2022 MU VRSP mentor profile form

| Mentor | R.W. (Bill) Stich |
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| Departmental bio web page. | http://vpbio.missouri.edu/faculty/Roger_Stich.html |
| Other relevant web pages, as applicable. E.g., lab group/personal web page, Google Scholar/ORCiD profiles, others | https://scholar.google.com/citations?user=- urolKoAAAAJ&hl=en&oi=ao |
| Research interests. | Biology of ticks and tick-borne pathogens, with the goal of developing more effective approaches for control of tick-borne diseases that impact people and domestic animals. |
| Active projects. | Identification of tick molecules that can be used to induce vertebrate immune response capable of blocking pathogens adapted to use ticks as vectors. Pathogen adaptations to tick vectors. |
| Research team. E.g., graduate students, post docs, technicians, other scholars | Both PhD candidates defended their dissertations in 2021, so it's a very small lab for the foreseeable future. DVM candidates Stefan Keller, Bridgette Rogers and Jenny Gibbs are interested in this work—when time permits! |
| | I also collaborate with Dr. Ram Raghavan on his projects to better understand the ecology of ticks and tick-borne pathogens in Missouri and Kansas. |
| About you Education/training Personal information, as interested—e.g., hobbies, etc. | MS and PhD in Veterinary Parasitology from Oklahoma State University. Postdoctoral training in Molecular and Cellular Parasitology at the University of Georgia and in Immunoparasitology at Washington State University. |
| | I am married to a very patient person, named Lora. We have a son, two dogs and two cats. |
| | I enjoy research, teaching and scholarship a great deal. For me, work is fun. I also enjoy working with students. When I'm not at 'work,' I'm spending time with my family (usually while working around the house). |
| I | Mentor Profile |
| I am available to mentor students in caree | er and life decisions, even if they do not choose research. |
| Very Untrue 1 - | 2 3 4 -X- 5 Very True |
| My students are/can be involved | d in the creation/development of their projects. |
| Very Untrue 1 - | 2 X 4 5 Very True |
| I expect students to co | ontribute to manuscripts/publications. |
| Very Untrue 1 - | 2 3 X 5 Very True |
| Students have the option | on to continue to work on this project. |
| Very Untrue 1 | 2 3 4 X Very True |

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

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

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

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

My mentoring style is very hands off.

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

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

I am usually open to new ideas and I'm willing to help students apply for funding to support their research ideas.

I am currently obsessed with a project formulated from some interesting results. The animal work is done for the time being, at least until we identify candidate antigens to test for inducing protective immune response in cattle. This project, by the way, came from an idea developed with a student, who is now a close friend as well as a highly regarded parasitologist, professor and dean.

Lab structure, if applicable.

The lab structure is not regimented. Everyone is expected to clean up after themselves every day (including cleaning glassware) and to do their part to maintain a safe workplace.

I make a conscious effort to avoid micromanagement that stifles creativity, productivity add morale in the lab. On occasion, I become a little overenthusiastic about an experiment, and then try to remember to ask the other person if they would rather I just "stay out of the way." Although I pride myself on not micromanaging research-learners, there are exceptions when we are working on an expensive or unrepeatable experiment.

When it comes to writing about your research, if I'm convinced that you're giving your best effort, then I will give back 110% to help you, too.

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

Typically, the day would start with sitting at your desk with your notebook to write down your plans for the day. These plans are typically designed to meet objectives that you and I have developed together.

Sometime before lunch, we would touch base to communicate the objective(s) for the day, and how I can help you achieve what you want to do.

Once the experiment has been designed, then the rest of the day is dedicated to conducting the experiment, recording the results, writing notes about how you interpret the results, any problems you encountered and how you will address those problems.

There are some days that we might do something a little different, such as participate in a lab meeting with another group, take a field trip to do or to look at something interesting that is related to our research interests, etc.

| What does engagement look like for your lab/project? | We start by identifying a knowledge gap to fill or a question to answer. Then we'll work to define an overall objective, a hypothesis to test in order to attain our objective, the strategy (experimental/research objectives) we think will be the best approach to testing the hypothesis, alternative approaches we could use if there are any problems with our strategy, and how we expect results from the project to help fill the knowledge gap or answer our big question. This can be done in writing, with a statement of work table or with PowerPoint slides. The main thing is that we both understand why and how these experiments will be done. Once we have filled in all the above blanks, we get to work on planning the tasks needed to reach our experimental objectives over the summer. On a daily level, my office is connected to my lab and the door is usually open. Sometimes, I close the door for "focus time," which is usually at the start of the day or when a deadline is looming. I also share my cell number to text questions, share results when I'm not nearby, etc. I try to be available to colleagues whenever they need to communicate with me. |
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