

UNIVERSITY OF CALIFORNIA

DAVIS

VOLUME XLIX

ANNUAL SUMMARY OF ACTIVITIES

OF THE FACULTY OF THE COLLEGE OF AGRICULTURAL & ENVIRONMENTAL
SCIENCES

JUNE 2023

TABLE OF CONTENTS

I.	SUMMARIES AND APPOINTMENTS	
	Summary of 2022-23 Faculty Executive Committee Activities	2
	Summary of 2023-24 Standing Committee Rosters	5
	Summary of the 2022-23 Lead Faculty Adviser Appointments	6
II.	REPORTS OF STANDING COMMITTEES	
	A. Graduate Education Standing Committee.....	7
	B. Rules and Jurisdiction Standing Committee	9
	C. Student Actions and Commencement Awards Standing Committee	11
	D. Undergraduate Majors and Courses Standing Committee.....	15
	E. Undergraduate Program Review Committee	16
III.	DEPARTMENTAL HIGHLIGHTS	
	Environmental Science and Policy, 2022-23	18
	Plant Sciences, 2022-23	20
IV.	STATE OF THE COLLEGE – Dean Helene Dillard	
	CA&ES Summary Report 2023.....	23

Brenda Nakamoto, Administrative Assistant
College of Agricultural and Environmental Sciences
Dean's Office

**CA&ES Faculty Executive Committee – Chair Gang Sun
Summary of Activities, 2022-23**

Academic Senate Requests for Consultation (RFC) and Other Requests	Date FEC Responded
RFC - Entry Level Writing Requirement Task Force Report	11/4/22
RFC - Entry Level Writing Requirement Task Force Report	11/4/22
RFC - Reference Check Program	11/25/22
RFC - Proposed Revisions to Presidential Policy on Sustainable Practices	1/11/23
RFC - Presidential Policy on Vaccination Programs	1/13/23
RFC - Proposed Revisions to 380-09, Visiting Academic Collaborators	3/3/23
RFC - Proposal to Transfer Computer Science Major and Minor	3/10/23
RFC - Incentivizing Completion of Trainings for Academic Appointees	3/24/23
RFC - Passed/Not Passed Deadline Proposal from ASUCD	4/7/23
RFC - Proposed Revisions to Presidential Policy on Inventions, Patents, and Innovation Transfer	5/12/23
RFC - Proposed Revisions to APM 210, Review and Appraisal Committees	6/23/23
RFC - Proposed Revisions to APM 710, Leaves of Absence/Sick Leave/Medical Leave	6/23/23
RFC - Proposed Revisions to PPM 240-50 General Policy Regarding Human Research	6/23/23

Other FEC Requests for Review and Comment	Date FEC Responded
Comment on the college budget, at the request of the Academic Senate Committee on Planning and Budget	4/13/23
Comment on the COACHE Faculty Satisfaction survey, at the request of Dean Helene Dillard	4/24/23
Review and approval of the revised proposal for an undergraduate Business major	4/13/23

Proposed Changes to CA&ES Undergraduate Majors and Minors approved by CA&ES FEC and forwarded to Undergraduate Council (UGC):	
Major/Minor	Date of UGC Approval
Food Science Management minor	1/19/23
Climate Science and Policy minor	2/27/23
Food Science major	5/5/23
Environmental Science and Management major	5/5/23

Environmental Policy Analysis and Planning major	5/17/23
Managerial Economics major	6/28/23
Managerial Economics minor	6/28/23

Proposed Changes to CA&ES Undergraduate Majors and Minors in the 2022-23 year submitted to the FEC and returned to the program level for additional revision:

Agricultural and Environmental Education major

Fungal Biology and Ecology minor

Global Disease Biology minor

Global Disease Biology minor

Sustainable Environmental Design major

Summary of the Faculty Executive Committee membership for 2023-24

An online Qualtrics vote by Academic Senate and Academic Federation members closed on Friday, June 23, 2023 at 5:00 pm. Items voted upon included the 2023-24 membership of the college Faculty Executive Committee, the 2023-24 membership rosters of the Standing Committees and the updated membership lists of Academic Senate and Academic Federation in the college.

2022-23 Election Results: There was no election held to fill five Academic Senate and one Academic Federation vacancies on the 2023-24 Faculty Executive Committee. The college received nominations from six well-qualified candidates. All were placed on the committee with uncontested nominations.

Executive Committee membership (2023-24)*

Roger Baldwin	Wildlife, Fish and Conservation Biology
Helene Dillard (ex officio)	CA&ES Dean's Office
Xiaoli Dong	Environmental Science and Policy
Sue Ebeler (ex officio)	CA&ES Dean's Office
Katrina Jessoe	Agricultural and Resource Economics
Nitin Nitin	Food Science and Technology / Biological and Agricultural Engineering
Patricia Oteiza	Nutrition / Environmental Toxicology
Alison Van Eenennaam	Animal Science

Incoming members:

Kris Godfrey, Academic Federation, Agricultural Sciences
Dan Kliebenstein, Academic Senate, Agricultural Sciences
Bruce Linqvist, Academic Federation, Plant Sciences
Neil McRoberts, Academic Senate, Agricultural Sciences
Cindy Osorio, Undergraduate student
Sanjai Parikh, Academic Senate, Environmental Sciences
Luxin Wang, Academic Senate, Food Science and Technology
Rachel Wang, Graduate student

2022-23 outgoing members:

Daniela Barile, Academic Senate, Human/Social Sciences
Eduardo Blumwald, Academic Senate, Agricultural Sciences
Georgia Drakakaki, Academic Senate, Agricultural Sciences
Anna Grulikowski, Undergraduate student
Gang Sun, Academic Senate, Agricultural Sciences
Sidney Woodruff, Graduate student

*CA&ES 2023-24 Standing Committee membership rosters approved by college faculty Qualtrics vote on 6/23/23 and updated to this list as of 9/7/23.

Summary of 2023-24 Standing Committee Nominees

COMMITTEE	NAME	DEPARTMENT
Graduate Education (2023-24)		
	Anca Barcu	Graduate student
	Michael Carter	Agricultural and Resource Economics
	Julien Delarue	Food Science and Technology
	Georgia Drakakaki	Plant Sciences
	Yanhong Liu	Animal Science
	Gerardo Mackenzie (chair)	Nutrition
	Dragan Milenkovic	Nutrition
Rules and Jurisdiction (2023-24)		
	Tom Buckley (chair)	Plant Sciences
	Annie King	Animal Science
	Christoph Vogel	Environmental Toxicology
Student Actions and Individual Majors (2023-24)		
	Md Shamim Ahamed	Biological and Agricultural Engineering
	Alina Bara	CA&ES Dean's Office
	Sue Ebeler (ex officio)	CA&ES Dean's Office
	Kris Godfrey	CA&ES Dean's Office
	Tiffany Hyun	Undergraduate student
	Matt Igel	Land, Air and Water Resources
	Peng Ji	Nutrition
	Dietmar Kueltz	Animal Science
	Elizabeth Prado	Nutrition
	Dan Sumner	Agricultural and Resource Economics
	Stavros Vougioukas (chair)	Biological and Agricultural Engineering
	Faith Xiong	Undergraduate student
Undergraduate Majors and Courses (2023-24)		
	Greg Anderson	CA&ES Dean's Office
	Geoffrey Attardo	Entomology and Nematology
	Shu-Hua Chen	Land, Air and Water Resources
	Sue Ebeler (ex officio)	CA&ES Dean's Office
	Hayley Hill	CA&ES Dean's Office
	Jens Hilscher	Agricultural and Resource Economics
	Ted Hullar (chair)	Land, Air and Water Resources
	Isaya Kisekka	Land, Air and Water Resources / Biological and Agricultural Engineering
	Dietmar Kueltz	Animal Science
	Pierre Mérel	Agricultural and Resource Economics
	Lisa Miller	Human Ecology
	Mariana Ortega-Nunez	Undergraduate student
	Daniel Potter	Plant Sciences
	Benjamin Wynd	Undergraduate student
Undergraduate Program Review (2022-23)		
	Sue Ebeler (ex officio)	CA&ES Dean's Office
	Ian Faloon	Land, Air and Water Resources
	Adele Igel	Land, Air and Water Resources
	Matt Wood (chair)	Environmental Toxicology

