



## **SPECIAL SEMINAR**

# **Principal Investigator Candidate Developmental and Stem Cell Epigenetics**

# **Dr. Ana Boskovic**

Department of Biochemistry and Molecular Pharmacology  
University of Massachusetts Medical School  
Worcester, MD

**Title:**

**“Molecular mechanism of transposon  
regulation via sperm-borne tRNA fragment“**

**Wednesday, January 30, 2019**

**9:30 a.m.**

**Location:**

**Mount Sinai Hospital  
60 Murray Street, 3<sup>rd</sup> Floor, Room 203**

Dr. Boskovic did her Ph.D. with Dr. Maria-Elena Torres Padilla at IGBMC, Strasburg, France, where she pioneered studies of chromatin dynamics in the early mouse embryo. She went on to do her postdoc with Dr. Oliver Rando at the University of Massachusetts Medical School, Worcester, USA, where she uncovered the mechanism by which tRNA fragments transmitted in the mouse sperm modulate the expression of early developmental regulatory genes after fertilization. She has also been optimizing methodologies for genome-wide analyses of chromatin states in single cells and early embryos. She is interested in systematically dissecting the regulation of chromatin remodeling and transcriptional dynamics during pre-implantation, and how it can be affected by environmental perturbations. Her work has been published in *Genes and Development*, *Epigenetics*, *Annual Review of Genetics*, among other journals, and she has 2 manuscripts under review that are available as preprints in BioRxiv (<https://www.biorxiv.org/content/early/2018/12/17/498949> and <https://www.biorxiv.org/content/early/2018/06/21/286351>).

**Host: Andrea Jurisicova /Miguel Ramalho-Santos**