Introduction

It is my pleasure to present the tenth volume of *Pioneering Neuroscience: The Grinnell Journal of Neurophysiology*. The first six articles collected in this volume, pp. 1 – 26, represent original contributions to the field of Neuroscience offered by students who took "Biology 150 – Introduction to Biological Inquiry: the Language of Neurons" during the Fall of 2009. For most of these students, Bio 150 was taken during their first semester in college. For all of the students, this was their first college-level biology course! The final nine articles, pp. 27-63, are contributions from students who took "Biology 363 – Neurobiology" during the Spring of 2010. For many of these latter students, this was the final course they took as college undergraduates. Thus, volume 10 of *Pioneering Neuroscience* provides a glimpse into the hard work and capabilities of my students, spanning their entire four years at Grinnell College.

The articles in this volume explore several themes including the retrograde modulation of synaptic transmission via nitric oxide, carbon monoxide and endocannabinoids, the role of internal calcium stores in neurotransmitter release, the mechanism of action of the crustacean neuropeptide DF_2, and an exploration of a novel cosmetic purported to reduce wrinkles using a similar mechanism to that of Botox injections. Of course, 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 Sue Kolbe, the lab instructor for Biology 150, Abby Griffith '07, curricular assistant, and Adhiti Kannan '10, student mentor and lab assistant for Bio 150.

Clark Lindgren, Editor
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