

CARNEGIE MELLON UNIVERSITY LIBRARIES

BOUNDless

A photograph of a modern library interior. The space is characterized by high ceilings with exposed wooden beams and a series of circular pendant lights hanging from the ceiling. In the foreground, several students are seated at long white tables, working on computers. One student in a red shirt is prominent, looking at a screen. To the left, a person in a striped shirt is walking away from the camera. The background shows more students and a clock on the wall. The word "BOUNDless" is overlaid in large, white, serif font across the center of the image.

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THREE MINUTE THESIS

by Cindy Carroll

2015 winners & judges

Three Minute Thesis (3MT®) is an internationally recognized research communication competition developed by The University of Queensland. It challenges Ph.D. students to present a compelling oration on their thesis and its significance in just three minutes, in language appropriate to a general audience.

3MT is not an exercise in ‘dumbing-down’ research. Rather, it requires students to consolidate their ideas and crystallize their research discoveries. Dean of Libraries Keith Webster brought the 3MT challenge to CMU for the first time in 2014, and students, faculty and administrators have embraced it as an annual competition.

“Many of our students are working on research that has a broader impact on society, health and the economy,” Webster said. “Challenging them to communicate their findings to a non-specialist audience, in a concise manner, helps to share their contribution. It also offers a great venue for students both to showcase their research, and to step back and reflect upon the big picture of their research.”

For the audience and judges, 3MT makes ongoing research in every discipline understandable (and brag-worthy). For participants, 3MT provides an impetus to sharpen communication skills and a chance to hear about peers’ research. For finalists and the ultimate championship winners, 3MT is a springboard to career recognition that also yields significant grants to help further their work.

Enrolled Ph.D. candidates may sign up and compete at any stage of their doctoral work, every year if they wish. A series of qualifying rounds each year produces a dozen or so finalists who vie for top honors in the 3MT@CMU Championship. All of the preliminary rounds and the Championship are open to the public.

Four finalists became “Academic Idols” at the 2015 Championship:

2015 First-place Winner

Annie Arnold, a first-year student in Chemistry presenting her thesis in a talk entitled “Modified graphene: Biodegradable bone implants.”

Second place

Michael Craig, a first-year student in Engineering & Public Policy, presenting “Keeping the lights on: Power systems, water and climate change.”

Third place

Sam Ventura, a fifth-year student in Statistics, speaking about his work to reduce search error, “Solving the identity crisis.”

People’s Choice (by audience ballot):

Vincent DeGeorge a fourth-year student in Materials Science & Engineering, presenting “Tomorrow’s electricity: Stadium or lawn seating?”



Who gets your vote?
Watch the competition.
tinyurl.com/oyag8kv

FINANCIAL SUPPORT FOR PUBLISHING

by Denise Troll Covey

Open access increases the impact of scholarly work and accelerates advances in research by providing worldwide online access at no charge. President Suresh has made open access a high priority for Carnegie Mellon.

To support CMU authors publishing open access, the Libraries have created a fund to help authors pay the Article Processing Charge (APC) levied by some publishers to cover basic publication costs.

If the author does not have grant funds available to pay the APC and the journal meets the eligibility criteria, the Libraries will pay a maximum of \$1,500 per article and \$3,000 per author per fiscal year. A bequest from Gloriana St. Clair in memory of Roger Sorrells seeded the APC fund.

CMU authors are also eligible for APC discounts provided by publishers in some of the Libraries' site licenses. For example, 25% discounts to publish in the *Proceedings of the National Academy of Sciences* or in American Chemical Society journals, and 15% discounts to publish in Royal Society of Chemistry (RSC), BioMed Central, Chemistry Central or SpringerOpen journals. Through the Libraries, RSC even provides a few vouchers for free open access publication. Inform the publisher about any relevant APC discount or note the reduced fee on the invoice.