Summary of the 2022-23 Lead Faculty Advisor appointments

Major Program

Animal Biology
 Agricultural and Environmental Education
 Agricultural and Environmental Technology
 Animal Science and Management
 Animal Science
 Atmospheric Science
 Biotechnology
 Clinical Nutrition
 Community and Regional Development
 Environmental Horticulture and Urban Forestry
 Ecological Management and Restoration
 Entomology
 Environmental Policy Analysis and Planning
 Environmental Science and Management
 Environmental Toxicology
 Food Science
 Global Disease Biology
 Human Development
 Hydrology
 International Agricultural Development
 Pre-Landscape and Landscape Architecture
 Managerial Economics
 Marine and Coastal Science
 Nutrition Science
 Plant Sciences
 Sustainable Agriculture and Food Systems
 Sustainable Environmental Design
 Viticulture and Enology
 Wildlife, Fish and Conservation Biology
 Undeclared/Exploratory Program
 Science and Society Program

Affiliated Major

Biological and Agricultural Engineering

Majors closed, discontinued or suspended

Agricultural Management and Rangeland Resources
 Avian Sciences
 Crop Science and Management
 Environmental and Resource Sciences
 Environmental Biology and Management
 Fiber and Polymer Science
 Individual Major
 Pre-Managerial Economics
 Textiles and Clothing
 Soil and Water Science

Lead Faculty Advisor

Robert Kimsey
 Lynn Martindale
 Ali Moghimi
 L. Allen Pettey
 Russ Hovey
 Kyaw Tha Paw U
 Diane Beckles
 Francene Steinberg
 Anne Visser
 Dan Potter
 Ken Tate
 Lynn Kimsey
 Gwen Arnold (Susan Handy, Fall 2022)
 Marissa Baskett and Terry Nathan
 Andrew Whitehead
 Alyson Mitchell
 Johan Leveau
 Johnna Swartz
 Isaya Kisekka
 Amanda Crump
 Claire Napawan
 Jeffrey Williams
 Anne Todgham, CAES; Tessa Hill; John Largier; Brian Gaylord
 Gerardo Mackenzie
 Dan Potter
 Will Horwath
 Claire Napawan
 Hildegard Heymann
 Doug Kelt
 Sue Ebeler
 Dave Rizzo

Graduate Education Committee—Gerardo Mackenzie, Chair

2022-23 Annual Report

May 2023

The Graduate Education Committee reviewed and ranked applicants for the **John F. Steindler Fellowship** (9 applicants), **John E. Kinsella Memorial Prize** (7 applicants), and **Neal Van Alfen and James MacDonald Graduate Student Award** (6 applicants). The committee received critical support from Brenda Nakamoto, which we would like to highlight and to whom we extend our thanks. Summaries for all awards are provided below.

Members of the committee [Diane Beckles, Michael Carter, Julien Delarue, Kris Godfrey, Elizabeth Mojica, Xia Zhu Barker and Gerardo Mackenzie (chair)] reviewed applicants and provided a numerical score with written support for their rankings. To aid in the ranking of applicants, the committee developed a scoring rubric for each award that considered specific award criteria. Rankings from committee members were used to identify the top ranked applicant, which in each case at the end of the review process received unanimous support from the committee. Following the review process, the committee noted the need to request specific types of information to aid review in future years. The committee will address this issue by updating the award call documents to include this needed information.

Regardless of award reviewed, committee members remarked on the strengths and impressive accomplishments of all the scholars who applied, which speaks to the excellent graduate students CA&ES faculty have the fortune of working with.

John F. Steindler Fellowship

This fellowship supports and encourages students pursuing careers in teaching and research and is awarded to entering Ph.D. students studying in the general areas of agricultural production, food and nutrition, molecular biology in plants, agricultural commodity marketing or rural/urban social studies.

This year the Graduate Education Committee reviewed and ranked 9 (nine) nominations for the John F. Steindler Fellowship, submitted as top student applicants in a graduate program, interested in working with a faculty member in the CA&ES. The Steindler fellowship is also used as a recruitment tool, to attract those students into our programs. This year the highest ranked candidate joining UC Davis was Heath Goertzen. As noted above, the committee members remarked on the strengths and impressive accomplishments of all the nominated scholars who applied and who were all worthy of the fellowship.

Heath Goertzen: Heath is entering the Soils and Biogeochemistry Graduate Group this coming fall quarter. Previously, Heath completed a double major in Chemistry and Biology from Bethel College and participated in several in-depth research experiences including two NSF Research Experience for Undergraduates (REU) programs. In addition to research, Heath has demonstrated a commitment to mentoring others. For example, Heath was the student body president at Bethel. After graduating, Heath founded the Bethel College Natural Science Research Network, an alumni group focused on providing resources for successful entry into

research activities for low-income students. For these reasons, the CA&ES Graduate Education Committee is honored to select Heath Goertzen for the John F. Steindler Fellowship.

John E. Kinsella Memorial Prize

An award given to an individual who submits their Ph.D. dissertation to Graduate Studies between March and February each year. Award criteria includes the quality and originality of the work, the multidisciplinary impact of the research, and the importance of the research to the college's mission to serve agriculture, the environment, and human health and development.

Bernie Bastien-Olvera: Bernie's dissertation research addressed how natural systems support human welfare into macro-economic models of the coupled climate-human system used to inform climate policy. The committee considered it a highly important area of work: since natural capital supports both economic production and human welfare in ways that are distinct from other forms of capital, and climate impacts on ecosystems are particularly consequential in ways not well captured by current economic models. Beyond scholarly excellence, including multiple publications, they were further distinguished by teaching and extensive service contributions to campus and professional societies. These activities included participation in professional society committees, graduate group committees, university groups, and departmental committees; public outreach. In summary, the awardee was considered outstanding excelling in all of the fellowship criteria, especially in their contributions to community and leadership. For these reasons, the CA&ES Graduate Education Committee is honored to recognize Bernie Bastien-Olvera with the Kinsella Memorial Prize.

Neal Van Alfen and James MacDonald Graduate Student Award

This award supports continuing graduate students who are studying in the general areas of agricultural, environmental, or social/human sciences. Recipients are selected that have a strong academic record and a commitment to service with demonstrated leadership, while performing original research that supports the college's mission to serve agriculture, the environment, and human health and development.

Mary Jade Farruggia: Mary Jade, a member of the Ecology Graduate Group, is an outstanding multi-disciplinary scholar investigating the impacts of climate change on species composition and health in fresh water lakes, which the committee considered highly significant. She has several peer-reviewed publications and has been honored by receiving a NSF award. As noted by the committee Mary Jade has an extensive service record and demonstrated leadership at the state and national levels. Mary Jade has demonstrated a consistent engagement in high-quality outreach activities. In particular, her work, both inside and outside UC-Davis to improve the inclusiveness and diversity of science has been outstanding. For example, strong involvement in outreach (KIDS in science, mentoring) and service to community (DEI committees, LGBTQ organizations). Given the above, the CA&ES Graduate Education Committee is honored to recognize Mary Jade Farruggia with the Neal Van Alfen and James MacDonald Graduate Student Award.

