

FULL SPEAKER BIOGRAPHY and ABSTRACT

Lorenz Studer, MD Sloan-Kettering Institute

A native of Switzerland, Lorenz Studer graduated from medical school in 1991 and received his doctoral degree in neuroscience at the University of Bern in 1994. While there, he initiated studies with Christian Spenger, MD, leading to the first clinical trial of fetal tissue transplantation for Parkinson's disease in Switzerland in December 1995. Studer next pursued his research interests at the National Institutes of Health (NIH) in Bethesda, Maryland, where he worked in the laboratory of Ronald D. McKay, PhD. At the NIH he pioneered techniques that allow the generation of dopamine cells in culture from dividing precursor cells. In 1998, he was first to demonstrate that the transplantation of dopamine cells generated in culture improve clinical symptoms in Parkinsonian rats.

In 2000, he moved to New York City where he started his own research program at the Memorial Sloan-Kettering Cancer Center with a focus on stem cells and brain repair. Major early contributions of his lab were the in vitro derivation of midbrain dopamine neurons from embryonic stem cells, mouse nuclear transfer embryonic stem cells and from a novel type of pluripotent parthenogenetic stem cell in monkey. His laboratory was also first to demonstrate "therapeutic cloning" in a mouse model of a CNS disorder, and he has pioneered studies on the directed differentiation, high-throughput screening and genetic modification of human ES cells. His most recent work increasingly focuses on the biology of human ES cells and human induced pluripotent stem cells developing novel strategies at the interface of developmental biology, regenerative medicine and disease modeling.

Studer is an Associate member in the Developmental Biology Program and the Department of Neurosurgery. He currently leads the steering committee of the Tri-institutional stem cell initiative (Sloan-Kettering Institute, Weill-Cornell Medical School, and Rockefeller University), and directs the SKI human ES cell core.

Modeling Human Neural Development and Disease in Pluripotent Stem Cells