PeerJ funds its open access publishing with a membership business model rather than APCs. If CMU authors elect to publish in *PeerJ*, the Libraries will pay for their lifetime *PeerJ* membership.



Open access publication funding
www.tinyurl.com/pxc6tmo

5 most-cited open access articles with a CMU connection

(Web of Science)

1. Kaelbling, Leslie Pack, Michael L. Littman, and **Andrew W. Moore**. 1996. "Reinforcement Learning: A Survey." *Journal of Artificial Intelligence Research* 4: 237-85.
2. Hallquist, Mattias, J. C. Wenger, U. Baltensperger, Y. Rudich, David Simpson, M. Claeys, J. Dommen, **N. M. Donahue** et al. 2009. "The Formation, Properties and Impact of Secondary Organic Aerosol: Current and Emerging Issues." *Atmospheric Chemistry and Physics* 9 (14): 5155-5236.
3. Lewis, David D., **Yiming Yang**, Tony G. Rose, and Fan Li. 2004. "RCV1: A New Benchmark Collection for Text Categorization Research." *The Journal of Machine Learning Research* 5: 361-97.
4. Fox, Dieter, Wolfram Burgard, and **Sebastian Thrun**. 1999. "Markov Localization for Mobile Robots in Dynamic Environments." *Journal of Artificial Intelligence Research* 11: 391-427.
5. Ng, N. L., M. R. Canagaratna, Qi Zhang, J. L. Jimenez, J. Tian, I. M. Ulbrich, J. H. Kroll, **N. M. Donahue** et al. 2010. "Organic Aerosol Components Observed in Northern Hemispheric Datasets from Aerosol Mass Spectrometry." *Atmospheric Chemistry and Physics* 10 (10): 4625-41.



KNOWLEDGE UNLATCHED

by Denise Troll Covey

Open access journal publishers use a variety of business models to fund their operation, often charging the corresponding author a per-article fee to cover the basic publication costs. Publishers of scholarly monographs are reluctant to use the author-side-pays model because publishing a book costs much more than publishing an article.

Lacking a viable open access business model, scholarly monographs remain locked behind costly paywalls, a situation particularly problematic in the humanities and social sciences that assess scholarly contributions based on book-length material. In 2014, CMU Libraries took part in a project that modeled a way to remove paywalls.

Knowledge Unlatched piloted a strategy that enables publishers and libraries to share the cost of making scholarly books available free online. The 13 publishers in the pilot—including Cambridge University Press, Duke University Press and De Gruyter—established a set price for 28 humanities and social sciences monographs based on projected sales to 200 libraries. Participating libraries agreed to purchase the books at a maximum total cost of \$1,680 (\$60 per book) with the understanding that if more than 200 libraries registered, the price would go down. Nearly 300 libraries from 24 countries joined, opening free global access to the 28 monographs for less than \$43 per title. Since the pilot, these books have been downloaded more than 25,000 times.



Researchers talk about Open Access

Open Access Week is celebrated internationally every October, promoting open access to peer-reviewed work as a new norm in research and scholarship. CMU's keynote event for Open Access Week 2013 was "Open Scholarship for Graduate Students and Early Career Researchers." The program featured Norman Bier, Open Learning Initiative; J. David Creswell, Psychology; Veronica Hinman, Biological Sciences; **Jelena Kovacevic** (pictured), Biomedical Engineering; Mary Shaw, Institute for Software Research, SCS; Reinhard Schumacher, Physics; Russell Schwartz, Biological Sciences and SCS; and Michael Tarr, Center for the Neural Basis of Cognition, discussing how and why they and their colleagues publish open access.



2013 Open Access videos
library.cmu.edu/node/978

100 YEARS OF DRAMA

by Patrick Trembeth

The School of Drama Centennial, celebrating the school's formation during the 1914 academic year, was no ordinary 100-year anniversary. Since its creation, the school has played a significant role in the Carnegie Mellon tradition of academic trailblazing, becoming the first drama school in the world to grant a program-specific degree, conferred in 1917.

