

# VIEW FROM THE LIBRARY

Spring 2013 Volume 4, Issue 2

[www.library.gatech.edu](http://www.library.gatech.edu)



## ELEMENTA

Science of the Anthropocene

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## GEORGIA TECH COLLABORATES WITH OTHER LEADING RESEARCH UNIVERSITIES ON NEW, OPEN ACCESS, SCIENTIFIC JOURNAL

Georgia Tech has joined forces with a global scientific publisher and four other leading research universities to launch a new, open access, scientific journal called *Elementa: Science of the Anthropocene*.

*Elementa* is the result of a collaborative effort among BioOne, Dartmouth, Georgia Tech, the University of Colorado Boulder, the University of Michigan, and the University of Washington. As a member of this campus-based publishing collaboration, Georgia Tech is strategically positioned to maximize the dissemination of new knowledge related to the Earth's physical, chemical, and biological systems during this era of human impact.

"*Elementa* is a terrific opportunity for Georgia Tech, as well as a much more sustainable economic model for libraries," said Catherine Murray-Rust, Vice Provost for Learning Excellence and Dean of Libraries at Georgia Tech. Murray-Rust serves on the board of BioOne, which is a non-profit collaboration that brings together scientific societies, publishers, and libraries to provide access to critical, peer-reviewed research in the biological,

ecological, and environmental sciences.

"I think it is really exciting for us [library] to have peer-reviewed, scholarly content that is freely available and for scholars to get their research out there to the world in a high-quality journal," added Murray-Rust.

Unlike many scholarly journals, *Elementa* is free and open to readers without subscription fees, while authors must pay a reasonable fee to submit their work. It serves as an alternative publisher of science research to the large, commercial publishing companies that charge libraries millions of dollars each year to provide access to faculty and students. Each article submitted to *Elementa* will undergo a rapid, but rigorous, peer-review process.

Authors retain copyright to their work and other scholars are allowed to copy, distribute, transmit, and adapt it, provided proper attribution is given. Articles published in *Elementa* will be available in machine- as well as human-intelligible formats: HTML, PDF, EPUB, Mobipocket, XML, and JSON. The journal is organized into six knowledge domains, all of which are led by a prominent Editor-in-Chief.

Dr. Michael Chang, Deputy Director of the Brook Byers Institute for Sustainable Systems at Georgia Tech, is the Editor-in-Chief of the Sustainable Engineering domain. He recently appointed several new Associate Editors for the Sustainable Engineering domain, two of which are also from Georgia Tech – Dr. Matthew J. Realff, Professor and David Wang Sr. Fellow at the School of Chemical and Biomolecular Engineering; and Dr. Yongsheng Chen, Associate Professor and the School of Civil and Environmental Engineering.

"What first attracted me to *Elementa* was the vision of the founders to rethink and redesign the very fundamental nature of academic publishing. We think of *Elementa* as a model of academic publishing for the future," said Chang. "From open



*Dr. Michael Chang*

access to dissemination via social media (that is also becoming increasingly mobile) to the business model of publishing to the metrics we use to measure impact, *Elementa* is a ground-up reinvention of the way the research community communicates even as it holds onto the requirement of rigor in peer review."

As Editor-in-Chief, Chang's role is three-fold. He will serve authors by ensuring the review process is fair, robust, and rapid; advance the science and engineering community by raising the awareness of topics and issues emerging in the field of sustainable engineering; and work to ensure *Elementa* becomes a stable, enduring open access journal for the publication and dissemination of the most important research in the epoch of the Anthropocene.

"As all of our economic and ecological futures are now irreversibly and globally connected, it is vital that we understand how this massively complex, hybrid natural-human system works, and how we, as the newly ordained greatest agents of change, are changing it, intentionally and otherwise," said Chang.

*Elementa* is slated to start accepting its first articles in April 2013 with an official launch set for July 2013. For more information, visit [elementascience.org](http://elementascience.org).



*Catherine Murray-Rust*

## A NOTE FROM THE DEAN

It feels like it is still winter outside, but inside the libraries and Clough Commons we are experiencing the familiar spring rush to the end of the academic year. Students are working hard on classes and projects while visitors of all ages, including prospective students and their families, tour the campus. For administrators, this is the time of year when we reflect on the past year and set strategic priorities for the 2013-2014 academic year.

