



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

115 Mill Street, Belmont, MA 02478-1064 800.333.0338

FOR IMMEDIATE RELEASE:

November 25, 2013

CONTACT:

Adriana Bobinchock

617.855.2110

abobinchock@partners.org

Pope Francis Invites Stem Cell Researcher Ole Isacson to Present at the Vatican

Harvard researcher discusses stem cell applications as a treatment for neurodegenerative diseases

Belmont, MA—Ole Isacson, MD, director of the Neuroregeneration Institute at McLean Hospital and one of the world's preeminent experts in the use of stem cell therapies to treat neurodegenerative diseases such as Parkinson's disease and Huntington's disease, was recently invited by Pope Francis to present his work at the Vatican.

More than 700 people, including doctors, health care practitioners, volunteers and religious men and women, attended the conference: "The Church at the Service of Sick Elderly People: Care for People with Neurodegenerative Pathologies." The three-day event was organized by the Pontifical Council for Health Care Workers, a group charged by the Pope to provide education and awareness about pressing healthcare concerns throughout the church.

In his opening remarks, Council President Archbishop Zygmunt Zimowski said that increased wealth and medical progress have led to more people being able to live a longer life. However, "the diminishment of the family's role in assuring social support and the frequent marginalization of the elderly have made it so that the fate of the elderly who are ill has paradoxically worsened."

According to Zimowski, the Church selected to focus this conference on neurodegenerative diseases and illnesses that affect older adults because of the increasingly high incidence of Alzheimer's, Parkinson's, Huntington's and other pathologies that affect the nervous system and impair mental or motor function. It is estimated that 7.7 million new cases appear each year, and by 2030 more than 65 million people worldwide are expected to be living with a neurodegenerative illness.

“It’s great that Pope Francis is making aging and regenerative treatments a top priority in 2013,” said Isacson, who was invited to speak about adult stem cells and how this novel work is accelerating the treatment of Parkinson's disease and other degenerative brain disorders. “As an academic member, it is an honor to speak on this global issue in an effort to increase awareness for neurodegenerative diseases impacting the elderly, and the treatments that are being developed.”

Over the past two decades, Isacson's discoveries have significantly advanced the understanding of neurodegenerative diseases to the point that researchers from around the world are currently exploring viable therapies both aimed at protecting vulnerable neurons and replacing those destroyed by disease.

During his presentation, Isacson, who is a professor of Neurology at Harvard Medical School, confirmed that with the implantation of neurons grown from pluripotent stem cells, researchers “can reverse cell loss in the part of the brain that controls the initiation of movement, which is hampered by Parkinson's, and "restore brain function in those regions."

Through the advances of modern science, researchers have been able to use adult skin cells to develop stem cells, which are then made into a neuron and implanted into the brain during a delicate surgical procedure. According to Isacson, the use of pluripotent stem cells from the patient bypasses the ethical concerns that come with the use of embryonic stem cells, allowing for greater acceptance worldwide.

"So far this type of stem cell-based therapy appears to be most promising for people with Parkinson's disease because the other neurodegenerative diseases are more complicated,” said Isacson. “However, with discoveries being made every day with research, one day, cell therapy may be able to help the other diseases as well.”

McLean Hospital is the largest psychiatric affiliate of [Harvard Medical School](#) and a member of [Partners HealthCare](#). For more information about McLean, visit www.mclean.harvard.edu or follow the hospital on [Twitter@McLeanHospital](#).

###