Corporate and Foundation Relations

College of Liberal Arts & Sciences

ANNUAL REPORT 21-22
Corporate and Foundation Relations (CFR)

THE COLLEGE OF LIBERAL ARTS & SCIENCES AT ILLINOIS is grateful for the strong relationships we have built with our external partners including government agencies, corporations and private foundations. This report is intended to provide a broad overview of investments by external partners in the College of Liberal Arts & Sciences at Illinois and to share select stories that highlight the impact of these partnerships. In FY21, the College of LAS received $56 million in funding from external partners to support research, scholarships, professorships, and programming among other activities in LAS units and student organizations. Students graduating with degrees from units in the College of LAS were hired by over 500 unique employers, demonstrating the broad range of disciplines and skill sets our students bring to industry.

$56 MILLION IN FUNDING FROM EXTERNAL PARTNERS

CFR RESEARCH GRANT SOURCES

- 37% Other
- 21% US National Science Foundation
- 18% National Institute of Medical Science
- 6% National Institute of Allergy & Infectious Diseases
- 4% NASA
- 3% National Institute of Diabetes & Digestive Kidney Diseases
- 3% Department of Education
- 3% National Institute of Neurological Disorders & Stroke
- 2% Department of Energy
- 2% National Heart & Lung Blood Institute
- 1% National Institute of Mental Health

TOTAL FUNDING FROM FEDERAL AGENCIES: $50,349,590.73

FY22 CORPORATE & FOUNDATION GIVING

<table>
<thead>
<tr>
<th>Funding Purpose</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Conference/Seminars/Workshops</td>
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<tr>
<td>Equipment</td>
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<td>Facilities</td>
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In partnership with the Department of Chemistry, AbbVie launched a mentoring program for PhD students interested in gaining exposure to industry. Each participating student is paired with one scientist from AbbVie, and the mentoring relationship primarily focuses on developing business skills related to careers in industry such as professional writing, creating, and delivering presentations to a variety of audiences and career planning. Each mentoring partnership lasts nine to 12 months with the mentor and mentee determining the frequency of meetings and expectations for outcomes of these meetings.

“I derive much satisfaction in engaging students as part of the AbbVie mentoring program. Sharing the unwritten rules of professional life gives them a head start I wish I had gotten when I was a grad student aspiring to work in industry.”

Didier Lefebvre, mentor and AbbVie Senior Principal Research Scientist

“I’ve always loved working with students—I used to be a high school chemistry teacher before getting my PhD And while I don’t work with high school students much anymore, I try to help position graduate students into whatever the next steps look like. It’s a point of emphasis for me to prepare them for what interviews and then careers look like. I love my job at AbbVie, though I didn’t have a clear understanding in graduate school of what process chemists did. (My mentee) and I got the chance to do a practice talk a week ago, which was a really fun experience. We had a couple other AbbVie employees listen in and then give him a mock interview. Regardless of what company he applies to, I hope that it provides a lot of concrete value for him going forward.”

Daniel Tao, process chemistry

“The mentorship program is going well so far. I feel that our monthly conversations are productive and useful. I am very supportive of continuing this mentoring program next year with a new group of applicants.”

Jeff Kallemeyn, process chemistry

“I derive much satisfaction in engaging students as part of the AbbVie mentoring program. Sharing the unwritten rules of professional life gives them a head start I wish I had gotten when I was a grad student aspiring to work in industry.”

Didier Lefebvre
AbbVie Senior Principal Research Scientist
Atmospheric sciences partners with Aon and Central Michigan University to develop models for predicting severe storms that result from climate change

Led by Professor Jeff Trapp, head of the Department of Atmospheric Sciences at the University of Illinois Urbana-Champaign, and John T. Allen, associate professor of earth and atmospheric sciences at Central Michigan University, this project aims to anticipate the likelihood of tornado, severe hail, and wind damage by time and geographical region using historical data, as well as novel applications of the latest meteorological technology to predict future occurrence of these events. Through a partnership with Aon, a leader in reinsurance and commercial risk solutions, researchers hope to mitigate increased losses for the insurance industry that result from elevated claim levels by developing more accurate methods for predicting severe weather. Damaging winds, tornadoes, and hail that drive increased losses are most often due to thunderstorms, which can occur any hour of the day and any day of the year. The annual cost of damage from severe storms to the insurance industry has increased from $6 billion to more than $21 billion in the last 10 years.