In this issue of the Library's newsletter, you will read about exciting new programs and services designed to enhance research and learning, including new open access initiatives, changes in the dissertation submission policy, supporting innovative teaching, and expanding digital collections. All of these fit into the Library's goals of broadening access to collections for research and learning and integrating librarians and library services into the academic programs of the Institute. During fall semester we will begin conversations on campus about what kind of library Georgia Tech should have in the 21st century. Meanwhile, we welcome your suggestions and encourage you to contact your department's subject liaison librarian, or any member of the Library Faculty Advisory Board or the Student Advisory Board.

Catherine Murray-Rust

Vice Provost for Learning Excellence and

Dean of Libraries

## Editorial Committee:

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## UPCOMING EVENTS

### CETL SPRING EVENTS

Integrating Learning through Capstone

Experiences

Wednesday, April 3, 2013

Crafting a Research Statement

Tuesday, April 9, 2013

### LIBRARY SPRING EVENTS

Blended Research @ The Library

"Sustainability"

April 18, 2013

11:00 a.m. - 12:30 p.m.

Wilby Room, Ground Floor West, Georgia Tech Library

### CLOUGH COMMONS

Expert Jackets with Congressman Phil Gingrey

Thursday, April 4, 2013

11am to 12pm; Clough auditorium 144

Hosted by GA Tech Alumni Association

Lecture: Baseball and Physics

Thursday, April 4, 2013

6pm to 7pm; Clough Auditorium 152

Hosted by GA Tech Physics Department

VWR Distinguished Speaker Seminar

Tuesday, April 16th

11am to 12pm; Clough auditorium 144

Hosted by the Biology Department

Veritas Forum Lecture

Thursday, April 18, 2013

7pm to 9 pm; Clough auditoriums 144 and 152

Lecture: How to Put your Brain on the Internet:

Lessons from a Cyborg with Michael Chorost, PhD

Tuesday, April 23, 2013

11am to 12pm; Clough 144

Hosted by the Biomedical Engineering Department





*Alison Valk - College of Computing Librarian*

## EMBEDDED LIBRARIAN, ALISON VALK

The term “Embedded Librarianship” comes from the concept behind “Embedded Journalists.” Embedded Librarianship involves taking a librarian out of their traditional environment and placing them in a situation that fosters closer collaboration with faculty involved in research and teaching. Embedded Librarianship involves two major factors: integration and collaboration. Roles can include things such as: librarians as co-instructors, course-integrated instruction, librarians as members of research teams, and virtual collaboration. Librarians are utilizing this model as a way to overcome the unavoidable limitations of one-shot library instruction classes. Moving from what might be seen as a consultant-type role into more of a partnership with teaching faculty allows librarians to build stronger connections with these colleagues, as well as improving the student learning experience and increasing student engagement.

One librarian moving forward with this new trend in librarianship is Georgia Tech librarian, Alison Valk. In the fall of 2012, as a part of her Teaching Scholar initiative, Valk partnered with former LMC faculty Dr. Robin Wharton in her upper-division seminar on the life and work of Geoffrey Chaucer. Through a series of integrated workshops, the students synthesized their learning about medieval and contemporary book and manuscript culture to produce handmade and digital artifacts reflecting their insights into Chaucer’s work. The workshops included topics related to bookmaking, book binding, paper making, open source software, and manuscript digitization. The first stage of the project involved these students in the creation of a physical manuscript of Middle English poetry with critical commentary. The second stage required them to digitize the manuscript and create a website to display the digital version alongside a variety of scholarly resources.

One project goal was to link the classroom to other physical and virtual learning spaces on campus and within the community. Various stages of the project were completed within the Georgia Tech Library, the Walter C. Williams Paper Museum, the Artists’ Library at the Atlanta campus of the Savannah College of Art and Design, the Georgia Tech craft studio, and a local woodworking shop, among other locations. This project created a valuable opportunity for students and instructors to build connections by collaborating and working creatively with departments all over campus as well as neighboring schools. It further had the advantage of merging a tactile learning experience with modern day issues related to digitization and e-publishing.

