

### **Discoveries**

Our commitment to both research and excellence has led to many ground-breaking discoveries.

- Identification and cataloging of 328 distant galaxies
- The link between smoking and emphysema
- Development of the drug ReoPro®, recommended for all cardiac angioplasties
- An ultrasound method to speed up healing of bone fractures
- Creation of the smallest electronic switch, using just one electron
- The cause of Lyme disease
- 3-D imaging software for 3-D colonoscopy
- The golden bamboo lemur, Hapalemur aureus
- The most primitive fossil bird, linking birds to dinosaurs
- Construction of the first nuclear magnetic resonance image of a living organism
- Homo floresiensis, a hobbit-like
  17,000 year-old hominid
- The "Giant Frog From Hell," Beelzebufo ampinga, a 10-pound ancient frog in Madagascar
- Design and synthesis of a new class of weakened polioviruses, demonstrating that a synthetic weakened virus can immunize an animal
- Thermoplastic spray paint made from old plastic bottles
- Parthenogenesis (virgin birth) in a female hammerhead sharks
- The first commercially successful bar code reader
- A new species of mouse lemur Microcebus mittermeieri

### **Facilities**

Stony Brook boasts modern state-of-the-art facilities for the campus community.

- The Charles B. Wang Center, celebrating Asian and American cultures, is a conference and events facility, a showcase for the arts, and a sophisticated global communications center allowing the worldwide exchange of ideas in real time.
- Our Kenneth P. LaValle Stadium, seating 8,300 fans, is home to Stony Brook's Division I teams, including football, soccer, and lacrosse.
- Stony Brook Medicine is the region's only academic medical center, providing advanced, specialized health care to serve the needs of Long Island residents.
- Our 246-acre Research and Development Park is home to the Center of Excellence in Wireless and Information Technology (CEWIT), a test bed for emerging wireless technologies, and the Advanced Energy Research and Technology Center.
- Campus Residences recently completed a 173,000 sq.ft., 600 bed Residence Hall incorporating sustainable design strategies. It is currently registered under the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) program and the university is close to achieving a LEED Silver rating.
- Completion of a new \$37.5 million 85,000 square foot Campus Recreation Center is expected in 2012. The CRC is designed to become a campus landmark with glass windows spanning much of the exterior. It will be visibly prominent and inviting, providing those on the outside with a view of the many diverse activities available within.
- Stony Brook Manhattan, at 401 Park Avenue South, is a state-of-the-art facility featuring classrooms for undergraduate and graduate classes, conference rooms, offices, a new Center for Wine, Food, and Culture, and a reception space for special events.

### Research

The breadth of scholarly and creative activity engaged in by Stony Brook researchers not only generates new knowledge, but also infuses our undergraduate and graduate curricula and has a substantial impact on the region's economy.

- Stony Brook faculty members have been responsible for more than 1,500 inventions and more than 450 patents.
- With 70 academic departments, Stony Brook is among the top 40 institutions funded by the National Science Foundation.
- Total expenditures on Organized Research, from external and internal sponsors, have reached \$210 million, reflecting activity in some 1,200 projects involving hundreds of investigators and providing jobs for 1,800 individuals.
- Stony Brook has been responsible for 95% of the licensing revenues that have won SUNY its top 20 national ranking in technology transfer, according to the Association of University Technology Managers.
- Stony Brook is one of only 94 institutions in the country to be designated a "Very High Research University" by the Carnegie Foundation.
- The University co-manages Brookhaven National Laboratory, joining such universities as Princeton, MIT, Cornell, University of California, and University of Chicago that run federal laboratories.
- New York Blue—one of the planet's most powerful supercomputers—links Stony Brook's New York Center for Computational Sciences with Brookhaven National Laboratory. New York Blue is capable of 102 trillion calculations per second.



## **Faculty**

Stony Brook's distinguished faculty, celebrated for their exceptional scholarship and innovative thinking, continue to receive the highest recognition.

