

From Cloning to Protein Structures: Engaging undergraduates in Protein Structural Biology at Bryn Mawr College

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The skillset required to be a protein structural biologist can be daunting, especially if you have yet to take a basic biochemistry course. To be a successful protein structural biologist one needs to be competent in: cloning a gene of interest, expressing that gene in an appropriate vector/organism, protein purification, crystallography, data collection, and data processing. Biochemical analysis along with altering the protein of interest via mutagenesis is also often a necessity. Protein crystallography has expanded over the years at Bryn Mawr College, a primarily undergraduate women's liberal arts college in the Philadelphia area. By incorporating protein structural biology in the lab, students become familiar with the wide verity of techniques required for protein structural biology all while focusing on how structure governs function.