TABLE OF CONTENTS

01 Letter from the Assistant Vice President
02 AI Mission & Vision
03 AI Strategic Initiatives
04 Overview of AI Offices & Programs
05 Learn Through Discovery Initiative
06 LTD Highlights
07 Wall of Fame
08 Inaugural Pop-up Course
09 Center for Community Engagement
10 Kellogg Honors College
11 Office of Undergraduate Research
12 Student Innovation Idea Labs
13 CPP NSF I-Corps
14
Dear friends of AI,

Welcome to the inaugural Annual Report of the Office of Academic Innovation (AI). AI was founded in August 2018 to foster a culture of innovation in teaching and learning and to institutionalize the Learn Through Discovery (LTD) Initiative which aims to provide every Cal Poly Pomona student a signature polytechnic experience (PolyX) and enable them to articulate the experience. We have had two consecutive successful years which would not have been possible without your support. We thank all the faculty, students, staff, and external partners who have collaborated with us to ensure the successful launch of AI.

AI has done a lot in a short period of time. The following pages will tell the story of our accomplishments. An important part of our story is that we were made up of units which had previously not worked together. We have gone from being individual separate units to becoming the AI team which consists of the Center for Community Engagement, Kellogg Honors College, Student Innovation Idea Lab, Office of Undergraduate Research, and CPP NSF I-Corps Program. We continue to build and strengthen our team through bi-annual AI retreats, AI happy hours, and AI team building activities. The success of AI lies in the strength of its team.

In our first year we launched the Projects Hatchery as an example of a PolyX to support students from every major through the project design and implementation processes and also provide them funding to successfully launch their projects for the betterment of an identified community. Also, in our first year the LTD Task Force was constituted to inventory existing curricular and co-curricular PolyX. The Task Force defined PolyX and developed a process for submitting and evaluating PolyX. The Steering Committee was constituted of academic leaders to guide the implementation of the LTD initiative. We also launched the faculty/staff summer institutes which provide professional development opportunities around innovative curricula and faculty/staff sandboxes which provide opportunities for multidisciplinary collaboration.

Our second year saw the expansion of the Projects Hatchery, the addition of faculty/staff winter institutes, the implementation of a pilot program to incorporate PolyX into First Year Experience courses, and the launch of the inaugural multidisciplinary pop-up course, our automated future. Our second year also saw the advent of a global pandemic, Cal Poly Pomona going virtual during the spring 2020 semester and the delivery of AI programs virtually including a successful 2020 virtual faculty/summer institute. Year two also saw AI becoming part of the Office of Student Success, Equity, and Innovation and the growth of the AI team to include the Office of Undergraduate Research.

We thank you for your continued support and look forward to being an integral part of Cal Poly Pomona’s aspiration to be the epicenter of creativity, innovation, and discovery!

Olukemi Sawyerr, Ph.D. | AVP Academic Innovation
Mission
The Office of Academic Innovation (AI) cultivates student success by fostering a culture of innovation in teaching and experiential learning; advancing and promoting a vision of innovative education; and collaborating with faculty, staff, and students to cultivate innovative curricular and co-curricular strategies aimed at nurturing life-long learning in the Cal Poly Pomona community.

Vision
By the year 2025 the office of Academic Innovation (AI) at Cal Poly Pomona will be the catalyst for developing innovative and transformative educational experiences that prepare students for the future of work and human and civic engagement.
AI Strategic Initiatives

Institutionalize the Learn Through Discovery (LTD) Initiative which aims to provide EVERY Cal Poly Pomona student at least one signature polytechnic experience (PolyX) and enable them to articulate that experience.

Create awareness/structure for LTD
Develop PolyX Inventory
Develop a PolyX badging system
Create PolyX pathways for students
Expand the LTD Projects Hatchery
Provide professional development for faculty/staff
Develop robust AI marketing plan

Provide strategic leadership, oversight and guidance to CCE, KHC, SIIL and OUR; support the formulation and implementation of CCE, KHC, SIIL and OUR’s strategic goals/priorities as well as their program evaluation and assessment plans; and build a strong, high functioning, highly collaborative team culture across all AI units.

Bi-annual reviews of strategic goals
Annual reviews of program/assessment
Provide professional development for AI team
Create data-driven decision culture
Create collaborative culture
Bi-annual AI retreats and team building

Create infrastructure to support faculty in developing and launching innovative curricular.

