Friends of the Caltech Libraries
Areas of Focus

**Authoring and Publishing**
Supporting writing, publishing, thesis preparation and repositories.

**Tools and Technology**
Providing equipment and software, TechLab, rapid prototyping and 3D printing.

**Caltech Research Online**
Exploring Caltech’s research outputs: data, theses, papers and publications.

**Archives**
Preserving and making accessible the materials that tell the Institute’s history.
A message from the
University Librarian, Kristin Antelman

Just as Caltech leads the world in groundbreaking research on the global challenges of today, the Caltech Library is helping to redefine the research library in the Google age.

The Friends of the Caltech Libraries have long supported programs that enhance the student experience as well as the Library’s ability to be nimble in response to opportunities offered by emerging technologies and how students learn today.

In an era in which so much information is at everyone’s fingertips, the personal interactions students and researchers have with Library staff, the “extra mile” services our staff provide, our support for scholarship in all its forms, past and future—all serve to make tangible the Library’s contribution to the greatness of Caltech. Even as libraries continue to evolve in the future, Caltech Library’s singular focus on listening to our community and evolving together, will always stand at the center our identity and mission.

We hope you will support the exciting work we are doing at the Caltech Library. We are planning several “open house” events around the TechLab and 3D printing, Archives and rare books, and transforming scholarly communication through Open Science. Please also visit our website library.caltech.edu to explore how the Library supports Caltech.

Rosemary Choate, President of the Friends of the Caltech Libraries, and I invite you to be a part of our exciting transformation and become a Friend of the Caltech Libraries.
Every year, the Friends of the Caltech Libraries recognizes an undergraduate senior thesis that exemplifies excellence in research, writing and the effective use of Library resources.

The prize is accompanied by a $1200 honorarium. Finalists are honored with a reception at the Alumni House where they are introduced by their advisors and presented with a bound copy of their thesis. Friends President Rosemary Choate presented Ayush Gupta with the prize this year for his thesis, “Noncovalent Immobilization of Electrocatalysts via a Pyrenial Ligand.” At the reception, his faculty sponsor, the Arnold O. Beckman Professor of Chemistry, Harry Gray, spoke highly of Ayush’s research, as well as the importance of developing alternative forms of energy. Ayush will pursue a PhD in chemistry at the University of Chicago.

In fall 2015 the Library opened the TechLab, located on the first floor of Sherman Fairchild Library. The TechLab provides the Caltech community with unfettered hands-on access to 3D printers, scanners and electronic kits to support prototyping and modeling.

Four TechLab students showcased their projects at an American Association for the Advancement of Science conference, including Pavan Bilgi, a graduate student in Aeronautics. Pavan used 3D printing to build a prototype piece for the Zwicky Transient Factory, a camera used to scan the sky for transient light objects in space.

The TechLab was created with the support of the Moore-Hufstedler Fund.
The Three Minute Thesis (3MT®) competition, founded by the University of Queensland in 2008, challenges final year PhD students to explain their research in an engaging 3-minute talk to a non-specialist audience.

On April 15th 2016, the Caltech Library hosted its first 3MT contest, and it was a wild success! It was held in Dabney Lounge, with standing room only. The Judges represented the broad Caltech community, including Pasadena Mayor Terry Tornek; physics graduate student Jamie S. Rankin; co-founder of Nonscriptum, LLC (a 3D printing educational firm) Joan Horvath; and Ernesto Mercado of Caltech’s legendary Ernie’s Al Fresco food truck. SpringerNature generously provided the prize money.

For the first time, the Caltech Archives has digitized an entire collection. Spanning more than 70 years, the Paul MacCready collection includes manuscripts, awards, videos, photographs, and diaries.

A Caltech alumnus (MS Physics, 1948; PhD Aeronautics, 1952), Paul MacCready was a visionary inventor and entrepreneur who pioneered alternative energy solutions through his company, AeroVironment. Among his many celebrated works is the human-powered aircraft series known as the Gossamer Albatross, which flew across the English Channel in 1980. Paul also created the high-altitude, long-endurance Helios solar aircraft used for telecommunications. His interest in environmentally friendly technology led to electric, hybrid, and micro-air automotive vehicles.

The Library is tremendously proud of this initiative which was made possible by a generous gift from the MacCready family.

The collection can be accessed at maccready.library.caltech.edu
At 98 years of age, John D. “Jack” Roberts, Institute Professor of Chemistry, Emeritus, garnered yet another distinction. His textbook, *Basic Principles of Organic Chemistry*, has surpassed 500,000 downloads, from over 200 countries.

The second edition, written with co-author Marjorie C. Caserio (1977), is available online through CaltechAUTHORS, the Library’s digital repository for faculty publications. “Since being included in CaltechAUTHORS, *Basic Principles of Organic Chemistry* alone has accounted for more than 10% (about 500K of 5 million downloads) during the last five years,” notes George Porter, Engineering Librarian and researcher. We are grateful to have been able to honor Dr. Roberts before he passed away in October.

**CaltechDATA**

As a research library, we have always been dedicated to fulfilling our role to disseminate and preserve the scholarly output that shapes our understanding of the world.

To meet the changing needs of research and to preserve and provide access to the data that underlie the research performed at Caltech, the Library is supplementing its platform for publications, CaltechAUTHORS, with a data platform, CaltechDATA. “The Caltech Archives holds the lab notebook that contains the data from Robert Millikan’s groundbreaking oil drop experiment. These handwritten tables of data serve as a crucial record of this work. If this experiment was carried out today, these numbers would be stored in a digital file,” says Tom Morrell, the Library’s Research Data Specialist. The launch of CaltechDATA is an exciting milestone in the Library’s support for Open Science and its core objective: advancing the pace of science by increasing its accessibility and replicability.
The Friends of the Caltech Libraries (The Friends) is devoted to the proposition that great institutions include great libraries. The Friends seek to assist the Caltech Libraries and the Caltech Archives in developing scope and quality.

Keep in touch and join our mailing list! We’d love to get to know you.

library.caltech.edu/friends

1200 E. California Blvd. MC 2-32, Pasadena, CA 91125

CaltechLibrary