

2026 MU VRSP mentor profile form

Mentor	Elizabeth Bryda
Departmental bio web page.	https://cvm.missouri.edu/pathobiology-and-integrative-biomedical-sciences/faculty/elizabeth-c-bryda-ms-phd/
Other relevant web pages, as applicable. E.g., lab group/personal web page, Google Scholar/ORCID profiles, others	
Research interests.	Animal modeling, molecular genetics, genetic engineering, comparative medicine
Active projects.	Generating and characterizing rat models, applying cutting edge genetic engineering tools to make rat models for biomedical research, improving reproductive technology tools and procedures (i.e. in vitro fertilization) in rats
Research team. E.g., graduate students, post docs, technicians, other scholars	Graduate students, undergrads, technicians, PhD-level scientists. We collaborate with several researchers at MU as well around the country on grant-funded projects
About you... Education/training Personal information, as interested—e.g., hobbies, etc.	Undergrad (Tufts University): Biology & Music Graduate training (Rutgers University): Microbiology & Molecular Genetics Post-doctoral training (Wadsworth Center): Mammalian Genetics Previous Faculty Position: Joan C. Edwards School of Medicine, Marshall University Other positions: ran Research Animal Diagnostic Lab genetic testing lab at MU, currently Director of Rat Resource & Research Center, Director of MU Rat Testing Center for Somatic Cell Genome Editing, Co-Director of MU Animal Modeling Core, Co-Director of MU Comparative Medicine Program, Co-PI on Comparative Medicine T32 training grant Hobbies: music (play clarinet), pickleball, running
Mentor Profile	
I am available to mentor students in career and life decisions, even if they do not choose research.	
Very Untrue 1 --- 2 --- 3 --- 4 --- 5 Very True	
My students are/can be involved in the creation/development of their projects.	
Very Untrue 1 --- 2 --- 3 --- 4 --- 5 Very True	
I expect students to contribute to manuscripts/publications.	
Very Untrue 1 --- 2 --- 3 --- 4 --- 5 Very True	
Students have the option to continue to work on this project.	

Very Untrue 1 --- 2 --- 3 --- 4 --- 5 Very True

My students often work closely with a research team, e.g., lab tech or other students.

Very Untrue 1 --- 2 --- 3 --- 4 --- 5 Very True

I frequently touch base with my research team—e.g., students, technicians, etc.

Very Untrue 1 --- 2 --- 3 --- 4 --- 5 Very True

My mentoring style is very hands off.

Very Untrue 1 --- 2 --- 3 --- 4 --- 5 Very True

Current/active project profile & timeline, including clinical vs. basic science.

All current projects involve ongoing characterization of genetically engineered rat models. This includes confirming the genetic and phenotypic characteristics of the rats by analyzing DNA and protein, performing microscopy imaging and running functional assays. The particular aspect of these projects assigned to scholars would be doable in the timeframe available over the summer.

Lab structure, if applicable.

I have a research lab overseen by a lab supervisor, and various other labs (genotyping, etc.) within the RRRC and MU Rat Testing Center for Somatic Cell Genome Editing (both of which I direct) have lab supervisors, PhD and DVM-level researchers and technicians. The labs are highly collaborative, so students often work with many different individuals among the various groups/labs. In addition, there are 4 other faculty members at Discovery Ridge and along with members of their labs, and staff associated with the AMC, MMRC and MUMC, there are routinely close interactions among everyone at Discovery Ridge and abundant opportunities to cross-train.

What does a typical day of research look like for VRSP scholars?

Projects typically involve molecular techniques and/or some aspect of animal biology. We tailor the project to the individual based on their interests and time commitment. Many projects involve a discrete aspect of a bigger project that is an interdisciplinary group effort. Most projects are basic science but involve animal work. Many are more applied than hypothesis-driven. A typical day will involve being hands on in the lab performing experiments or in the vivarium working with animals, working both independently and with others depending on the specific task. There will be periods of time at the bench mixed with computer work. There can be down time during experiments (incubation periods, etc.) during which there is time to write up notes in your lab notebook, check email, read relevant papers, work on assignments and/or shadow/help others. The expectation is that the scholar will be present during normal working hours so that lab personnel are available to assist. The amount of time needed in the lab each day is dependent on the

	<p>experiments being performed and will vary. Scholars are expected to participate in every other week lab meetings at Discovery Ridge.</p>
What does engagement look like for your lab/project?	<p>Being actively involved in hands on tasks, taking advantage of any opportunities to learn new techniques, asking lots of questions, looking up information as needed, contributing to discussions, being excited about generating and analyzing data and sharing results with others.</p>