Bridge Funding Program
2014 Recipients

MARCH

Patrick Mueller, Physiology
Inactivity and Enhanced Sympathoexcitation: Role of Neuroplasticity in the RVLM

Zhengping Yi, Pharmaceutical Sciences
Human Skeletal Muscle Proteome and Phosphoproteome in Obesity and Type 2 Diabetes

JULY

Christine Chow, Chemistry
The Role of Ribosomal RNA Modifications

David Cinabro, Physics and Astronomy
R&D on CCD's for Astronomy at Lawrence Berkely National Lab

Tamara Hendrickson, Chemistry
Ammonia transport through a hydrophilic ammonia tunnel

Ho-Sheng Lin, Otolaryngology
Identification of Early Marker for Head and Neck Cancer Through Antibody Profiling

Philip Pellett, Immunology and Microbiology
Biogenesis and operation of the human cytomegalovirus assembly complex

NOVEMBER

Randall Armant, Obstetrics and Gynecology
Assessment of human placentas in real time

Xiaoyan Han, Electrical and Computer Engineering
Bridge Funding on Sonic Infrared Imaging Non-destructive Evaluation of Advanced Composite Materials

Henry Heng, CMMG
Linking Genomic Instability and ER Stress to Gulf War Illness

Bridge Funding Program
2013 Recipients

MARCH

Robert Akins, Biochemistry and Molecular Biology
Validation of a rapid tool for diagnosing and predicting bacterial vaginosis

Xiaoyan Han, Electrical and Computer Engineering
Sonic Infrared Imaging Non-destructive Evaluation of Advanced Composite Materials

Sandra Jacobson and Joseph Jacobson, Psychiatry and Behavioral Neurosciences
Etiology and Prevention of Fetal Alcohol Spectrum Disorders in Cape Town, South Africa

Menq-Jer Lee, Pathology
Lipid signaling in adipose inflammation and vascular dysfunction

Li Li, Internal Medicine
The Role of SM22 in the Pathogenesis of Aortic Aneurysms

Jeffrey Taub, Pediatrics and **Yubin Ge**, Oncology
Molecular and Pharmacologic Correlates of Acute Myeloid Leukemia in Down Syndrome

Gen Sheng Wu, Oncology
Developing targeted therapeutics for triple-negative breast cancer

JULY

Q Ping Dou, Oncology
Bortezomib resistance and AMPK signaling in multiple myeloma

Tamara Hendrickson, Chemistry
Ammonia transport through a hydrophilic ammonia tunnel

Kenneth Hohn, Pathology
12-HETER1, a high-affinity receptor or 12(S)-Hydroxyeicosatetraenoic Acid in prostate carcinoma

Mahendra Kavdia, Biomedical Engineering
Nitric Oxide-Superoxide Interactions in Endothelial Cell Dysfunction

Bridge Funding Program
2012 Recipients

MARCH

Sandro da Rocha, Chemical Engineering
Nanocarriers for the Delivery of siRNA to the Lungs

Chunying Li, Biochemistry and Molecular Biology
EPC Homing and Angiogenesis: a Role of CXCR2 Macromolecular Complex

Li Li, Internal Medicine
Genetic Control of Smooth Muscle Inflammation in Response to Vascular Injury

Philip Pellett, Immunology and Microbiology
Biogenesis and operation of the human cytomegalovirus assembly complex

John Reiners, Institute of Environmental Health Sciences
Targeting the Insulin-like Growth Factor-1 Receptor as a Therapy for NF1 Malignant Peripheral Nerve Sheath Tumors

Youming Xie, Oncology
Proteasomal degradation of Rpn4

JULY

Karen Beningo, Biological Sciences
Calpains and Mechanical Forces

David Gorski, Surgery
Glutamatergic signaling as a therapeutic target for breast cancer

Peter Hoffmann, Physics and Astronomy
Nanomechanics and dynamics of confined water layers

