

CARNEGIE MELLON UNIVERSITY LIBRARIES



BOUNDLESS

OCTOBER 2016

two	Showcasing World-Class Scholarship
three	3MT @ CMU
four	#OpenCMU Updates
five	Making it Open
six	Digital Scholarship Support and Services
seven	Insight: Keith Webster
eight	Research Support: Digital Humanities
nine	Archiving the Web
ten	Spotlight: 400 Years of Shakespeare

Front cover: A vertical image of Hunt Library's "boundless" staircase

Back cover: 2016 1st Place and People's Choice Awardee Pratiti Mandal presenting her Three Minute Thesis

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Showcasing World-Class Scholarship

by Keith Webster

Carnegie Mellon's Strategic Plan 2025 requires the libraries to build a series of services to curate the evolving scholarly record. An early move is the introduction of four new services in the fall of 2016.

One of the key roles of the modern academic library is capturing, analyzing and showcasing the university's research output. In the final months of 2016 we will be implementing a number of tools, in association with our development partner, Digital Science.

Key amongst these are:

Symplectic Elements – will become the definitive source of research information for CMU and will be used by faculty to help showcase and measure both the output and qualitative impact of CMU research, enabling a unique insight into where our research is strongest.

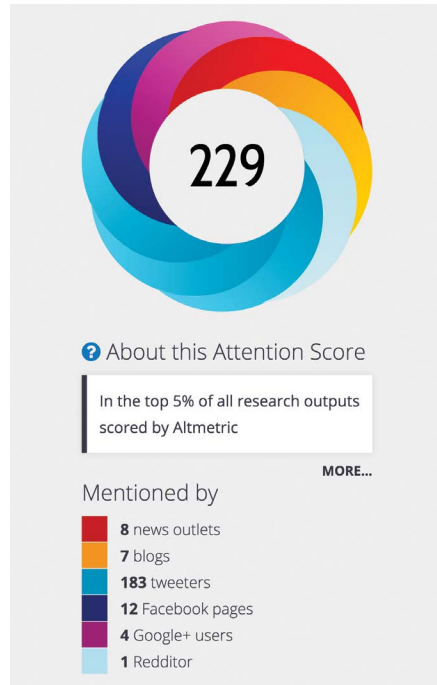
Figshare for Institutions – will become our institutional data repository, providing a robust and reliable place to curate research data; promote an open culture of sharing; and ensure compliance with open data mandates from funders.

Altmetric Explorer for Institutions – will enable CMU to monitor and report on the attention that our research is garnering from wide-ranging audiences, including practitioners, policymakers and the general public, across sources such as mainstream media, blogs, social networks, Wikipedia and other community forums. ▶

Dimensions – will give CMU access to the world's leading grants database powered by ÜberResearch, enabling automatic links between publications and grants in Symplectic Elements, as well as helping us to identify people and research groups of interest and with whom to collaborate around the globe.

Further details on these services are available from liaison librarians.

Liaison librarians
cmu.is/2d4URGD





For the past three years the University Libraries has hosted the CMU Three Minute Thesis (3MT) Competition. 3MT challenges Ph.D. students to present their thesis and its significance in just three minutes.

Developed at the University of Queensland, 3MT is an event that celebrates the research conducted by Ph.D. students. The 3MT competition challenges students to consolidate and streamline their thoughts and findings into a three-minute presentation.

3MT provides students an opportunity to hone their communication skills, while also sharing their research with their peers and a wider general audience. Individual heat and overall competition winners also earn additional research funding or needed technology.

Over 70 Ph.D. students participated in the 2016 competition at CMU, bringing the participant grand total to over 300 students competing in 3MT @ CMU. Of note, the 2016 finals mirrored CMU's trends in diversity with six out of 10 finalists being women.



three

All Ph.D. students at CMU are welcome to compete. Students may sign up and compete in the initial knockout rounds. Round winners are eligible for research travel funds as well as technology prizes. All round winners then go on to compete for the Championship and People's Choice award. All preliminary rounds and the championship are free and open to the public.