Collaborate to create innovative curricula
Support faculty/staff to obtain funding
About Learn Through Discovery (LTD)

The Learn Through Discovery Initiative at Cal Poly Pomona ensures that all students will have at least one Signature Polytechnic Experience (PolyX) before they graduate, and be able to articulate that experience. LTD also engages faculty and staff through institutes and sandboxes that promote multidisciplinary collaboration.
The LTD Projects Hatchery is a PolyX that focuses on helping students discover their passion and create their impact. In the Hatchery, students will turn meaningful and innovative ideas into fully realized projects. The Hatchery team will guide students through every phase of development, from conception to implementation to completion.

### 2019-2020 AY Project Examples

**Team Food Justice**
We aim to examine how the Pomona Valley Certified Farmer’s Market contributes to the development of socioecological community and addresses food access and insecurity in the City of Pomona.

**Team Veteran’s Nutrition**
The goal of our study is to determine whether nutrition education and using motivational interviewing can improve nutritional intake and body compositions within a student veteran community.

**Team Super eMoto**
Our project is developing a user-friendly kit that can convert a gas-powered dirtbike to an electric one.

**Team Trichomonas Lab**
Our project uses CRISPR gene-editing to study how immune-cells kill the sexually-transmitted parasite *Trichomonas vaginalis*.
Signature Polytechnic Experiences (PolyX) at Cal Poly Pomona promote students' discovery of the opportunities and challenges within the field and the development of creative and innovative solutions to those conditions. Through collaborative learning and intense mentoring, PolyX engages students beyond the classroom and prepares them for professional and civic success.

PolyX Inventory
- HRT3830 - Food & Beverage Operations  Jason Y. Zhang
- Learn Through Discovery Projects Hatchery  Winny Dong & Jeremy Jurgens
- Market Analysis in the Lodging Industry  Linchi Kwok
- National Model United Nation (NMUN)  Marc Scarcelli
- New Food Product Development (FST 4290L)  Gabriel Davidov-Pardo
- PolyPet Spa Day and Vaccine Clinic  Joanne Sohn
- Professional Work Experience Course  Ann Lara
- The Poly Post (news lab)  Jason Turcotte

LTD FYE Challenge
LTD encourages all first-year students to engage in a PolyX based on the FYE Common Read. Students who participate in the LTD FYE Challenge read the book and develop innovative solutions to an opportunity or problem in the book that they can launch in an impacted community.

Fall 2018 Challenge
Date  11.03.2018
Book  So You’ve Been Publicly Shamed by Jon Ronson
Number of Participants  10 (3 Teams)
Winning Team  #SHHHAME:
A Campaign to End Public Shaming
Judges  Kenneth Lamb and Jessica Perez

Fall 2019 Challenge
Date  11.15.2019
Book  Becoming by Michelle Obama
Number of Participants  14 (3 Teams)
Winning Team  Fistbump:
The App That Gives Students Hope
Judges  Bryant Fairly, Kenneth Lamb, and Shirli Driz

LTD Highlights I LTD FYE Challenge & PolyX

“The Hatchery allowed us to work on our project in a way that would not have been possible before, through providing campus resources, connections, and financial support.”
- Marmar Tavsol, Student, Hatchery Team “Cut the Bias”

“ I think doing the LTD FYE challenge was a worthwhile experience because it taught me how to present a research proposal without getting too nervous”
- Cesar A. Valdovinos, LTD FYE Challenge Participant

Signature Polytechnic Experiences (PolyX)

LTD FYE Challenge
LTD encourages all first-year students to engage in a PolyX based on the FYE Common Read. Students who participate in the LTD FYE Challenge read the book and develop innovative solutions to an opportunity or problem in the book that they can launch in an impacted community.