Respectfully,

Diane Beckles, Michael Carter, Julien Delarue, Kris Godfrey, Elizabeth Mojica, Xia Zhu Barker and Gerardo Mackenzie (chair).

2022-23 Annual Report

Rules and Jurisdiction Committee

College of Agricultural and Environmental Sciences, UC Davis

29 March 2022

Three actions concerned this committee in the last year:

I. Opinion regarding Chair eligibility

On 29 April 2022, Brenda Nakamoto asked this committee for its opinion on whether the Chair of the CAES Graduate Education Committee needs to be an Academic Senate member. The relevant portion of the relevant Bylaw (#11) reads (emphasis added),

"This committee shall consist of at least four appointed members of the Academic Senate, representing differing areas of interest and expertise, two appointed representatives of the Academic Federation, one nonvoting graduate student representative, and, as a nonvoting ex officio member, an associate dean of the college selected by the dean. **The chair of the committee shall be appointed by the Executive Committee.** Only members of the Academic Senate shall be eligible to vote when the committee is taking action on any matter for the Academic Senate, including matters relating to courses and programs of instruction, or giving advice to University officers or other non-Senate agencies in the name of the Senate. Members of the Academic Federation are given the right to vote on other questions. The graduate student representative is selected through a call by the college Committee on Committees. The committee solicits applications from volunteers who note their committee interest, current GPA and grade level. On this basis, the student is invited to participate. The chosen student is required to complete FERPA certification to ensure student confidentiality."

This committee concluded that no requirement that the Chair be a Senate member was either explicit or implicit in the Bylaw. We noted that the only explicit constraint is that the Chair shall be appointed by the Executive Committee, while the Bylaw contains numerous explicit constraints on what Federation members can and cannot do regarding committee membership and voting; we therefore concluded that, had the college intended to limit the GEC Chair to Senate members, they would have written that into the Bylaws explicitly.

II. Verifying faculty vote

On 29 June 2022, Brenda Nakamoto asked this committee to verify the votes from a CAES faculty vote on the 2022-23 standing committee rosters, proposed bylaw changes, and college Academic Senate and Academic Federation membership lists. The committee verified that the results were as follows:

	Federation	Senate
<i>Committee rosters</i>	15 yes	59 yes, 2 abstain
<i>Rules change</i>	n/a	59 yes, 1 abstain
<i>CAES membership</i>	15 yes	59 yes

III. Typo in Regulation 27

On 15 July 2022, CAES Associate Dean Sue Ebeler noted a seemingly erroneous reference to "Regulation 31" within Regulation 27 (Academic Advising) in the Bylaws.

Brenda Nakamoto eventually deduced that the correct reference was "Regulation 28", and tracked down the fact that this arose from a clerical error that arose from changes in the numbering scheme of College Bylaws in 2017, 2018 and 2022.

Brenda then asked Associate Director Mary Vasquez of the Academic Senate Office to clarify whether it was necessary to go through the College CERJ and a faculty vote to correct the error. Senate CERJ Chair Fascetti concluded that the College FEC could decide this, and Gang Sun and FEC Chair Charlie Brummer both agreed that the error could be corrected without a vote or CERJ approval.

Respectfully submitted,
Tom Buckley (Chair)
Christian Nansen
Zhongli Pan

STUDENT ACTIONS AND COMMENCEMENT AWARDS COMMITTEE

2022-2023 Annual Report

May 3, 2022

Awards Application Online

This year the committee continued to provide access to the awards application online on the CA&ES website. The SACA Committee members are charged with reviewing, ranking, and making recommendations for the following campus and college specific prizes and awards:

- Undergraduate college/university medals and various other college awards
- Undergraduate Travel Awards
- The Provost's Undergraduate Fellowship

Review of Applications for Undergraduate College/University medals and other College Awards

The committee reviewed 8 applications for the University/College Medal, and 25 applications for the Hess/Mary Regan awards. The committee met virtually on multiple occasions to review and rank the candidates for all of the awards and selected the following four students to be interviewed for the University/College Medal: Ameya Naik; Gabrielle Basuki; Ivan Martinez; Alicia Hans.

After interviews and committee ranking, the top candidate, Ameya Naik, was nominated to be forwarded as CA&ES' candidate for the University Medal.

The committee made the following **Award Selections**:

College Medal Confirmed Recipient: (\$2,500 and Medal)

Naik, Ameya Sanjay	Atmospheric Science
--------------------	---------------------

The Charles Hess Community Service Awards Confirmed Recipients (\$2,500 each and plaque)

Prajogo, Christopher	Biotechnology
Ha, Stephanie	Human Development

The Mary Regan Meyer Confirmed Recipient (\$1,000 and plaque)

D'Souza, Indira	Global Disease Biology
Larman Alexandra	Community and Regional Development

Dean's Circle Award Confirmed Recipient (\$1,000 and plaque)

Basuki, Gabrielle	Food Science
Hans, Alicia	Environmental Science and Management
Martinez, Ivan	Sustainable Agriculture and Food Systems

Congratulatory notifications will be sent to all awardees via a letter/email from Dean Helene Dillard.

Alina Bara will coordinate with the CA&ES Commencement Team and order plaques and certificates. The awards will be presented to awardees during a celebratory lunch on Monday, May 22, 2023.

Review of Candidate Applications for the Undergraduate Travel Awards

Each quarter the Undergraduate Research Center accepts applications for undergraduate travel to undergraduate

research conferences and meetings of nationally and internationally recognized professional societies, or discipline specific events such as performance at nationally recognized festivals. The awards, which support the presentation of the students' research, are for travel—planned or already completed— during the current academic year and during the preceding and following summers.

The Travel Award reimburses up to \$500 of travel expenses for out-of-state travel and up to \$250 for in-state travel for Undergraduate students who are presenting at research conferences, meetings of regionally or nationally, internationally recognized professional societies (or discipline specific equivalent-e.g. performance at nationally recognized festival) are eligible to apply.

The committee reviewed four applications for the Fall Undergraduate Travel Awards. The committee ranked the applications and selected the top students, whose names were then sent forward for further review. The names listed below are this year's Travel Award winners for CA&ES:

Da Jin, Clinical Nutrition, *2022 Western Regional Honors Council Conference*

Lauren Yen, Human Development, *Western Psychological Association*

The Spring 2023 Travel Award Application closed on April 19th and to this date, the committee has not yet received a list of applications.

Review of Candidate Applications for The Provost's Undergraduate Fellowship

The Provost's Undergraduate Fellowship (PUF) supports undergraduate students doing research or creative projects under the guidance of UC Davis faculty members. Students from all disciplines are eligible to apply in Fall and Spring. The maximum award is \$1,500 toward approved costs directly related to the project. The applicants were ranked based on:

- *Learning impact.* What impact on the student's future career will be made by this project?
- *Qualifications.* Based on transcript, recommendation letter, and clarity and quality of the proposal.
- *Feasibility.* Proposed approach is reasonable and well designed.
- *Budget.* Requested materials and costs are reasonable and well justified

In Fall 2022, SACA Chair, Beth Prado, reviewed and ranked 10 applications for The Provost's Undergraduate Fellowship (PUF). Of those, the following are the Fall 2022 CA&ES PUF Award winners.