Continuing its pioneering role, the Carnegie Mellon School of Drama, now led by Head of School Peter Cooke, remains one of the premier institutions in its field with generations of graduates writing, producing, costuming, lighting and, most visibly, headlining acts from television and film to the Broadway stage. Notable alumni include James Cromwell (*L.A. Confidential*, *The Artist*), Ming-Na Wen (*Mulan*, *Agents of S.H.I.E.L.D.*), and Zachary Quinto (*Heroes*, *Star Trek*).

When School of Drama faculty reached out to the University Archives in fall of 2013, seeking images to help showcase Drama's storied past for current students, they found a treasure trove of photographs and other media documenting the school's campus production history.

Over 60 photographs spanning 80 years were selected, beginning with the school's first production, *Two Gentlemen of Verona* in 1914, to create a visual narrative of the dramatic excellence put forth by the School of Drama since that year. The images were used to promote Drama's keynote Centennial Celebration on campus in February 2014.

Drama's 'Wild Party' continued through May with events in New York and Los Angeles, highlighting the far spanning reach and influence of the school.

The research was performed largely within two Archives' collections: the Elizabeth 'Bes' Kimberly collection and School of Drama Photograph collection.

The first collection are photographs and publications donated by Elizabeth 'Bes' Kimberly (pictured), beloved alumna and faculty member in the School of Drama from 1928-1968.

The Drama Photograph collection is comprised of prints and negatives donated by Drama to Archives to insure their long-term preservation and use. Combined, these collections span the school's entire history, including production and classroom activities.

As this story illustrates, the University Archives delights in providing the university community with high quality research founded on our institution's invaluable records.



Archives' Digital Collections
digitalcollections.library.cmu.edu

ORCID

ORCID@CMU

A university-wide campaign just launched by Vice President for Research Farnam Jahanian and Interim Provost Nathan Urban, urges CMU faculty, graduate students and other researchers to join ORCID® and link their ORCID ID with the Andrew identity management system. The University Libraries has developed a web app to make it easy.

Why? Enabling others to quickly and confidently identify you and your body of work is critical to your reputation and career. Funders, publishers, scholarly societies and associations, fellow researchers, potential collaborators—and CMU—need to be able to accurately identify you and your work for myriad reasons, from benchmarking and recordkeeping to discovery and access.

Why ORCID? An ORCID ID uniquely and persistently identifies you throughout your career. It enables you to pool works and data associated with other institutions and identity systems; for example, works associated with your Scopus Author ID or ResearcherID. With ORCID, you maintain all key information in one place and control privacy settings, including what information is displayed publicly and what is shared with trusted partners.

Other campus systems will harvest ORCID IDs from CMU's identity management system for strategic purposes. For example, the Sponsored Programs and Research Compliance System (SPARCS) will harvest ORCID IDs to facilitate communication with government systems and research sponsors. Funders and publishers are increasingly requiring ORCID IDs with grant and article submissions.



Connecting Research
and Researchers

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accurately identified with your complete
body of work throughout your career

Carnegie Mellon University



ORCID + Andrew—
there's an app!
orcid.library.cmu.edu



Insight

BOUNDless is Carnegie Mellon University Libraries' first publication in many years. We chose the name mindfully, envisioning an expressive communication about our work and our vision for friends and supporters on campus and beyond. If we're lucky, it will also reach others in the university community who rarely think about the library or its potential to benefit their research and academic life. We intend occasional publication, twice or three times a year.

We launch **BOUNDless** at a real point of change. As we strive to preserve the best of what libraries have 'always done,' we are even more intrigued with the future and defining new roles for ourselves in the context of the university's changing academic and research mission. President Suresh and Chancellor Gallagher at the University of Pittsburgh have opened the door to unprecedented collaboration between the institutions' library systems, to best anticipate and meet the critical needs in education and research at each campus. And this brings to mind the essential symbiotic link between libraries and the fascinating evolution of

scholarly communication. Libraries naturally champion all aspects of freeing knowledge to create new knowledge—driving open access, leading data management, assisting researchers and creators in every discipline to identify themselves with their research on an international stage and, further, to identify themselves and their research with the university.