Fall 2018 Challenge
Date  11.03.2018
Book  So You’ve Been Publicly Shamed by Jon Ronson
Number of Participants  10 (3 Teams)
Winning Team  #SHHHAME:
A Campaign to End Public Shaming
Judges  Kenneth Lamb and Jessica Perez

Fall 2019 Challenge
Date  11.15.2019
Book  Becoming by Michelle Obama
Number of Participants  14 (3 Teams)
Winning Team  Fistbump:
The App That Gives Students Hope
Judges  Bryant Fairly, Kenneth Lamb, and Shirli Driz

LTD Highlights I LTD FYE Challenge & PolyX

“The Hatchery allowed us to work on our project in a way that would not have been possible before, through providing campus resources, connections, and financial support.”
- Marmar Tavsol, Student, Hatchery Team “Cut the Bias”

“ I think doing the LTD FYE challenge was a worthwhile experience because it taught me how to present a research proposal without getting too nervous”
- Cesar A. Valdovinos, LTD FYE Challenge Participant

Signature Polytechnic Experiences (PolyX)
Signature polytechnic experiences (PolyX) at Cal Poly Pomona promote students’ discovery of the opportunities and challenges within the field and the development of creative and innovative solutions to those conditions. Through collaborative learning and intense mentoring, PolyX engages students beyond the classroom and prepares them for professional and civic success.

PolyX Inventory
- HRT3830 - Food & Beverage Operations  Jason Y. Zhang
- Learn Through Discovery Projects Hatchery  Winny Dong & Jeremy Jurgens
- Market Analysis in the Lodging Industry  Linchi Kwok
- National Model United Nation (NMUN)  Marc Scarcelli
- New Food Product Development (FST 4290L)  Gabriel Davidov-Pardo
- PolyPet Spa Day and Vaccine Clinic  Joanne Sohn
- Professional Work Experience Course  Ann Lara
- The Poly Post (news lab)  Jason Turcotte

LTD FAQs:
LTD encourages all first-year students to engage in a PolyX based on the FYE Common Read. Students who participate in the LTD FYE Challenge read the book and develop innovative solutions to an opportunity or problem in the book that they can launch in an impacted community.

Fall 2018 Challenge
Date  11.03.2018
Book  So You’ve Been Publicly Shamed by Jon Ronson
Number of Participants  10 (3 Teams)
Winning Team  #SHHHAME:
A Campaign to End Public Shaming
Judges  Kenneth Lamb and Jessica Perez

Fall 2019 Challenge
Date  11.15.2019
Book  Becoming by Michelle Obama
Number of Participants  14 (3 Teams)
Winning Team  Fistbump:
The App That Gives Students Hope
Judges  Bryant Fairly, Kenneth Lamb, and Shirli Driz

LTD Highlights I LTD FYE Challenge & PolyX

“The Hatchery allowed us to work on our project in a way that would not have been possible before, through providing campus resources, connections, and financial support.”
- Marmar Tavsol, Student, Hatchery Team “Cut the Bias”

“ I think doing the LTD FYE challenge was a worthwhile experience because it taught me how to present a research proposal without getting too nervous”
- Cesar A. Valdovinos, LTD FYE Challenge Participant

Signature Polytechnic Experiences (PolyX)
Signature polytechnic experiences (PolyX) at Cal Poly Pomona promote students’ discovery of the opportunities and challenges within the field and the development of creative and innovative solutions to those conditions. Through collaborative learning and intense mentoring, PolyX engages students beyond the classroom and prepares them for professional and civic success.

PolyX Inventory
- HRT3830 - Food & Beverage Operations  Jason Y. Zhang
- Learn Through Discovery Projects Hatchery  Winny Dong & Jeremy Jurgens
- Market Analysis in the Lodging Industry  Linchi Kwok
- National Model United Nation (NMUN)  Marc Scarcelli
- New Food Product Development (FST 4290L)  Gabriel Davidov-Pardo
- PolyPet Spa Day and Vaccine Clinic  Joanne Sohn
- Professional Work Experience Course  Ann Lara
- The Poly Post (news lab)  Jason Turcotte

LTD FAQs:
LTD encourages all first-year students to engage in a PolyX based on the FYE Common Read. Students who participate in the LTD FYE Challenge read the book and develop innovative solutions to an opportunity or problem in the book that they can launch in an impacted community.
The LTD institutes provide a great learning environment where instructors from different disciplines can meet and exchange ideas.”

- Joanne Sohn, Associate Professor, Program Director, Animal Health Science

“I was truly impressed how these new First Year Experience (FYE) students did research in their first year at CPP.”