2016 Championship Winners

1st Place and the People's Choice Award:

Pratiti Mandal, Mechanical Engineering, *Investigation and Mitigation of Degradation of Fuel Cells*

2nd Place:

Shinjini Kundu, Biomedical Engineering, *Predicting Future Osteoarthritis Using MRI: The Untold Story of Cartilage* and
Juliann Reineke, English, *Three Sheets to the Wind: The Jolly Jack Tar and British Masculinity in the 18th Century*

3rd Place:

Amit Datta, Electrical and Computer Engineering, *Discovering Personal Data Use on the Web*

Each finalist's presentation, along with additional photos, can be found on the Libraries 3MT Competition portal.

cmu.is/2dbBvAa



#OpenCMU Updates

by David Scherer

Building upon the efforts of the open movement to expand access to scholarly work, the University Libraries continues and is expanding its tools, services and events in support of the #OpenCMU campaign. #OpenCMU aims to educate and engage the campus community in thinking 'open' to enhance the discovery, use and impact of research at CMU.

As the open movement continues to expand and mature, the #OpenCMU campaign increases access to CMU work by educating and engaging the CMU community in important practices that can enhance discovery, use and impact of CMU research.

The #OpenCMU campaign promotes various 'open' initiatives and what the Libraries is doing for them. These initiatives include: ORCID, open access, open access repositories, open access publishing, public (open) access mandates, open data, open data mandates, open licenses (e.g., Creative Commons), copyright and author rights.

Leading the 2016-2017 academic year #OpenCMU campaign is Open Access Week, which is being held the week of October 24. Open Access Week is an annual international event promoting open access to peer-reviewed work as a new norm in research and scholarship. Sponsored by the Scholarly Publishing and Academic Resources Coalition (SPARC), Open Access Week began in 2007. Carnegie Mellon University Libraries has been organizing

Open Access Week activities on campus since 2010. 2016 Open Access Week events will be held in conjunction with the University of Pittsburgh and Duquesne University.

Getting Involved with #OpenCMU

There are many ways to participate with #OpenCMU!

- ▶ Join ORCID through CMU cmu.is/2d0ic1l
- ▶ Request funds for an APC to publish openly cmu.is/2d9Bjgg
- ▶ Attend our Open Access Week Events cmu.is/2dhJfMV
- ▶ Deposit your research materials in Research Showcase cmu.is/2dbBSuu

#OpenCMU
cmu.is/2cpl41Z

Open Access Week @ CMU
cmu.is/2dhJfMV

Image Caption: #OpenCMU refreshments for the 2015 Open Access Week events baked from open access 3D printed cookie cutters of the international symbol of open access.



Making It Open

by David Scherer

The University Libraries continues to provide funding assistance to Carnegie Mellon authors to pay for Article Processing Charges (APC) to make their research openly available immediately upon publication.

Since 2013 the University Libraries has been raising awareness of the benefits of open access publishing by providing funding support so that CMU authors can publish their research openly with approved open access journals and publishers.

To use the fund, authors must ensure their articles meet the conditions of the fund:

- ▶ The faculty member, research scientist or graduate student cannot have grant funding that could be used to otherwise pay the APC;
- ▶ The journal must provide immediate open access to all peer-reviewed articles and have a publicly available standard article fee schedule;
- ▶ The journal publisher must be a member of the Open Access Scholarly Publishers Association or adhere to its Code of Conduct.

Once meeting the conditions, authors can apply to have the APC Fund pay 80 percent of the APC to a maximum amount of \$1,500 per article. Expectations are that the corresponding author's department will pay the remainder. Authors have an annual cap of funding of \$3,000.

There are also a number of APC discounts that author's are eligible for because of the University Libraries' affiliations, and individual author's memberships and partnerships with publishers. While discounts are not necessarily applied automatically, corresponding CMU authors are encouraged to inform the publisher or note the reduced fee on the invoice.

