

Media Contact: Russell Rian
214-648-3404
russell.rian@utsouthwestern.edu

UT Southwestern's Dr. Beth Levine elected to National Academy of Sciences

DALLAS – April 30, 2013 – The National Academy of Sciences today announced the election of Dr. Beth Levine, professor of internal medicine and microbiology, and a Howard Hughes Medical Institute (HHMI) investigator at UT Southwestern Medical Center, to membership, representing one of the highest honors attainable by an American scientist.

With Dr. Levine's election, UT Southwestern now has 20 members of this prestigious society among its faculty, a distinction that places UT Southwestern among the very best academic medical centers in the country.

"I am thrilled to be acknowledged by my fellow researchers with such a prestigious honor. I am extremely appreciative to those who have supported me along the way and for all those who have helped contribute to the scientific discoveries in our lab," said Dr. Levine, who directs the Center for Autophagy Research in Internal Medicine and who holds the Charles Cameron Sprague Distinguished Chair in Biomedical Science. "Most of all, I appreciate the freedom I have enjoyed throughout my career to pursue new scientific ideas – as this freedom has been at the root of our discoveries. We hope to use our discoveries to improve the prevention and treatment of human disease."

Dr. Levine's research explores a cellular process called autophagy, in which cells devour their own damaged or unneeded components. Her laboratory identified the first known gene in mammals that is responsible for autophagy. Her research has since shown that defects in the expression or function of this specific gene, called *beclin 1*, may contribute to cancer, aging, neurodegenerative diseases such as Alzheimer's, and infectious diseases. Conversely, *beclin 1* activity and the autophagy pathway appear to be important for protection against breast, lung, ovarian, and perhaps other cancers, as well as for fighting off viral and bacterial infections, and protecting individuals from neurodegenerative diseases and aging.

Dr. Levine's current research focuses on the role of autophagy in normal development and control of lifespan, the mechanisms by which autophagy genes suppress tumors, the biochemical mechanisms that regulate *beclin 1* function, and the role of autophagy as a defense mechanism against certain viruses and bacteria.

(MORE)

Levine NAS – 2

“Dr. Levine’s groundbreaking work has identified fundamental biological pathways with broad importance for understanding the pathogenesis of many of the most significant disease challenges of our time,” said Dr. Daniel K. Podolsky, president of UT Southwestern. “This award is a well-deserved acknowledgement of her accomplishments and another shining example of the strength of UT Southwestern’s research community.”

Dr. Levine received her medical degree from Cornell University Medical College. She completed her residency at Mount Sinai Hospital, followed by a postdoctoral fellowship in infectious diseases at Johns Hopkins Hospital. She was a faculty member at Columbia University College of Physicians and Surgeons before joining the UT Southwestern faculty in July 2004. A recipient of the American Cancer Society TIAA-CREF Award for Outstanding Achievements in Cancer Research, Dr. Levine was elected to membership in the American Society of Clinical Investigation in 2000 and the Association of American Physicians in 2006.

“This is terrific news. Beth is an extraordinary physician scientist, and her work in autophagy has defined an entirely new area that has fundamental importance across medicine and biology. This election is so well deserved, and I think the best is yet to come,” said Dr. J. Gregory Fitz, executive vice president for academic affairs, provost, and dean of UT Southwestern Medical School.

In 2008, Dr. Levine received one of four Edith and Peter O’Donnell Awards from The Academy of Medicine, Engineering and Science of Texas (TAMEST). The annual award honors researchers in science, medicine, engineering, and technology innovation whose work seems destined for international prominence at the highest level.

“Beth is justly deserving of this latest honor based on her remarkable scientific achievements. She is such an amazing mentor and a superb role model for our young physician-scientists. We are incredibly proud to have her as a colleague in medicine,” said Dr. David Johnson, chairman of internal medicine.

In all, the NAS announced the election of 84 new members and 21 foreign associates. One other new member is from a Texas institution, which makes for a total of 31 NAS members at Texas academic medical centers, almost two-thirds of them at UT Southwestern. The election of new NAS members was announced during the 150th annual meeting of the academy in Washington, D.C. The NAS is a private, nonprofit society of distinguished scholars engaged in

(MORE)

Levine NAS – 3

scientific and engineering research.

Other UT Southwestern faculty who are members of the NAS and the years they were appointed are:

Dr. Ronald Estabrook, 1979; Dr. Michael Brown, 1980; Dr. Joseph Goldstein, 1980; Dr. Jean Wilson, 1983; Dr. Jonathan Uhr, 1984; Dr. Alfred Gilman, 1985; Dr. Roger Unger, 1986; Dr. Steven McKnight, 1992; Dr. Ellen Vitetta, 1994; Dr. Johann Deisenhofer, 1997; Dr. Eric Olson, 2000; Dr. Joseph Takahashi, 2003; Dr. Masashi Yanagisawa, 2003; Dr. Melanie Cobb, 2006; Dr. David Russell, 2006; Dr. Helen Hobbs, 2007; Dr. Bruce Beutler, 2008; Dr. David Mangelsdorf, 2008; and Dr. Luis Parada, 2011.

About UT Southwestern Medical Center

UT Southwestern, one of the premier academic medical centers in the nation, integrates pioneering biomedical research with exceptional clinical care and education. The institution's faculty has many distinguished members, including five who have been awarded Nobel Prizes since 1985. Numbering more than 2,700, the faculty is responsible for groundbreaking medical advances and is committed to translating science-driven research quickly to new clinical treatments. UT Southwestern physicians provide medical care in 40 specialties to nearly 100,000 hospitalized patients and oversee more than 2.1 million outpatient visits a year.

###

This news release is available on our World Wide Web home page at
<http://www.utsouthwestern.edu/home/news/index.html>

To automatically receive news releases from UT Southwestern via email,
subscribe at www.utsouthwestern.edu/receiveneews