- Ben Dewald, Professor, Collins College
Fall Sandbox 2019
Date 9.10.2019
Topic Proactive Procrastination
Number of Participants 32
Location Maker Studio/Library

Spring Sandbox 2020
Date 02.27.2020
Topic Research Collaboration
Number of Participants 32
Location Collins College/ HRT

Spring Sandbox 2020
Date 04.09.2020
Topic Virtual Research Mentoring 1
Number of Participants 9
Location Online

Spring Sandbox 2020
Date 04.27.2020
Topic Virtual Research Mentoring 2
Number of Participants 16
Location Online

“The interaction and energy during the LTD Sandbox events was contagious. I met new faculty and staff each time I attended and left with new knowledge.”
- Michelle Lyn Elrod, Director, EODA

“LTD Sandboxes are the only planned opportunity on campus for networking between administrators, staff and faculty. Through this experience I have met many people that I would have otherwise not known worked at CPP.”
- Seema Shah-Fairbank, Associate Professor, Civil Engineering
**Wall of Fame**

**LTD Steering Committee**
- Sep Eskandari
- Laura Massa
- Terri Gomez
- Alison Baski
- Olukemi Sawyerr
- Winny Dong
- Aaron DeRosa

**LTD Task Force**
- Sarah Meyer
- Gina Johnson
- Tari Hunter
- Joanne Sohn
- Winny Dong
- Kenneth Lamb
- Nina Abramzon
- Hyounae Min
- Barry Lehrman
- Christine Ortega
- Julie Chen
- Shonn Haren
- Jason Lu
- Teresa Lloro-Bidart
- Michael Millar

**Institute Planning Group**
- Preeti Wadhwa
- Joanne Sohn
- Nina Abramzon
- Dora Lee
- Olukemi Sawyerr
- Winny Dong
- Ericka Olguin
- Micayla Anderson

**Sandbox Planning Group**
- Victoria Bhavsar
- Kenneth Lamb
- Seema Shah-Fairbank
- Olukemi Sawyerr
- Winny Dong
- Michelle Elrod
- Ericka Olguin
- Micayla Anderson

**Hatchery Mentors**
- Jill Adler-Moore
- Kevin Anderson
- Steve Archambault
- Kevin Autry
- Zeynep Aytug
- Elke Azpeitia
- Robert Blumentfeld
- Scott Boskovich
- Eduardo Corpuz
- Amy Dao
- Adrian Gonzalez
- Mehrdad Haghi
- Hyung Chul Han
- Analena Hassberg
- Kyung In Huh
- Moliappan Jawaharlal
- Juanita Jemmyman
- Jae Min Jung
- Seth Ketron
- Mehrdad Koochikamali
- Trayan Kushev
- Ann Loomis
- Alex Madva
- Frances Mercer
- Sean Monemi
- Sergio Maldonado
- Norali Pernalete
- Jascha Polet
- Peter Ross
- Ertan Salik
- Zahrat Sotoudeh
- Kiem Tsong
- Nolan Tsuchiya
- Edmond Wu
- Farbod Khoshnoud
- Randy Stein
- Stephen Osborn
- Andrea Bonisoli-Alquati

"I am so fortunate to be a part of the LTD initiative which not only aims to ensure that all CPP students engage in a PolyX (signature polytechnic experience), but also creates opportunities to showcase and celebrate these learn by doing experiences and accomplishments of our students."

-Preeti Wadhwa, Associate Professor, Management & Human Resources Department
Mission
The Kellogg Honors College cultivates students’ many forms of talent in an academically enriching environment within an inclusive and nurturing community. We motivate and prepare intellectually curious, civically engaged, lifelong learners.

Vision
We will be a college that fosters an environment, community, and foundation where personal growth, self-awareness, and professional confidence are coupled with academic excellence, innovation, and career readiness to prepare self-aware, civically engaged, visionary, global citizens.

“The KHC continues to be the strong academic community where students strive for excellence in a supportive and nurturing environment.”
- Suketu Bhavsar, Director, Kellogg Honors College

<table>
<thead>
<tr>
<th>College</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>38%</td>
</tr>
<tr>
<td>Science</td>
<td>31%</td>
</tr>
<tr>
<td>CLS</td>
<td>9%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>7%</td>
</tr>
<tr>
<td>Business</td>
<td>6%</td>
</tr>
<tr>
<td>Collins</td>
<td>2%</td>
</tr>
<tr>
<td>Environmental Design</td>
<td>1%</td>
</tr>
</tbody>
</table>

Total number of students: 339
After a one-year hiatus, the Showcase of Excellence returned! The KHC invited a group of high school seniors from the top 15% of applicants to come to campus with their families and learn more about CPP, along with encouraging them to apply for the KHC.