Charles and Margaret Levin Family Foundation provide critical support for research on mitigation of Idiopathic Pulmonary Fibrosis

Idiopathic Pulmonary Fibrosis (IPF) is a chronic and incurable disease, and most patients with the disease have a life expectancy of only two to three years after diagnosis. Globally the disease afflicts more than 5 million patients. With support from the Charles and Margaret Levin Family Foundation, Isaac Cann, professor in the Department of Animal Sciences and affiliate professor of Microbiology at the University of Illinois Urbana-Champaign, is collaborating with Esteban C. Gabazza, from the Department of Immunology at Mie University (Japan), to identify causes of IPF as well as methods for mitigating the effects of the disease.

Cann and Gabazza have determined that lung fibrotic tissue, which is tissue with thickening or scarring, has diminished capacity to regulate salt. This leads to a very salty lung environment and supports growth of bacteria that are associated with the development of lung fibrotic tissue. In addition, when these bacteria grow, they release a small peptide that induces apoptosis (cell death) of lung cells, a hallmark of IPF, especially during the stage called “Acute Exacerbation” or AE. AE accounts for almost half of all IPF-related deaths.

The research team believes that their unconventional approach to IPF research has the potential to allow for rapid progress towards providing significant understanding of the disease itself and development of drugs, such as a monoclonal antibody, that can be used to block the disease from progression in the early stages and importantly preventing AE. Cann and Gabazza are also developing biomarkers that may help detect early onset of IPF and thus arrest its development.
Sandia partners with the College of Liberal Arts & Sciences to host climate security workshop series

Sandia National Laboratories partnered with leadership from the Office of the Vice Chancellor for Research and Innovation and faculty from across the College of Liberal Arts & Sciences and the Grainger College of Engineering to host a series of the Sandia-Illinois Climate Security Virtual Workshops and follow-up visits, discussions, and seminars during the 2021-2022 academic year. The goal of this series was to bring together researchers from Sandia and Illinois with overlapping interests to give short technical presentations on their ongoing work and to facilitate focused discussions to brainstorm ways to collaboratively move forward in joint projects. Workshop themes included energy + water + climate, climate modeling, geologic carbon storage, and climate security.

The workshop series was open to participants from across the University of Illinois Urbana-Champaign as well as Sandia National Laboratories team members from relevant research areas. College of LAS units represented in these workshops included the departments of geology, geography and geographic information science, and atmospheric sciences, as well as Grainger College of Engineering departments of mechanical science and engineering and civil and environmental engineering. Faculty and staff with appointments at The Institute for Sustainability, Energy, and Environment, the Illinois State Water Survey, and the Illinois State Geological Survey also participated as presenters in the workshop series. Several Sandia researchers have consequently initiated or expanded collaborations in strategic areas that take advantage of Illinois’ unique strengths and capabilities.

First Spoke Foundation and Jewish Federation of Metropolitan Chicago support collaborative effort to create anthology of modern Hebrew literature

With support from the First Spoke Foundation and the Jewish Federation of Metropolitan Chicago, associate professor Rachel S. Harris is leading a collaboration with the University of Cambridge to create an anthology of modern Hebrew literature that will be the first comprehensive anthology of modern Hebrew prose, poetry, fiction, and drama to be published in English translation. The anthology will trace the development of modern Hebrew literature from its beginning in the 19th century to contemporary 21st century writing, and the texts selected for inclusion are representative of its breadth and diversity. This four-volume anthology, which is expected to go into publication in 2026-2027, will be divided by genre with each volume subdivided into chronological and thematic sections, each of which will address historical and geographical influences, as well as different literary groups and movements.

Harris will lead a team of editors from a number of partner institutions including Evan Fal lenberg (Bar Ilan University), Adriana Jacobs (University of Oxford), Arie Dubnov (George Washington University), Shai Ginsburg (Duke University), Nancy Berg (Washington University) and Adam Rovner (University of Denver) as well as translator Jessica Cohen (University of Denver).