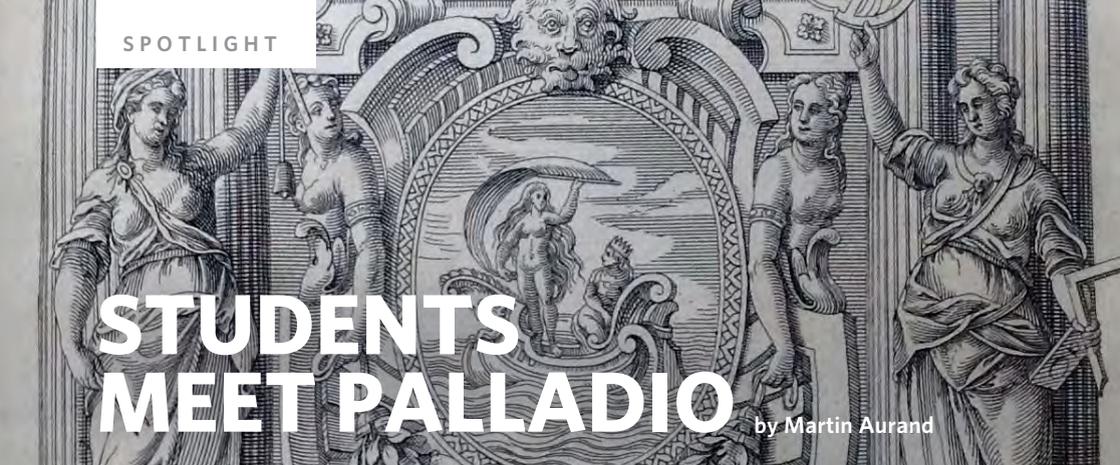
You'll find in this issue a mix of our most recent endeavors, connecting with students and faculty on an ever-expanding continuum of teaching and learning. It is a *boundless* enterprise that I am pleased to share with you.

Keith G. Webster
Dean of Libraries



Keith's blog
www.libraryofthefuture.org

@CMKeithW



STUDENTS MEET PALLADIO

by Martin Aurand

The Fine and Rare Book Room in Hunt Library houses a fine leather-bound copy of Andrea Palladio's *Four Books of Architecture*, here titled *The Four Books of Andrea Palladio's Architecture*, wherein, *After a short Treatise of the Five Orders, Those Observations as that are most necessary in Building, Private Houses, Streets, Bridges, Piazzas, Xisti, and Temples are treated of.*

First published in Italy in 1570, this is the third English translation of 1738, translated and presented by Isaac Ware, which is still considered to be the definitive English edition. The volume includes an acknowledgement of Lord Burlington, a Palladio booster who sponsored Ware's edition; and an advertisement in which Ware claims to have been true to Palladio's original drawings and text.

Palladio's treatise is perhaps the most influential architectural book ever printed in the western world. It addresses the principles of classical architecture and encompasses Palladio's reconstructions of Roman buildings and his own architectural designs that were executed in this spirit. Its translation and broad distribution greatly influenced eighteenth-century architecture in Britain and America. Thomas Jefferson was a notable admirer and follower of Palladio among many others.