If you are interested in finding out more about this project or similar initiatives, Valk and Wharton’s collaboration is one of the featured projects in an upcoming ACRL publication *The Embedded Librarian’s Cookbook* later this year. The two will also present their work together in a roundtable session at the International Congress on Medieval Studies at Kalamazoo, Michigan in May.



*photos: Alison Valk*



## INSTITUTE REMOVES SUBMISSION FEE FOR DISSERTATIONS

Georgia Institute of Technology policy states that Doctoral and Master's Theses must be submitted electronically and be openly published in the GT institutional repository, SMARTech. Authors grant Georgia Tech a non-exclusive license to distribute and preserve the materials for educational purposes, while retaining copyright to their scholarly work.

In years past, Georgia Tech doctoral students were also required to submit their dissertations to ProQuest Dissertation Publishing, for inclusion in the ProQuest Dissertation Abstracts database. Students were required to sign a publishing agreement with the company and pay a document submission fee. In essence, doctoral students were required to enter into an agreement with a third-party vendor as a condition of graduation.

Not only did this requirement create a financial burden on students, it also forced them to sign a publishing agreement with an external company.

## FOSTERING INNOVATION

Spring semester 2013 brought change to the Library, as we are piloting two, new projects in library spaces. The first space experiment is taking place in the Library East Commons (LEC), which was formerly used as group study and occasional performance space. The LEC furniture was replaced with studio furniture in support of the new, freshman and sophomore course offering, GT2803, "Your Idea, Your Invention." Structured in a project-based learning format, the course encourages innovation as students work in teams on projects meant to foster creativity and see an idea move from the drawing board to execution. The hope is that working in the open studio classroom will help the students think outside the box. The course is taught by a cross-disciplinary team of faculty led by Dr. Ray Vito, Regents' Professor Emeritus, and former Vice Provost for Graduate and Undergraduate Studies.

Vito created the course and assembled the faculty team, and the library is pleased to host this pilot in order to test a different way of offering co-working space. In addition to Vito, course faculty include

Many dissertation authors were surprised to later find their works sold by ProQuest via venues such as Amazon or Barnes and Noble.

As of Fall 2012, that requirement is no longer in effect for Georgia Tech doctoral students. The revised policy removes the ProQuest submission requirement and fee, while continuing to make theses and dissertations openly available in SMARTech at no cost to the student. Doctoral students may elect to submit their dissertations to ProQuest Dissertation Abstracts for processing and distribution by working with them directly.

This policy change came about as a result of discussions between Susan Cozzens, Vice Provost for Graduate Education and Faculty Affairs, the Library's Scholarly Communication and Digital Curation Department, Georgia Tech's Graduate Studies and Admissions Office, and the Office of Legal Affairs.

Dr. Wendy Newstetter, School of Biomedical Engineering; Dr. Wayne Li, College of Architecture; Dr. Ashok Goel, College of Computing; and Jill Fantauzzacoffin, a PhD student in the School of Literature, Media, and Communication's Digital Media Program. Dr. Roberta Berry in the School of Public Policy, Dr. Ed Coyle in the School of Electrical Engineering, and Librarian Charlie Bennett are also contributing to the course.

Another spring semester co-working experiment allows students to design the programming of a Library space. The Library's Presentation Rehearsal Studio was taken offline early in the semester and is now the site of The Startup Exchange, a clubhouse of sorts for Startup Semester, which is a group of students seeking to encourage and inspire entrepreneurship on campus. Startup Semester students are using The Startup Exchange as a meeting and collaboration space. Through this and other experiments, the Library hopes to learn how to better create and maintain student-driven, co-working spaces.

## SMARTeCH EXPANDS INTELLECTUAL FOOTPRINT OF GEORGIA TECH RESEARCH

With the campus-wide Open Access policy in full swing, much of the research conducted at Georgia Tech will soon be freely accessible to the public through SMARTech (Scholarly Materials and Research at Georgia Tech), the institutional repository.

More than 39,000 scholarly items of Georgia Tech research are archived and made freely available to the public through SMARTech. Scholarly items include dissertations, theses, research findings, and much more.

