July 2022

Employment Opportunities

- **Structural Virology Postdoctoral Opening with Dr. Richard Kuhn**
- **Internship in Molecular Biology and Protein Biochemistry**
- **Interactions between bone and the immune system to develop new therapies for cancer and arthritis**
- **Tesmer Lab**

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**Structural Virology Postdoctoral Opening with Dr. Richard Kuhn**

The Kuhn laboratory at Purdue University looks to further advance the structural information available for various targeted viruses. Skills in molecular biology, virology, structural biology, crystallography and electron microscopy are used by his group to provide advanced structural information for specific RNA viruses. Typically, these include positive-sense, single-stranded viruses from the families *Picornaviridae* and *Flaviviridae* but specific projects can sometimes extend beyond these boundaries. Individual assignments for the successful applicant will be determined based on applicant experience and in direct consultation with Dr. Kuhn.

Dr. Kuhn is looking for qualified Ph.D. applicants willing to work full-time on his NIH-funded research projects. Candidates should have a strong background in structural biology as well as be proficient in molecular biology, virology, or a related field of study. Candidates should expect to have both individual and team responsibilities to meet in a timely and efficient manner. Typically, this focuses on independently performing experiments within appropriate biosafety guidelines, recording & interpreting data and reporting results. Applicants should also be self-motivated, able to provide oral and written results in reasonably proficient English, and willing to participate in further career development activities such as professional meetings and conferences, seminar presentations, etc.

Interested individuals should submit the following documents, preferably as one pdf file, to Dr. Richard Kuhn (kuhnr@purdue.edu):

- Cover letter
- Curriculum Vitae
- The names and contact information of three references.

Salary is to be commensurate with relative education and/or experience and usual Purdue University benefits (such as health insurance options, paid holidays and vacations, sick leave, etc.) will apply. Purdue University is an equal opportunity, affirmative action employer.
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<thead>
<tr>
<th><strong>Position Title</strong></th>
<th>Internship in Molecular Biology and Protein Biochemistry</th>
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<tbody>
<tr>
<td><strong>Employer</strong></td>
<td>Purdue University</td>
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<tr>
<td><strong>Location</strong></td>
<td>Hall for Discovery and Learning Research, Room 431 207 S. Martin Jischke Dr., West Lafayette, IN 47907</td>
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<tr>
<td><strong>Discipline</strong></td>
<td>Life Sciences, Biotechnology, Biochemistry</td>
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<td><strong>Position Type</strong></td>
<td>Full time</td>
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<td><strong>Approximate duration</strong></td>
<td>12 months</td>
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<tr>
<td><strong>Job Type</strong></td>
<td>Internship</td>
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**Project description**
We are looking for a highly motivated intern to join MEPEP and work on interesting research projects. The student would be expected to follow the given protocols, take proper notes and observations regarding the outcome of experiments and modify the protocols as needed. We look forward to working together with young scientists to provide unique opportunities to enhance their professional skills. We want your internship to be rewarding and a fun learning experience. Consider joining our R&D group for your internship.

**Work responsibilities and activities**
- Under the guidance of senior laboratory staff, perform laboratory experiments potentially including protein expression in bacterial, yeast and mammalian expression systems as well as protein purification and protein analysis (e.g. SDS-PAGE, Western Blot, analytical SEC).
- Work independently in the laboratory once on the job training has been provided by senior laboratory staff.
- Document experimental data using internal systems.
- Contribute to scientific discussions and present data at internal meetings.
- Contribute to the maintenance of a safe and effective working environment by setting high personal standards and complying with all Purdue codes of practice.

**Qualifications/requirements**
Bachelor degree in biology, immunology, microbiology, molecular biology, cellular biology, or biochemistry. Experience with standard cell culturing techniques and analytical procedures (cell counting, cell seeding, viability, sterility sampling etc.) is generally a requirement. Other laboratory techniques such as cloning, PCR, enzyme kinetics, SDS PAGE, ELISA, are highly appreciated. We are looking for proactive individuals, good team-players, organized, accurate and precise in performing the experiments.

**Start date**
July 2022

**Contact**
rostafe@purdue.edu
Postdoc or Graduate Student Position Available

A postdoctoral or grad student position, funded by NIH is open in the laboratory of Dr. Marxa Figueiredo at Purdue. The ideal candidate would have a PhD, MS, or BS in molecular and cell biology and an interest in drug discovery for arthritis and reversing bone erosion or therapeutics for bone metastatic tumors. Mouse Models or in vivo experience is key.

Desired experience includes basic molecular biology techniques, cell culture, and especially drug discovery and in vivo mouse models.

Candidates from backgrounds underrepresented in STEM are encouraged to apply.

We study the interactions between bone and the immune system to develop new therapies for cancer and arthritis. Our therapeutic toolbox includes osteo-immune cytokines, small molecules (drug discovery), and mesenchymal stem cells (MSC).

http://vet.purdue.edu/discovery/figueiredo/index.php

The Tesmer lab at Purdue University (https://www.bio.purdue.edu/lab/tesmer/index.html) is seeking 1-2 outstanding postdoctoral fellows to work on projects related to structure, function, and small molecule modulation of GPCRs, GPCR kinases, and heterotrimeric G protein effector enzymes. In particular, we are especially interested in interviewing:

1. Individuals who have been awarded their Ph.D. in the last year or who will defend their Ph.D. in the next few months.

2. Individuals whose thesis work involved the structure and function of macromolecules OR eukaryotic signal transduction mechanisms/molecular pharmacology. (Ideally, both!)

3. Individuals with strong skills in scientific communication and a strong interest in obtaining extramural support.

Our lab uses a number of biophysical methods to probe protein structure and function of signaling proteins and their regulatory complexes including cryo-EM single particle analysis and X-ray crystallography. We also have mature drug discovery campaigns as well as those poised for initial screens. Please see our current list of publications on PubMed. We strive for a friendly, stress free work environment inclusive to all.

To apply, please send:

1. A cover letter that states your interests in the lab and brief summary of your prior research experience,
2. An NIH formatted biosketch,
3. The names of three references to jtesmer@purdue.edu and lva@purdue.edu