

Postdoctoral Research Fellow position: The role of inflammation in recurrent pregnancy loss

Where: Tolnay Lab, Office of Biotechnology Products, CDER, FDA

Location: White Oak campus, Silver Spring, MD

Project description:

The project will investigate the inflammatory signature of recurrent pregnancy loss. We have reported a novel mechanism whereby regulatory T cells lose their critical inhibitory function upon binding secretory IgA. This project will investigate whether secretory IgA could trigger immune-mediated pregnancy loss in a subset of patients. The larger question is the role of inflammation in recurrent pregnancy loss, whether secretory IgA driven or not. The project combines elements of cellular and molecular immunology with advanced statistical analysis, aiming to define a biomarker of tissue inflammation linked to increased pregnancy risk. This research may also suggest novel therapies to reduce and prevent recurrent pregnancy loss.

References:

1. S. Agarwal, Z. Kraus, J. Dement-Brown, O. Alabi, K. Starost, M. Tolnay. 2020. Human FCRL3 inhibits regulatory T cell function and binds secretory IgA. *Cell Reports*. 30:1292.
2. M. Tolnay. 2022. Lymphocytes sense antibodies through human FCRL proteins: Emerging roles in mucosal immunity. *J. Leukoc. Biol.* 111:477.

Candidate qualifications:

- The optimal candidate will have a PhD in immunology, or an MD with research experience
- Independence, initiative, and excellent communication skills
- Expertise in flow cytometry and gene expression analysis are desired
- Experience in pregnancy research will be valued

Position and how to apply:

This contractor position is initially for one year with the possibility to extend, appointed via the ORISE Research Participation Programs at FDA (<http://orise.orau.gov/fda/>). ORISE fellowships are available for US citizens and permanent residents, or non-citizens eligible for a J-1 visa, who resided in the US for at least 3 of the past 5 years. Salary is commensurate with experience and includes an allowance for mandatory health insurance.

Qualified candidates should email their CV, a statement of past research experience, and contact information of three references to Dr. Mate Tolnay at mate.tolnay@fda.hhs.gov.