"One of Georgia Tech's strategic goals is to expand its intellectual footprint locally and worldwide - what better way to accelerate and expand the reach of the scholarly work done by our leading faculty, than by making sure there is broad access to it," said Fred Rascoe, Scholarly Communication Librarian at the Georgia Tech Library.

A number of funding agencies such as the National Institute of Health, Howard Hughes Medical Institute, and National Center for Atmospheric Research already require authors to comply with open access. Recently, Congress introduced the Fair Access to Science and Technology Research

(FASTR) bill, which if passed, would require authors who receive funding from almost any federal agency to comply with open access.

The Library's Scholarly Communication and Digital Curation Department is tasked with helping faculty understand their options for publishing via open access, negotiating with publishers, and preserving their work in SMARTech.

"Submitting your scholarly work to SMARTech is the easiest way to comply with the Open Access policy and ensure that your work is available to a broad community, not just those with the budget and resources to purchase access," said Rascoe.

To contribute your research to SMARTech, simply complete the easy-to-use SMARTech Deposit Form.

For more information about SMARTech, the Georgia Tech Open Access policy, or to ask questions about your rights as an author, contact Fred Rascoe at [Fred.Rascoe@library.gatech.edu](mailto:Fred.Rascoe@library.gatech.edu) or 404.385.0075.

## COLLECTIONS NEWS

Have you noticed that more electronic books are available in the GT Catalog? In response to requests from faculty and students, the Library added thousands of new eBooks to the Library catalog in the fall of 2012 and continues to add hundreds of new eBooks each month. With the increased demand for access to eBooks, publishers worked with libraries to develop new business plans which make the addition of eBooks to the catalog easy and cost effective. The Library began participating in one of these plans in

2012 and is pleased with its success thus far. New eBooks are added each week as soon as they are available from the publishers. Since the Library only pays for eBooks that are being used. A simple search in our catalog is all it takes to locate these items in our collection.

# MINI INNOVATION HUBS TO ADDRESS CHANGING LANDSCAPE OF HIGHER EDUCATION

Georgia Tech researchers from around campus are coming together to address the changing landscape of higher education with a mini innovation hubs initiative which is led by Dr. Donna Llewellyn, Associate Vice Provost for Learning Excellence and Director of the Center for Teaching and Learning; Michael McCracken, Director of Online Course Development and Innovation of the Center for 21st Century Universities; and Dr. Wendy Newstetter (COE), Director of Educational Research and Innovation for the College of Engineering.

The initiative supports mini innovation hubs which are groups of faculty and graduate students tasked with defining and answering critical questions related to online learning and its impact on higher education.

Each hub has a champion leader and focal research question. Currently the hub leaders are determining how they will address their research questions and setting a goal to achieve by the end of the spring semester. Hubs are encouraged to provide a vision of what they would like to work on in the future if funding is available and if the hub makes sufficient progress this term.

**Delivery Mechanisms** - How can we use augmented reality to help online learners experience hands-on learning activities such as those experienced in labs or studios?

Hub Champion: Racel Williams, [racel.williams@gatech.edu](mailto:racel.williams@gatech.edu).

**Multidisciplinary Courses** - How can we leverage online classes to bring people together from multiple disciplines and locations to form engaging, collaborative learning environments?

Hub Champion: Wayne Li, [wayne.li@coa.gatech.edu](mailto:wayne.li@coa.gatech.edu).

**Social Structure** - What are the important differences between MOOCs and face-to-face courses particularly regarding student motivation and learning outcomes?

Hub Champion: Al Ferri, [al.ferri@me.gatech.edu](mailto:al.ferri@me.gatech.edu).

**Library Support** - How do institutes provide library resources needed by people taking MOOCs but who are not students of the institute?

Hub Co-Champions: Lori Critz, [lori.critz@library.gatech.edu](mailto:lori.critz@library.gatech.edu); Cari Lovins, [cari.lovins@oit.gatech.edu](mailto:cari.lovins@oit.gatech.edu)

**Math Bridge** - Can Georgia Tech provide an effective, online math course to prepare students to take Calculus I, and should that course be available to non-GT learners?

Hub Champion: Shannon Dobraski, [shannon.dobranski@gatech.edu](mailto:shannon.dobranski@gatech.edu).

