non-excitabile cells and in particular, in vascular endothelial cells and renal epithelial cells
<a href="#">Schmaier, Alvin</a>	Vascular biology of the kallikrein/kinin and renin angiotensin systems, examining the proteins prolylcarboxypeptidase, prekallikrein, factor XII, & high molecular weight kininogen. Development of an antiplatelet drug for heart attacks that is a thrombin and PAR 1 and 4 activation antagonist
<a href="#">Sedwick, W. David</a>	Mutational specificity at DNA sequence level, DNA damage and drug access, DNA repair, genetic susceptibility to cancer, colon cancer, mutagens and their specificity
<a href="#">Sékaly, Rafick</a>	
<a href="#">Sen, Ganes C.</a>	Mammalian gene expression of angiotensin-converting enzyme and interferon; Mechanism of interferon action
<a href="#">Sieg, Scott</a>	Immune dysfunction in HIV disease; mucosal defensins and adaptive immunity; chronic immune activation in HIV disease
<a href="#">Silver, Jerry</a>	Role of glial cells in development and regeneration of neural circuits, nerve regeneration, glia, axon guidance
<a href="#">Silverman, Robert</a>	Molecular mechanisms of the antitumor and antiviral activities of interferons
<a href="#">Singh, Neena</a>	Prion diseases, protein transport, chaperones, proteasomes, nuclear import
<a href="#">Skowronski, Jacek</a>	HIV-host cell interaction, accessory proteins
<a href="#">Smith, Corey</a>	Cell physiology, neural circuits and synaptic plasticity, secretion and endocytosis, systems neuroscience, neuroendocrinology, electrophysiology
<a href="#">Smith, Jonathan</a>	Cholesterol metabolism by macrophages. Genetics of atherosclerosis susceptibility in mouse models. Genetics and drug discovery in mouse models of Alzheimer disease.
<a href="#">Stamler, Jonathan</a>	Redox-based cellular regulation and signal transduction, and in particular the role of protein S-nitrosylation

<a href="#">Stelzer, Julian</a>	Cellular and molecular mechanisms of muscle contraction in the development of hypertrophic and dilated cardiomyopathy
<a href="#">Stepanyan, Ruben</a>	Physiology of mechanosensory cells of the inner ear; receptors for senses of hearing and balance; in mouse and zebrafish models; electrophysiology, optical and electron microscopy imaging
<a href="#">Stewart, Phoebe</a>	Structural characterization of macromolecular complexes by cryo-electron microscopy and hybrid methods
<a href="#">Strowbridge, Ben</a>	Synaptic physiology, hippocampus, olfactory bulb, computational neuroscience.
<a href="#">Subauste, Carlos</a>	Immunology, cell signaling in host-pathogen interactions, Toxoplasma, HIV, autophagy, selective blockade of CD40 signaling to control disorders such as atherosclerosis and microvascular complications of diabetes
<a href="#">Surewicz, Witold</a>	Aging; diseases of protein conformation; amyloid; prion disease; prion protein; Alzheimer's disease; molecular chaperones; heat shock proteins; cataract; protein chemistry; protein folding; protein-membrane interactions; biophysical chemistry
<a href="#">Sy, Man-Sun</a>	Transmissible spongiform encephalopathy, prion diseases
<a href="#">Tartakoff, Alan</a>	Dynamic spatial relations in eukaryotic cells and development of genetic strategies to combat disease
<a href="#">Taylor, Derek</a>	Telomere maintenance and mRNA regulation. Macromolecular structure and function, primarily using electron microscopy
<a href="#">Tesar, Paul</a>	Stem cell pluripotency and differentiation; developmental neurobiology; developmental genetics
<a href="#">Tilton, John</a>	Cellular factors that regulate susceptibility of cells to HIV infection. Defining the subsets of CD4+ T cells that are infected by HIV.
<a href="#">Tochtrop, Gregory</a>	Linkage between oxidative stress pathways and lipid peroxidation. Role of the fatty acid binding protein family in lipid signaling
<a href="#">Tolbert, Blanton</a>	Structural biophysics of protein-viral RNA interactions involved in gene expression
<a href="#">Trapp, Bruce</a>	Cellular and Molecular Biology of Myelination, Demyelination, and Dysmyelination
<a href="#">Valadkhan, Saba</a>	Mechanism of splicing. Determining if RNA molecules, which were the primordial catalysts in living systems, still retain catalytic function in the spliceosome, the largest cellular machine in modern eukaryotes.
<a href="#">Van Den Akker, Focco</a>	Structural biology; infectious diseases/antibiotic resistance; cardiovascular diseases; small-molecule therapeutics design; cell signaling
<a href="#">Veigl, Martina</a>	DNA repair, mutation analysis in bacterial and mammalian gene targets, mutagenic effects of nucleotide pool imbalance, colon cancer, genetic susceptibility, environmental mutagens
<a href="#">von Lintig, Johannes</a>	Role of retinoids in processes ranging from development to vision, cell proliferation and metabolic control.
<a href="#">Wald, David</a>	Cancer drug development; genetic and molecular analyses of leukemia