#### Honors, Prizes, and Awards

- ★ Nobel Prize in Economics
- ★ Nobel Prize in Physics
- ★ Nobel Prize in Medicine
- ★ Pulitzer Prize
- ★ Crafoord Prize
- ★ Fields Medal in Mathematics
- ★ Abel Prize in Mathematics
- ★ National Medal of Science (5)
- ★ National Medal of Technology (2)
- ★ Benjamin Franklin Medal
- ★ National Book Critics Circle Award
- ★ Grammy Award
- ★ Chevalier de l'Ordre National de Merit de la France
- ★ Chevalier de l'Ordre National de Madagascar
- ★ Obie Award
- ★ Howard Hughes Medical Institute Award
- ★ Humboldt Research Award for Senior U.S. Scientists
- ★ Principe de Asturias Prize
- ★ Fellows of the Royal Society (5)
- ★ MacArthur Foundation Fellows (3)
- ★ Members of the National Academy of Engineering (3)
- ★ Members of the National Academy of Sciences (18)
- ★ Members of the American Academy of Arts and Sciences (15)
- ★ Guggenheim Fellows (87)
- ★ Fulbright Fellows (54)
- ★ Sloan Foundation Fellows (46)
- ★ Rockefeller Foundation Fellows (13)
- ★ Institute of Medicine Members (3)
- ★ NASA Exceptional Scientific Achievement Award
- ★ NASA Distinguished Service Medal

## **Education**

As a leading public university, we are proud of our exceptionally strong academic programs and policy of selectivity that bring the best students to Stony Brook.

- One of only 9 public institutions recognized for its undergraduate research program by *U.S.News & World Report*.
- The prestigious London *Times Higher Education World University Rankings* places Stony Brook University in the top 1% of universities worldwide.
- A member of the invitation only Association of American Universities (AAU). We are one of only 61 members, joining such institutions as Harvard, Yale, Johns Hopkins, Princeton, and Stanford.
- We are one of 16 Leadership Institutions named by the Association of American Colleges and Universities.
- Our Graduate School was awarded the CGS/Peterson's Award for Innovation in promoting an Inclusive Graduate Community.
- Our School of Medicine was named one of the nation's top 50 primary care training programs by U.S. News and World Report.
- Our School of Marine and Atmospheric Sciences was given top ranking in coastal oceanography, ranked eighth overall by the National Research Council for Ph.D. programs in oceanography.
- We are one of ten universities given a National Science Foundation recognition award for successful linking of research and education at all levels, and in creating a "discovery-rich environment" on campus.
- We are eighth among public institutions placing students in graduate programs in medicine, law, and business, according to a Wall Street Journal survey of undergraduate programs.
- Payscale.com ranked us 22 among all public universities by salary potential.

## **Schools & Colleges**

Stony Brook offers more than 150 undergraduate programs, more than 100 master's programs, and more than 40 doctoral programs. The University is divided into 12 academic units:

- The College of Arts and Science offers degree programs in fine arts and humanities, biological and physical sciences, mathematics, and social and behavioral sciences.
- The School of Journalism is the first and only undergraduate school of journalism in New York State's public university system.
- The School of Marine and Atmospheric Sciences is one of the leading coastal oceanography institutions in the world.
- The College of Business offers a major in business management, an MBA programs, and an MS degree in Management and Policy.
- The College of Engineering and Applied Sciences offers a wide range of programs, including seven ABET-accredited majors.
- The School of Nursing offers full- and parttime educational opportunities in preparation for professional nursing practice.
- The School of Health Technology and Management offers baccalaureate, master's, and doctoral degrees in both clinical and non-clinical areas.
- The School of Social Welfare offers undergraduate and graduate degree programs in social work.
- The School of Medicine consists of eight basic science and 18 clinical departments providing preclinical and clinical education of medical students.
- School of Dental Medicine offers the Doctor of Dental Surgery degree.
- The Graduate School offers advanced degree programs in many fields leading to the master's and doctoral degrees.
- The School of Professional Development provides part-time graduate education for working adults.



