

## **Postdoctoral Research Associate in Tissue Engineering,** **Department of Biomedical & Pharmaceutical Sciences**

A **Postdoctoral Research Associate** position is available immediately at the University of Montana, in the lab of **Dr. Monica Serban** as part of an academia-industry partnership focused on the development of a noise-level triggered drug dosing and delivery system to prevent cochlear damage. This is an excellent opportunity to join an Office of Naval Research funded project and gain experience in both academia and industry, as part of the work will be conducted at our partner company in Massachusetts. We are looking for highly motivated candidates with a strong working knowledge of drug delivery, pharmaceutical science, organic and analytical chemistry with a solid understanding of biological systems.

The Postdoctoral Fellows will work under the supervision of Dr. Monica Serban to complete exciting research on in vitro organotypic models of ear tissues and novel therapeutics development against hearing loss. This is a unique opportunity to research a new technology to prevent and/or treat hearing loss in military personnel and the general population. The positions involve substantial full-time research and the appointees have the freedom and are expected, to patent/publish the results of his or her research or scholarship during the period of the appointment.

The appointee is expected to be both highly independent and collaborative, and s/he will have significant leeway in the scope and design of projects. A key requirement is that the individual is able to see intellectually and technically complex projects through to their conclusion, which will involve developing methodological approaches and reviewing, analyzing, and interpreting scientific data and results from the project. Great autonomy and ability to exhibit independent decision making is expected in designing and implementing strategies for achieving company research goals.

The appointee will write papers for publication based on research, compose projects reports and contribute to grant applications; present at seminars and national meetings; and participate in research group meetings with project partners, which may include oral and/or written brief reports. The appointee may be asked to supervise research personnel including undergraduate and/or graduate students, providing training and guidance with regard to specific techniques. The appointee may assist students/interns in their research efforts, acting as a resource and a mentor. This requires good communication and teaching skills and thorough knowledge of the technical aspects of the various scientific procedures to be conducted.

The University of Montana is an Affirmative Action/Equal Opportunity employer and has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of qualified people who would assist the University in demonstrating its five [priorities for action](#): Place student success at the center of all we do; drive excellence and

innovation in teaching, learning, and research; embody the principle of “mission first, people always”; partner with place; and proudly tell the UM story.

## Position Details

- Position is full-time, 1.0 FTE, Letter of Appointment and includes a comprehensive and competitive [benefits package](#) including Insurance package, mandatory retirement plan, partial tuition waiver, and wellness program.
- Salary for this position is \$45,000 - \$54,000 per year, commensurate with qualifications.

## Required qualifications

- Ph.D. in Biomedical Sciences, Chemistry, Pharmaceutical, Biomaterials, Biomedical Engineering
- Ability to manage several projects of a highly complex nature simultaneously
- Demonstrated experience and/or knowledge in some or all of the following techniques:
  - Tissue processing, cell isolation, maintenance and proliferation
  - Biomaterial formulations and three-dimensional cell culture matrices
  - Analytical characterization of formulated tissue models
  - Analytical method development and troubleshooting
  - Experimental design with appropriate controls included
  - Ability to use experimental data to rationally develop the next experiment
  - Demonstrated experience of excellent research capabilities required to carry out innovative and insightful research
  - Ability to identify, analyze and summarize relevant literature
  - Ability to devise and articulate a research plan with defined goals, and design sound experimental strategies with appropriate controls
  - Proven record and ability to produce research to a high publication standard
  - Ability to learn and apply new skills appropriate to conduct necessary research
  - Knowledge and experience in a laboratory environment
  - Proven ability to communicate complex ideas and concepts (both orally and in writing) to scientific and non-scientific audiences
  - Ability and willingness to undertake collaborative research
  - Ability to supervise and mentor undergraduate and graduate students
  - Ability to maintain a safe working and learning environment
  - Ability to achieve project goals within time and budget
  - Ability to prepare competitive manuscripts and grant applications

## Preferred Qualifications

- Industry experience
- Experience with 3D tissue models and extracellular matrices

## About the Serban Lab, Department of Biomedical & Pharmaceutical Sciences, [UM](#) and Missoula

The [Serban Lab](#) is led by Dr. Monica Serban, who joined UM in 2015 after spending close to 5 years in the medical device industry. Her [research](#) also gained national attention recently when was the subject of a press release from the [American Chemical Society's \(ACS\) News Service Weekly PressPac](#). She has 15 patents/patent applications and numerous peer reviewed scientific publications. The lab currently has several funded projects focused on translational research and commercialization of developed intellectual property. The lab culture is focused on collegiality, collaboration, efficient communication and team spirit.

The mission of the Department of Biomedical & Pharmaceutical Sciences is to offer a dynamic curriculum in the biomedical and pharmaceutical sciences in support of the School's professional pharmacy degree and strong graduate programs. The Department places high priority on the development of nationally recognized programs of research, NIH supported programs, and Ph.D. level graduate education. The Department provides service to the University and to local, regional, and national scientific and professional organizations. The Department is committed to development of minority training programs and recruitment of minority and female faculty and students.

The University of Montana is a unit of the Montana University System with over 10,000 students. It is located in Missoula, a culturally vibrant community of about 72,000, surrounded by mountain grandeur which was recently ranked in the "[top 20 best college towns with a population of less than 250,000](#)" by the American Institute for Economic Research and ranked 9th in Outside Magazine's "[The 16 Greatest Places to Live in America](#)" in 2014. Many national publications recognize Missoula for its [high quality of life](#). Abundant recreational opportunities in surrounding state and national forests and nearby Glacier National Park and Yellowstone National Park complement a thriving intellectual atmosphere. The University of Montana offers eligible employees a generous benefits package that positively separates UM from other local employers and offers many programs and policies to support work-life balance for its employees.

**To learn more about the University of Montana, Missoula, and the State of Montana, please visit the links below.**

- [University of Montana](#)
  - Video: [UM Lifestyles](#)
  - [University Highlights](#)
- [City of Missoula](#)
  - Video: [There's This Place](#)
  - [Destination Missoula](#)
  - [Missoula Area Chamber of Commerce](#)
- [The State of Montana](#)
  - [Visit Montana](#)

Criminal Background Investigation is required prior to the Offer of Employment In accordance with University regulations, finalists for this position will be subject to criminal background investigations. **ADA/EOE/AA/Veteran's Preference** Reasonable accommodations are provided in the hiring process for persons with disabilities. For example, this material is available in alternative format upon request. As an Equal Opportunity/Affirmative Action employer, we encourage applications from minorities, veterans, and women. Qualified candidates may request veterans' or disabilities preference in accordance with state law. **References:** References not listed on the application materials may be contacted; notice may be provided to the applicant. **Testing:** Individual hiring departments at UM may elect to administer pre-employment tests, which are relevant to essential job functions. **Employment Eligibility:** All New Employees must be eligible and show employment eligibility verification by the first date of employment at UM, as legally required (e.g., Form I-9).

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