The fund isn't just for faculty. Carnegie Mellon graduate students are also eligible for support at the same levels and annual amounts as faculty. Once the article is funded, the University Libraries will work with the authors to deposit the open access version of their articles to the institutional repository.

By The Numbers...

Since the start of the APC Fund, the University Libraries has supported **54 open access articles**.

There have been **21 unique approved authors** representing five Colleges, 11 departments and the Libraries.

Articles supported by the APC Fund have been published in **13 unique journals from 13 different publishers** from around the world.

Out of the 20 APCs funded in 2015-2016, **six of those were for graduate student articles**.

For more information about the Open Access Article Processing Charge Fund, please visit cmu.is/2cDapYR.

Digital Scholarship Support and Services

by Rikk Mulligan

Advancing Carnegie Mellon's strategic goals includes evolving a 21st century library that supports students, faculty and staff who create digital scholarship (DS). By providing a discipline-neutral base for exploration and experimentation, the CMU Libraries will promote interdisciplinary approaches to problem-solving and support researchers and students along several points of the DS research lifecycle.

Digital scholarship requires the use of digital evidence, tools or methods employing data visualization and analysis, GIS data and digital mapping, text encoding and computational analysis, 3D modeling and makerspaces, digital collections or adapting and coding digital tools. The outcomes of digital scholarship are often hybrids of traditional print and born-digital products using multimedia or channels including print and web-based text, video, audio and still images, annotation and new modes of multithreaded, nonlinear online discourse.

DS requires multidisciplinary teamwork to craft not only its tools and systems, but often its argument, narrative and scholarly discourse environment. This work requires an iterative process that increasingly turns to library expertise, subject matter experts and specialized resources during the research lifecycle. The CMU Libraries' digital sphere of activity includes the digital humanities, research product and data management,

and scholarly communications and digital publishing — digital scholarship writ large.

The Libraries will provide specialists for one-on-one consultations, workshops, training seminars and collaboration on projects using their expertise with digital tools and methods. CMU Libraries' digital humanities specialist, Dr. Jessica Otis, works closely with her digital humanities counterparts in the Dietrich College of Humanities and Social Sciences to develop new tools and projects in collaboration with faculty and graduate students, such as the Six Degrees of Francis Bacon.

Many humanists are coming to recognize that their work not only generates data, but often is data, and they can turn to the expertise of Lisa Zilinski, research data consultant for help in research data management, for reproducible and reusable research. David Scherer, scholarly communications and research data consultant, supports DS where it involves copyright, intellectual property, open access, the institutional repository and digital publishing more broadly. In addition to liaison librarians with Digital Humanities experience, the new digital scholarship strategist, Dr. Rikk Mulligan, will round out DS support by working to connect students and researchers with the right tools, people and other resources.



Insight

This fall, Carnegie Mellon joins the world in commemorating the 400th anniversary of Shakespeare's death. In the splendid setting of the Posner Center, we will be displaying our copy of the Shakespeare First Folio, together with an array of costumes and other artifacts from our School of Drama's productions over the past 100 years. The world of publishing, which brought us such rich treasures as the works of William Shakespeare, has undergone profound change over the past two decades. This transformation is powered by a combination of technological advances and policy initiatives driven by funding agencies, scholarly societies and members of the research community.

Libraries have not been untouched by these developments, and perhaps our professional landscape has undergone more transformation than in any other field. Our traditional role of building collections of published materials continues, but our remit has expanded considerably. Today, librarians bring their expert knowledge of

scholarly communications into the academic community, promoting initiatives such as student research, open access, digital humanities and the sharing of research data. The services offered by libraries today embrace a range of activities under the brand auspices of the evolving scholarly record. Our expertise in curating the formal research record, as published in books and journals, has broadened to embrace datasets, software and other products of scholarly enquiry.