In addition to the anthology, Harris and her team will hold two public events: one at the University of Illinois and one in the Chicago metro area. These events will include literary readings by authors and translators that offer audiences an opportunity to engage with the process of selection and translation. In conjunction with Hillel and the Program in Jewish Culture & Society, the team will also host a half-day educational program that teaches students on the UIUC campus and at Chicago area high schools about the process of literary translation.

This project is made possible by funding support from the University of Cambridge, Jewish Federation of Metropolitan Chicago, the College of LAS, and the Office of the Provost at UIUC.

RACHEL S. HARRIS
3M Foundation supports C² program

With generous support from the 3M Foundation, Lisa Olshansky, assistant professor of chemistry, launched the Chemical Science through Community (C²) program in collaboration with faculty, staff, and students in the department. The goal of C² is to bolster success and increase participation in research for undergraduate chemistry and chemical engineering majors with a specific focus on students from underrepresented minority (URM) groups. To achieve these goals, Olshansky and her team created a multi-faceted program that is rooted in building community among URM chemistry majors through activities including one-on-one mentorship; monthly networking, career, and skills development workshops; summer research scholarship opportunities; conference travel awards; and research presentation opportunities.

Some key goals for students participating in the C² program include improved GPA and increased completion rates for courses and degree programs, participation in research, acceptance into PhD programs and job placement. Program coordinators also hope to support soft skill development for students including increased confidence, stress management, professional communication skills, the ability to identify and handle bias, development of coping strategies, and having a research and scientific identity. The organizers envision that all of these outcomes can be achieved through an increased sense of belonging within the chemistry community.

In its first year, C² is comprised of 12 dedicated graduate student mentors and 12 undergraduate mentees. The program has hosted a series of boisterous network-building and professional development workshops and celebrated the end of 2021 with an undergraduate research symposium featuring two of its C² mentees. Soon, the organization will announce seven Summer Research Scholars and two travel award recipients from among graduate and undergraduate C² affiliates. Heading into the 2022-2023 academic year, the group plans to build off the strong foundation of community they have established to recruit new members from across the School of Chemical Sciences.

“Thanks to the C² Mentor program I was connected with … a grad student mentor. She has been of great help and guidance for me to find, reach out, and get started in … a lab, a process which I had found to be quite intimidating before joining the C² program.”

“I am a first-generation college student and first-generation Mexican American, and because of my background I know little about academia. I am a junior, and I will be graduating in a year, and I still do not know what I want to do with my life. I know that dedicating a whole to summer to research will positively impact my life and help me gain some perspective about my future academic endeavors.”
SUPPORTING STUDENT SCHOLARS

Bp joins LAS Corporate Affiliate Program to catalyze chemical engineers’ careers

Alumnus John Bartels (BS, ’89, chemical and biomolecular engineering) describes his career as a “Disney World” for chemical engineers. Through a new collaboration between bp and the College of Liberal Arts & Sciences’ Corporate Affiliate Program, Bartels presented key insights from his 30+ year career in oil refining to students in an introductory chemical engineering course (ChBE 121) and thermodynamics (CHBE 321). Bartels was joined by bp process safety engineer Tunde Dokun and bp early career advisor Jessie Dengvasang.

“I am thrilled to have had so many opportunities in the last several years to be part of activities like these that link two exceptional organizations, bp and the University of Illinois, which have been such a profound part of my life for the last four decades,” Bartels said. “I look forward to future collaborations that will enhance the educational experience for the students of this outstanding department and university.”

bp’s participation is a double win for students who benefit from real-world industry perspectives as well as through scholarships and funding for student organizations like Omega Chi Epsilon (OXE), the national honor society for chemical engineering students. The LAS Corporate Affiliate Program facilitates broad access to students and faculty, through activities such as guest lectures, in acknowledgment of their financial support. In addition to the recent lectures, bp hosted a popular networking event—complete with frozen yogurt! — for chemical engineering students to discuss bp’s internship and career opportunities at one of the world’s leading energy companies.

