Innovation in Medical Education
Brown offers the opportunity to medical students, residents, and fellows to experience medical education in another country. The existing programs are exchange programs open to Americans and foreigners at various levels of training. The exchange with Bologna University involves medical student and doctoral students. The goals are to expose the participants to:

1. Different teaching methods
2. Different health systems
3. The role of physician in other cultures and societies.

In some countries, formal mini-courses in comparative health are offered jointly by the faculty of the two universities.

Becoming the doctor for the future

Leading the change

The students/faculty visiting Brown medical school become familiar with the recently developed innovative integrated curriculum. It was developed to prepare physicians for the future of medicine, which is patient centered, technologically advanced and global. The need for establishing meaningful outcomes and quality measures is also stressed at all levels of training.

Guiding principles of the curriculum

- Competency based
- Integration of medical knowledge
- Development of doctoring skills
- Hands-on active learning.

WE ARE INTERESTED IN EXPANDING OUR PROGRAMS AND PARTNERING WITH OTHER MEDICAL SCHOOLS

FOCUSES

1) MEDICAL EDUCATION
2) COMPARATIVE HEALTH

The Warren Alpert Medical School of Brown University is a part of the Division of Biology and Medicine at Brown University

- First class graduated 1975
- 457 medical students, 727 residents and fellows, 2,566 faculty
- Eight affiliated hospitals in five miles radius
- New state of the art building opened August 2011

CENTERS AND PROGRAMS

- AIDS Research Center for Area Health Education Center of Rhode Island
- Biomedical Engineering Center for Biomedical Excellence for Cancer Signaling Networks, Center of (COBRE)
- Brown Institute for Brain Science
- Cancer Research Development Center for (COBRE)
- Children at Risk, Center for the Study of Chronobiology and Sleep Lab
- Computational Molecular Biology, Center for Environmental Change Initiative
- Excellence in Women’s Health, Center for Fatigue Treatment Program
- Genomics and Proteomics, Center for Global Health Initiative
- Hallett Center for Diabetes and Endocrinology at Rhode Island Hospital
- Liver Research Center
- Molecular Medicine, Laboratories for Norman Prince Neurosciences Institute
- Primary Care Genomics Laboratory and Translational Research Center
- Superfund Basic Research Program
- Vision Research Center for

The Liver Center

Currently ONGOING projects

- Development and implementation of vaccines for liver and pancreatic cancer. Studies involve animal models and early clinical trials using nanoparticle-based vaccines and small molecule inhibitors developed at the LRC that will reduce tumor cell migration invasion and metastasis.
- Studies on immunotherapy of liver and gastric cancer. Investigations involve the development and use of peptide-based vaccines to stimulate cellular immune responses against tumor associated cell surface antigens and bacteria such as H. pylori which is a major risk factor for gastric cancer.
- Role of Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) infection in the pathogenesis of liver cancer. These studies involve the interaction between viral and cellular proteins that stimulate liver growth through activation of signal transduction pathways and place the liver at risk for cellular transformation.
- Study of mutations in the HBV genome that changes the properties of viral replication, secretion and expression of proteins important in viral persistence.
- Role of "occult" HBV infection in the etiology of chronic liver disease and in patients with and without co-existing HIV infection. These studies involve the molecular characterization of HBV genomes that may predispose to low level "occult" infection and contribute to the risk of liver cancer in co-infected individuals.
- Activation and characterization of signal transduction pathways important in liver growth and transformation.
- Role of chronic alcohol consumption on liver injury and repair. Importance of insulin signaling and resistance in the liver as a mechanism for alcohol adverse effects.
- Studies on the pathogenesis of non-alcoholic steatohepatitis (NASH) in animal models and humans that involves investigations of insulin resistance and regulation of downstream gene expression in hepatic tissues.
- The importance of the liver-brain access. Role of ceramides produced by the liver and the subsequent neurocognitive alterations observed with chronic liver disease and especially with NASH and alcohol induced steatohepatitis (ASH).
- Biomarker discovery using "state of the art" proteomics for the early diagnosis of human hepatocellular carcinoma and other GI malignancies using blood and liver tissue derived from animal models and humans.

These are representative examples of the ongoing projects available in the Liver Research Center and the Division of Gastroenterology. However, there are many other projects could also be attractive for participation by trainees from Europe studying at Brown.

The Liver Research Center is a recently constructed 13,000-sq. ft. facility emphasizing molecular biology of liver diseases.

It is directed by Dr. Jack Wands Professor of Medicine at Brown University. Many core shared facilities as the following are available to the investigators:

- Genomics Core
- Ledux Biomaging Facility
- Magnetic Resonance Imaging Research Facility
- Molecular Pathology Research Core
- Rodent Mouse Transgenic and Gene Targeting Facility
- Proteomics Facility
- Rhode Island Biobank
- Structural Biology Facility
- X-ray Reconstruction of Moving Morphology

http://gastroenterology.med.brown.edu/LiverResearchCenter/