New Piece Found In Climate Puzzle

Mariusz Potocki is pursuing his Ph.D. in the Department of Earth Science and working in the Climate Change Institute. He is both a paleoclimatologist and a glaciochemist. Mariusz is part of a team that most often works on ice cores from the Antarctic. This team analyzes samples taken from the ice cores and they measure chemistry, hydrogen and oxygen isotopes, dust (for example volcanic tephra) and other data. Based on this information, the team reconstructs past atmospheric circulation and climate changes.

This research helps us understand current issues about climate change. Mariusz says that, "knowing the past changes in the climate can help us understand the current changes and predict and understand the future." This research is new and exciting in that there are gaps in the knowledge we already have about climate change. This research offers another piece to the puzzle that helps the researchers understand the climate change processes and atmospheric circulation. Mariusz speaks to his interest in this research: "It's a combination of passion towards the field, the need to discover (solving the puzzle, filling the gaps), and of course, the exciting aspects of fieldwork - working in remote places (Antarctica or Andes in Peru and Chile) and meeting fantastic new people."

-story by Wesley McMasters and Aleksandra Swatek
Digital Visions In A Non-Digital World

Third year Intermedia MFA student, Reese Inman was nominated for a juror’s award at the Pixxelpoint New Media Art Festival 2011 in Nova Gorica, Slovenia, which is north of Italy. She also won a first place award at the 2010 GSG Graduate Exposition for an earlier video.

Pixxelpoint is geared towards new media art that “takes on new meanings in multiple contextual re-configurations no matter what their materiality or mediality.” Reese was able to attend Pixxelpoint thanks to a Graduate Student Government (GSG) Travel to Present grant and an Intermedia Masters of Fine Art (MFA) grant.

Inman exhibited a video of NYC’s Times Square, redrawn entirely in colorful images of flowers. The underlying technique that Reese worked with in this video, Times Square Garden, redraws video content with a palette of recognizable and well-known icons, using custom software that she has developed.

The software examines the color and shades of an area in the video and substitutes color-matched images at that location, such that the video image is readable as Times Square, but is composed entirely of flowers. Another example of this process is a second video, Discovery Channel Super Mario, in which Reese uses a palette of Super Mario icons to redraw video from the Discovery Channel.

Another technique that Reese has developed is using custom software to generate precise, geometric digital images as cartoons for paintings. After generating the cartoon, Reese then meticulously copies the computer-generated images and paints them, using acrylic paint. One of these paintings, Invention II, is 40x80” in size.

A person viewing these paintings from a distance assumes that the paintings are digital in origin, but as the person comes closer it becomes apparent that the paintings are done by hand. “I want to create confusion in the mind of a viewer,” Reese says. “I want the viewer to wonder whether this is digital or analog.”

Digital art generally refers to art that is created using a digital medium such as a computer, Reese explains. Analog art refers to art that is created using one’s hand, such as painting.

Reese’s interest in digital vs. analog is related to the current human experience, with the explosion of digital forms of communication and their change or displacement of traditional analog forms of expression. By juxtaposing digital and analog elements in novel ways, Reese’s work calls attention to how we perceive images and what we think we know about how specific images have been created.

Reese lives and works in Belfast, Maine, and maintains a website www.reeseinman.com. Her work has been exhibited in numerous art venues, including Gallery NAGA, Simon Gallery, Decordova Museum and the Center for Maine Contemporary Art. Currently, her work is on show at the Montserrat College of Art Gallery in Beverly, MA as part of the exhibition “Random Access: Data as Art.”

Reese graduated in 1992 from Harvard University with an A.B. in Visual and Environmental Studies. After working for a few years at a startup company in Massachusetts she completed the four-year all-studio Diploma degree at the School of the Museum of Fine Arts in Boston. Reese came to the University of Maine in 2009 and is currently pursuing the Master of Fine Arts in Intermedia degree.

-story written by Ali Shareef
The Department of Earth Science Brown Bag Seminar Series

It is noon on a Wednesday in Bryand Global Sciences Center and everyone vacates their offices and classrooms and beelines to room 100; it is time for the Department of Earth Sciences (ERS) Brown Bag Seminar series. The Brown Bag Seminar is a weekly event that features up to two technical presentations given by Earth Science faculty and graduate students on their research. This seminar series provides an opportunity for graduate students to receive constructive feedback on the state of their research as well as practice at giving technical style presentations such as those commonly given at professional meetings.

This semester features a large slate of talks, 24 in total, covering a wide range of disciplines in the Earth Sciences including but not limited to structural geology, glacial geology, georarchaeology, paleoclimatology, oceanography and more. The research being conducted in the Earth Sciences at UMaine encompasses a wide array of sub disciplines, and the Brown Bag seminar series allows for everyone in the department to keep up with current and future research projects being undertaken within the department.

A recent Brown Bag Seminar featured two technical talks by ERS graduate students Bess Koffman and Ben Frieman. The first focused on the climate record from the West Antarctic Ice Sheet (WAIS) Divide deep ice core. PhD candidate Bess Koffman, with the aid of several undergraduate research assistants, melted and analyzed the ice core in the laboratories at UMaine’s Climate Change Institute as part of her dissertation research. The objective of this work is to produce a new dust and trace element deposition record from West Antarctica in order to promote a better understanding of Southern Hemisphere climate during the Late Holocene (the past 2400 years).

The second oral presentation, by M.S. candidate Ben Frieman, was focused on the ways in which polycrystalline materials (i.e. rocks) record the conditions of stress and strain during deformation associated with mountain building events. One such event, associated with the formation of the Appalachian Mountains, occurred here in Maine roughly 400 million years ago.

Every week during the school year the Brown Bag Seminar Series hosted by the Department of Earth Sciences provides a forum for new and exciting research by faculty and graduate students alike. So, if you are ever in the neighborhood, come on down to Bryand Global Sciences Center and explore the research being conducted by the Earth and Climate science graduate students, and learn something new!

- story written by Ben Frieman
Greetings!

As the academic year comes to a close and many of us are preparing to graduate I would like to take a moment to thank all of you for helping to make this organization the thriving success it is today. I know that being a part of the GSG has given me innumerable opportunities to proudly represent the graduate student body at the various administrative levels on this campus. Through my experience with the GSG I have had the privilege to experience the vast range of amazing research and scholarship that is conducted at this university. I have made new and lasting friendships that I will carry with me into the future.

Congratulations on another fantastic year and good luck with all of your journeys into the next chapter of your lives.

Go Blue!
James

The final scheduled GSG meeting for spring 2012 will be held on

APRIL 25, 2012

11:30 - 12:30 in room 57 Stodder Hall