Monica Ardon, Animal Biology - *Effects of CESC's When Used in Mechanical Injury Using a Rabbit Model*

Melissa Huang, Food Science - *Impact of PPIs on protein and starch breakdown of standard meals in vitro*

Christopher Prajogo, Biotechnology - *Effects of trans vaccenic acid on Akt protein phosphorylation in a mouse model of diet-induced obesity and insulin resistance*

Meirun Zhang, Environmental Science and Management - *Putah Creek Herpetofauna Survey*

The Spring 2023 PUF Applications closed on April 25th and to this date, the committee has not yet received a list of applications

CA&ES Dean's Office Undergraduate Academic Programs Workload: May 1, 2022- Apr 30, 2023

Under the Bylaws and Regulations of the College of Agricultural and Environmental Sciences, this committee is responsible for reviewing and making recommendations on individual student petitions, including general education credit, changes in majors, excess unit petitions, senior residence waivers within 1-5 units, graduation requirements and dropping courses after normal deadlines. Decision making authority can be delegated to the Associate Dean of Undergraduate Academic Programs (Academic Advisors).

General Student Petitions Reviewed and Processed by the CAES Dean's Office Undergraduate Academic Programs Team	
Name of Petition	Number of petitions reviewed and processed
Academic Plan	389
Change of Major	1789
Excess Units	223
Extend Incomplete Grade Deadline	71
General College & GE Credit Request Petitions	154
Late Drop Petition	587
Minor Declaration	933
Multiple Repeat Of A Course (2nd or more time)	220
Optional P/NP Grading Mode Change	84
Readmission Application	239
Senior Residence Waiver	15
Simultaneous Enrollment At Another University	30
Total	4734

Note 1: The above numbers above do not include the 2,153 graduation certifications that were reviewed and processed by the CA&ES Academic Counselors (Summer 2022=267 students; Fall 2021=221 students; Winter 2022=249 students; Spring 2023=1416 students).

Note 2: The above numbers do not include approximately 9,366 pre-scheduled and drop-in student appointments.

Action Items Pending in 2023

May

- Alina Bara (CA&ES Dean's Office Staff Consultant) will send regret emails to all other applicants.
- Congratulations message from Dean Dillard
- Award certificates and plaques to be presented to all awardees during a celebratory lunch on May 22nd. Dean Dillard, Associate Dean Ebeler; SACA Chair, Beth Prado and Eva Hess will be present to celebrate the

awardees ad tehri amazing achievements.

June

- “Meet your College Awardees and their UCD stories” will be posted on CA&ES website by the college Communication Team

Late August

- Alina will process the awardees’ payments in collaboration with CA&ES Financial Team. This will be completed after the Spring 2023 degrees are awarded.
- Award payment checks will be mailed to the awardees by the CA&ES Financial Team

Additional Information

The Committee thanks the members of the faculty who provided letters in support of the medal and awards nominees.

The Chairperson also thanks the Committee members for their efforts and dedication in providing thorough and effective review of the student award applications (Travel, PUF, College and University Medal, Hess and Mary Regan Meyer and Dean’s Circle Awards). Due to hybrid work environment for most committee members, the circumstances under which the committee met were unusual (i.e. remotely, over Zoom) but despite this, the committee worked well together and had fruitful discussions and deliberations over the applications and rankings of candidates for these awards.

Respectfully submitted,

Elizbeth Prado

MD SHAMIM AHAMED, Assistant Professor, Biological and Agricultural Engineering
ALINA BARA, Academic Advisor, CA&ES Dean’s Office
XIA ZHU BARKER, Associate Professional Researcher, Land, Air and Water Resources
MICHELLE CHANG, Undergraduate Student, Undeclared
ELIZABETH CHIU, Undergraduate Student, Environmental Toxicology
HONG DAO, Academic Advisor, CA&ES Dean’s Office
SUE EBELER, Ex Officio, Associate Dean, CA&ES Dean’s Office
PENG JI, Assistant Professor, Nutrition
ELIZABETH PRADO, Associate Professor, Nutrition
TINA SAITONE, Associate Specialist in CE, Agricultural and Resource Economics
DAN SUMNER, Professor, Agricultural and Resource Economics
JOHNNA SWARTZ, Associate Professor, Human Ecology



1146 PLANT AND ENVIRONMENTAL SCIENCES BUILDING
TELEPHONE: (510) 917-2209
WEB: <http://lawr.ucdavis.edu>
EMAIL: thullar@ucdavis.edu

DEPARTMENT OF LAND, AIR & WATER RESOURCES
ONE SHIELDS AVENUE
DAVIS, CALIFORNIA 95616-8627

May 3, 2023

**To: Gang Sun
Chair, CA&ES Faculty Executive Committee**

Re: Annual Report for the Undergraduate Majors and Courses Committee (UMAC)

On behalf of the members and staff of the Undergraduate Majors and Courses Committee (UMAC), I'm pleased to submit this annual report summarizing our activities for 2022-2023.

UMAC has met for 11 meetings from September 2022 – May 2023 and has 3 additional meetings scheduled for May 8, 22, and June 5. The committee has reviewed 50 courses, including full review, prerequisites only, and cancellations. The committee also reviewed changes to 11 majors and minors: Global Disease Biology major, Global Disease Biology minor, Environmental Policy Analysis and Planning major, Sustainable Environmental Design major, Food Science major, Environmental Science and Management major, Climate Science and Policy minor, Managerial Economics major, Managerial Economics minor, as well as proposals for a discontinuation of the Fungal Biology and Ecology minor and the creation of a joint Business major.

I would like to take this opportunity to thank the members of the committee for their careful attention and useful comments throughout our discussions: Shu-Hua Chen, Amelie Gaudin, Jens Hilscher, Isaya Kisekka, Dietmar Kueltz, Pierre Merel, Michael Miller, Kathryn Nguyen, Jeffrey Williams, Sorina Ying, and Sue Ebeler (ex-officio). Finally, I am grateful for the steadfast and tireless support from Greg Anderson and Clarissa Mark, whose efforts have been instrumental to the success of this committee.

Regards,

A handwritten signature in black ink that reads "Ted Hullar".

Ted Hullar
Chair, Undergraduate Majors and Courses Committee
College of Agricultural and Environmental Sciences

Undergraduate Program Review Committee
College of Agricultural and Environmental Sciences

Ian Faloona
2022-2023 Annual Report

May 18, 2023

This report summarizes the Undergraduate Program Review Committee's (UPRC) activities in the College of Agricultural and Environmental Sciences (CA&ES) for the 2022-2023 academic year. As UPRC chair this year, I participated ex officio on the Academic Senate's Undergraduate Council Subcommittee of the Undergraduate Instruction and Program Review Committee (UIPRC), which is made up of 15 UCD faculty. As concisely stated on the Committee's website, "The Undergraduate Instruction and Program Review (UIPR) Subcommittee studies the effectiveness and efficiency of undergraduate programs at UC Davis and makes recommendations for improvements. UIPR determines if established educational objectives for programs have been meaningfully addressed." During the past academic year the committee has reviewed 14 undergraduate majors, 5 of which are administered within CAES.

Although the committee is still in the process of discussing and finalizing reports from the cluster 1 programs, initial reports are currently available from 5 CAES programs. These are:

- Biotechnology (BIT)
- International Agricultural Development (IAD)
- Plant Sciences (PLS)
- Sustainable Agriculture and Food Systems (SAF)
- Sustainable Environmental Design

Overall the undergraduate program reports from the CAES paint a picture of many unique programs in our college, most of which are characterized by rapid faculty attrition and dwindling resources, and an especially dire shortfall in staff advising for students.