This 7th annual course for new KHC freshmen was co-taught by Suketu Bhavsar and Won Choi. Course topics included: FYE common read, time management, study skills, research, scholarships, alumni speakers, study aboard, and grad school prep.

Due to the COVID-19 pandemic, the in-person Honors Convocation in May 2020 was cancelled. However, the KHC still prepared a video celebration of the achievements of their graduating seniors. Watch here.

The Capstone Symposium was also held virtually in May 2020. Graduating KHC student submitted pdf posters and video presentations for their Capstone projects. View Posters & Videos.
Mission
The Center for Community Engagement (CCE) strives to enhance learning, encourage career exploration, inspire civic engagement and empower students with meaningful community engaged learning experiences that have a positive impact on our local community, region and world.

Vision
To engage, empower, and encourage students to become civically minded graduates; reflecting the impact of an experiential education to inspire students to learn by doing good.

“The CCE inspires students to “learn by doing good” through encouraging students to embrace the opportunity to learn and explore solutions, and empowering students to make an impact.”
- Bryant Fairley, Director, Center for Community Engagement

Cooperative Education Testimonials
“Co-op students not only gain valuable hands-on experience with industry professionals who can become great mentors, but they also develop professionalism, good communication, and networking skills.”
- Rafael Reyes, CPP Co-Op Student at CalFire
Engaged Learning Course-Based Outcomes

**Service Learning**
- AY 2019-2020
  - Number of Service Learning Courses: 100
  - Student Participants: 911
  - Hours: 19,753
  - Average hour per student: 20

**Academic Internships**
- AY 2019-2020
  - Number of Internship Courses: 225
  - Student Participants: 328
  - Hours: 81,368
  - Average hour per student: 88

**Cooperative (Co-Op) Education**
- AY 2019-2020
  - Number of Co-Op Courses: 18
  - Student Participants: 26
  - Hours: 17,160
  - Hour / week during school: 20
  - Hour / week during summer: 40

---

**CPP KARES**
CPP KARES (Kids Activities and Resources for Educational Support) is a website developed by Cal Poly Pomona students providing So Cal parents/caregivers of kids aged 0-12 with access to educational activities and resources that can assist with educating kids at home.

**MLK Day Beautification Project**
CPP students, staff, faculty and family members joined the local community in a LA Works-hosted beautification project, in honor of Dr. Martin Luther King. Volunteers built benches, painted murals and lockers, and beautified a playground at a local LA middle school.

**Welcome Back Service Project with Habitat for Humanity**
The CCE partnered with Pomona Valley Habitat for Humanity and the City of Upland to refurbish a relocated historic 1914 Craftsman home for a deserving family. CPP students, staff, and faculty kicked off the spring semester with this volunteer project.

---

**Website**
bit.ly/CPP-KARES

**Website Visits**
650 +

**Number of Activities**
130 +

**1000 + Total Volunteers**

**40 CPP Volunteers**

**01.20.2019**

**Los Angeles, CA**

**38 CPP Volunteers**

**01.25.2019**

**Upland, CA**
The mission of the Office of Undergraduate Research (OUR) at Cal Poly Pomona is to increase the awareness of, participation in, and opportunities for undergraduate research across the disciplines and for students who are traditionally underrepresented in research: lower-division, first-year transfer, under-represented, and first-generation students. The OUR also supports faculty members who mentor undergraduate student researchers. As an umbrella office, OUR coordinates efforts of programs that provide undergraduate research opportunities.

The vision of the Office of Undergraduate Research at Cal Poly Pomona is to support a diverse culture of experiential learning, discovery, and innovation by ensuring access to research for every undergraduate student.