<a href="#">Wang, Bing-cheng</a>	Molecular mechanisms governing cell migration and proliferation, experimental therapy of cancer metastasis using tumor-targeting peptides.
<a href="#">Wang, John</a>	Role of protein tyrosine phosphatases in cancer; chromosomal instability in cancer.
<a href="#">Wang, Qing</a>	Human genetics, angiogenesis, development and regulation of the cardiovascular system, electrophysiology, calcium signaling, apoptosis, and gene expression
<a href="#">Ward, Nicole</a>	Development of the neural and vascular systems; angiogenesis; neurogenesis; mouse molecular genetics; angiopoietins; vascular endothelial growth factors; neurotrophins
<a href="#">Watanabe, Michiko</a>	Heart Development, cardiogenesis, apoptosis, cell signaling, coronary vessel development, lymphangiogenesis, cardiac conduction system
<a href="#">Weiss, Michael</a>	Structural mechanisms of human diseases; Transcriptional deregulation and protein misfolding with applications to diabetes and disorders of sexual development
<a href="#">Willis, Mark</a>	Neural basis of adaptive behavior. Odor-guided navigation and flight in insects.
<a href="#">Wise, Jo Ann</a>	Mechanism and regulation of pre-mRNA splicing, RNA-protein interactions, fission yeast genetics
<a href="#">Wynshaw-Boris, Anthony</a>	Pathophysiological mechanisms and novel therapeutic strategies of human neurogenetic diseases using in vivo mouse models and patient-derived induced pluripotent stem cell cellular models.
<a href="#">Xiao, Tsan Sam</a>	Structural biology and biochemistry of immune signaling pathways; functional analysis of immune receptors during infections by Mycobacterium tuberculosis, HIV, and in autoimmune disorders such as SLE and psoriasis
<a href="#">Yang, Sichun</a>	Estrogen receptor biophysics and integrative structural biology
<a href="#">Yee, Vivien</a>	Determination of protein molecular structure using X-ray diffraction and correlation with function.
<a href="#">Zhang, Junran</a>	Repair of DNA double strand breaks. Role of repair in protection against carcinogenesis by maintaining genomic stability. Sensitization of tumor cells to radiation and chemotherapeutic drugs by interruption of DNA double strand break repair
<a href="#">Zhang, Youwei</a>	Molecular mechanisms of DNA damage and replication checkpoint control and their potential in cancer therapy
<a href="#">Zheng, Qing</a>	Genes and molecular pathways that are involved in disease processes in mouse models of human deafness, including Otitis Media (OM) and Usher syndrome
<a href="#">Zhou, Guang</a>	Transcription factors that determine cell fate and regulate cell function during skeletogenesis and bone metastasis
<a href="#">Zhou, Lan</a>	Notch signaling in hematopoiesis; myeloid development; hematopoietic stem cells; fucosylglycans in cancer biology
<a href="#">Zhu, Xiongwei</a>	Neurodegeneration, Alzheimer disease, Amyotrophic lateral sclerosis, Oxidative stress, Signal transduction, Mitochondria, Cell cycle control

<a href="#">Zigmond, Richard</a>	Changes in neuronal gene expression after injury.
<a href="#">Zimmerman, Peter</a>	Influence of human and parasite genetic polymorphism on pathogenesis of infectious diseases
<a href="#">Zou, Wenquan</a>	Protein aggregation in the conformational diseases especially on the physiological and pathologic prion proteins