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The computational chemistry and biophysics group of Professor Martin Karplus in the Department of Chemistry and Chemical Biology at Harvard University is seeking outstanding postdoctoral scholars to join our efforts toward computational design of a universal influenza vaccine.

The research is co-funded by the Grand Challenges program of the Bill & Melinda Gates Foundation and the Flu Lab, and offers a unique opportunity to achieve a breakthrough in the quest for a permanent flu vaccine through a synergistic combination of theoretical approaches validated by our experimental collaborators. For more information on the research project, please visit:

<https://projects.iq.harvard.edu/karplusgroup/universal-influenza-vaccine>.

To apply for these positions, applicants must have

- PhD in Chemistry, Physics, Computer Science, Engineering, Computational Biology or a related field, with a focus on modeling and computation
- an outstanding academic record with significant research accomplishments
- ability to think and work independently, but also as members of a research team

We value overall research ability and a passion for science above a specific skill set. However, applicants with expertise in areas that complement those of the Karplus group are especially encouraged to apply. Examples include a) novel methods of sequence and structural data analysis using bioinformatic tools and b) *de novo* or homology modeling of protein structures. In addition, applicants should have experience in some of the following areas

- molecular dynamics simulations of biomolecules
- protein-protein docking and scoring
- familiarity with programming and scripting languages, such as C/C++, Fortran, Python, bash, MATLAB
- familiarity with molecular simulation software, such as CHARMM, OPENMM, NAMD2 or Amber, and protein structure modeling software such as Rosetta or Modeller
- Linux-based high-performance computing

To apply, please send the following materials via email to marci@tammy.harvard.edu :

1. a short cover letter explaining your interest in and qualifications for this position
2. resume or curriculum vitae
3. contact information for three references, one of whom should be your PhD advisor
4. a link to your representative publication(s)

Applications will be reviewed on a continuous basis until the position is filled. The initial appointment will be for one year, with possibility of renewal based on performance. Harvard is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.