Nathan McCaughtry, Kinesiology
Detroit Healthy Youth Initiative

Takeshi Sakamoto, Physics and Astronomy
The structure and function of actin bundle protein TRIOBP

Christopher Steiner, Biological Sciences
The impacts of dispersal and clonal diversity on the stability of environmentally forced metacommunities

NOVEMBER

Donald DeGracia, Physiology
Ribonomics and Brain Ischemia

Miriam Greenberg, Biological Sciences
The Role of Cardiolipin in the TCA Cycle – Implications for Barth Syndrome

Susil Putatunda, Chemical Engineering
Development of Nanostructured Austempered Ductile Iron (ADI)

Assia Shisheva, Physiology
Functions of adipocyte PIKfyve and its lipid products

Bridge Funding Program
2011 Recipients

MARCH

Robert Akins, Biochemistry & Molecular Biology
Development and validation of new PCR tools for human vaginal microbiome analysis

Sandra Jacobson, Psychiatry & Behavioral Neuroscience
Exploratory Trial of Choline Supplementation for Fetal Alcohol Snydrome

Youming Xie, Oncology
Proteasomal Degradation of Rpn4

Alexander Gow, Center for Molecular Medicine & Genetics
Trb3-Mediated Modulation of Oligodendrocyte Stress

Tamara Hendrickson, Chemistry
Substrate Divergence in Aminoacyl-tRNA Biosynthesis

Sharon Ackerman, Biochemistry & Molecular Biology
Biophysics of Neurofilament Compaction: The Hallmark of Traumatic Axonal Injury

Ashis Mukhopadhyay, Physics & Astronomy
Nanoscale Dynamics of Confined Fluids by Time-Correlated Fluorescence Spectroscopy within an Atomic Force Microscope.

JULY

Ikuko Kato, Oncology and Pathology
Luminal Bacterial Markers and Colorectal Cancer Risk

Nicholas Davis, Pharmacology
Protein Palmitoylation in Yeast and Mammals

Kenneth Honn, Pathology
Role of GPR31, a high-affinity receptor of 12(S)-HETE, in prostate cancer progress

Jianjun Wang, Biochemistry and Molecular Biology
NMR studies of apoE and its interaction with receptors

Tiffany Mathews, Chemistry
The interplay between ethanol, dopamine, and BDNF

Gen Sheng Wu, Oncology
The mechanisms of TRAIL resistance in cancer cells

Guojun Wu, Oncology and Pathology
Forkhead-Box Q1 in breast cancer metastasis and chemoresistance

NOVEMBER

David Randall Armant, Obstetrics & Gynecology
Defects in Mitochondria Impacting Primate Oocyte Quality

Nabanita S. Datta, Internal Medicine/Endocrinology
Role of MAP Kinase Phosphatase-1 in the anabolic actions of PTH in osteoblasts

Venuprasad K. Poojary, Oncology
Ubiquitination in the regulation of inflammation and cancer

Bridge Funding Program
2010 Recipients

MARCH

Gen Sheng Wu, Pathology
Role and regulation of the phosphatase CL100/MKP1 in human cancer

Melody Neely, Immunology & Microbiology
Analysis of the virulence mechanism of a lantibiotic locus

Sean Wu, Mechanical Engineering
Path to intelligent noise control

Gyula Acsadi, Pediatrics and Neurology
Inherited neuropathy consortium: An integrative approach leading to therapy

George Borszcz, Psychology
Emotion of Pain: A Neurobiological Analysis

Tamara Hendrickson, Chemistry
GPI Anchor Attachment: Substrate Specificity and Tumorigenicity

Hasan Jamil, Computer Science
Automatic Tools for the Integration and Analysis of Life Sciences Data

JULY

Bhanu Jena, Physiology
Chemistry of Calcium-Lipid Interactions: Implication in Life Processes

Jianjun Wang, Biochemistry and Molecular Biology
Structural Studies of apoE and its Interaction with LDL receptors

John Cavanaugh, Biomedical Engineering
Prevention of Blast-Related Injuries

David Oupicky, Pharmaceutical Sciences
Gene Delivery Modulated by Redox Potential Gradients

