Overview

The Division of Gastroenterology at Brown University extends to Rhode Island, Miriam and Veteran’s Administration Hospital(s), and is an established presence on the Consultative Service at Women and Infants Hospital. The major missions of the Division are to provide state-of-the-art treatment in those with gastrointestinal and liver diseases to educate undergraduates, medical students/residents, postdoctoral fellow in the pathophysiology of digestive diseases, and to engage in “cutting-edge” basic and applied research. The recently completed Endoscopy Suite is equipped with the latest technological advances, and accommodates consultations from Southeastern Massachusetts, Cape Cod, Connecticut and Rhode Island. The new Liver Research Center, and Swallowing/Motility Research Center are located on the Rhode Island Hospital campus, and staffed with twelve principal investigators, twenty-five postgraduate physician/scientists and twenty undergraduate/graduate students, providing a strong basic science program to advance the understanding of disease processes at the cellular and molecular level. N.I.H. sponsored projects include: motility and signal transduction of the G.I. tract, H. pylori in gastric cancer, pathogenesis of NASH, molecular mechanisms of hepatic fibrosis, antiviral approaches to hepatitis B and C infection, molecular pathogenesis of human hepatocellular carcinoma, and monoclonal antibodies in the treatment of G.I. malignancy.

RESEARCH

Faculty in the Division of Gastroenterology hold varied N.I.H., N.S.F., corporate, foundation, and pharmaceutical grants to support basic and translational research activities. Fifty faculty publications appeared in highly respected, peer-review journals in the past year.

TEACHING

The Brown University Fellowship Program in Gastroenterology is a three-year A.C.G.M.E./A.B.I.M.-accredited program conducted by thirteen fulltime and twenty-seven volunteer faculty stationed at the Rhode Island, Miriam, and Veteran’s Administration Hospital(s). Individuals are encouraged to select the Clinical-Scholar, Physician-Scientist, or Research Track; mentors in varied interests are on-site to assist Fellows allowing a unique clinical/research perspective.
Faculty Members

FULL-TIME FACULTY
(Hospital and Foundation Based)

Jack R. Wands, M.D., Jeffrey and Kimberly Greenberg – Artemis and Martha Joukowsky Professor in Gastroenterology and Professor of Medical Science; Director, Division of Gastroenterology and Liver Research Center; R.I. Hospital/Miriam Hospital, University Medicine Foundation

Gyorgy Baffy, M.D., Assistant Professor, Rhode Island Hospital, University Medicine Foundation

Jose Behar, M.D., Professor, Rhode Island Hospital, University Medicine Foundation

Piero Biancani, Ph.D., Professor, Rhode Island Hospital

Weibao Cao, Ph.D., Assistant Professor, R.I. Hospital

Suzanne de la Monte, M.D., MPH, Associate Professor of Pathology and Medicine, R.I. Hospital

Ramy Eid, M.D., Assistant Professor, Veteran's Administration Medical Center, Univ. Medicine Foundation

Pierre Gholam, M.D., Assistant Prof., Veteran's Administration Medical Center, Univ. Medicine Foundation

Fadlallah Habr, M.D., Assistant Professor, Rhode Island Hospital, University Medicine Foundation

Karen M. Harnett, Ph.D., Assistant Professor, Rhode Island Hospital

Miran Kim, Ph.D., Assistant Professor, Rhode Island Hospital

Ji-su Li, M.D., Ph.D., Assistant Professor, The Liver Research Center

Zixu Mao, M.D., Ph.D., Assistant Professor, The Liver Research Center

Steven Moss, M.D., Associate Professor, Rhode Island Hospital, University Medicine Foundation

Kittichai Promrat, M.D., Assistant Professor, VA Medical Center, University Medicine Foundation

Harlan Rich, M.D., Associate Professor, Rhode Island Hospital, University Medicine Foundation

Walter R. Thayer, M.D., Professor, Rhode Island Hospital, University Medicine Foundation

Shuping Tong, M.D., Ph.D., Assistant Professor, The Liver Research Center

Nicholas Califano, M.D., Clinical Associate Professor, Rhode Island Hospital

Thomas DeNucci, M.D., Clinical Assistant Professor, Rhode Island Hospital

Christy L. Dibble, D.O., Clinical Assistant Professor, Women & Infants Hospital

Joseph DiMase, M.D., M.S., Clinical Assistant Professor Emeritus, Rhode Island Hospital