- Christoph Carl H. Adami '91 PhD, Professor, California Institute of Technology; Recipient of the NASA Exceptional Achievement Medal
- Craig Allen '79, Chief Meteorologist, CBS "This Morning" & WCBS Newsradio 88
- Michael Anastasio PhD, Director of the Los Alamos National Laboratory
- Josephina Victoria "Joy" Behar, '66 MA, Co-host of the talk show The View
- Mark Bridges, '83 BA, Oscar Award Winner 2012 for Best Costume Designer
- Linda A. Capuano, Vice President, Emerging Technology, for Marathon Oil Corporation
- Wen-Ping Chen; '90, Professor, National Central University, Taiwan
- "Jack" Chuanjie Song, CIO, Agricultural Bank of China Shandong and Shandong provincial legislator
- Daniel Corbett '90 BS, Weather forecaster on the BBC News at Six
- Patricia S. Cowings '70, Director of Pyschophysiological Research at NASA's Ames Research Center; the first American woman astronaut
- Barry Cozier, '71, former Associate Justice of the Appellate Division of the New York State Supreme Court
- Jane Delgado, '81 PhD, President/CEO of National Alliance for Hispanic Health
- Theodore G. Eppenstein '68, Lecturer on Arbitration, argued landmark McMahon case before the U.S. Supreme Court
- Diane Farr BA, Actress best known for role as FBI agent Megan Reeves in CBS series NUMB3RS.
- Jacqueline Fischer, '81, head of Naval Research Laboratory's Infrared-Submillimeter Astrophysics & Techniques Section in the Remote Sensing Division.
- Lee A. Fleisher, '86 MD, Professor and Chair of Anesthesiology and Critical Care and Professor of Medicine at the University of Pennsylvania School of Medicine
- Rear Admiral Steven K. Galson, '78, former Acting U.S. Surgeon General
- Robert Geary '68, Senior executive vice president of business affairs at Columbia TriStar Motion Picture Group

- David Hillel Gelernter '82 PhD, Professor of Computer Science at Yale University and author of *Drawing Life:* Surviving the Unabomber
- Richard Gelfond, '76, Co-Chairman and Co-CEO, IMAX Corporation
- Christine Goerke, '94 BA, Opera Singer, recipient of the 2001 Richard Tucker Award, 1999 & 2003 Grammy Award for Best Choral Performance
- Dario Gonzalez '79 MD, Medical Director of New York's Urban Search and Rescue Team - Task Force One - at "Ground Zero" for 9/11 World Trade Center Tragedy
- Kedar P. Gupta, '73, Founder of Advanced Renewable Energy Company, producing energy-efficient LED bulbs
- Gail S. Hackett, '85, MasterCard International Executive Vice President, General Manager, Citibank Global Team
- John Harris '78, Professor of Physics, Yale University, Spokesperson for STAR
- Julia R. Heiman, '75 PhD, American sexologist and psychologist; fifth Director of the Kinsey Institute for Research in Sex, Gender, and Reproduction at Indiana University
- John Hennessey '77 PhD,President, Stanford University
- Scott Higham '82, Investigative Journalist for The Washington Post and winner of the 2002 Pulitzer Prize
- David S. Joachim, '93 BA, Weekend Editor in the Washington Bureau of The New York Times.
- Stephen Kaplan, MA, Founder/Director of the Vampire Research Center and Parapsychology Institute of America
- Perry Kivolowitz, '81 BS, Won an Academy Award for Scientific & Technical Achievement in 1996 for invention of shape-driven warping and morphing
- Hyun-Soon Lee, '79 MS, '81 PhD, Vice Chair of the Research and Development Division, Hyundai Motor Company
- Hal Lieberman '75 BA, Former president of production for Universal Pictures

