Loyola Names Junior and Senior Scientists of the Year

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MAYWOOD, Ill. - Katherine L. Knight, PhD, one of the nation's leading immune system researchers, has been named 2012 Senior Scientist of the Year at Loyola University Chicago Stritch School of Medicine.

Sakthivel Sadayappan, PhD, FAHA, who is doing groundbreaking research on a protein that is critical for the normal functioning of the heart, has been named 2012 Junior Scientist of the Year. Knight and Sadayappan were honored during Loyola's St. Albert's Day, an annual campuswide celebration of research.

Knight's primary research interest focuses on two critical components of the immune system, antibodies and B lymphocytes. She also has expanded her research to include studies on how microbes regulate the immune system and how certain bacteria protect from infectious diseases. She also is working to develop a vaccine for Clostridium difficile (C. diff.), the leading cause of hospital-acquired infections.

Knight is passionate about mentoring students and faculty, and has written and spoken widely on the topic.

Knight is chair of the Department of Microbiology and Immunology and co-director of the Infectious Disease & Immunology Institute. She has had continuous funding from the National Institutes of Health for 45 years, and now is funded by four multi-year grants totaling $4,458,710.

She has served on and chaired many NIH review panels, and was president of the American Association of Immunologists in 1996-97.

Sadayappan's research has shown that during a heart attack, a protein called cardiac myosin binding protein-C breaks into pieces. This fragmentation coincides with damage to the heart muscle that leads to heart failure.

Sadayappan is studying what happens to the protein, known as cMyBP-C, during a heart attack. This could lead to the development of drugs to protect cMyBP-C following a heart attack, and thereby limit damage to heart muscle that leads to heart failure.

Sadayappan is an author of many peer-reviewed publications. He has served on the editorial boards of Frontiers in Cardiac Muscle Physiology and the American Journal of Cardiovascular Disease. He also has served on study sections of the American Heart Association and National Heart, Lung and Blood Institute.
Sadayappan joined Loyola in 2009 as an assistant professor in the Department of Cell & Molecular Physiology.