



## UNIVERSITY OF MICHIGAN INTERDISCIPLINARY JUNIOR FACULTY INITIATIVE IN REPRODUCTIVE SCIENCES

The Reproductive Sciences Program (RSP) at the University of Michigan Medical School, which includes the Departments of Cell and Developmental Biology, Obstetrics & Gynecology, Pediatrics, Physiology, and Urology, in collaboration with the School of Engineering, Department of Biomedical Engineering invites applications for tenure track positions at the levels of ASSISTANT PROFESSOR. We seek 5 outstanding scholars, with Ph.D., M.D. or combined Ph.D. and M.D. degrees with relevant postdoctoral or fellowship training with an established record or exceptional potential for conducting **Interdisciplinary Translational and Fundamental Research in the Reproductive Sciences**. Areas of interest include, but are not limited to: reproductive bioengineering, cell biology, genetics, or physiology; ovarian/gamete biology and oncofertility; stem cell biology; and fetal origins of adult diseases. Applicants should send by September 1, 2010 a curriculum vitae, a 1-2 page summary of research plans, and provide 3 letters of support to:

Michael Lehman and Gary D. Smith  
c/o Jeni Chapman

RSP Interdisciplinary Junior Faculty Cluster Hire Search Committee,  
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website: <http://www.med.umich.edu/obgyn/research/rsp/index.htm>

**U-M EEO/AA Statement:** The University of Michigan is an equal opportunity/affirmative action employer.

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### **Introduction:**

President Mary Sue Coleman and Provost Teresa A. Sullivan announced the call for a third round of interdisciplinary junior faculty initiative proposals in the fall of 2009. The focus of this initiative was to create 100 new tenure-track positions at the University of Michigan – Ann Arbor. The positions were designated for junior faculty members whose research and teaching interests are interdisciplinary. The goals of the initiative were to enhance the University's ability to engage emerging research opportunities and to increase tenure track faculty involvement with the University's teaching mission. In the 2008 and 2009 rounds, 49 faculty positions in 12 clusters received funding approval. In response to the 2009-2010 call for applications, 5 proposals were approved for funding, including "Reproductive Sciences – A Multidisciplinary Approach".

### **Reproductive Sciences - A Multidisciplinary Approach:**

The Reproductive Science Program at the University of Michigan aims to develop new diagnostic and therapeutic strategies for diseases that result in reproduction failure and disease processes that have their origins in reproductive processes but that are expressed later in life. Processes as varied as gametogenesis, fertilization, embryonic-fetal development, stem cell biology, fetal programming and pregnancy are all part of reproduction and such reproductive processes have long-term effects on health that go beyond fertility. Hence, the Reproductive Sciences Program encourages broad, multidisciplinary involvement in reproductive sciences. Reproductive sciences are central to women's and men's health, fertility, and embryonic stem cell biology. This proposed Interdisciplinary Junior Faculty Initiative has three primary goals: 1) Infusion of junior faculty into a long-standing successful Reproductive Science Program at University of Michigan with emphasis on developing new interdisciplinary fields of study directly related to translational research and improved reproductive health. This infusion will capitalize on the recent recruitment of three internationally renowned reproductive scientists who will serve as outstanding mentors; 2) Establish the infrastructure to facilitate translational science advancements integrating biomedical engineering and reproductive/stem cell biology, physiology and genetics; 3) Build new bridges of collaboration across departments and across schools. Toward this last goal, our interdisciplinary proposal brings together six departments from two schools: The College of Engineering (Department of Biomedical Engineering) and the Medical School (3 clinical and 2 basic science departments). We are proposing 5 hires in the following departments and areas: 1) Obstetrics and Gynecology, Pediatrics or Urology focused on reproductive genetics as it relates to the clinical applications of preimplantation genetic diagnosis; 2) Molecular & Integrative Physiology and/or Pediatrics to establish a research program in gonadal physiology as it relates to fertility preservation in the new field of oncofertility; 3) Cell and Developmental Biology to enhance understanding of embryonic stem cell growth regulation and directed differentiation with a translatable focus on regenerative medicine; 4) Biomedical Engineering to develop and expand transforming technologies that integrate with genetic analysis, gamete/embryo culture, and/or control of stem cell development. Application information can be obtained at:

<http://www.med.umich.edu/obgyn/research/rsp/index.htm>