



### **Postdoctoral Fellow Position in Protein Engineering**

The Mrksich group ([mrksichgroup.northwestern.edu](http://mrksichgroup.northwestern.edu)) at Northwestern University is seeking a highly motivated postdoctoral researcher to join our efforts in building protein-based molecules using the MegaMolecule approach developed in our laboratory ([Modica, et al., JACS, 2018](#); [Kimmel, et al., JACS, 2020](#); [Modica, et al., JACS, 2020](#)). To build MegaMolecules, we react the enzyme component of recombinant fusion proteins with selective inhibitors at the end of synthetic chemical linkers to precisely assemble large scaffolds. This approach has superior specificity and kinetics, often several orders of magnitude greater than traditional bioconjugation chemistries. Because of this distinct synthetic advantage, we can build molecules with much greater control of their structure and complexity than with traditional protein engineering techniques, and can create, for example, structures composed of more than twenty protein domains, with branched, cyclic and dendritic architectures, and with molecular weights greater than one Megadalton.

#### Qualifications

We are seeking a candidate with a PhD in Chemical Biology, Chemical Engineering, Bioengineering, Biomedical Engineering, Chemistry, Synthetic Biology, Materials Science, or related field. The ideal candidate will have expertise in recombinant protein expression and protein engineering (plasmid design and preparation, cloning, protein expression, purification, and characterization), organic synthesis, and materials characterization.

*To apply or inquire about the position, please email Brianna Bullock at [mrksich-ofc@northwestern.edu](mailto:mrksich-ofc@northwestern.edu) and attach your cover letter and CV.*