Edward Feller, M.D., Clinical Professor, Miriam Hospital

Neil Greenspan, M.D., Clinical Assistant Professor, Memorial Hospital of Rhode Island

Edward Iannuccilli, M.D., Clinical Professor, Rhode Island Hospital

Donald Kaufman, M.D., Clinical Assistant Professor, Memorial Hospital of Rhode Island

Sheldon Lidofsky, M.D., Clinical Assistant Professor, Rhode Island Hospital

James Manis, M.D., Clinical Associate Professor Emeritus, VA Medical Center

Peter Margolis, M.D., Clinical Assistant Professor, Rhode Island Hospital

Michael Nissensohn, M.D., Clinical Instructor, Miriam Hospital

Theodore C. Palumbo, M.D., Clinical Instructor, Rhode Island Hospital

Daniel Quirk, M.D., M.P.H., Clinical Assistant Professor, Rhode Island Hospital

Herbert Rakatansky, M.D., Clinical Professor, Miriam Hospital

Steven Sepe, M.D., Ph.D., Clinical Associate Professor, Rhode Island Hospital

Thomas Sepe, M.D., Clinical Assistant Professor, Rhode Island Hospital

Samir A. Shah, M.D., Clinical Assistant Professor, Miriam Hospital

Jay Sorgman, M.D., Clinical Assistant Professor, Miriam Hospital

Joel S. Spellun, M.D., Clinical Assistant Professor, Rhode Island Hospital

Philip Torgan, M.D., Clinical Associate Professor Emeritus, Miriam Hospital

Sonia Uchman, M.D., Clinical Associate Professor, Memorial Hospital of Rhode Island

Paul Van Zuiden, M.D., Clinical Assistant Professor, Rhode Island Hospital

ADJUNCT FACULTY

Amer B. Malik, M.D., Adjunct Assistant Professor, Veterans' Administration Medical Center

Paul Akerman, M.D., Clinical Assistant Professor, Rhode Island Hospital
National and International Honors and Recognition of Faculty

György Baffy, M.D., Ph.D.
Presentations:
• Annual Meeting of Hungarian Medical Association of America, Sarasota, FL
• Non-alcoholic steatohepatitis and insulin resistance (Plenary Presentation)
• Annual Meeting of American Association for Study of Liver Disease, Boston, MA
• UCP2 affects fasting-induced steatosis and metabolic parameters in lean and obese mice – poster presentation
• American Gastroenterological Association, Orlando, FL 2003
• Liver regeneration is delayed after partial hepatectomy in mice deficient for uncoupling protein-2 – poster presentation
• Uncoupling protein-2 modulates crypt cell apoptosis rate in the colon of mice fed with high-fat diet – poster presentation
• Fas-mediated liver injury in ob/ob mice is attenuated in the absence of uncoupling protein-2 – poster presentation

Jose Behar, M.D.
• Chairman, Biliary and Pancreatic Section, Rome 3 (International Committee on Functional Gastrointestinal Diseases) – 2002

Reviewer:
• American Journal Physiology
• Gastroenterology

Presentations:
• American Gastroenterological Association, San Francisco, California - 2002
  Role of Caveolae in the pathogenesis of cholesterol induced gallbladder muscle hypomotility – Forum presentation
  Role of PGF2 in the genesis of phasic contractions of guinea pig colon – Poster presentation
  Effect of progesterone on the phasic contractions of the colonic circular muscle of guinea pigs – Poster presentation
• American Gastroenterological Association, Orlando, Florida - 2003
  Role of PGE2 in maintenance of tonic contraction of guinea pig gallbladder – Poster Presentation
  Smooth muscle abnormalities in female patients with chronic constipation due to colonic inertia – Poster presentation

Piero Biancani, Ph.D.
Reviewer:
• Gastroenterology
• Amer J Physiol.
• J. Pharmacol & Exp. Therapeutics