In this issue of *Boundless* my colleagues provide further information on activities that seek to advance our mission to build the research library of the 21st century. As always, our efforts would not be possible without the support and generosity of the wider community of which we are so proud to be part. On behalf of everyone at Carnegie Mellon University Libraries, thank you for all you do to make our work possible.

Keith G. Webster
Dean of University Libraries

digital humanities

by Jessica Otis

The University Libraries and Dietrich College of Humanities and Social Sciences have partnered on an Andrew W. Mellon Foundation grant to support and enhance Digital Humanities. This partnership builds on traditional strengths here at Carnegie Mellon University.

The “digital humanities” have been defined in numerous ways over the years. The breadth, innovation and interdisciplinarity of the field make singular definitions difficult, while the rapid pace of technological developments make any definition a moving target. At Carnegie Mellon University, our current working definition of the digital humanities includes, 1) the application of digital methods and tools to humanistic questions, 2) the analysis of digitized and born-digital sources, and 3) a shared culture and community of practice.

Carnegie Mellon University has a long, distinguished tradition of digital humanities research. David Kaufer and Suguru Ishizaki’s text analysis and visualization suite, DocuScope, originally dates to 1998, while the cross-institutional team of Christopher Warren and Daniel Shore (Georgetown University) just this summer won a coveted NEH-ODH Digital Implementation Grant for their work reconstructing and analyzing a historical social network in Six Degrees of Francis Bacon.

With assistance from the Andrew W. Mellon Foundation, the University Libraries and Dietrich College of Humanities and Social Sciences have partnered to build on this foundation. For two years, humanities graduate students have attended a Digital Humanities Literacy Workshop run by digital humanities specialist Scott Weingart. There, graduate students, along with interested faculty and staff, learn about diverse methodologies, practice interdisciplinarity and begin to engage with global scholarship issues of open access, copyright and data curation. This year also saw the first cohort of graduate fellows in Digital Humanities and the first Digital Humanities Seed Grants, with interdisciplinary teams drawn from the English, History, Modern Languages and Statistics Departments.

Weingart and digital humanities developer Dan Evans, along with University Libraries faculty Rikk Mulligan and Jessica Otis, are now spearheading weekly “Digital Office Hours” in the IDEATe studios for interested faculty, students and staff from across the university to learn more about and gain assistance in undertaking their own digital humanities projects.



DocuScope – cmu.is/2cS3XDj

Six Degrees of Francis Bacon – www.sixdegreesoffrancisbacon.com

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Current Students

Archiving the Web by Julia Corrin

The University's website encapsulates the CMU identity. Beyond containing important information about our programs, it is the face we show to the outside world. The University Archives is taking steps to preserve it for the future.

Carnegie Mellon's website (or some version of it) dates back 30 years, but the University Archive holds very little information related to it. In fact, its first 10 years of existence are lost entirely. While the university first registered the domain in 1985, the earliest version available on the Wayback machine only dates to 1997. We've unfortunately already lost over 10 years of the university's online identity. The home page during the almost 20 years between 1997 and 2016 has luckily been preserved at some level thanks to the work of the Internet Archive and the Wayback machine. Starting this fall, the University Archive will be an active partner in this process, ensuring that from 2016 onwards the entire website will be preserved.

The University Archives will now be working with the Internet Archive's ArchiveIT to begin a program to collect and preserve the university's web presence. This program will allow us to preserve not only the home page, but also the pages created by departments and student groups, and other sites outside the main CMU domain. In short, it will enable the archive to capture the public face of the University.

The University Archives will continue to be the home of the university's physical history,

but the ability to preserve the website means that future researchers will be able to see Carnegie Mellon as people today see it. Most people's first introduction to CMU is the website, and for many students and faculty members, the website remains one of their primary methods of interacting with and obtaining information about the university. The website will be the best way to show future generations of students what life on campus was like, the work being done by faculty and development of new projects and programs as they happened.

