

The Department of Biological Structure currently has an outstanding opportunity for a **Research Scientist 1**.

The human inner ear contains the organ that allows us the ability to hear, the cochlea, and also the organs that mediate our sense of balance. These delicate sensory structures contain hair cells that detect the auditory or vestibular signal. The hair cells are susceptible to damage from ototoxic drugs, noise and normal aging. In addition some congenital conditions affect the integrity and function of these cells. Once lost these hair cells do not regenerate and hearing or balance deficits occur. The Birmingham-McDonogh lab studies mouse inner ears because like humans they have the same basic structure and the hair cells are susceptible to the same types of damage. We seek to establish if there is any pathway that can be manipulated to allow the hair cells to regenerate after damage. We use state of the art techniques to profile the sensory cells after various manipulations. In addition we are also interested in the development of these sensory structures. Our findings should inform regenerative therapies for debilitating hearing and balance loss.

This job is for a motivated Research Scientist 1 (RS1) who will manage day-to-day operations of the lab and assist with ongoing experiments. The RS1 will contribute to the smooth running of the lab by managing a mouse colony, ordering supplies, maintaining protocols and working as a member of the research team. In addition the RS1 will work under limited supervision to conduct experiments with inner ear tissue including documenting results. The RS1 may contribute data for use in reports or publications and is expected to participate in laboratory meetings and events.

Responsibilities:

- Maintain a breeding colony of mice under specific-pathogen-free conditions, including animal husbandry, weaning, ear tagging, genotyping, and updating the mouse census.
- Maintaining inventory and ordering supplies .
- Basic molecular biology, including PCR, DNA and RNA preparation and cloning.
- Tissue isolation from mouse inner ears.
- Organ culture using sterile technique.
- Fluorescent Immunohistochemistry.
- Confocal Microscopy.
- Supervise undergraduate researchers and/or student employees.
- Prepare lab for inspections.
- Maintain training records for team members.
- Actively participate in lab meetings.

Minimum Requirements:

- B.S. degree in Neurobiology, Biology, Biochemistry, or related field and one year of relevant experience.
- Experience with basic molecular biology techniques and tissue culture/sterile technique.
- Experience with operating standard laboratory equipment such as centrifuges, spectrophotometers, incubators, pH meters, balances.
- Experience with preparing basic laboratory reagents, buffers, culture media etc.

- Excellent organizational skills with good written and oral communication and ability to work well in a team.
- Motivated to learn and master new techniques.
- Ability to work with a team and good written and oral communication skills.

Desired Requirements:

- Up to three years of relevant laboratory experience.
- Experience working with mice in a research laboratory.
- Fine dissection skills.
- Competency in data analysis using R or equivalent.

This position is on the UW jobs site see Req# 168078 application should be made through this site.