Presentations:
• American Gastroenterological Association, San Francisco, California - 2002
  Platelet activating factor contributes to decreased cat LES tone in acute experimental esophagitis – poster presentation
  Hydrogen peroxide reduces LES tone in human esophagitis – Poster presentation
  Platelet activating factor and prostaglandin E2 impair Ach release in the body of the esophagus in experimental esophagitis – Poster presentation
  Production of proinflammatory cytokines IL-1, IL-6 and IL-8 in active esophagitis – poster presentation
• American Gastroenterological Association – Orlando, FL 2003
  In vitro model of acute esophagitis in the cat - poster presentation
  Kinase and cat lower esophageal sphincter tone - poster presentation
  Integrin linked kinase in Ach-induced contraction of cat esophageal circular smooth muscle – poster presentation
  Pancreatic phospholipase A2 in the lower esophageal sphincter – poster presentation

Invited Presentations:
• Invited speaker – Ca2 dependent/independent contraction of esophageal smooth muscle. 4th International Symosium Supra-Esophageal complication of reflux, San Diego, CA
• Invited speaker – LES sphincter tone, normal LES, and esophagitis, University of Pisa, Italy and University of Genova, Italy

Weibiao Cao, M.D.
Reviewer:
• Inflammatory Bowel Diseases, Inflammatory Bowel Disease Grants

Presentations:
• American Gastroenterological Association, San Francisco, California 2002
  Neurokinin A signal transduction pathway in human ulcerative colitis – Oral presentation
Ulcerative colitis affects intracellular Ca\(^{2+}\) signaling in human colon – Oral presentation

Platelet activating factor contributes to decreased cat LES tone in acute experimental esophagitis – Poster presentation

Hydrogen peroxide reduces LES tone in human esophagitis – Poster presentation

Platelet activating factor and prostaglandin E2 impair Ach release in the body of the esophagus in experimental esophagitis – Poster presentation

American Gastroenterological Association, Orlando, Florida 2003

Interleukin-1\(b\) (IL-1\(b\)) induced H\(_2\)O\(_2\) production contributes to the motor dysfunction in human ulcerative colitis (UC). –Poster presentation (Distinguished abstract)

Rho kinase and cat lower esophageal sphincter (LES) tone. –Poster presentation (Distinguished abstract)

Integrin linked kinase (ILK) in Ach-induced contraction of cat esophageal circular smooth muscle (ESO). –Poster presentation

Pancreatic (Group I B) phospholipase A2 (PLA2) in the lower esophageal sphincter (LES) –Poster presentation

In vitro model of acute esophagitis in the cat. –Poster presentation

Suzanne de la Monte, M.D., M.P.H.

Panacea Symposium on Oxidative Stress-Mediated Neurodegeneration, Rockville, M.D.: 2002

Hypoxia-Induced Alzheimer-type molecular and cellular neurodegeneration

Invited Presentations:

Massachusetts Institute of Technology, Cambridge, MA: 2002

Potential Mechanisms of Neuronal Thread Protein-Mediated Neurodegeneration-Relevance to Alzheimer’s Disease


Mechanisms of Thymosin-alpha-Inhibition of Glioblastoma

Providence College, Providence, RI: 2002

Potential Neuroprotective Strategies for Preventing of Alzheimer’s Disease


Role of Neuronal Thread Protein in the Pathogenesis of Alzheimer’s Disease-New Findings

Reviewer:

Hepatology, Neuroscience

Karen Harnett, Ph.D.

Guest Lecturer, Boston University School of Medicine

Presentations:

American Gastroenterological Association, San Francisco, California 2002

Platelet activating factor contributes to decreased cat LES tone in acute experimental esophagitis – Poster Presentation

Hydrogen peroxide reduces LES tone in human esophagitis – Poster presentation

Platelet activating factor and prostaglandin E2 impair Ach release in the body of the esophagus in experimental esophagitis – Poster presentation

Miran Kim, Ph.D

Presentations:

Ecto-ATPase Meeting, Woodshole, MA

A P2X7 receptor complex.

The P2X7-Hsp90 relationship: a matter of tyrosine phosphorylation?

Ji-Su Li, M.D., Ph.D.

Presentations:

Further characterization of glycine decarboxylase (p120), a pre-S envelope –interacting protein in duck hepatitis B virus life cycle. Annual Molecular Biology of Hepatitis B Virus Meeting, Amherst, MA - 2001

p120/glycine decarboxylase is a key component for establishing duck hepatitis B virus infection in primary duck hepatocytes. Annual Molecular Biology pf Hepatitis B Virus Meeting (2002), Pacific Grove, California

Steven Moss, M.D.