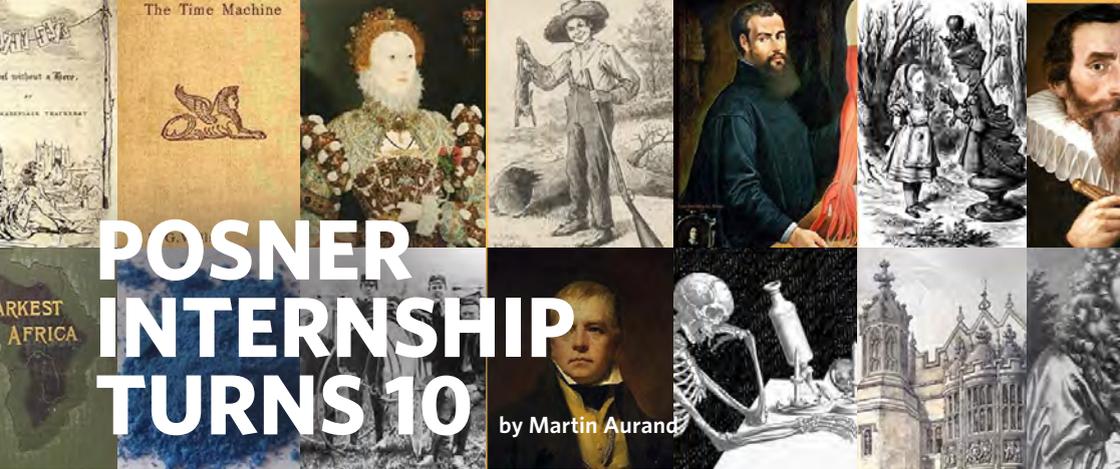
Students in 48-368: Rediscovering Antiquity: Travelers, Archeologists & Architects in the Mediterranean, a course in the School of Architecture taught by Professor Francesca Torello, recently visited the Fine and Rare Book Room for a class session. In the course, ancient Greek and Roman cities and archeological sites are studied as the object of late eighteenth

and nineteenth century rediscovery by western European visitors, who filtered the reality and transformed the understanding of ancient places and objects. In the library, students explored and examined the Palladio and many other rare architecture books ranging from a 1552 edition of Vitruvius' *De architectura libri decem*, the only architectural text to survive from antiquity, to Stuart & Revet's *The Antiquities of Athens* published in 1762-1830, which includes the first measured drawings of the Acropolis. Professor Torello remarks,

“The visit is an exceptional complement to the course. The students get a very concrete sense of another era—when books were scarce and expensive, and transferring information was a lot less easy than today.

The drawing and printing techniques never fail to attract their attention. Images that seemed flat on the screen in our classroom really come to life, and it is exciting to explore every detail, marveling at the skill of the draftsman.”

Other editions of Palladio's *Four Books of Architecture* are available in the Libraries' circulating print collection or may be accessed as e-books. The Ware edition can be viewed online as part of the Libraries subscription to *Eighteenth Century Collections Online*. Classes are welcome to schedule visits to the Fine and Rare Book Room for teaching and learning experiences with library collections.



Since 2004, the Posner Fine Arts Foundation has funded the Posner Internship Program to enable students to engage with the Posner Memorial Collection, a collection of landmark titles in the history of western science, beautifully produced books on decorative arts and fine sets of literature.

Each student intern works 15 hours a week for 15 weeks on a topic that they have chosen in order to research, design and install an exhibit in display cases in Posner Center. Each exhibit includes at least one book from the Posner Memorial Collection to achieve the goal of the program as expressed by Anne Molloy, the Foundation's executive director and a Carnegie Mellon University trustee, to "make the old books and ideas relevant to present-day viewers."

The internship is a model program that connects students with rare books, provides a funded research experience, and offers the opportunity to learn about exhibit design and installation in a public setting. Exhibits open with a public reception, and are scheduled so that they can be viewed by Carnegie Mellon's Board of Trustees, which meets biannually in the Posner Center.

Since the program started, 19 interns have developed exhibits on a wide range of topics. Mary Catharine Johnsen, special collections librarian, who works intensively with each student, says that "the students' creative projects have offered fresh views on using images to express power; on the science in science fiction; on the tragedy of imperialism;

and on ways to contextualize patronage, public policy, performance, and even probability."

