1.1 OVERVIEW Introduction



Carnegie Mellon is a global research university of more than 11,000 students, 84,000 alumni and 4,000 faculty and staff. Recognized for its world-class arts and technology programs, collaboration across disciplines and innovative leadership in education, Carnegie Mellon is consistently a top-ranked university. At Carnegie Mellon, our core values of innovation, creativity, problem-solving and collaborative teamwork provide the foundation for everything we do. Guided by these values, Carnegie Mellon students experience a distinctive education that gives them tools to pioneer solutions through an approach that values both teamwork and leadership. The effect is both far-reaching and close to home. Its real-world impact is visible within our local communities, across the country and around the world.

Over 11,000 undergraduate and graduate students at Carnegie Mellon receive an education characterized by its focus on creating and implementing solutions to solve real problems, interdisciplinary collaboration and innovation. A small student-to-faculty ratio provides an opportunity for close interaction between students and professors.

The university is committed to broadening and enhancing undergraduate education, allowing students to explore various disciplines while maintaining a core focus in their primary area of study. Realizing that today's graduates must understand international issues, Carnegie Mellon is committed to providing a global education for its students and continues to expand its international presence and programs.

Carnegie Mellon's unique mix of strengths in technology, business, public policy and the arts is distinctive among national research universities. Its schools and specialty programs are consistently ranked among the best in the country by U.S. News & World Report, Business Week and The Wall Street Journal.

Carnegie Mellon is one of the most technologically sophisticated campuses in the world. When it introduced its "Andrew" computing network in the mid-1980s, it pioneered educational applications of technology. In 2000, Carnegie Mellon continued its technical tradition with a campus-wide wireless network. Today, Carnegie Mellon consistently ranks as one of the "most wired" campuses in America.

Carnegie Mellon Office of Government Relations

Pittsburgh office: 412.268.7778 Washington, D.C. office: 202.547.8515 email: governmentrelations@cmu.edu Web: www.cmu.edu/govrel





Jared Cohon has been president of Carnegie Mellon University since 1997. He came to Carnegie Mellon from Yale, where he was dean of the School of Forestry and Environmental Studies from 1992 to 1997. He started his teaching and research career in 1973 at Johns Hopkins, where he was a faculty member in the Department of Geography and Environmental Engineering for 19 years. He also served as Assistant and Associate Dean of Engineering and Vice Provost for Research at Johns Hopkins. Dr. Cohon earned a B.S. degree in civil engineering from the University of Pennsylvania in 1969 and a Ph.D. in civil engineering from

the Massachusetts Institute of Technology in 1973.

An author, coauthor, or editor of one book and more than 80 professional publications, Dr. Cohon is an authority on environmental and water resource systems analysis, an interdisciplinary field that combines engineering, economics and applied mathematics. He has worked on water resource problems in the United States, South America and Asia and on energy facility siting, including nuclear waste shipping and storage. In addition to his academic experience, he served in 1977 and 1978 as legislative assistant for energy and the environment to the late Honorable Daniel Patrick Moynihan, United States Senator from New York. President Bill Clinton appointed Dr. Cohon to the Nuclear Waste Technical Review Board in 1995 and appointed him as chairman in 1997. His term on the Board ended in 2002. President George W. Bush appointed Dr. Cohon in 2002 to the Homeland Security Advisory Council and President Barack Obama reappointed him in 2009.

During his presidency, Carnegie Mellon has continued along its trajectory of innovation and growth. Priorities have included: undergraduate education; new interdisciplinary initiatives in information technology, biotechnology, energy and environment, and the fine arts and humanities; diversity; international initiatives; and the economic development of southwest Pennsylvania.

SEVEN DIVERSIFIED SCHOOLS

Carnegie Mellon's seven schools boast diverse focuses, but share a common mission: innovation.

The H. John Heinz III College offers courses in arts, public policy, health care and educational technology management designed to develop the cultural, government and civic leaders of tomorrow. The Tepper School of Business, one of the top business schools in the world, was the first in the country to offer classes in e-commerce and entrepreneurship. And the College of Engineering (Carnegie Institute of Technology) is one of the foremost engineering schools in the United States. Its partnerships with industry and its inter-disciplinary research initiatives produce graduates who know how to transfer their fundamental knowledge to industrial practice.