The first report of a CAES program to be finished was Biotechnology, a one-of-a-kind program in the UC system with about 250 majors and rapidly expanding student interest since the Covid-19 pandemic. The situation was found to be so dire that the committee recommended an interim review be scheduled to determine if the BIT major can continue to be offered in the face of retirements and a lack of administrative commitment on the part of Plant Sciences, which hosts the Biotechnology program, its largest major. The second report on International Agricultural Development (IAD, ~35 majors) found this to be a high-quality, interdisciplinary program recommending some curriculum adjustments, improved faculty participation, and an increase in opportunities for international experience. Next is the world-renown, top-ranked Plant Sciences major (~90 majors). Although the report points out a steady rise in the number of majors since the last review (~30%), and good progress in addressing the results of the last review, the review team recommends working on community-building, course requirement adjustments, and an increase in available classroom lab space. The SAF major, first of its kind in the nation, is considered pioneering and innovative by industry and the public sector. It maintains a fairly large and passionate student base (~100 majors), but the review team recommended increasing the availability of TA's and/or faculty FTE to allow it to offer more courses and

increasing advising staff. Finally, the Sustainable Environmental Design review pointed out a rapidly growing major (more than doubling to about 150 since the last review) that is now larger than its parent Landscape Architecture. The review team recommend some considerable attention be paid to program leadership and overall goals in light of its rapid expansion, with a target of 2-3 new FTE to meet the demand.

Theresa Costa (staff advisor) and Mitchell Singer (chair) direct the UIPRC process and do a very effective job. Each program review team contains two people: a national reviewer and a UC Davis reviewer, as well as a host who is part of the UIPRC for a two day systematic review of the major: meeting all faculty, staff, and a selection of undergraduate students in the major. The committee has three more meetings scheduled this academic year, and then will provide summarized UIPRC reports to the entire review which goes to the Undergraduate Council (UGC) for analysis. UGC will write a final letter with recommendations directed to the program, Dean, and the Provost. Finally, the UGC letter will be added to the program review packet, and complete review packets will be sent to the Provost, Deans, and Program Chair in late June or early July. In the coming 2023/24 academic year the UIPRC will review approximately a dozen more programs including 3 from CAES: Atmospheric Science, Environmental Toxicology, and Hydrology.

Environmental Science and Policy (ESP) highlights, 4-8-23:

We are excited to welcome **Dr. Sean Godwin** as an Assistant Professor of Sustainable Aquaculture, part of a Provost's Hiring Initiative on "Food from the Sea." Shared with Bodega Marine Laboratory, this position will continue the long and productive partnership of ESP and BML.

We congratulate **Profs. Mark Schwartz, Ted Grosholz, and Tom Tomich** on their recent or upcoming retirements, with warm thanks for their contributions to the department, college, campus and world.

We congratulate the following ESP faculty for their recent honors and awards:

Asst. Prof. Jesus Barajas: Outstanding Paper Award from the Traffic Law Enforcement Committee of the Transportation Research Board

Asst. Prof. Xiaoli Dong: Chancellor's Early Career Faculty Award for Creativity and Innovation

Prof. Susan Handy: Fulbright Fellowship

Prof. Susan Harrison: Chair, "An Assessment of Native Seed Needs and the Capacity for Their Supply," a report of the National Academies of Science, Engineering and Medicine

Assoc. Prof. Fran Moore: Senior Economist, Council of Economic Advisors, Executive Office of the US President (one-year appointment)

Assoc. Prof. Fran Moore: Michael and Joelle Hurlston Presidential Chair (5-year appointment)

Prof. Daniel Sperling: Member, National Academy of Engineering*

Prof. Daniel Sperling: UC Davis Distinguished Scholarly Public Service Award**

Assoc. Prof. Fernanda Valdovinos: Early Career Fellow, Ecological Society of America

We're extremely happy to have kept all of our faculty through the past several years, despite the pandemic, rising cost of living, and other challenges, and we're grateful for the College's support.

We were delighted to learn that our **Environmental Science and Management (ESM)** major is not only the fourth largest major in the college but the fastest-growing one over the past 12 years. Our **Environmental Policy and Planning (EPAP)** major is also growing.

We thank our skilled and tireless staff for another year of taking care of us. Special recognition goes to **Carlos Barahona** for stepping into the role of IT Lead and navigating us through another crisis-free year with a team that also includes **Viendi Hoang** and **Linette Velasco** (welcome, Linette!)

* Showcasing **Dan Sperling:** He played a leading role in designing California's vehicle electrification policies and low-carbon fuels standard, which have spread to other states and nations. He was twice a lead author for the IPCC (sharing the 2007 Nobel Peace Prize), testified 8 times to Congress, authored or co-authored 13 books, given >900 public presentations, and been interviewed many times by major national news media. We're proud of all our faculty, but extra proud this year of Dan!

** About the **Distinguished Scholarly Public Service Award:** Dan Sperling is unique in having won it twice (in 1996 and 2023), but other ESP winners have included Charles Goldman (1993), Joan Ogden (2007), John Largier (2012), Jim Sanchirico (2014) and Mark Lubell (2021). Since its founding in 1970,

ESP has always been engaged in providing the best available scholarship on environmental issues to policymakers and the public.

Dept. of Plant Sciences Awards & Accomplishments

May 2022– April 2023

(compiled by Trina Kleist)

New Faculty

- [Mitchell Feldman](#): Hired as an assistant professor and continuing with the UC Davis Strawberry Breeding Program. March 2023.

Faculty / Staff Awards

- [Jeffrey P. Mitchell](#). The Conservation Agriculture Systems Innovation Center won the Conservation Innovation Award, Soil and Water Conservation Society. June 2022.
- [Jennifer Funk](#): Inaugural Barbara D. Webster Scholar Award of \$20,000, for a program bringing local high school girls into a science project. June 2022.
- [Lisa F. Brown](#). Eleanor & Harry Walker Academic Advising Award, CAES. June 2022.
- [Amelie Gaudin, Jeffrey Mitchell](#). Distinguished Service Award for Outstanding Team by UC ANR for wintertime cover crops. July 2022.
- [Matthew Gilbert](#): Program Advising and Mentoring Award, UC Davis Graduate Studies. Sept. 2022.
- [Jorge Dubcovsky](#): Frank N. Meyer Medal for Plant Genetic Resources, and a \$2,000 prize, Crop Science Society of America. Nov. 2022.
- [E. Charles Brummer](#): Honored by the North American Alfalfa Improvement Conference. Dec. 2022.
- [Leslie Roche](#): Partnership Award for Multi-State Efforts, National Institute of Food and Agriculture. Dec. 2022.
- [Maeli Melotto](#): Fellow, American Association for the Advancement of Science. Jan. 2023.
- [Brad Hanson](#): Fellow, Western Society of Weed Science. March 2023.
- [Alessandro Ossola](#): New Innovator in Food & Agriculture Award, Foundation for Food & Agriculture Research. April 2023.

Faculty Accomplishments

- [Louise Ferguson](#): Completed three years as president-elect, president and chair of the board, American Society of Horticultural Science. Aug. 2022.
- [Eduardo Blumwald](#): Named “highly cited researcher” for the sixth consecutive year, with more than 19,600 citations. Nov. 2022.
- [Giulia Marino](#): Named Presidential Chair for Tree Nut Genetics, UC Office of the President. Dec. 2022.
- [Steve Knapp](#): Strawberry Breeding Program released five new varieties that resist the *Fusarium* wilt, offer high yields and improve fruit quality. April 2023.

