1,926 participants in IDEAL Center programming in 2015

James K. Ferri
Diane Cole Ahl
Nicole V. Crain
Ashley Cramer
Christine Schatz
Katie Schimpf
Jolene Cardassi
The IDEAL Center serves as a platform for engaging external partnerships and facilitating experiential learning, while showcasing the connection between the liberal arts and engineering at Lafayette.

The Center provides resources, curricular connections, and infrastructure that build and sustain a culture of creativity and connection.

IDEAL engages Lafayette with collaborative opportunities and encourages crossing boundaries and taking bold leaps of imagination to uncover new solutions to global challenges.

We develop translational thinking and facilitate risk taking by encouraging student-faculty teams to identify societal needs and lead change.
In 2015
IDEAL supported innovative programs, projects, and individual experiences.

Learn more.
The cybersecurity initiative is a collaboration between Lafayette College, cybersecurity experts, and government organizations designed to address cyber threats. Programming focused on the current state of prevention and the on-going challenges of security breaches in state and local government.

1 broadcast
The Value of PII
This program explored the quest for data containing personally identifiable information, or PII, and the surge in cyber attacks and security breaches. It aired on PBS39 on May 5, 6, and 10. Produced in collaboration with the Policy Studies Program.
125 participants in the symposium:
“Cybersecurity Threat Landscape: Proactive Measures for Your Municipality”
co-sponsored by the Robert B. and Helen S. Meyner Center and the Policy Studies Program

95 participants in the Lehigh Valley Chamber of Commerce mini-conference on cybersecurity

Trustee Ed Ahart welcomed the roughly 95 attendees and two distinguished experts: Kevin Mandia ’92 and Erik Avakian.

Co-sponsored by the Lehigh Valley Chamber of Commerce, the Easton Area Chamber of Commerce, the Pennsylvania Governor’s Office for Homeland Security, the Manufacturer’s Resource Center, the Robert B. and Helen S. Meyner Center, and Policy Studies Program.
Cultural Conservation and Nanotechnology is a metaphor for liberal arts and engineering. The goal of the program is to train Lafayette students to be fluent in both and play a significant role in leading trans-domain initiatives.

\[
\text{Ca(OH)}_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O}
\]
IDEA 375:
Cultural Conservation and Nanotechnology

Casey White (Neuroscience, '17) and Noelle Kosarek (Biology, '16) prepare for a public fresco painting activity co-hosted by the Art and Chemistry Departments with Ed Kerns, Jim Toia, and Melissa Galloway.
student leaders facilitated public-facing programming and participated in an internship and cultural immersion in Italy
DIGITAL CONSERVATION

Digital documentation of historic and culturally important structures using three-dimensional imagery is relatively new; however, its use by researchers and educators is rapidly growing because it has several distinct advantages over traditional photographs and surveying methods. The Bachmann Tavern is the oldest surviving building in the City of Easton and carries immense significance to the history of the region and German-American heritage. Given its importance and proximity to Lafayette College, this structure is an excellent choice for a first effort to develop a three-dimensional model for digital preservation.

This initiative is a collaboration of 5 organizations at Lafayette.

FOREIGN LANGUAGES AND LITERATURES

CIVIL ENGINEERING

COMPUTER SCIENCE

INFORMATION TECHNOLOGY SERVICES

SKILLMAN LIBRARY
Different academic departments collaborated on programming.

6 faculty from different academic departments collaborated on programming.

46 registered participants in the international workshop; “Nanotechnologies for Cultural Conservation: Current Trends and Practices”

576 total participants in all Cultural Conservation and Nanotechnology programming in 2015.
Understanding the translation between the physical and the digital enables creative thinkers to take the bold leaps of imagination needed to find new technological solutions to global societal problems.

The AMI meets the needs of students, entrepreneurs, and new industry adopters using state-of-the-art 3D printing technologies through seminars, Maker Meet-ups, workshops, and design challenges hosted by the AMI.

These experiences prepare students for innovative work environments while growing the entrepreneurial ecosystem at the College and helping to stimulate the regional economy.
SEMINARS

“Basic Introduction to Filament Printing with the Ultimaker2”
Ashley Cramer, Additive Manufacturing Institute
Jon Macasevich, Skillman Library Technology Specialist
Co-sponsored with Skillman Library

Ashley Cramer, Additive Manufacturing Institute
Christopher “Barker” Carlock, Additive Manufacturing Institute
Co-sponsored with Admissions

MAKER MEET-UPS

29
faculty and students at Lafayette
gathered to explore 3D printing

DESIGN CHALLENGES

Level 1: Customize
Level 1+: Create
Level 2: Design

WORKSHOPS

14
faculty and students at Lafayette
learned about metal printing
IDEAL • Design

Explore

Create

W Ti printable metal materials (steel, tungsten, titanium) with M-Flex suite

420 stainless steel

Design

Ultimaker 3D print biodegradable and sustainable plastic in sizes up to 10 x 16 x 10 inches

9³ inches

large-format 3D metal printing up to 10 x 16 x 10 inches

Ultimaker2 3D print biodegradable and sustainable plastic in sizes up to

ADDITIVE MANUFACTURING INSTITUTE
I see manufacturing taking a profound turn with additive technologies in the next five years. We’ll see elite job shops grow, and new start-ups grow. We’ll also see blue-collar employees learn the technology and adapt and start wearing white shirts.”

