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Editorial Introduction

Issues in Neuroscience Education: Making Connections

Kimberly D. Tanner, Issue Editor

Department of Biology, San Francisco State University, San Francisco, CA 94132

Welcome to this special issue of *CBE—Life Sciences Education*. Titled *Issues in Neuroscience Education: Making Connections*, it is the first of several planned special issues, occasional installments of the journal focused on approaches to teaching and learning within a particular subdiscipline of the life sciences. For this issue, we have chosen to highlight neuroscience education and the resources, teaching innovations, and research particular to that content area.

The field of neuroscience is progressing at a rapid pace, generating new knowledge—from the molecular mechanisms of behavior to insights and treatments for neural diseases—that presents a wealth of opportunities to engage students from kindergarten through college in understanding the wonders of the nervous system. The mysteries of the human brain are inherently engaging to most students, yet few have had the opportunity to delve into the vast scientific advances that have occurred since the emergence of neuroscience as a discipline over 30 years ago. Increasingly, the neuroscience community is exploring innovative strategies to teach neuroscience to students of all ages, to forge educational collaborations across institutional boundaries, and to translate new findings from neuroscience research into educational materials that engage students in learning neuroscience.

This special issue includes invited contributions from organizational stakeholders in neuroscience education, including the Faculty for Undergraduate Neuroscience and the Society for Neuroscience. In addition, our regular feature writers have highlighted resources specific to neuroscience education in "WWW: Neuroscience Web Sites" and "Video Views and Reviews," and we have book reviews that give insights into teaching neuroscience to elementary-age students, understanding the brain-based learning movement, and connecting neuroscience and how people learn. The op-ed "Points of View" features debate the unique role of neuroscience as a branch of biology that encompasses the study of brain mechanisms of learning by answering the question: "What are the current and future implications of neuroscience research, if any, for how to improve K–25+ science teaching and learning in schools and universities?" Finally, the seven research articles included present assessment evidence on innovations in the teaching of neuroscience that range from elementary school to graduate school and integrate online, literature-based, partnership, and laboratory research approaches. We hope you enjoy this focused exploration of issues in neuroscience education, and we welcome your feedback and suggestions on future special issue installments of *CBE-LSE*.

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Address correspondence to: Kimberly D. Tanner (kdtanner@sfsu.edu).