

2022 MU VRSP mentor profile form

Mentor	Doug Bowles
Departmental bio web page.	https://biomed.missouri.edu/douglas-k-bowles-phd/
Other relevant web pages, as applicable. E.g., lab group/personal web page, Google Scholar/ORCID profiles, others	
Research interests.	Atherosclerosis, smooth muscle proliferation, migration, ion channels
Active projects.	Role of KCa3.1 in atherosclerosis
Research team. E.g., graduate students, post docs, technicians, other scholars	technicians
About you... Education/training Personal information, as interested—e.g., hobbies, etc.	I was born and raised in south central Kansas. Besides Columbia, I have lived in Lawrence, KS; Manhattan, KS and Austin, TX. I got my undergraduate degree in Biochemistry from Kansas State University and stayed to get a Master’s in Exercise Physiology. I then got my Ph.D. in Exercise Physiology at the University of Texas-Austin, studying the protective effects of exercise on ischemia/reperfusion (a.k.a. heart attack). I then came to Columbia, MO for a “temporary” postdoctoral fellowship and over 25 years later, I’m still here as a Professor in Biomedical Sciences. My research focuses on the role of ion channels in vascular smooth muscle in atherosclerosis (heart disease). My wife (who I met in Austin) and I have one son. We enjoy staying active by backpacking, fly fishing, snowboarding/skiing and golf.

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.

Lab will have primarily cell-culture experiments going during the summer as the mouse experiments timelines are too long. These involve basic biochemical/molecular studies (qRT-PCR, etc) on cell cultures to answer basic cell biology questions.

Lab structure, if applicable.

Bench type lab

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

Managing cell cultures, running experiments, harvesting cells, isolating running qRT-PCR, etc.

What does engagement look like for your lab/project?

Running experiments, contributing ideas for new experiments if the student desires; compiling data, analyzing and interpreting results. Ideally, the student is the "boss" of the project and I assist.