Huntsman Cancer Institute Researcher Named a MacArthur Foundation Fellow

Known as the “Genius Award,” Recipients Receive $500,000

September 23, 2008, Salt Lake City—“I was just doing something boring, like spell checking, when I got the call last week,” explained Susan Mango, Ph.D. to the students in her lab as they gathered around her today upon hearing she was one of only 25 recipients of the annual MacArthur Fellowship award sponsored by the MacArthur Foundation. “I had no idea anyone had nominated me and was completely surprised. I still can hardly believe it.” The award recipients are each given $500,000 over the course of five years, to be used at their discretion.

Mango, an investigator at Huntsman Cancer Institute and professor in the Department of Oncological Sciences at the University of Utah, is a developmental biologist and leads a research team that focuses on discovering the genes that control the formation and physiology of the digestive tract. The genes necessary for these processes are often mutated in cancer or in birth defects. Mango’s research also focuses on the cellular mechanisms that generate an epithelial tube, the role of the digestive tract during starvation, and the processes that govern how cells are specified to become part of the digestive tract.

“Dr. Mango is a vibrant young biomedical researcher with a remarkable career,” Michael Young, president of the University of Utah, said. “Dr. Mango’s research accomplishments, her vivacious enthusiasm for science, her clarity in thinking and presenting her work has catapulted her to a national
reputation and leadership role within the broad fields of developmental, systems, and molecular biology in just a few years of starting her independent laboratory.”

Just last week a paper co-authored by Mango was published in the journal *Current Biology*, describing a previously unknown link between two genes—one associated with aging, the other with certain types of cancer. The research also indicates calorie intake can affect how these genes operate, possibly increasing lifespan in animals, an effect which has been previously observed but is not yet fully explained. [http://healthcare.utah.edu/publicaffairs/news/current/Cancer%20and%20Worms.html](http://healthcare.utah.edu/publicaffairs/news/current/Cancer%20and%20Worms.html)

The announcement from the MacArthur Foundation follows:

Chicago, IL) — The MacArthur Foundation today named 25 new MacArthur Fellows for 2008. This past week, the recipients learned in a single phone call from the Foundation that they will each receive $500,000 in “no strings attached” support over the next five years. The new Fellows work across a broad spectrum of endeavors and include a neurobiologist, a saxophonist, a critical care physician, an urban farmer, an optical physicist, a sculptor, a geriatrician, a historian of medicine, and an inventor of musical instruments. All were selected for their creativity, originality, and potential to make important contributions in the future.

“The MacArthur Fellows Program celebrates extraordinarily creative individuals who inspire new heights in human achievement,” said MacArthur President Jonathan Fanton. “With their boldness, courage, and uncommon energy, this new group of Fellows, men and women of all ages in diverse fields, exemplifies the boundless nature of the human mind and spirit.”

MacArthur Fellowships offer the opportunity for Fellows to accelerate their current activities or take their work in new directions. The unusual level of independence afforded to Fellows underscores the spirit of freedom intrinsic to creative endeavors. The extraordinary creativity of MacArthur Fellows knows neither boundaries nor the constraints of age, place, and endeavor.

Recipients this year include:

- an **astronomer** designing experiments and devices to advance understanding of the geometry of the universe and the story of both its beginning and its end (Adam Reiss);
- a **neuroscientist** tracing the natural interactions of differentiating neurons, bringing us closer to developing effective methods for treating central nervous system damage (Sally Temple);
• a novelist exploring the circumstances that lead to ethnic conflict in works inspired by events in her native Nigeria (Chimamanda Adichie);

• an inventor of musical instruments that transform and transcend the musical experience and navigate the boundaries between live and recorded sound (Walter Kitundu);

• an urban farmer applying low-cost technologies to the cultivation, production, and delivery of healthy foods to underserved urban populations here and abroad (Will Allen);

• a geriatrician transforming treatment for the seriously ill into more humane and effective care (Diane Meier);

• an optical physicist demonstrating that power can be transmitted wirelessly, opening the door to the possibility of a range of devices operating free of traditional power sources (Marin Soljačić);

• a saxophonist drawing from a variety of jazz idioms and the music of his native Puerto Rico to create complex, accessible sounds that overflow with emotion (Miguel Zenón);

• a critical care physician devising life-saving, clinical practices to improve patient safety in hospitals and spare countless lives from the deadly consequences of human error (Peter Pronovost);

• a structural engineer restoring cathedrals and other structures of the distant past and identifying ancient technologies for use in contemporary constructions (John Ochsendorf);

• a stage lighting designer pushing the visible boundaries of her art form with painterly lighting that evokes mood and sculpts movement in dance, drama, and opera (Jennifer Tipton);

• an anthropologist illuminating the intellectual and emotional life of ancient Mesoamerican peoples through insightful interpretations of hieroglyphic inscriptions and figural art (Stephen Houston).

“Our goal, each year, is to surprise ourselves and others by the creativity, distinctiveness, and reach of those we identify and support. We have surprised ourselves again this year. As a group, this new class of Fellows takes one’s breath away. Each is an original, and each confirms that the creative individual is alive and well, at the cutting edge, and at work to make our world a better place,” said Daniel J. Socolow, Director of the MacArthur Fellows Program.

The MacArthur Fellows Program was the first major grantmaking initiative of the Foundation. The inaugural class of MacArthur Fellows was named in 1981. Including this year’s Fellows, 781 people, ranging in age from 18 to 82 at the time of their selection, have been named MacArthur Fellows since the program began.

The selection process begins with formal nominations. Hundreds of anonymous nominators assist the Foundation in identifying people to be considered for a MacArthur Fellowship. Nominations are accepted only from invited nominators, a list that is constantly renewed throughout the year. They are chosen from many areas and challenged to identify people who demonstrate exceptional creativity and promise. A 12-member Selection Committee, whose members also serve anonymously, meets regularly to review files, narrow the list, and make final
recommendations to the Foundation’s Board of Directors. The number of Fellows selected each year is not fixed; typically, it varies between 20 and 25.