**Physics Lab** - How can a physics lab be emulated in a MOOC?

Hub Champion: Ed Greco, [edwin.greco@physics.gatech.edu](mailto:edwin.greco@physics.gatech.edu).

**Dual Use** - What is the best way to blend online and face-to-face learning environments to achieve the best learning outcomes?

Hub Champion: Bonnie Ferri, [bonnie.ferri@ece.gatech.edu](mailto:bonnie.ferri@ece.gatech.edu).

Please contact Lauren Margulieux, [l.marg@gatech.edu](mailto:l.marg@gatech.edu), for more information or to get involved in this initiative.

# USING THE INTERNET TO CONNECT STUDENTS WITH AUTHENTIC AUDIENCES

When students feel disconnected from what they are asked to do in class or for an assignment, they call it “busywork.” They are unhappy about how they are being asked to use their time--and often faculty are disappointed with what they produce.

Derek Bruff, Director of Vanderbilt University’s Center for Teaching and a senior lecturer in mathematics, finds that the Internet makes it possible to change typical academic exercises into authentic expressions of learning. For example, Bruff posted his students’ essays for his first-year seminar on the history and mathematics of cryptography on the course blog, and then asked the students to read and comment on two papers of their peers. Since the course blog was on the open Web, his students’ work could be seen by others too. Imagine the class’ surprise when one student received a lengthy comment on the blog from the cryptography researcher he had cited. “That’s pretty cool that the guy in my footnotes read my paper,” said the student.

According to Bruff, “social pedagogies provide a way to tap into a set of intrinsic motivations that we often overlook: people’s desire to be part of a community and to share what they know with that community. My first-year students might not see the beauty and power of mathematics, but they can look forward to participating in a community effort to learn about math. Online, social pedagogies can play an important role in creating such a community. These are strong motivators, and we can make use of them in the courses we teach.”

Bruff visited campus on March 28 for *Georgia Tech’s Celebrating Teaching Day*. As part of the day’s events, he highlighted how adding on-line learning tools (course blogs, social bookmarking, back channels and collaborative documents) to a face-to-face course can engage students. The topic of Bruff’s presentation was “Social Pedagogies: Motivating Students through Authentic Audiences.”





## HELP 'PIN' TECH'S HISTORY



Do you ever wish you could tour Tech's grounds in an earlier era? Do you have vintage pictures of campus gathering dust in a drawer or recent digital photos sitting on your hard drive? The Georgia Tech Archives invites you to visit and participate in our new Historypin channel.

Historypin is an international, collaborative mapping project, spearheaded by Google and the nonprofit organization called We Are What We Do, with a simple goal: to cover a Google

Street View map of the world with layers of digitized

and born-digital historical photos. The result is an interactive landscape of past and present that brings history to life.

Visit our Historypin channel to take a tour of historic campus buildings and explore photo collections documenting Georgia Tech Athletics, ROTC, and Greek life over the years. Download the Historypin mobile app to engage in an augmented reality experience that superimposes the historical realm onto the real world. Simply log in with your Google account to add memories to existing pictures, "pin" your own photos and videos to the map, or take "Historypin Repeats" -- modern day photos that capture the current appearance of a place, which will one day become historical records themselves.

## IAC PARTNERS WITH ARCHIVES FOR DIGITAL COLLECTION OF IVAN ALLEN JR.

The Georgia Tech Archives and Ivan Allen College are partnering to create a digital collection to document Ivan Allen Jr.'s impact on Georgia Tech and the city of Atlanta. Allen (B.S., 1933) served as Mayor from 1962 to 1970, a period of profound expansion for the city, and is widely credited for his efforts to desegregate Atlanta and maintain peace during the Civil Rights Movement.

Jody Thompson, Head of Archives and Records Management, reflects that the "collaboration with the College is a great fit for the Library Archives. We can offer our knowledge of preserving and displaying collections, paper or virtual. We look forward to working with them."

