

Post-doctoral Research Associate position in MSU College of Agriculture and Natural Resources

A post-doctoral Research Associate position is available in the laboratory of Dr. Yuan Wang at Michigan State University (MSU, East Lansing, Michigan). This postdoc is expected to work on stem cell differentiation and germ cell development. Germ cells carry genomic information across generations to ensure the continuation of life. Disruption of germ cell development will lead to infertility, affecting about 15% of couples worldwide. Using stem cell differentiation platforms and various mouse models, the Wang lab seeks to understand the regulatory pathways that govern germ cell development to eventually improve mammalian reproductive health (https://www.canr.msu.edu/people/yuan_wang). The successful candidate will have the opportunity to work on multiple projects to gain experience in stem cell differentiation, mammalian embryonic development, and spermatogenesis. MSU provides a competitive salary and excellent benefits for the position.

Specific Position Duties

Research (100%)

- Perform experiments using advanced molecular, cellular and mouse genetic research techniques to unveil key regulators in spermatogonial stem cell self-renewal and differentiation during mammalian germ cell development
- Have the primary responsibility for analyzing data and writing scientific publications
- Present the results at national and international scientific meetings

Eligibility

Minimum Requirements

- Doctoral degree in Biological Sciences related disciplines (Molecular Biology, Cell Biology, or Developmental Biology).
- Experience in molecular and cell biology research (please refer to desired skills below).
- Knowledge in germ cell development and stem cell differentiation is preferred but not required.
- Prior experience with gene knockout mouse models and stem cell culture is preferred but not required.
- Established track record of success, including first-authored publications in peer-reviewed scientific journals.

Desired skills in cell culture and transfection, molecular cloning, protein expression, and Western blots, RNA isolation and real time-PCR, immunofluorescence/immunohistochemistry, flow cytometry, confocal microscopy.

How to apply: Application materials should include:

- A one-page cover letter describing your research experience and interest
- Curriculum vitae
- Contact information of 3 references

For interested candidates, please contact Dr. Yuan Wang, wangyu81@msu.edu