The College of Fine Arts, home to the oldest school of drama in the nation, claims an outstanding roster of artists, producers, actors and designers among its graduates. The College of Humanities and Social Sciences explores the human experience through programs as diverse as cognitive neuroscience and creative writing. The Mellon College of Science is home to researchers who are leading inventive programs and research centers dealing with computational biology, molecular biosensors and imaging, nuclear magnetic resonance, polymer chemistry, green chemistry, computational finance and astrophysics.

The School of Computer Science leads the world in computing, artificial intelligence, human-computer interaction, machine translation and robotics. Its Robotics Institute, founded in 1979, was the first in the world to offer a doctoral degree in robotics.

Each of these schools is a leader in its field. And the points where they intersect are the places that engage Carnegie Mellon's unique culture: creative minds collaborating to solve the most important problems facing the nation and world.

Notable Alumni and Faculty

Her Highness Sheikha Moza bint Nasser al-Missned,

Chair of Qatar Foundation, Forbes 100 Most Powerful Women

Keith Block, Executive Vice President, Oracle North America

 $\textbf{Steven Bochco}, \, \text{TV producer}, \, \textit{ER, NYPD Blue}$

Albert Brooks, filmmaker, Broadcast News

Mary Ann Chiulli, U.N. Chief of Systems Support

George Cowan, Manhattan Project scientist

Ted Danson, Emmy-winning actor, Cheers, Becker

Clinton J. Davisson, Nobel Laureate, Physics, 1937

Robert Dennard, inventor of DRAM

Iris Rainer Dart, novelist

Dina Dublon, former CFO of J.P. Morgan Chase

David Farber, co-creator of ARPANET

Yoshiaki Fujimori, President and CEO, GE Consumer Finance

Paul Flory, Nobel Laureate, Chemistry, 1974

Javier Grillo-Marxuach, Emmy-winning writer and producer, *Lost, Medium*

Jim Gosling, inventor of Java programming

Josh Groban, singer/songwriter

Ralph Guggenheim, Oscar-winning producer, *Toy Story* and *Toy Story 2*

John L. Hall, Nobel Laureate Physics, 2005

Edward C. Prescott, Nobel Laureate, Economic Sciences, 2004

Jack Klugman, actor, The Odd Couple

Vinod Khosla, Co-founder, Sun Microsystems

Walter Kohn, Nobel Laureate, Chemistry, 1998

Elaine Konigsburg, Newberry Medal-winning author

Finn E Kydland, Nobel Laureate, Economic Sciences, 2004

Stephanie Kwolek, inventor of Kevlar, National Medal of Technology

Paul Lauterber, Nobel Laureate, Physiology or Medicine, 2003

Kai-Fu Lee, President, Greater China, Google Inc.

Keith Lockhart, conductor, Boston Pops Orchestra

Robert E. Lucas, Jr., Nobel Laureate, Economic Sciences, 1995

Ming-Na, actor, ER, The Joy Luck Club

Rob Marshall, director, Chicago, Memoirs of a Geisha, Nine

Merton H. Miller, Nobel Laureate, Economic Sciences, 1990

Edgar Mitchell, Apollo astronaut

Franco Modigliani, Nobel Laureate, Economic Sciences, 1985

Dale Mortensen, Nobel Laureate, Economic Sciences, 2010

John F. Nash Jr., Nobel Laureate, Economic Sciences, 1994

Gela Nash Taylor, Co-founder of Juicy Couture fashion line

George Peppard, actor, Breakfast at Tiffany's

John A. Pople, Nobel Laureate, Chemistry, 1998

Ed Rubin, Nobel Laureate, Peace, 2007

Judith Resnik, Challenger astronaut

Stephen Schwartz, composer

Clifford G. Shull, Nobel Laureate, Physics, 1994

Herb Simon, Nobel Laureate, Economic Sciences, 1978

Candace Sheffield Matthews, Chief Marketing Officer,

Amway Global

Luke Skurman, Founder and CEO, College Prowler

Otto Stern, Nobel Laureate, Physics, 1943

Blair Underwood, actor, L.A. Law, LAX

Luis von Ahn, Creator of CAPTCHA security programs and Assistant Professor

Andy Warhol, Artist and pop culture icon

Red Whittaker, Tartan Racing team leader and University Professor

Bud Yorkin, TV producer, All in the Family