-S. Kent Rockwell ’66

students at Lafayette had a course experience in additive manufacturing offered through the AMI in 2015
Co-curricular workshops including: From Concept to Reality; Funding and Cash Flows; and Organizational Management and Lean Operations were offered in fall and will continue in the spring and summer of 2016.

“From Concept to Reality”

“Funding and Cash Flows”

“Lean Start-up and Operations”

The focus in the fall was on first-year students with guest lectures amplifying different sub-topics through personal perspective. In the spring, the focus will be on capstone students and examples (e.g. filing a provisional patent or writing a business pro-forma). In the summer, EXCEL 2nd and 3rd year students will learn through case studies of student start-ups. Open to all students at Lafayette.

Co-sponsored by the Engineering Division, The Kern Family Foundation, KEEN Initiative Engineering and the Entrepreneurial Mindset.
The President’s Entrepreneurship Lecture Series

257 students at Lafayette attended keynote lectures in entrepreneurship by high impact speakers

“Change the World: Pass Legislation, Start a Company, and Solve the Great Challenges of Our Time”

David Weild IV
Founder, Chairman, and CEO of Weild & Company
Father of the JOBS Act
former Vice Chairman of The NASDAQ Stock Market

“Growing Up by Working in a Growing Company”

Jerome B. Zeldis
Chief Medical Officer, Celgene Corporation
CEO, Celgene Global Health
This course is an exploration of leadership examining political, social, military and business leaders, and leaders of conscience. Seminar discussions include a wide variety of topics including characteristics leaders share, successes and failures in leadership, and crisis decision-making.

Developed in collaboration with the Policy Studies Program

11 students at Lafayette enrolled in Leadership Seminars
Contributors

CULTURAL CONSERVATION AND NANOTECHNOLOGY
Faculty
Anthony Cummings
James Ferri
Diane Ahl
Rachel Goshgarian
Markus Dubischar
Melissa Galloway
Edward Kerns
James Toia
Filippo Gambinossi
Michael McGuire
Amir Sadovnik
Margarete Lamb-Faffelberger

PARTNERS
Consorzio per lo Sviluppo dei Sistemi a Grande Interfase (CSGI)
Piero Baglioni
Rodorico Giorgi
Emiliano Carretti
David Chelazzi
Michele Baglioni
Nicole Bonelli
Giovanna Poggi
Metropolitan Museum of Art
Daniel Weiss
Marco Leona
Julie Arslanoglu
Allentown Art Museum
David Mickenberg
Sigal Museum and Northampton County History and Genealogical Society

SPONSORS
Keefe Family Foundation
Samuel H. Kress Foundation
nanoforart.org
Camille and Henry Dreyfus Foundation
Donald Morel
SUSTAINABLE NATURAL RESOURCE DEVELOPMENT
Faculty
James Ferri

PARTNERS
Martin Guitar
Nick Colesanti

SPONSORS
Martin Guitar

LEADERSHIP
Faculty
Donald Morel
S. Abu Turab Rizvi

GLOBAL CHALLENGE OF CYBERSECURITY
Faculty
Mark Crain
Nicole Crain
John Kincaid
David Woglam

PARTNERS
FireEye
Kevin Mandia ’92
Chief Information Security Officer, Commonwealth of Pennsylvania
Erik Avakian
Richard Harris
Chief Security Information Officer, State of South Carolina
Marcos Vieyra
PBS39
Laura McHugh
U.S. Representative of PA, 15th Congressional District
Charles Dent
Director of Homeland Security, Commonwealth of PA
Thomas Minton III

SPONSORS
Donald Morel

ENTREPRENEURSHIP
Faculty
Alison Byerly
Erin Evans
Scott Hummel
David Stifel
James Ferri
Fluney Hutchinson
Rose Marie Bukics

PARTNERS
BioSig Technologies
Kenneth Londoner
Weild and Co.
David Weild IV
Zzyzx Polymers
Philip Brunner
Ydatum
Alex Woltornist
Celgene
Jerome Zeldis

SPONSORS
The Kern Family Foundation
Donald Morel

HONORS THESIS
Faculty
Jennifer Talarico
Daniel Sabatino
David Stifel

PARTNERS
United Technologies, Pratt and Whitney
Thomas Praisner
Easton Rotary Club
Susan Herschlag

ANALOG MODULAR SYNTHESIZERS
Faculty
Daniel Sabatino

PARTNERS
ANSWER Productions
Al Sgro

FRANKENSTEIN
Faculty
Edward Kerns
Jim Toia

ADDITIVE MANUFACTURING INSTITUTE
Faculty
Ashley Cramer
James Ferri
Neil McElroy
Kylie Ballin
Michael McGuire
Matthew Hyde
Mary Wilford-Hunt
Jonathan Macasevich
Scott Hummel
Rebecca Rosenbauer
Luis Schettino
Dan Bauer

PARTNERS
The ExOne Company
Jared Helfrich
Mike Orange
Philip Lane
Victaulic
John Malloy
Mark Danial
Richard Bucher

SPONSORS
Rockwell Venture Capital

PRODUCT DESIGN FOR SPORTS REHABILITATION
Faculty
Tobias Rossmann

PARTNERS
Athletics Division, Lafayette College
Matt Bailey

DATA ANALYTICS
Faculty
Trent Gaugler
James Ferri

PARTNERS
Crayola Digital Marketing
Justin Odom

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Crayola