

Getting Your Eyes On: Art/Biology Connections

A Proposed 2016 AALAC workshop

Location: Grinnell College

Dates: Late Spring or Early Summer 2016

Workshop leaders: Jackie Brown (brownj@grinnell.edu), and Lesley Wright (wrightL@grinnell.edu)
Grinnell College

Workshop description:

In the 19th century, scientists were skilled at drawing as a means of conducting field research. Artists studied anatomy and natural science to sharpen their artistic skills. Both remained open to a wide range of ideas and influences as they pursued their investigations. At liberal arts colleges today, there are always a few students who major in both art and biology, sensing a connection that has long been buried by academic differences. There are many more with an abiding interest in using art to enrich their scientific experience. We propose a faculty workshop that will bring together faculty from the biological sciences and the visual arts, to explore ways to revive and reinvent pedagogical, scholarly, and curricular connections between art and biology.

The workshop will bring together invited guests and AALAC faculty and teaching staff to explore collaborations and projects such as team taught courses across the divisions, workshops in observational skills focused on art and nature, illustration and Scientific Visualization as it informs art and science research, and scientific questions used in art practice. Our goal is to stimulate new curricular collaborations that can positively impact student learning, both in the 'regular' curriculum and in a vibrant community of collaborative faculty and student scholars.

We will assess the workshop through a post-workshop survey, and another after 6-12 months, to assess the impact of projects on different campuses. We will also assess how participants continue to keep in touch and inform one another's teaching and research. One additional outcome may be an exhibition that makes visible the concepts, questions, and practices explored in the workshop; Wright and Brown have both institutional and external (NSF) resources to develop an exhibition, and we hope that the exhibition could travel to multiple AALAC campus museums.

Grinnell is well positioned to host this workshop, as the organizers, Jackie Brown (professor, biology) and Lesley Wright (director, Faulconer Gallery and lecturer, Art and Art History) have engaged in collaborations around these themes over the last decade. In addition, we can tap Grinnell colleagues in non-biological sciences (chemistry and computer science) and in studio art who currently teach courses that build connections between their disciplines.

Planning team

Jonathan (Jackie) Brown, Professor of Biology, Grinnell College

Lesley Wright, Director, Faulconer Gallery and Lecturer in Art History, Grinnell College

Taylor Allen, Associate Professor of Biology, PULSE Fellow (Partnership for Undergraduate Life Science Education), Oberlin College

Liliana Milkova, Curator of Academic Programs, Allen Memorial Art Museum, Oberlin College

Geraldine Ondrizek, Professor of Art, Reed College

Scott F. Gilbert, Howard F. Schneiderman Professor of Biology, Swarthmore College

Nancy Pokrywka, Professor of Biology, Vassar College

Richard Jones, Lab Technician and Collections Manager, Dept of Earth Science & Geography, Vassar College

Proposed outline:

Day 1 Arrival (afternoon)

Opening dinner and keynote talks by 2-3 of the following non-AALAC guests. (Number of guests depends on availability, costs, and budget.)

Andrew Yang (<http://www.andrewyang.com>), School of the Art Institute of Chicago. Yang teaches biology to art students, including classes such as *Biological Semiotics* and *Visualizing Biological Phenomena*, and has published several articles on the art/science interface.

Nancy Lowe, (http://www.discoverlife.org/who/Lowe,_Nancy.html) Executive director of the Symbiosis Art + Science Alliance, and Outreach coordinator for Discover Life. Lowe is a fine artist and biological illustrator with deep experience in science/art collaborative projects.

Barrett Klein (<http://www.pupating.org/>), Asst. Professor of Biology at U. Wisconsin-LaCrosse. Klein is a behavioral biologist with extensive experience as a scientific illustrator and artist. He also has experience in creating visualizations for natural history museums.

Idelle Cooper (<http://www.idellecooper.com/>), Asst. Prof. of Biology at James Madison University. Cooper studies the evolution of color and shape, teaches biological illustration, and is a visual artist. She is a collaborator with J. Brown and L. Wright on the development of an outreach exhibition based on their NSF-sponsored research.

Day 2 Experiments in art /science pedagogy and research

One day of sessions with participants and guests sharing collaborations, research, and classroom practices already underway. These may include sessions on: shared art and biology pedagogies, artist scientists/scientist artists, artists in the lab/scientists in the studio and their contributions to research in a liberal arts college, possibilities for scientific illustration, and the challenges and rewards of team taught courses.

After dinner, we will define a set of working groups based around shared interests, with the goal of defining new or refining old approaches at our particular institutions.

Day 3 Development and presentation of plans for the future

A day of working in small groups to develop applications to participants' scholarship and pedagogy, ending with sharing out of ideas developed and plans for implementation.

Day 4 Morning departure