Malathy Shekhar, Pathology-Karmanos Cancer Institute
Delineating the origin of triple negative basal-like breast cancer

NOVEMBER

Andrew Feig, Chemisty
Investigations of RNA-Hfq Interactions

Russell Finley, Center for Molecular Medicine and Genetics
Defining genetic networks required for cell division and viability

Leonard Lipovich, Center for Molecular Medicine and Genetics
Differential expression and regulatory functions of long non-coding RNA molecules in the nucleus accumbens of human cocaine and heroin abusers

Raymond Mattingly, Pharmacology
Regulation of Ras through the Ras-GRF exchange factor

Lori Pile, Biological Sciences
Role of Histone Deacetylation in Cell Cycle Progression and Development

Jeffrey Withey, Immunology and Microbiology
Mechanisms for Control of Vibrio cholerae Virulence

Bridge Funding Program
2009 Recipients

MARCH

Gyula Acsadi, Pediatrics
The effects of SMN depletion on the expression of genes participating in axonal growth and transport

Mary Ann Kosir, Surgery
Targeting Breast Cancer Metastasis: Role of Chemokine Heparanase

Mark VanBerkum, Biology
Signal Transduction Mechanisms Regulating Axon Guidance of Drosophila Pioneer Neurons

Michael Cher, Urology
Proteases in Prostate Cancer Bone Metastasis

JULY

Louis Romano, Chemistry
Effect of DNA Adducts on dNTP Binding to E. coli DNA Polymerase I

Judith Whittum-Hudson, Immunology & Microbiology
Biodegradable Nanoparticles for Targeted Antibiotic Delivery

Wen Li, Mechanical Engineering
SBIR Phase I: Non-invasive vibro-acoustic diagnostic and prognostic system

NOVEMBER

Lore Pile, Biology
Role of Histone Deacetylation in Cell Cycle Progression and Development

Sandra Jacobson, Psychiatry and Behavioral Neuroscience
Choline Supplementations for Fetal Alcohol Syndrome Prevention in Cape Town, South Africa

Todd Leff, Pathology
Regulation of skeletal muscle metabolism by PPAR-gamma

Bonnie Sloane, Pharmacology
Cathepsins in Malignant Progression

Andrew Feig, Chemistry
Investigations of Hfq-RNA Interactions and Related RNA Chaperones

Bridge Funding Program
2008 Recipients

MARCH

Michael Cher, Urology
Proteases in Prostate Cancer Bone Metastasis

Robert MacKenzie, Psychiatry & Behavioral Neurosciences
CREB regulation of gene expression in NPY/AgRP hypothalamic neurons

Mairi Noverr, Immunology & Microbiology
The Role of Oxylipins in the Development of Pulmonary Allergy

Anders Sima, Pathology
The effects of various modes of administration of C-peptide on diabetic neuropathy

Yong Xu, Electrical & Computer Engineering
novel single molecule DNA sequencing method

Albert King, Biomedical Engineering

JULY

Robert Akins, Biochemistry
Molecular Diagnostics of Pathogenic Fungi

Scott Bowen, Psychology
Self-Administration of Abused Inhalants in Mice

Dennis Drescher, Otolaryngology
Identification of Acoustico-Lateralis Transmitters

Miriam Greenberg, Biological Sciences
A novel mechanism of regulation of inositol biosynthesis in yeast

Ananda Prasad, Internal Medicine
Deficiency and Th1 Functions: Molecular Mechanisms

Virginia Rice, Adult Health Administration
Jordanian Tobacco Control Research & Capacity Development

Judith Whittum-Hudson, Immunology & Microbiology
Pathogenic mechanisms in chlamydial reactive arthritis

Hai-Young Wu, Pharmacology
Genome organization: Coordinated gene expression

NOVEMBER

David Evans, Biochemistry
Control of Pyrimidine Biosynthesis in Mammalian Cells

Hyeong-Reh Kim, Pathology
PDGF-regulation of cell growth and death

Melody Neely, Immunology & Microbiology
Analysis of the virulence mechanism of a lantibiotic locus

