

Postdoc position on protein formulation development and characterization of protein excipients interactions to correlate with computational methods.

**Where:** University of Maryland School of Pharmacy

**When:** As soon as possible

**Funding support:** NIH grants

**Minimal requirements:** Candidates must have PhD or equivalent degree/experience and working permit in the US.

UMB requires all faculty, staff, and students to be vaccinated against COVID-19. Exemptions for medical or religious reasons will be processed through Human Resources.

**Job description:**

Drs Daniel Deredge and Stephen Hoag are hiring 2 post-docs for a joint project on the development and characterization of protein formulations; in particular, we will be examining the role excipients play in the chemical and physical stability of various biological proteins and IgG antibodies.

The first postdoc will work with Dr. Hoag and will be developing formulations for various biologic proteins and IgG antibodies using different excipients and processing techniques; this will be followed by stress testing these formulations to see how excipients affect formulation physical and chemical stability. Candidates who have knowledge or excipients, protein formulation and process development are encouraged to apply.

The second postdoc will work with Dr. Deredge and be responsible with characterizing the effect of these formulations and excipients on the structure and dynamics of the biologic protein and IgG antibodies using hydrogen-deuterium exchange coupled with mass spectrometry (HDX-MS). Candidates with prior experience in bottom up HDX-MS are highly encouraged to apply.

A successful candidate must have a knowledge of protein formulation and characterization, excellent analytical skills, be able to design experiments, analyze data, write up results and work as a team with each other and with computational collaborators. For a highly motivated candidate without prior experience we would be willing to train in certain areas.

Please send your CV, along with contacts of three references to Dr. Stephen Hoag ([shoag@rx.umaryland.edu](mailto:shoag@rx.umaryland.edu)) and Dr. Daniel Deredge ([dderedge@rx.umaryland.edu](mailto:dderedge@rx.umaryland.edu)).

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