Joyce Danielle Sharpe, a History, Technology, and Society (HTS) major in the Ivan Allen College(IAC) with a personal interest in urban planning and the development of Atlanta, is working with the project team to digitize, preserve, and provide online access to archival materials related to Allen's legacy. Among the resources that will be made available are oral histories with major figures in modern Atlanta history conducted by Ronald Bayor, Professor Emeritus in HTS, during the writing of his book *Race and the Shaping of Twentieth-*

*Century Atlanta*. The digital collection will reflect the distinct mission of IAC, while showcasing the Archives' strength in curating unique collections.

IAC Dean Jacqueline Jones Royster hopes the digital collection "will be of benefit in two specific ways: 1) to researchers who need a starting point to explore Ivan Allen Jr.'s contributions as a business leader and as Mayor of Atlanta during a critical period in the city's urban development, and 2) to students and the public in general in raising knowledge and awareness of Mayor Allen's leadership in the rise of Atlanta as an international city. We are happy to be working with the Library to strengthen Georgia Tech's digital collections, as well as with partners in the Atlanta community who have an interest in Atlanta history and general questions of urban governance."

Faculty members who know of any uncollected materials documenting Allen's leadership or his relationship with Tech are encouraged to contact the Archives at [archives@library.gatech.edu](mailto:archives@library.gatech.edu). Further details about how to access the digital collection will be provided in the coming months.

## GEORGIA TECH'S NEW WIKIPEDIA CAMPUS AMBASSADORS

Professors across the country are recognizing the value of having students edit or create Wikipedia articles. As one of the largest and most widely used online encyclopedias with content that remains available long-term, freely available, and openly editable Wikipedia's policy states that it is "verifiable against a published reliable source." According to BME Professor Steve Potter, "It gives students such a sense of accomplishment that will persist years after they leave Tech. The fact that they are being 'graded' not just by their professor, but by the whole world, really motivates them to do a good job."

In fall 2012, three librarians from the Faculty Engagement Department took on new roles as Wikipedia Campus Ambassadors. Lori Critz, Willie Baer, and Crystal Renfro collaborated with Potter to help support his BMED 4752: Introductory Neuroscience class. This is not the first time that Potter used his creative Wikipedia article project with his Neuroscience class. His past experiences with negotiating the technical and editorial needs of students prompted him to search for additional project support this time. With 92 students to support, Potter embraced the "it takes a village" philosophy and welcomed Critz, Baer, and Renfro as volunteers. The trio quickly completed the online training program to become the new Georgia Tech Wikipedia Campus Ambassadors.

Putting their new knowledge to immediate use, they created and conducted a series of workshops for BMED 4752, where students learned the specialized technical skills needed to create their own Wikipedia articles. The Ambassadors also offered individual follow-up consultations to students throughout the semester as they developed and polished their Wikipedia articles. The Ambassadors were joined by Brian Basden, one of Wikipedia's expert Online Ambassadors, who coordinated a program of support throughout the semester. Basden, an active editor for WikiProject Medicine, offered editorial and content assistance. After the conclusion of the project and the course, Potter noted, "Overall, last semester's Wikipedia assignment was the most successful in the six years since I began doing this. In large part that is thanks to Lori and her team at the Library, and to Brian." Potter's class created over 250 neuro-related articles for Wikipedia, from scratch or from "stubs" - a significant contribution in this arena.

The Campus Ambassador Program is currently being reorganized to better serve the professors and students planning to use Wikipedia as part of the curriculum. Lori Critz, the BME Liaison Librarian, participated in a two-day colloquium in December, with 10 other Campus Ambassadors from across the country, to brainstorm about the future of the program. The goal is to transition the program from the current, highly-centralized model to one where local volunteers (professors, Ambassadors, etc.) take ownership over using Wikipedia in the classroom to have a high impact on the student experience.

To learn more about incorporating Wikipedia projects into your classes, contact Steve Potter at [steve.potter@bme.gatech.edu](mailto:steve.potter@bme.gatech.edu) or your Wikipedia Campus Ambassadors:

- Lori Critz: [lori.critz@library.gatech.edu](mailto:lori.critz@library.gatech.edu)
- Crystal Renfro: [crystal.renfro@library.gatech.edu](mailto:crystal.renfro@library.gatech.edu)
- Willie Baer: [willie.baer@library.gatech.edu](mailto:willie.baer@library.gatech.edu)