- Russell T. Lewis '69, Former CEO and President, The New York Times Company
- Steven Mackey '80 MA, Grammy Award Winner 2012, Professor and Chair of the Department of Music at Princeton University
- Lynn Matthews, '98, Astronomer, Haystack Observatory
- Matthew A. Moskowitz '95, Editor/Producer at CNN
- Joe Nathan, '97, Closer for Minnesota Twins Baseball Team
- Jon Oringer, '97 BS, Founder/CEO of Shutterstock; Pioneered the subscriptionbased microstock photography business model when he created Shutterstock in 2003
- Sandy Pearlman '66 BA, Music producer, manager, poet, and songwriter, best known for his work with the band Blue Oyster Cult
- Hanspeter Pfister, Professor, Harvard University; chief architect of VolumePro, Mitsubishi Electric's award-winning real-time volume rendering hardware for PCs.
- Terry Pinkard, '74 PhD, noted Hegel scholar and Professor of Philosophy at Georgetown University
- Carolyn Porco, '74, Leader of Imaging Team for the Cassini Mission to Saturn
- V. Ramanathan '73, Distinguished Professor of Atmospheric and Climate Sciences at the Scripps Institution of Oceanography
- Jef Raskin '64 BS, '65 BA, Author and Co-Creator of the Macintosh Computer at Apple Computer, Inc.
- John Reiner '78, Syndicated cartoonist, Laugh Parade, Howard Huge, The Lockhorns
- Stuart Rosenblum, '87 PhD, named a "Hero of Chemistry" by the ACS in 2004, for his role in the discovery of cholesterol-lowering drug Zetia as part of a Schering-Plough team
- Tamara Schnurr, '96 MD, former flight surgeon for the U.S. Navy Blue Angels
- Laura Schlessinger, BS, Nationally syndicated radio talk show host of the Dr. Laura show
- Abraham Silberschatz, PhD, Professor and Chair of the Computer Science Department at Yale University
- Dan Slepian, '93, NBC Dateline producer
- Scott Wolk, '96, Astrophysicist, Harvard-Smithsonian Center for Astrophysics



### Education, Arts, and Culture

Center for India Studies

Center for Italian Studies

Center for Lifelong Learning

Center for Teaching,

Center for Science, Math and Technology Education

Center for Wine, Food, and Culture

Charles B. Wang Center

**Humanities Institute** 

Language Laboratory and Research Center

Latin American & Caribbean Studies Center

Poetry Center

Point of Woods Laboratory and Parenting Clinic

Pollock-Krasner House and Study Center

Reinvention Center

Staller Center for the Arts

#### Social and Behavioral Sciences

Center for Global History

Center for Study of Working Class Life

Center for Survey Research

Turkana Basin Institute

### Physical Sciences, Mathematics and Engineering

Center for Thermal Spray Research

Garcia Center for Polymers at Engineered Interfaces

NYS Center for Advanced Technology in Sensor Systems

and Diagnostic Tools

C.N. Yang Institute for Theoretical Physics

Institute for Mathematical Sciences

Laser Teaching Center

Mass Spectrometer Facility

Mineral Physics Institute

**Nuclear Theory Institute** 

**Nuclear Structure Laboratory** 

**Proteomics Center** 

Simons Center for Geometry and Physics

### Biomedical Sciences

ALS Comprehensive Care Center

Carol M. Baldwin Breast Care Center

Center for Medical Humanities, Compassionate Care, and

Bioethics

Center for Biotechnology

Centers for Molecular Medicine and Biology Learning Laboratories

Center for Developmental Genetics

Center for Infectious Diseases

Center for Structural Biology

Cerebrovascular and Stroke Center

Cody Center for Autism and Developmental Disabilities

**Heart Center** 

Institute for Cell and Developmental Biology-Biochemistry

Institute for Medicine in Contemporary Society

Institute for Mental Health Research- Psychiatry

Institute of Chemical Biology and Drug Discovery

Long Island Cancer Center

Long Island State Veterans Home

Lyme Disease Center

Molecular Toxicology Center

Pediatric Multiple Sclerosis Center

Stony Brook Medicine

Trauma Center

#### Environmental Sciences

Center for Environmental Molecular Science

Coastal Ocean Action Strategies Center

Institute for Terrestrial and Planetary Atmospheres

Institute for Ocean Conservation Science

Living Marine Resources Institute

Long Island Groundwater Research Institute

Marine Sciences Research Center (MSRC)

New York State Sea Grant Institute

Waste Reduction and Management Institute

### Technology and Business

Advanced Energy Research and Technology Center

Center for Emerging Technologies

Center of Excellence in Wireless and Information

Technology

New York Center for Computational Science

Small Business Development Center