Interns are chosen through a competitive application process. Applications are invited two times a year, in fall and spring.



Interns talk about the experience of hands-on rare book curation tinyurl.com/ptrr7le

Posner Interns and their Exhibits, 2004-14

- Eric J. Goldman, *Music of the Spheres*
- Mary Grace Duncan, *Scheherazade's Legacy*
- Rachel Gougian, *Darwin's Impact on Science and Society*
- Benjamin C. Jantzen, *Protean Probability*
- Deanna M. Mulye, *Vanity Fair: A Study in Adaptation*
- Christine Beaty, *The Familiar and the Strange*
- Julianne Mentzer, *Representations of Queen Elizabeth I*
- Jessica Dickinson, *Poetry and Prose Performances*
- Mirae Kim, *History of Patronage*
- Vanessa L. Koch, *Through the Looking Glass*
- Kate Holterhoff, *Romance and Reality of Darkest Africa*
- Hannah Gilchrist, *Creating & Copying Color*
- Prisca Ohito, *Pedals, Pittsburgh, and Planning*
- Sheila Liming, *The Last Minstrel*
- Marisa Colabuono, *Seeing is Believing*
- Julie Bowman, *Ancient and Picturesque Edifices*
- David Haeselin, *Das Kapital: Illustrious but Ill-Read*
- Nicole Anderson, *Make Your Own Meaning: Evolving Ritual*
- Jesse Boardman Kauppila, *Reticulation*



INTEGRATED DESIGN, ART AND TECHNOLOGY: IDEATE@HUNT

by Erika Linke

In the 2012-2013 ACRL Statistics Survey, questions about academic library facilities included a section on repurposing space:

“In the past three years, has library space been repurposed for some other use?”

88 of 229 doctorate-granting institutions responded yes.

“For what purpose was the space used?”

38% identified student success areas (writing/tutoring centers) and 42% noted technology/learning spaces.

The Libraries’ renovations over the last three years are part of a national trend inserting the library more directly into the teaching and learning space. Libraries have been one place where people read, learn, work with others and explore new ideas. Traditionally the result of this exploration has been a written work—a paper or thesis—or a presentation. Now, thanks to **IDEATE@Hunt**, a student will be able to take that idea, inspiration or project and make it—bring it to life through prototyping, or create a media event.

IDEATE is a new academic program at CMU, launched in the fall 2014 with a handful of portal courses laying a foundation for students to enroll in more advanced courses.

- 15-104 Introduction to Computing for Creative Practice (I-CS)
- 16/60-223 Introduction to Physical Computing (I-RI/ART)
- 18-090 Introduction to Signal Processing for Creative Practice (I-ECE)
- 62-150 Introduction to Media Synthesis and Analysis (I-CFA)

“The IDEATE portal courses cross-train students, introducing them to the concepts and practices of knowledge areas beyond their discipline. After completing the portal courses, students will be able to:

