

It is my pleasure to present the thirteenth volume of *Pioneering Neuroscience: The Grinnell Journal of Neurophysiology*. The articles collected in this volume represent original contributions to the field of neuroscience offered by students *in the twelfth offering* of Biology 150: Introduction to Biological Inquiry - the Language of Neurons. As has been true for eleven previous classes of Bio 150, this course was taken by most of the students during their first semester in college. For all of the students, this was their first college-level biology course!

The articles in this volume explore several unique themes: the role of the phosphatase calcineurin and the protease calpain in synaptic plasticity, the contribution of the sodium-calcium exchanger in paired-pulse facilitation, the involvement of the NMDA glutamate receptor in the production of EPSPs, and the surprising effect of Ruthenium Red on neurotransmitter release. As usual, all of this was done using the wonderful model system of the crayfish neuromuscular junction. I hope you enjoy this volume and trust you will be as impressed as I am with what these students have accomplished in such a short time.

I wish to thank the students of Biology 150 for their hard work and collegiality. None of this would have been possible without the major contributions of Jason Parks, the lab instructor, and the excellent work of mentor/lab assistant Kaya Matson '14. The cover picture was downloaded from <http://imgur.com/xcXLbWW>.

Clark Lindgren, Editor
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Grinnell, Iowa