“OUR programs provide both a launching point and a nurturing environment where students from all backgrounds can be successful in undergraduate research”

- Winny Dong, Faculty Director, Office of Undergraduate Research
Student Research, Scholarship, and Creative Activities (RSCA) Conference

563 students participated
March 2020

Students Served by the OUR

968 unique students served
2019 - 2020

All OUR Programs

• Achieve Scholars Program (ASP)
• OUR GRAD
• Summer Undergraduate Research Experience (SURE)
• Research Scholars Association
• Faculty Mentor STARS
• Student Conference Presentation Awards
• Creative Activities & Research Symposium (CARS)
• RSCA Conference
• OUR research workshops

Weekly Summer Seminars

Summer 2020

50 participants per seminar
7 seminars

Over 110 students participated

Scholarship and Fellowships

Disbursed nearly $100,000 in scholarships and fellowships.

to students
Mission
The mission of the Cal Poly Pomona Student Innovation Idea Labs (SIIL) is to create and maintain an ecosystem that fosters creativity, innovation, and entrepreneurship.

Vision
The vision of the Student Innovation Idea Labs is to be a catalyst for innovation through the establishment of strategic partnerships with internal and external stakeholders on the Cal Poly Pomona campus and throughout the greater Pomona Valley region.

“What we hope the Innovation Idea Labs provides to students, whether in person or virtually, is the confidence that each person can be creative and innovative regardless of your position of influence.”

- Kenneth Lamb, Director of Student Innovation Idea Labs
Event Highlights

SIIL Celebration Week (March 2 – 5) celebrated 10 years of the ESTEAM class and 5 Years of the Student Innovation Idea Lab.

The events included:
- Learning to create molds to cast chocolate
- Building the best foam airplane
- Creating custom tote bags by learning to use the vinyl cutter
- And the CPP Maker Fair and SIIL-ebration event!

Focus Areas for Our Strategic Plan

- Maintain maker spaces to support student innovation and creativity
- Disseminate creative and entrepreneurial knowledge
- Ensure safe and secure access to equipment
- Celebrate the innovative process in its entirety
About CPP NSF I-Corps

Since its inception in spring 2019, the CPP I-Corps Site program has successfully recruited and trained 34 teams through 4 cohort offerings. These teams consist of 54 students, 21 faculty members, and 5 local entrepreneurs in a total of 80 participants. Thirteen teams were granted to move forward by attending the next-step training BOOM program by Innovation Network – Los Angeles I-Corps Node (regional program management site). One team, Vistendo, has been awarded a $250K SBIR Phase 1 grant from the Defense Health Agency, team LV Bottle is in licensing talks with LOOP, and team Azuza Beverage won $10K in the 2020 Big Bang Competition hosted by UC Davis for the category of Food and Agriculture sector. It has been a great experience with the 8-person teaching faculty team from multiple disciplinary fields when interacting and assisting these teams to develop and enhance their bud/seed ideas.

“If you’re passionate about research and dream about bringing the results to the market, then I-Corps program is for you! It’s an exciting journey from start to finish!”

- Olive Li, Associate Professor, Nutrition and Food Science Department
Cohort 1
Date Spring 2019
Number of Teams 7
Number of Participants 24

Cohort 2
Date Summer 2019
Number of Teams 9
Number of Participants 21

Cohort 3
Date Fall 2019
Number of Teams 21
Number of Participants 42

Cohort 4
Date Spring 2020
Number of Teams 8
Number of Participants 19

Team Summary - Cohort 2: Azuza Beverage
Azuza Beverage is a technology startup which addresses the increasing market preference for alcohol-free adult beverage options, while offering superior quality non-alcoholic beer in contrast to today’s competitors.

Team Summary - Cohort 4: QUIC
The Quickly Universally Integrated Concept Cube Satellite helps academic and civil researchers who want to get their research in Low Earth Orbit by reducing the complexity and lead times while also enabling on-demand delivery for quick returns and rapid response.
Pop-Up Course

What is a Pop-Up Course?
Pop-up courses provide students with the opportunity to learn about important new developments in society and the latest innovations and happenings across academia that are critical to their professional success.

Inaugural Pop-Up Course
Fall 2019 | Our Automated Future
This pop-up course focused on automation from three different perspectives: Technology, Ethics, and Service Business.

“A pop-up course format gives faculty the flexibility to cover new developments quickly. Faculty can then innovate the curriculum and test ideas that may eventually become permanent parts of the curriculum.”

- Olukemi Sawyerr, AVP of Academic Innovation