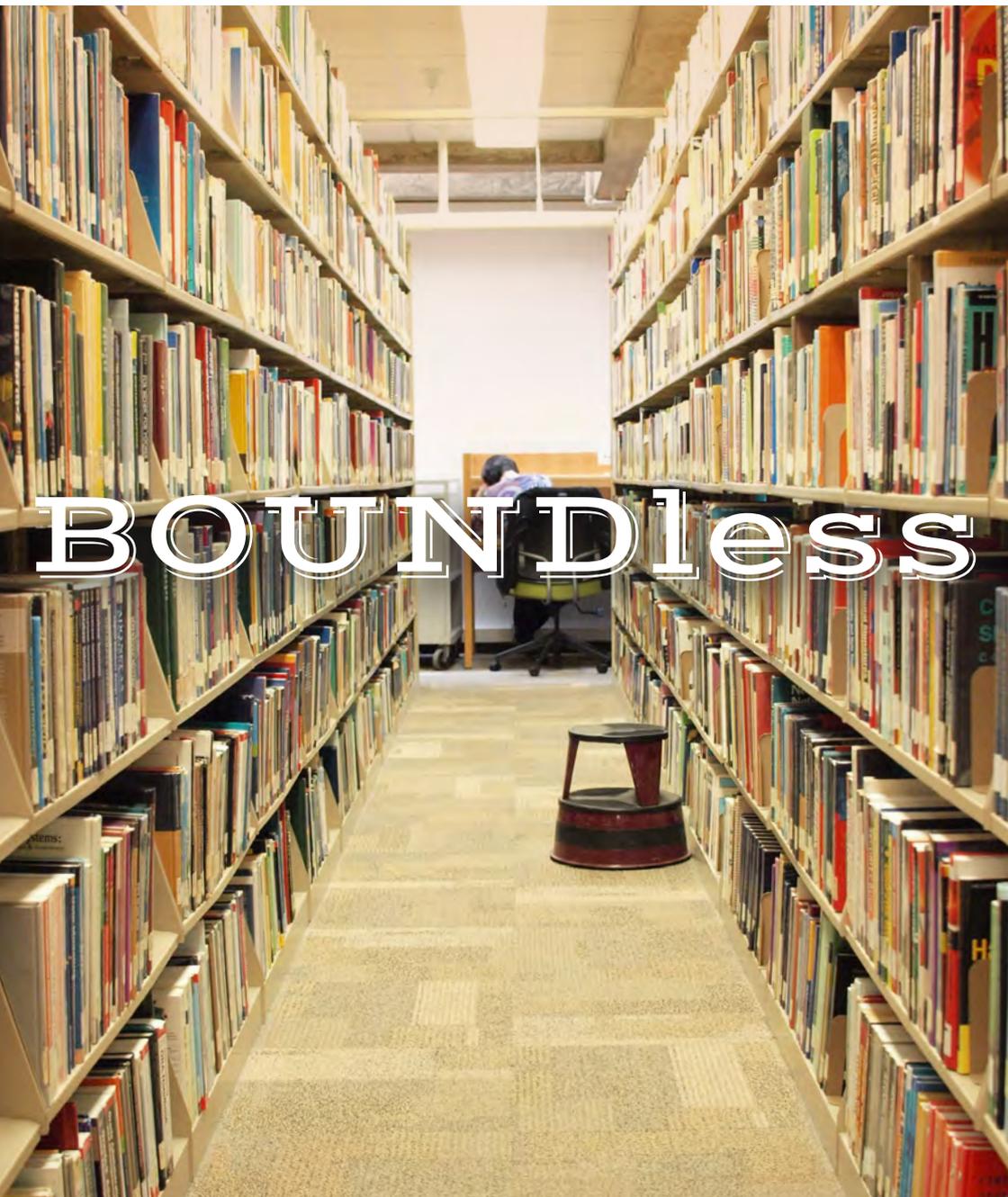
- Interpret cross-disciplinary communication from their collaborators (and use that interpretation productively in the collaborative work)
- Translate their own disciplinary expertise to describe ideas and outcomes in a way their cross-disciplinary collaborators can understand
- Develop interdisciplinary tech-arts prototypes (that include perspectives from multiple disciplines and enable further interdisciplinary communication and collaboration)”

Appreciating the creative and intellectual promise of IDEATE, the Libraries responded quickly to the university’s request to locate IDEATE program facilities in Hunt Library. The print reference collection was downsized and the number of computer workstations reduced to allow construction of two studio classrooms on the first floor of the library. Video and print collections from the basement were relocated to the second and third floors to make room for production facilities in the lower level. The studio classrooms have been a boon to students looking for a good place to study or work together on projects. Quieter than the former open study area, furnished with configurable tables and seating and movable white boards, the rooms are available 24/7 except when an IDEATE class is in session.

Carnegie Mellon University
Libraries

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