American Gastroenterology Association, Funderburg award for gastric cancer research, 2002 “Regulation of gastric epithelial p27kip1 by H. pylori

Invited Presentations:


H. pylori and gastric cancer. Gastroenterology Grand Rounds: Northwestern University, Chicago, IL; NEMC, Boston, MA & Surgery Grand Rounds, Rhode Island Hospital

American Gastroenterology Association annual meeting. Orlando, May 2003

Oral Presentations:

Kuzushita N, Aswad B, Park M-J, Moss SF. Deficiency of p27 leads to increased gastric epithelial and inflammatory responses to Helicobacter pylori.

Eguchi H, Moss SF. Degradation of p27kip1 by Helicobacter pylori in gastric epithelial cells is proteasome-dependent but independent of ubiquitination or mitogen-activated protein kinase (MAPK) phosphorylation.
• Shirin H, Kravtsov V, Shahmurov M, Bruck R, Moss SF, Avni Y, Avinoach I. p27kip1 expression is inversely related to the grade of gastric malt lymphoma, irrespective of disease stage.


• Davis GC, Kethu SR, Ramzan UC, Moss SF. Are we performing unnecessary endoscopies for suspected upper gastrointestinal bleeding in hospitalized patients? Poster presentation

Reviewer:


Promrat, Kittichai M.D.

• American Association for the Study of Liver Diseases, Boston, MA – 2002

• The association of interferon regulatory factor-1 promoter polymorphism with HCV infection and interferon treatment response – Poster presentation

• Associations of Chemokine System Polymorphisms with Disease Manifestations and Treatment Responses of Chronic Hepatitis C – Poster Presentation

• American Gastroenterological Association – Orlando, FL, 2003

One year of pioglitazone therapy is associated with histologic improvement in NASH – Poster Presentation

Harlan Rich, M.D.

Reviewer:

• Journal of Clinical Gastroenterology

• Member, Internal Medicine Residency Curriculum Committee, Rhode Island Hospital

• Member, Ambulatory Physician Leadership Committee, Rhode Island Hospital

Brown Medical School

• Master of Arts, ad eundem, Brown Medical School (awarded May 2003)

• Speaker: Perspectives on MD2000 MD2000 Retreat, Brown Medical School, April 2003

• Speaker: Advances in Gastroenterology: Where will the new technology take us? Brown University Department of Medicine Update in Internal Medicine, Providence, RI, May 2003

Shuping Tong, M.D., Ph.D.

Invited Presentation:

• Evidence for the involvement of furin, a basic endopeptidase, in the DHBV life cycle. Annual Molecular Biology of Hepatitis B Virus Meeting, Amherst, Massachusetts

Panelist – 2003

• Workshop 3 (hepatitis B virus e antigen). Annual Molecular Biology of Hepatitis B Virus Meeting, Pacific Grove, California

Reviewer:

• Hepatology, Gastroenterology, Journal of General Virology

Jack Wands, M.D.

• Jeffrey and Kimberly Greenberg-Artemis and Martha Joukowsky Professor in Gastroenterology, and Professor of Medical Sciences, Brown Medical School

• Bristol-Myers Squibb Research Award in Infectious Diseases, Brown Medical School

• Master of Arts, ad eundem, Brown Medical School

Brown Medical School

• Chair, Cardiology Search Committee

• Member, Search Committee for Medical Scientist

• Member, Search Committee for Director, Cancer Research

• Member, Search Committee for Pediatric Gastroenterology

• Science and Technology Council – 2003

State of Rhode Island and Providence Plantations, Governor Donald L. Carcieri

Editorial Boards:

• Hepatology

• International Hepatology Communications

• Journal of Viral Hepatitis

• Viral Hepatitis Reviews

• International Journal of Oncology

• Cancer Therapy

Editorial Consultant:

• Journal of Clinical Investigation

• New England Journal of Medicine

• Journal of Biological Chemistry

• Proceedings of the National Academy of Sciences

• Journal of Infectious Diseases

• Gastroenterology

• Journal of Virology

• Virology

• Nature Medicine

• Journal of Medical Virology

• Journal of Hepatology
Invited Presentations:
- Hepatocellular carcinoma and HBV, Molecular Biology of Hepatitis B Viruses, Amherst, MA
- Alcohol and HIV, N.I.H. Special Emphasis Committee, Bethesda, Maryland
- Hepatic Oncogenesis, International Meeting on Therapy in Liver Diseases, Barcelona, Spain (Panel Discussion)
- Organizer, Session 2: Induction of Hepatocellular Carcinogenesis, Falk Workshop: Malignant Liver Tumors: Basic Concepts and Clinical Management, Leipzig, Germany
- Human Hepatocellular Carcinoma, Fukuoka Cancer Symposium, Fukuoka, Japan
- International Workshop on Molecular Pathogenesis of Human HCC, Sep 17 – 18, 2003 N.I.H., Bethesda, M.D.
- Korean Association for the Study of Liver Disease, Nov 19 – 22, 2003 Seoul, Korea
- Symposium on Receptors and Entry for Oncogenic Viruses Jul 09 – 12, 2003 Park City, UT
- Chair, Diagnosis of Liver Diseases Oct 16 – 19, 2003 Falk Symposium, Freiburg, Germany
- Chair–N.I.A.I.D. Study Section on HCV and HIV, 2002
- Member, Special Emphasis Panel to review NIH GCRL Grant
- Chair, NIDDK Special Emphasis RFA HCV proposals, 2003

TEACHING ACTIVITIES

EDUCATION HONORS
Harlan Rich, M.D.
- Chairman’s Award for Excellence in Teaching, Brown Medical School
- Faculty Marshall, 28th Medical Convocation, M.D. Class of 2002, Brown Medical School

TEACHING RESPONSIBILITIES
Suzanne de la Monte, M.D., M.P.H.
- Course Leader: Brown University Graduate Program in Pathobiology Bio 283: Aging and Disease
Edward Feller, M.D.
- Independent Study 15
Harlan Rich, M.D.
- Integrated Medical Sciences, Biomed 282 Gastroenterology
Jack Wands, M.D.
- BioMed 305A – Elective in Gastroenterology

PUBLICATIONS

Gyorgy Baffy, M.D.

Jose Behar, M.D.
- Sohn UD, Cao W, Tang DC, Stull JT, Haeberle C, Wang LA, Harnett KM, Behar J, Biancani P. Myosin light chain kinase and PKC dependent contraction of...


**Piero Biancani, Ph.D**


**Weibiao Cao, Ph.D**


**Suzanne de la Monte, M.D., Ph.D**


### FACULTY TRANSITIONS

#### Departing Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Former Brown Medical School Position</th>
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<tbody>
<tr>
<td>Michael Kirber, Ph.D.</td>
<td>Assistant Professor (Research)</td>
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#### New Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Former Position</th>
<th>Faculty Rank</th>
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<tbody>
<tr>
<td>Alyn Adrain, M.D.</td>
<td>Appoint: Crouse Hospital, St. Joseph's Hospital,</td>
<td>Clinical Assistant Professor</td>
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<tr>
<td></td>
<td>University Hospital, Community General Hospital</td>
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<tr>
<td>György Baffy, M.D., Ph.D.</td>
<td>Fellow, Harvard Medical School</td>
<td>Assistant Professor, Brigham &amp; Women's Hospital</td>
</tr>
<tr>
<td>Weibiao Cao, M.D.</td>
<td>Research Associate, Brown Medical School</td>
<td>Assistant Professor (Research)</td>
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<tr>
<td>Leslie Cashel, M.D.</td>
<td>Appoint: Rhode Island Group Health Associates</td>
<td>Clinical Instructor</td>
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<tr>
<td>Ramy Eid, M.D.</td>
<td>Fellow in Gastroenterology, Brown University</td>
<td>Assistant Professor, Medicine</td>
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<tr>
<td>Pierre Gholam, M.D.</td>
<td>Fellow in Gastroenterology, Mt. Sinai, NY</td>
<td>Assistant Professor, Medicine</td>
</tr>
<tr>
<td>Fadlallah Habr, M.D.</td>
<td>Fellow in Therapeutic Endoscopy, Toronto</td>
<td>Assistant Professor, Medicine</td>
</tr>
<tr>
<td>Miran Kim, Ph.D</td>
<td>Postdoctoral Research Fellow, University of Sheffield, U.K.</td>
<td>Assistant Professor, Medicine</td>
</tr>
<tr>
<td>Kittichai Promrat, M.D.</td>
<td>Research Fellow, N.I.H.</td>
<td>Assistant Professor, Medicine</td>
</tr>
</tbody>
</table>

Ramy Eid, M.D.

