

**From:** Ferguson, Paige  
**Subject:** Post-doc position: Modeling viral transmission

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Dr. Paige Ferguson, Assistant Professor in the Department of Biological Sciences at the University of Alabama, is seeking a Post-Doctoral Researcher to begin in August 2017 or later. Research will focus on modeling the transmission of infectious hematopoietic necrosis virus (IHNV) among salmonids in the Columbia River Basin landscape. The post-doc will extend an existing model to investigate generalist and specialist phenotypes. Throughout the project, the post-doc will be collaborating with colleagues at multiple institutions around the country. The position comes with competitive salary and benefits.

In the Columbia River Basin, IHNV causes severe disease, predominantly in juvenile steelhead trout (*Oncorhynchus mykiss*) and less frequently in Chinook salmon (*O. tshawytscha*). Mortality events following IHNV infection can be devastating for individual hatchery programs. Despite reports of high local mortality and extensive surveillance efforts, there are questions about how viral transmission is maintained. Modeling this system offers important insights into disease transmission in natural aquatic systems. Currently, our dynamic epidemiological model evaluates the relative importance of potential transmission routes. The post-doc will extend the model to develop understanding of how transmission of generalist and specialist genogroups has generated the explicit spatio-temporal patterns of infection across the CRB hatchery landscape.

Applicants should have a background in ecology, epidemiology, ecological modeling, and statistics. Applicants should have strong skills in computer programming, GIS, and communication across disciplines. Applicants should be highly motivated and prepared to conduct independent modeling research.

**To apply, please email Dr. Ferguson ([pfferguson@ua.edu](mailto:pfferguson@ua.edu)) the following:**

- 1. a cover letter describing your interest in the project and prior experiences that have prepared you for the project**
- 2. your CV,**
- 3. your transcript (an unofficial copy is fine), and**
- 4. contact information for 3 references.**

Review of applications will begin immediately and will continue until positions are filled.

Additional information is available from the following links:

Dr. Ferguson's Research: <http://bsc.ua.edu/paige-ferguson/>

Department of Biological Sciences: <http://bsc.ua.edu/>

University of Alabama: <http://www.ua.edu>

Outdoor opportunities in Alabama: <http://www.outdooralabama.com>

Tuscaloosa: <http://www.tuscaloosa.com/visitor-services>