Abhilash Pandya, Electrical & Computer Engineering
Real-time Augmented Reality Development and Human Factors Assessment for the Special Purpose Dexterous manipulator

Jeffrey Stanley, Psychiatry
Spectroscopy and MRI in ADHD

Gen Sheng Wu, Barbara Ann Karmanos Cancer Institute
Role and regulation of the phosphatase CL100/MKP1 in human cancer

Bridge Funding Program
2007 Recipients

MARCH

Donald DeGracia, Physiology
The Unfolded Protein Response After Brain Ischemia

Robert Freedman, Psychiatry & Behavioral Neurosciences
Behavioral Treatment of Menopausal Hot Flashes

Sandra Jacobson, Neurology
Identification of FASD in South African Children

Jason Mateika, Physiology
Respiratory Chemoreflex Control in Obstructive Sleep Apnea

Boris Nadgorny, Physics & Astronomy
The development of the Multifunctional Scanning Nanoprobe and its application to the new spintronics materials development.

Melody Neely, Immunology & Microbiology
Streptococcal-Zebrafish Model of Bacterial Pathogenesis

Daniel Rappolee, Obstetrics/Gynecology & Anatomy/Cell Biology
Impact of stress and stress enzymes on peri-implantation embryonic development

Jeffrey Taub, Pediatrics
GATA1, Chromosome 21 and Chemotherapy Sensitivity

JULY

George Brush, Pathology
Mechanism of Mec1p in the Checkpoint Response

John Cavanaugh, Biomedical Engineering
Neurophysiology of Whiplash Pain

David Evans, Biochemistry and Molecular Biology
Control of Pyrimidine Biosynthesis in Mammalian Cells

Rafael Fridman, Pathology
Novel nanoprobe approach to investigate membrane proteases in live cancer cells

S. Helena Kuivaniemi, Surgery
Genetic Risk Factors in Abdominal Aortic Aneurysms"

Leslie Lundahl, Psychiatry and Behavioral Neurosciences
Cue Reactivity Model for Assessing Pharmacologic Intervention in Treatment of Cannabis Use Disorders

Ananda Prasad, Hematology-Oncology
Zinc deficiency and Th1 functions: Molecular mechanisms"

Thipparthi Reddy, Immunology and Microbiology
Small Heat Shock Proteins As Novel HIV-1 Therapeutic Agents

Gabriel Sosne, Anatomy and Cell Biology

Chin-An Tan, Mechanical Engineering
Collaborative Research: A Novel Video-Assisted Integrated Approach for Enhancing Bridge Health Monitoring

Guri Tzivion, Pathology
Regulation of c-Raf-1 by Ras and Growth Factors

Fayth Yoshimura, Immunology and Microbiology
DNA Forms of Murine Leukemia Viruses

NOVEMBER

Husam Abu-Soud, Obstetrics and Gynecology
Regulation of Myeloperoxidase Catalysis by Nitric Oxide and Ascorbate

Xiaoyan Han, Electrical & Computer Engineering
IR Crack Detection in Aircraft Structures Using Chaotic Sound Excitation

Daniel Rappolee, Obstetrics and Gynecology
Effects of microgravity on Preimplantation Mouse Development

Melissa Runge-Morris, Institute of Environmental Health Sciences
Sulfotransferase Expression: Implications for Toxicity

Bridge Funding Program
2006 Recipients

JULY

Stephanie Brock, Chemistry

Li Li, Internal Medicine

Andrea Sankar, Anthropology

Malathy Shekhar, Pathology and Karmanos Cancer Institute

Shijie Sheng, Pathology

NOVEMBER

Miriam Greenberg, Biological Sciences

Enrique Ostrea, Pediatrics

Bonnie Sloane, Pharmacology

Melissa Runge-Morris, Institute of Environmental Health Sciences