To see archived content as it becomes available, you can visit our ArchiveIT page at cmu.is/2cl0ajv.



1997 cmu.edu



2001 cmu.edu



2006 cmu.edu



400 Years of Shakespeare

by Mary Kay Johnsen

Celebrating the 400th anniversary of playwright William Shakespeare's death and the 100 years of his works being performed at Carnegie Mellon University, the First Folio and items from the School of Drama and the University Archives are on display.

Shakespeare's plays are available in comics, audio books, films, on stage, on smart-phones, in user-friendly paperbacks, or in a First Folio printed in 1623, a few years after William Shakespeare's death in 1616. The Carnegie Mellon copy of the First Folio came to the university in 1974 from the estate of Pittsburgh philanthropist and university life trustee Charles J. Rosenbloom.

Carnegie Mellon students see the First Folio when they visit the Rare Book Room for a Shakespeare class or to learn the history of books and printing. The First Folio can be used as a sample of poor printing. It was inked by hand using leather ink balls, so many pages are blotchy and hard to read. But it is still the most valuable book in the Libraries!

From August 29 through November 30, the exhibit "Carnegie Mellon's Shakespeare" will show the First Folio, amazing prints from the Boydell Shakespeare Gallery and costume designs, photographs and prompt books that date from 1914 to 1970 from the University Archives.

Recent productions, 2010-2013, are represented by costumes, props and photographs. On November 4, a scholarly

dialogue on teaching Shakespeare will feature Peggy Knapp of the English Department and Michael Witmore, director of the Folger Shakespeare Library. Other events are planned for November.



Carnegie Mellon's Shakespeare

August 29 – November 30

Monday – Friday 1-7 p.m.

Posner Center

Carnegie Mellon University

412-268-7680

For tours or more information,

contact Mary Kay Johnsen

Special Collections Librarian

mj0g@andrew.cmu.edu

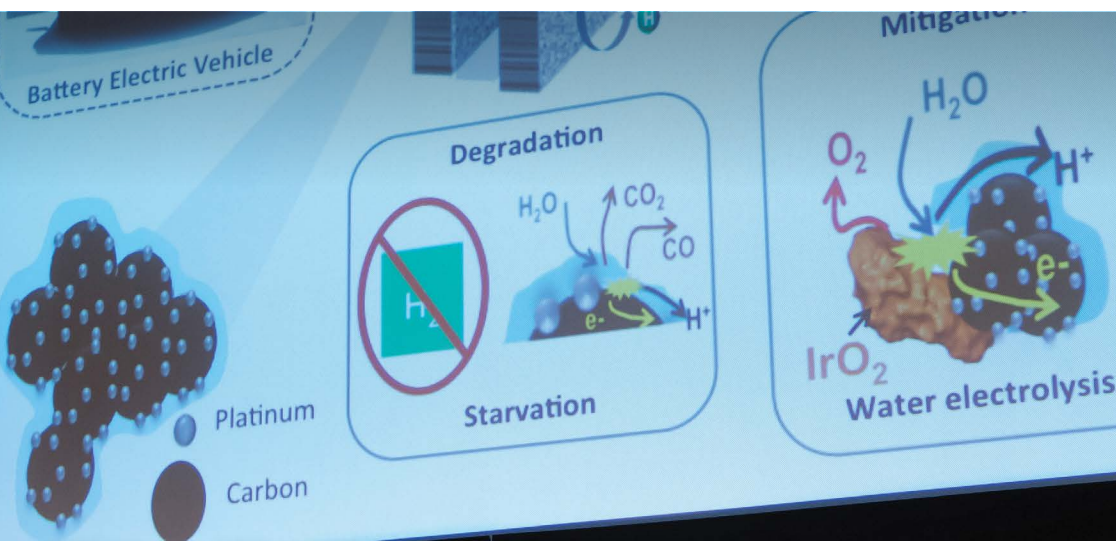
412-268-6622

Posner Center

www.cmu.edu/posner-center

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