“These corporate interactions are invaluable to help our students envision what opportunities there are after graduation at bp and what skills (in addition to technical content) will propel their careers in industry,” said chemical and biomolecular engineering department head Paul Kenis, the Elio E. Tarika Endowed Chair. “bp is a strong supporter of the department, and we are cognizant that their support has enhanced the educational experiences for countless chemical engineering students at Illinois—and I know that fro-yo is always much appreciated as well!”

bp campus liaison and alumnus Anthony Valente (BS, ’90, chemical and biomolecular engineering) is another key partner who has helped Illinois establish and maintain this fruitful and longstanding relationship. Many students have followed Valente and Bartels into careers at bp, which is the third-largest employer of Illinois’ chemical engineering graduates, according to LinkedIn.
SUPPORTING STUDENT SCHOLARS

DuPont and NISA Investment Advisors support summer scholars program for math, stats

Named for University of Illinois mathematics alumnus David H. Blackwell, the Blackwell Summer Scholars program honors the legacy of this world-renowned scholar of mathematics and statistics. Created to increase the access and equity for graduate degrees in statistics, data sciences, and mathematics, the Blackwell Summer Scholars program provides undergraduate student scholars with the opportunity to carry on his legacy.

Selected from a highly competitive applicant pool, Blackwell Scholars are paired with mentors from the University of Illinois departments of statistics and mathematics based on their research interests. In addition to their research, students participate in weekly seminar presentations throughout the program focused on topics such as admissions topics for graduate school applications; the importance of mentors and finding opportunities to chase goals, and accurate assessment via process data, among others.

During Summer 2022, DuPont and NISA Investment Advisors provided generous financial support for a total of five students participating in the program, increasing access to this unique learning and professional development opportunity at Illinois. In addition, the College of Liberal Arts & Sciences Access and Achievement Program matched gifts provided by our corporate sponsors, providing opportunities for even more students to participate in this program.
FUNDING ORGANIZATIONS

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| Aerodyne Research Inc | Canadian Institute of Actuaries |
| Air Force | Carnegie Mellon University |
| Air Force Office of Scientific Research (AFOSR) | Case Western Reserve University |
| Alan W Haussermann DDS | Casualty Actuarial Society |
| Alfred P Sloan Foundation | Caterpillar |
| Almond Board of California | Champaign County Mental Health Board |
| American Cancer Society | Charles and Margaret Levin Family Foundation |
| American Chemical Society | Chevron Phillips Chemical LP |
| American Council of Learned Societies | Children’s Hospital of Philadelphia |
| American Diabetes Association | City of Jacksonville |
| American Educational Research Association | Coaching Actuaries |
| American Epilepsy Society | Colorado School of Mines |
| American Heart Association | Corteva Agriscience |
| American Institute for Cancer Research | Country Financial |
| American Mathematical Society | Covia Holdings Corporation |
| American Political Science Association | Cystic Fibrosis Foundation Inc |
| American Psychological Association | Donald Danforth Plant Science Center |
| Ames Laboratory | Doris G Quinn Foundation |
| Andreas Foundation | Dow Chemical Company |
| Andrew W Mellon Foundation | Dreispag Consulting Group |
| ANP USA | Duke University |
| Anthem | DuPont Specialty Products USA |
| AON Global Operations | Eli Lilly & Company |
| Army CERL | Erwin and Linda Arends Foundation |
| Army Research Office | Etexpare Basque Institute |
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| Association for Israel Studies | ExxonMobil |
| Atotech USA | F Hoffman-La Roche Ltd |
| Avantor | FACE Foundation |
| Bank of America | Facets Organization |
| Barbro Osher Pro Suecia Foundation | Federal Aviation Administration |
| Barrick Gold | First Christian Church |
| Bill and Melinda Gates Foundation | FMC |
| Biochemistry Trust of Urbana | French Embassy |
| BioNanoCon | French Government |
| Boehringer Ingelheim Pharma | Galactic Pizza |
| Boom Technology Inc | GDL Foundation |
| BP North America | Genentech Inc |
| Brain and Behavior Research Foundation | Geological Society of America |
| Brain Research Foundation | Geological Society of America Foundation |
| Brandeis University | Georges Family Foundation |

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