Pierre Gholam, M.D.
• Gholam PM, Charney DA, Siddiqui RK. The metabolic syndrome is associated with steatosis and fibrosis in patients with chronic hepatitis C infection. Gastroenterology 2001;120:2811.
• Gholam PM, Kotler DP. Guidelines for enteral and parenteral nutrition in AIDS wasting syndrome. J Parenteral Enteral Nutr 2002;26:1SA-138SA.

Karen Harnett, Ph.D

Miran Kim, Ph.D
Ji-Su Li, M.D., Ph.D


Zixu Mao, M.D., Ph.D

Steven Moss, M.D.


Kittichai Promrat, M.D.


Harlan Rich, M.D.

Shuping Tong, M.D., Ph.D


Jack Wands, M.D.


- Khamzina L, Gruppuso PA, Wands JR. Insulin signaling through insulin receptor substrate 1 and 2 in normal liver development. Gastroenterology 2003;125:624.

BASIC RESEARCH

Gyorgy Baffy, M.D.
• UCP2 In the Pathogenesis of Steatohepatitis, NIH/National Institute of Diabetes and Digestive and Kidney Diseases

Jose Behar, M.D.
• Myogenic Disorders of the Gallbladder, NIH/National Institute of Diabetes and Digestive and Kidney Diseases

Peiro Biancani, Ph.D.
• Inflammation and Signal Transduction in Esophagitis, NIH/National Institute of Diabetes and Digestive and Kidney Diseases
• Biophysical Principles of Peristaltic Phenomena, NIH/National Institute of Diabetes and Digestive and Kidney Diseases

Weibiao Cao, Ph.D.
• COBRE - Transduction in Acid Induced Progression of Barrett’s Esophagus (BE) From Metaplasia to Dysplasia, NIH/National Center for Research Resources
• Contractile Signal Transduction in Ulcerative Colitis, NIH/National Institute of Diabetes and Digestive and Kidney Diseases
• Interleukin 1B and Contractile Signal Transduction in Ulcerative, Lifespan

Suzanne de la Monte, M.D.
• Effects of Ethanol on Insulin Signaling in the Brain, NIH/National Institute on Alcohol Abuse and Alcoholism

Ji-Su Li, M.D.
• Molecular Characterization of Carboxypeptidase D, American Liver Foundation
• Role of Glycine Decarboxylase in Hepadnaviral Infection, NIH/National Cancer Institute

Zixu Mao, M.D.
• Transcription-Dependent Mechanisms of Neuronal Survival and Apoptosis in Neurodegenerative Diseases, Rhode Island Foundation
• Calcium Dependent Survival of Developing Neurons, NIH/National Institute of Child Health and Human Development

Steven Moss, M.D.
• Regulation of Gastric Epithelial p27KIP1 By H. Pylori, Foundation for Digestive Health and Nutrition
• Helicobacter Pylori and Decreased p27kipl in Gastric Carcinogenesis, Concern Foundation

Shuping Tong, M.D.
• Molecular Basis for Unusual Replication and Secretion Phenotypes of Hepatitis B Virus Variants, Lifespan

Jack Wands, M.D.
• Research Training Program in Gastroenterology, NIH/National Institute of Diabetes and Digestive and Kidney Diseases
• Ethanol, IRS-1 Signaling and Neuronal Migration, NIH/National Institute on Alcohol Abuse and Alcoholism
• Centers of Biomedical Research Excellence (COBRE) Mechanisms of Cellular Injury and Transformation, NIH
• Effects of Alcohol on the Liver, NIH/National Institute on Alcohol Abuse and Alcoholism
• HBV and HCV in Alcoholics, NIH/National Institute on Alcohol Abuse and Alcoholism
• Vascularized Tissue Sensors for Detection of Genetic Toxins and Pathogens, DARPA, Massachusetts Institute Technology
• Pathogenesis, Immunodiagnosis and Therapy of HCC, NIH/National Cancer Institute

Zuo-Liang Xiao, M.D.
• Effects and Mechanisms of Actions of Progesterone (PG) on Human Colonic Muscle Function, Lifespan