Research – Highlights from 400+ publications

- [Mary L. Cadenasso](#): Argued that people “co-produce” natural disasters such as wildfire; *Bioscience*. July 2022.
- [Steve Knapp](#): Discovered genes in strawberry that resist *Fusarium* wilt; *Theoretical and Applied Genetics*. July 2022.
- [Eduardo Blumwald](#). Found a new pathway for cereals to capture nitrogen, which could lead to reduced nitrogen pollution; *Plant Biotechnology*. Aug. 2022.
- [Imtiyaz Khanday](#): Developed rice strain that could make high-yielding, disease-resistant seed available to low-income farmers; *Nature Communications*. Dec. 2022.
- [Gilad Gabay](#): Found the genetic basis for longer root growth in wheat, enabling plants to pull water from deeper supplies; *Nature Communications*. Feb. 2023.
- [Cameron Pittelkow](#): Developed a strategy for reducing use of nitrogen fertilizer in rice that includes risks to and incentives for farmers; *Nature*. March 2023.
- [E. Charles Brummer](#): Government agricultural policy must promote multi-crop systems to reduce unsustainable damage to ecosystem and human health; *Proceedings of the National Academy of Sciences*. March 2023.

Special Publications – Books, videos and interactive media

- [Kassim Al-Khatib, Brad Hanson](#): Gold Award from the Association for Communication Excellence for their animated, online tutorial, “[Diagnosing Herbicide Injury](#).” July 2022.
- [Georgia Drakakaki](#): Developed the first biophysical model of cytokinesis. Published in *Plant Physiology* and released as an animated video. Nov 2022.
- [Louise Ferguson](#): Published *The Fig: Botany, Production and Uses*, part of CABI’s specialty crop series. Dec. 2022.

Other – Events, visits, etc.

- [Industrial Hemp Field Day](#): First-ever event presented methods for managing common problems and improving yields to an estimated 80 to 100 growers. Nov. 2022.
- [Georgia Drakakaki](#): Organized the first workshop on “Navigating Through Applications to Graduate School,” part of the department’s DEI efforts. Nov. 2022.
- [Allen Van Deynze](#): African Plant Breeding Academy launched a new course on using CRISPR to adapt African crops to meet new challenges. Feb. 2023.
- [Diane Beckles](#): Hosted 40 high school students from South San Francisco High School District as part of the UC Davis Biotechnology Program. Feb. 2023.
- [Eight faculty](#) attended the UC ANR 2023 Statewide Conference, including offering workshops in communication. April 2023.

Students

- [Katherine Simpson-Johnson, Marie Klein, Dante Leventini, Kyle Rizzo, Sadikshya Sharma, Matt Davis, Mary-Francis Laporte.](#) Graduate students hosted the Plant Sciences Symposium for the first time since COVID-19 pandemic. May 2022.
- [Terryn Hutchings, Mary-Francis LaPorte, Luis Salazar:](#) Borlaug Scholars, National Association of Plant Breeders. June 2022.
- [Max Vo, Julia Dang, Ofelia Viloche, Tiffany Chen.](#) Undergraduate students finished in the top five in the Urban Greenhouse Challenge, Wageningen University. June 2022
- [Joseph Student, Madeleine Macconnell, Sire Kassama.](#) Launching Tomorrow's Leaders fellowship, hosted by CAES. June 2022.
- [Matt Davis.](#) Rockey Fellowship, Foundation for Food and Agricultural Research. June 2022.
- [Melotto Lab:](#) A student-led effort earned a Lab Safety Award from UC Davis Safety Services, after two years of zero findings during lab inspections. Oct. 2022.
- [Isha Poudel:](#) Fellowship, American Association of University Women. Dec. 2022.
- [Ana Zepeda:](#) \$7,300-grant to help women in southern Mexico plant a community garden, from UC Davis Advancing Sustainable Development Goals. March 2023.

Funding – highlights from a strong year for research income

- [Grey Monroe, Daniela Quiroz:](#) \$50,000 from the UC Davis Science Translation and Innovative Research (STAIR) program. Aug. 2022.
- [Derek Young:](#) \$1 million from the National Science Foundation to build the Open Forest Observatory. Sept. 2022.
- [Antonia Palkovic, Paul Gepts, Christine Diepenbrock, Travis Parker:](#) \$3.3 million from the Specialty Crops Research Initiative for breeding lima beans. Oct 2022.
- [Steve Knapp:](#) \$6.2 million from the National Institute of Food and Agriculture to advance strawberry breeding. Nov. 2022.
- [Patrick J. Brown, Louise Ferguson, Richard W. Michelmore, Giulia Marino, Grey Monroe:](#) \$3.8 million from the National Institute of Food and Agriculture to improve pistachio production amid climate challenges. Dec. 2022.
- [Allen Van Deynze:](#) The department's new Multicultural Scholar's Program granted \$250,000 from the National Institute of Food and Agriculture to recruit more LatinX/ChicanX students into plant sciences. Dec. 2022.
- [Alessandro Ossola:](#) \$649,000 by the Agriculture and Food Research Initiative to research urban trees amid climate change. Dec. 2022.
- [Gail Taylor:](#) Nearly \$2 million in continued funding from the U.S. Department of Energy to develop poplar trees for jet fuel. March 2023.



UC DAVIS

**COLLEGE OF AGRICULTURAL
AND ENVIRONMENTAL SCIENCES**

2023 SUMMARY REPORT

SUMMARY REPORT

Helene Dillard, Dean

Dear Faculty,

The 2022-2023 academic year is almost complete, and I know everyone is looking forward to the warmth of the summer months. We are excited to be trying out a new venue for undergraduate commencement at the Golden 1 Center in Sacramento on June 16, 17, and 18!

The times are listed below:

Friday, June 16, 2:00 p.m.

Saturday, June 17, 9:00 a.m., and 2:00 p.m.

Sunday, June 18, 9:00 a.m., and 2:00 p.m.

This year the commencement ceremonies will feature faculty speakers, nominated by the deans from each college and selected by the students. Two CA&ES faculty speakers and one alternate were selected. The speakers and their times are listed below:

Saturday, June 17, 9:00 a.m.—Kristin Kiesel

Saturday, June 17, 2:00 p.m.—Gwen Arnold

Alternate—John Eadie

I want to thank all of the faculty, staff and students for their concern and diligence for the safety of our community members during the recent act of violence in Davis. Faculty, staff and students helped identify key locations where extra lighting was needed in the evenings, and early and late classes where safe rides should be made available. Our hearts are heavy as we mourn the loss of Karim Abou Najm, a fourth-year student in computer science, and son of Professor Majdi Abou Najm in the Department of Land Air and Water Resources. Karim was an outstanding student, a mentor to many, and a compassionate caring soul. He will be greatly missed and fondly remembered. While we are grateful and relieved that a suspect is in custody, we also recognize the shock and grief that comes from the knowledge that the suspect is a former UC Davis student. Resources are available to help students, staff and faculty during this difficult time and can be found at the following websites:

Campus information:

ucdavis.edu/news/campus-response-may-2023

Safe rides:

police.ucdavis.edu/safe-rides

Mental Health Support:

mentalhealth.ucdavis.edu/i-need-help (students)

hr.ucdavis.edu/departments/asap (academic and staff)

Our college is large and complex, and I can't thank you all enough for helping with our day-to-day activities and assisting us during difficult times. Thank you to everyone involved in supporting our students – advisors, counselors, teaching lab managers, wellness coordinators, and student clubs and groups. I also want to recognize the hard work and generosity of the numerous staff in the college who keep our HR, IT, finance, communications, fields, facilities, greenhouses, flora and fauna in great shape. All your efforts are very much appreciated.

This year, there are several college highlights worth mentioning. Below is an overview of accomplishments and areas we are still working on.

