molecular mechanisms, and present their model descriptions to others. To better understand student learning gained as part of this experience, an altered RISC (Research on the Integrated Science Curriculum) Survey was administered at the end of the semester. Students showcase their models and protein stories to other researchers through the NSU library-sponsored website: https://nsuworks.nova.edu/protein_modeling_reports/. Many past participants have presented their work at local, national, and international conferences. This course represents a successful example of a course-based undergraduate research opportunity (CURE) that can be replicated in a wide variety of institutions and provide research opportunities for many students.

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Abstract 1536

Evaluating Biomolecular Visual Literacy: A Library of Classroom-Tested Assessments for Instructor Use

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BioMolViz is a community of instructors and assessment experts working to evaluate and improve visual literacy in the molecular biosciences. For a decade, the team has supported biomolecular visualization instruction by establishing a Framework (biomolviz.org/framework) and developing NSF-funded workshops that train instructors to write assessments. The Biomolecular Visualization Framework outlines overarching themes, learning goals, and learning objectives for the targeted assessment of visual literacy, and was crafted collaboratively with input from the biochemistry and molecular biology (BMB) education community. BioMolViz workshops train instructors to use the Framework for backward design of assessments that probe students' visual literacy skills. Through this work, we have developed a five-step process for assessment validation involving iterative revision and expert panel review. Here, we report on the validation of 15 assessments that have undergone the classroom testing stage of our process. Assessment items were distributed to students at several institutions to broaden the range of instructional contexts and types of courses surveyed. We present analysis of the data from our field testing, including student responses regarding perceived difficulty and open-ended feedback. These assessments are among the first available in the BioMolViz library, a repository designed to increase instructors' access to validated visual literacy assessment tools. We will demonstrate its key features and invite the BMB educator community to use and contribute to the library.

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