

“Notable Honors Awarded to Rett Investigators”

Rudolf Jaenisch received the National Medal of Science

This past month President Barack Obama announced that Rudolf Jaenisch, MD from the Whitehead Institute will be awarded the nation's highest scientific honor- the National Medal of Science. This award recognizes his outstanding contributions to knowledge in the biological sciences that pertain to how genetic information is variably expressed through epigenetics.

Rudolf Jaenisch has made pioneering achievements in biomedical research that include the introduction of the transgenic mouse and the use of therapeutic cloning in mice to alter a genetic defect. Jaenisch's more current research advances the therapeutic potential of induced pluripotent stem cells (iPSC). His lab published the first proof-in-principle experiments to show that neurons-derived from iPSCs can integrate in fetal mouse brains and reduce symptoms in a Parkinson's disease rat model.

Rudolf Jaenisch is known in the Rett syndrome research community for his great contribution of a Rett mouse model that has a deletion in the *MeCP2* gene (known in the field as the “Jaenisch *MeCP2*-null mouse”). In 2000, Rudolf was awarded an IRSF research grant for “*A Mouse Model for Rett Syndrome*”. Today, this Rett mouse model is widely being studied around the world and has advanced our knowledge of the biology behind Rett syndrome. In 2002, an IRSF research grant was awarded to Rudolf Jaenisch for his grant titled “*Mecp2 Deficiency in Mice: Can the Course of RTT-like Disease Development be Modified?*” to study the underlying molecular mechanisms of Rett syndrome and to design therapeutic approaches. Another IRSF research grant was awarded in 2006 to Rudolf for “*Identification of critical time points for treatment in RTT disease progression and genome-wide analysis of distribution of MeCP2 in gene promoters regions*” to help better understand disease progression and determine when therapeutic intervention should be given.

Everyone at IRSF congratulates Rudolf Jaenisch for being awarded the National Medal of Science for his outstanding achievements and his contributions to Rett syndrome research.

For more information, please visit:

http://www.wi.mit.edu/news/archives/2011/wi_0927.html

<http://www.wi.mit.edu/research/faculty/jaenisch.html>

http://www.rettsyndrome.org/content/view/282/944/#rudolf_jaenisch

<http://www.rettsyndrome.org/content/view/278/944/#Jaenisch>

NIH Director's Early Independence Award given to Rodney Samaco

Rodney Samaco, PhD from the Baylor College of Medicine is an up-and-coming, talented, young Rett investigator, who IRSF would like to congratulate for receiving the NIH Director's Early Independence Award for his project entitled “*The Genetic and Neuroanatomical Origin of Social Behavior*”.

Rodney Samaco recently completed his doctoral studies last fall at Baylor College of Medicine, where he performed his graduate studies in the laboratory of Huda Zoghbi, MD, who had discovered that mutations in the *MECP2* gene caused Rett syndrome. His graduate research project analyzed the consequences of

MeCP2 deficiency in the serotonergic system in Rett syndrome, and he has published his work in a number of articles in high impact journals. Samaco also studied genetics as an undergraduate at the University of California-Davis, where he worked in the laboratory of Dr. Janine LaSalle, who is also a Rett investigator.

The NIH Director's Early Independence Award is given to "talented young scientists who have the intellect, scientific creativity, drive and maturity to flourish independently without the need for traditional post-doctoral training". Rodney is one of 10 young researchers nationwide to receive this distinction. This is a \$1.25M five-year award that will allow him to continue his postgraduate research related to Rett syndrome.

For more information, please visit:

<http://www.bcm.edu/news/item.cfm?newsID=4509>