- The college received a transformative \$50 million investment that established the Lynda and Stewart Resnick Center for Agricultural Innovation and Research Fund. The Center will be located near the Plant Reproductive Building off Hutchison Drive and is scheduled for completion by 2026. The new LEED-certified, state-of-the-art hub will house classrooms, research and laboratory spaces. Ten million dollars of the Resnick's gift is directed toward annual competitive research grants through the Resnick Agricultural Innovation Research Fund. We have established a robust advisory board composed of academic, industry and investor members from the agricultural sector. The inaugural grant Request for Proposals (RFP) resulted in the submission of 26 multidisciplinary proposals. After extensive review, the advisory board ranked and selected nine projects targeted to receive nearly \$1.7 million in seed funding.
- Faculty in the college continue to receive large numbers of external grants and contracts in support of their research, teaching and extension/outreach. CA&ES secured \$86,130,921 of new extramural funds in the first six months of fiscal year 2022-23 after a record breaking \$217,194,426 from the prior year.
- The college received the [summary report of the 2021 COACHE Faculty Satisfaction Survey](#). These results are presented for all faculty respondents from the college and disaggregated by gender, race/ethnicity and rank. Included were also results for all UC Davis faculty respondents to provide comparative context. The Faculty Executive Committee and the dean, associate deans, and assistant deans were asked by Vice Provost Phil Kass to identify survey findings of special interest to CA&ES faculty and propose policies and practices that these findings might suggest. Comments from the CA&ES FEC and from college leadership were submitted in May 2023.
- Updates from the newly appointed dean's advisory committees:
 - CA&ES is moving forward with the design and build of a greenhouse-based, state-of-the-art high throughput plant phenotyping facility after a year of careful planning and a comprehensive survey of faculty needs. The facility will likely be an automated gantry-based system that will include laser, multi-spectral, and thermal imaging and lysimetry. The committee is currently soliciting bids from multiple companies.

- The Strategic Use of Endowments and Gifts committee reviewed the current use of endowed funds and considered a proposal to fund a portion of the cost of the salary and benefits of existing endowed chair holders. The proposal was not popular, so the committee recommended engaging departments in conversations about plans for more fully utilizing endowments that have over two years of annual payout and carryforward (which was already discussed yearly with the department chairs and CAOs in the spring meeting with the dean).
- The Strategic Use of Land and Water Resources committee made the following recommendations: replace the Oakville well within five years, conduct a comprehensive inventory of departmental equipment, invest in developing plots for commercial production, explore cost effective efficiencies, explore philanthropic and internal funding sources, invest in equipment, and implement low/zero emissions strategies wherever possible.
- CA&ES allocated more than \$500k in building and security needs and invested facility infrastructure and department needs, including the Center for Aquatic Biology and Aquaculture, Controlled Environment Facility, and the CalFresh relocation. More than \$42k was spent on landscaping, electrical, lighting and security equipment to improve safety and security measures for CA&ES occupied spaces. This included advocating for new aggie access installation on older buildings with Veihmeyer Hall as the first test case installation for UC Davis, and support for the hiring of additional non-uniformed officers for after-hours patrols—a program that began March 2023.
- The campus continues to experience a multimillion-dollar structural deficit. Our college has been asked to reduce the base budget by \$1.1 million each year for five years. An additional year was added to the original cut for a total multi-year budget cut of \$6.6 million. We thank the FEC Finance Committee for assisting in reaffirming our budget priorities as a college and working with us at several meetings as we commit to investing in our future and assuring the money serves the mission.
- Our ongoing financial challenges remain. We are looking at ways to increase the unrestricted college funds in the Dean’s Office and departmental operational accounts. This will enable us to provide competitive startups to hire faculty FTE as we invest in the future of the college.
- HR is working hard at managing several challenges and navigating hiring trends in a post pandemic environment:
 - We saw higher than historical staff turnover (following national trends), but below industry and university, with career staff turnover expected to end at roughly 10% for the full fiscal year.

- Job vacancies dropped from a high of approximately 7% in at the beginning of the fiscal year to an anticipated ~3.5% by end of fiscal year.
 - The college received approval for more equity increases for policy covered staff than in any previous year to help maintain competitive wages.
 - Hiring improved across the year, and current time to hire has decreased to 63 days versus 113 campus average.
 - Applicant flow improved with average applicants nearly doubling over the course of the fiscal year. We expect this trend to continue through fiscal year 2023-24.
 - The college continues to promote from within at a higher level than the rest of the university, and we consistently saw staff choosing to stay in CA&ES. Roughly 62% of staff internal movement was promotional.
 - Two positions, which are among the hardest to recruit, are advising and account management, with higher rates of external hires (and training) needed to fill positions.
- Faculty hiring has been successful, with 14 hires in 2020-21, five hires in 2021-2022, and nine new appointments (Senate and CE) starting in 2022-23. In addition, there are five tentative offers accepted or near acceptance and five currently in the recruitment process.
 - The provost typically releases positions to the college at the beginning of the fiscal year. Based on careful evaluation of teaching needs, program reviews, research needs, demographics, growth areas in the strategic plan, and budget review, we anticipate hiring ten new faculty FTEs if approved by the provost and we can demonstrate adequate funding for the positions and their start-up packages.
 - We are fortunate to have five new Cooperative Extension faculty who have started or will be starting by July 1, 2023, and two additional positions actively in recruitment.
 - We hosted a new faculty meet and greet in fall 2022 and a faculty social in spring 2023.
 - The Expect Greater Fundraising Campaign, which quietly began in July of 2016 and formally launched to the public in 2020, continues to highlight the impact of philanthropy on our campus. To date, CA&ES has generated more than \$358,119,073 in gifts supporting research, teaching and other parts of our core mission. In FY23 that number so far has reached just under \$23.5M. These gifts reflect a number of ongoing projects, new endowments, student scholarships, and capital investments, many of which are within individual departments and with a few designated at the college level. Throughout the philanthropic campaign, our goal has been to highlight priorities for the

college that thematically cover large swaths of our work including Smart Farming and Food Systems, Leading-Edge Research and Tomorrow's Change Makers.

- The college communications team produced and partnered in the promotion of 119 web stories and press releases in the past year. They created approximately 1,122 original social media posts across Twitter (460), Facebook (247), YouTube (28), Instagram (184) and LinkedIn (203). They also sent out 11 newsletters to 22,356 subscribers, and developed eight media kits, which include a press release, photography, video, and social media posts. Press release stories resulted in multiple media requests and placement in publications, including but not limited to: Wired, the New York Times, Capital Press, KCRA, Cap Radio, Western Farm Press, Washington Post, Morning Ag Clips, etc.
- In addition to supporting the CA&ES Dean's Office, Undergraduate and Academic Programs, the Development Team, and Policy Council, the communications team brought in approximately \$30k in additional funding through more than 360 hours of recharge work to help offset salaries and support the budget. They also provided communication support for all 14 departments, Vet Med, the Western Center for Agricultural Health and Safety (WCAHS), College of Letters and Science, Public Scholarship and Engagement, Ceremonies and Special Events, Robert Mondavi Institute, Olive Center, the Student Farm, CLEAR Center, the Honey and Pollination Center, the Brewery, and the Food Loss and Waste Collaborative. Creative support included digital and graphic design, photography and videography, content creation, web design and communication strategy and consultation.
- We had more than 15,000 applications for admission to our college's undergraduate programs for fall 2022. We expect to enroll about 2,000 total first year and transfer students. Below is additional information regarding our current and incoming students:
 - Animal science and managerial economics are our most popular majors, followed by human development and environmental science and management.
 - The weighted GPA for incoming fall 2022 first year (freshmen) was 4.1, and the GPA for incoming fall 2022 transfer students was 3.5.
 - Students represented 33 states/territories and 26 countries.
 - 31% of incoming fall 2022 students identify as underserved (African/African American, American Indian/Native Alaskan, Chicanx/Latinx).
 - 42% of incoming fall 2022 students are first generation.
 - Last year (2021-22), 2,186 bachelor of sciences degrees were conferred.

