Jean-Laurent Casanova elected to the National Academy of Medicine

October 19th, 2015

Jean-Laurent Casanova, who investigates genetic vulnerability to infectious diseases among children, has been elected to the U.S. National Academy of Medicine, the health and medicine arm of the National Academy of Sciences.

Casanova is professor and head of the St. Giles Laboratory of Human Genetics of Infectious Diseases, as well as senior attending physician at The Rockefeller University Hospital and an investigator of the Howard Hughes Medical Institute. He is among 10 new international members, out of 80 total new members, the academy announced on October 19.

In what is considered to be one of the highest honors in medicine, new members are elected annually in recognition of their outstanding professional achievements and commitment to service.

“Jean-Laurent’s work has established that unusual vulnerability among young people to specific infectious diseases, such as the flu and mycobacterial infections, can arise from single-gene errors. He has helped drive a paradigm shift within the fields of genetics and infectious disease that has enabled dramatic improvements in patients’ health,” says Marc Tessier-Lavigne, the university president. “It is gratifying to see the great significance of his research recognized by his peers in the academy.”

Through his research, Casanova has identified inborn errors of immunity conferring increased susceptibility to specific pathogens, including mycobacterial diseases such as tuberculosis; invasive pneumococcal disease; herpes simplex encephalitis; and chronic mucocutaneous candidiasis.

His work has driven the revelation that many immunological processes thought to play a broad defensive role are essential against only one or a few specific infections. The discovery of single-gene based vulnerabilities in otherwise healthy children has profound clinical implications, offering families the possibility of molecular diagnosis and genetic counseling, as well as treatments aimed at restoring the deficient immune response.

Casanova received his M.D. from the University of Paris Descartes and his Ph.D. in immunology from the Pierre and Marie Curie University, in Paris. As a professor of pediatrics at the Necker Hospital in
Paris, he and Laurent Abel cofounded and codirected the Laboratory of Human Genetics of Infectious Diseases. In 2008, Casanova joined Rockefeller. He is the recipient of numerous awards. Most recently, he was elected as a foreign associate of the National Academy of Sciences.

Established in 1970 and formerly known as the Institute of Medicine, the Academy of Medicine is a national resource for independent, scientifically informed analysis and recommendations on health issues.

With Casanova’s election, Rockefeller has 17 members of the Academy of Medicine among its faculty.