- CA&ES Global Engagement hosted a total of 108 visitors from 11 countries including the Minister of Agriculture of New Zealand, President of National University of Singapore, Rector of Indonesian's university (IPB) and former Prime Minister and current Ambassador of Pakistan to the US. They also conducted seven training programs including five USDA Cochran fellowships. People from Japan, Ghana, Haiti, Brazil, Colombia, Guatemala, Peru, El Salvador, and Honduras were training on issues such as food safety, craft beer, residues due to pesticides, and meat product processing.
- The CA&ES Dean's Advisory Council (DAC) met in-person in October 2022 and April 2023. This critical body helps our college leadership team carry out our public mission by providing a critical external perspective from key industry and stakeholder groups. At the April meeting, the group explored ways to potentially expand and deepen their impact by diversifying our membership and areas of focus—including philanthropy, government and external relations, as well as infrastructure. As part of this discussion, we completed a review of similarly positioned advisory boards from throughout our sister colleges and schools at UC Davis as well as peer agricultural and environmental science institutions across the county. Throughout our review and benchmarking we kept an eye toward three key areas: the core mission of CA&ES, the role of DAC in serving that mission and the strategic goals that this body is best positioned to help achieve. We look forward to continuing this discussion over the next year and growing our partnership with these dedicated volunteers and advocates.

The college is incredibly proud of the achievements of our faculty, staff and students. Below is a roundup of the awards received over the past year.

- Pamela Ronald, a distinguished professor of plant pathology, was elected to the American Academy of Arts and Sciences.
- Kate Scow, distinguished professor emeritus in the Department of Land, Air and Water Resources was elected to the National Academy of Sciences.
- Four advisors were recognized with 2022 Eleanor and Harry Walker Academic Advising Awards. They are Gwen Arnold with environmental science and policy, Lisa Brown with plant sciences, Elizabeth Dui with nutrition and Jemi Okolo with agricultural and resource economics.
- Frances Moore, associate professor of environmental science and policy, was appointed to the White House Council of Economic Advisers.
- Ermias Kebreab, the Sesnon endowed chair in Department of Animal Science, earned a 2022 Chancellor's Innovation Award for research on methane reduction in cows via food additives.

- Distinguished Professor Jorge Dubcovsky with plant sciences was awarded the Frank N. Meyer Medal for Plant Genetic Resources by Crop Science Society of America.
- Leigh Ann Simmons, professor and chair of Department of Human Ecology, received the university's inaugural Women and Philanthropy Impact Award.
- Assistant Professors Haven Kiers, Emily Meineke and Maciel Hernandez join the 2022 class of Hellman Fellows.
- Distinguished Professor Susan Ustin with the Institute of the Environment and Center for Spatial Technologies and Remote Sensing won the U.S. Geological Survey's 2022 Pecora Award.
- Tina Jeoh, professor with the Department of Biological and Agricultural Engineering, received the 2021 Danisco Foundation Science Excellence Award from International Flavors and Fragrances Inc.
- Distinguished Professor Pamela Ronald with plant pathology was included in the "Best Female Scientists in the World" list compiled by Research.com.
- John Eadie, D. G. Raveling Chair of Waterfowl Biology in the Department of Wildlife, Fish and Conservation Biology, received the UC Davis Prize for Undergraduate Teaching and Scholarly Achievement.
- Anita Oberholster, viticulture and enology professor of Cooperative Extension, won the Wine Enthusiast's 2022 Wine Star Award for Innovators of the Year.
- Distinguished Professor Jorge Dubcovsky was awarded the Frank N. Meyer Medal for Plant Genetic Resources by the Crop Science Society of America.
- Assistant Professor Luis Diaz-Garcia from the Department of Viticulture and Enology was named a Center for the Advancement of Multicultural Perspectives on Science (CAMPOS) faculty scholar.
- Plant Sciences Professor E. Charles Brummer was named an honorary member of the North American Alfalfa Improvement Conference.
- Professor Huaijun Zhou with the Department of Animal Science received the NAS Prize in Food and Agriculture Sciences by National Academy of Sciences
- Distinguished Professor Pamela Ronald with plant pathology won the VinFuture Prize for Female Innovators.

- Rachel Vannette, associate professor with Department of Entomology and Nematology, was named a Chancellor's Fellow for excellence in research, teaching and service.
- Distinguished Professor Michael Carter with the Department of Agricultural and Resource Economics received the Chancellor's award for International Engagement.
- Maeli Melotto, professor with Department of Plant Sciences, was named a fellow of the American Association for the Advancement of Science.
- Christopher Simmons, the Department of Food Science and Technology chair and professor, received the Academic Senate's Distinguished Teaching Award from the Academic Senate.
- Haven Kiers, an assistant professor with the Department of Human Ecology, won the 2023 Excellence in Design Studio Teaching Award (junior level) from Council of Educators in Landscape Architecture.
- Louie Yang, entomology and nematology professor, is the 2023 winner of the Distinction in Student Mentoring Award from the Pacific branch of the Entomological Society of America.
- Xiaoli Dong, assistant professor in Environmental Science and Policy, received a campus Early Career Faculty Award for Creativity and Innovation
- Alessandro Ossola, assistant professor of plant sciences, received an award from the Foundation for Food and Agriculture.
- Emily Meineke, assistant professor of urban landscape entomology, was selected as an Early Career Fellow of the Ecological Society of America.
- Charlie Bamforth, distinguished professor emeritus with the Department of Food Science and Technology, was honored as the 2023 Craft Beer Pioneer at the third annual Brewers Cup of California.
- Each year CA&ES recognizes individuals for their achievements, support, leadership and service to the college with an Award of Distinction honoring those contributions. Alumnaus of the Year: Marko Zaninovich; Distinguished Friend of the College: William "Bill" Patterson; Exceptional Faculty Award: Daniel Sumner; Exceptional Emeriti Award: Robert Page; Exceptional Staff Award: Shannon Tanguay.
- Zann Gates, a program representative for the Department of Food Science and Technology, won the 2023 Staff Appreciation and Recognition award.

- Seven college faculty members won Graduate Program Advising and Mentoring Awards for 2022. They are: Helen Dahlke in land, air and water resources; Anna Denicol in animal science; Matthew Gilbert in plant sciences; Cassandra Swett in plant pathology; Richard Sexton in agricultural and resource economics; Jay Rosenheim in entomology and nematology and Andrew Whitehead in environmental toxicology.
- Leslie Charlton earned outstanding advising administrator, Lili Bynes earns outstanding advising equity champion, and Mandy Rousseau earns campus awards for outstanding academic advisor.
- Hong Dao (Undergraduate Academic Programs) recognized with a Global NACADA Outstanding Advisor, Certificate of Merit Award
- Professor Maeli Melotto's lab, where researchers study how plants defend themselves against attack by microbes, has earned a 2022 Lab Safety Award from UC Davis Safety Services office.
- Amanda Porter, Community and Regional Development major received the University Medal.
- Rory Greenhalgh, Biotechnology major, received the College Medal.

In closing, I want to thank all of the faculty and staff for their tireless teaching, research and outreach. We are very proud of the efforts of the college and the excellence of our community. Our success as a premier college is due to the hard work of our faculty and staff and we see examples of your commitment to our mission every day. It is truly an honor to be a part of this outstanding institution.

Sincerely,



Helene R. Dillard
Dean and Professor