Welcome to the 2023-2024 academic year!

We hope you had an enjoyable summer and are ready to conquer the Fall semester.

Chairperson's Corner
Welcome to the Fall 2023 semester. I hope you had an exciting, productive, and relaxing summer. I am happy to start the new academic year with you. Together, let us strive to build a strong sense of community in the department.

Our department graduated 12 students with B.S. and two with M.S. in the 2022-2023 academic year (page 3). For the first time, we had 20 students who participated in on and off campus summer internships at various Universities and Institutions including Northwestern University, University of Chicago, Purdue University, and the Field Museum. Also, for the first time, four of our biology students were recognized with top awards at the university, which included the Presidential Cup (Adaeze Olikagu), Outstanding Senior (Korvell Russell), Outstanding Sophomore (Valeria Vizcaino) and Graduation Speaker (Dominick George). I am so proud of the students' accomplishments. I appreciate our dedicated faculty and staff who contributed immensely to student success.

The student run club, Biological Society, participated in several activities throughout the year (page 7, 9 and 10). I encourage all students to become active member of the Biological Society and take advantage of leadership and service opportunities as resume builders. Visit the department's website news and events site to learn of student leaders (https://www.csu.edu/bioprehealth/news.htm).

Feature Story
Welcome to the 2023-2024 academic year!

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Announcements:
Graduation application deadline for undergraduate and graduate students is September 29, 2023.

Apply to Scheinbuks Scholarship: The deadline is September 29, 2023, at 4:00 p.m. The requirements are a minimum cumulative grade point average of 3.0 on a 4.0 scale; has completed one full semester at CSU; can demonstrate a commitment to scholarship and achievement in Biology; are willing to volunteer as a participant in university activities; has not received the award more than once. For additional information, please contact Dr. Andrew Maselli, amaselli@csu.edu for further information.

Apply for paid research opportunities as an LSAMP Scholar: (https://www.csu.edu/ILSAMP/scholars.htm). Contact Dr. Christopher Botanga, cbotanga@csu.edu. Follow the department on social media: Twitter(@ChicagoStateBio), Instagram (chicagostatebio)
Dr. Julian Scheinbuks Scholarship

Dr. Julian Scheinbuks was a part of the Department of Biological Sciences faculty at CSU from 1989-2003. His great love was teaching and working with students. He taught various biology courses for 13 years. In 2003, he was appointed the Director of Distance Learning. Under his leadership, a small and developing operation was transformed into a successful department within the Library and Instruction Services. Upon Dr. Scheinbuks passing, he donated $1 million dollars towards student scholarships for the department. As a memorial to Julian, the campus community has planted a native burr oak tree. A leaf from that tree is the symbol of the Scholars Program. Every year, the department gives scholarships to students through an application process, applicants are awarded based on academics and service.

Scheinbuks Scholarship Recipients 2022-2023

(Undergraduates $2,000 each)
Ebony Banks
Adaeze Olikagu
Korvel Russell
Valeria Vizcaino

(Graduate $2,000)
Graduate Student:
Akilah Davis
Congratulations 2022 to 2023 Graduates

BS:  **Biology, General Biology Option**
    Andrea Brown
    Dominick S. George
    Carlette Y. Johnson
    Cinderella McKinney
    Josue Puente
    Aleah T. Wilson

    **Biology, Premed/PreDent Option**
    Miata K. Bracey
    Laura Giron
    Andriana L. Malone
    Adaeze Olikagu
    Korvell Russell

MS:  **Biology, Applied Physiology**
    Chanel Norphlet

    **Biology, Environmental**
    Steven Philott
Where Are the Class of 2022-2023?

Uzoma Emeakoroha  MS. 2021; PharmD 2023.

Dominick S. George  BS. 2022; Started Ph.D. Program, Fall 2023 at Rochester University, NY.

Josue Puente  BS 2023; Started Doctor of Optometry Program, Summer 2023, at Rocky Mountain School of Optometry.

Cinderella McKinney  BS 2023; Started a Master's Program at DePaul University, Summer 2023.

Laura Giron  BS 2023; Started Research Technician position at The Field Museum.

Steven Philpott  MS. 2023; Started Ph.D. Program, Fall 2023, at North Carolina State University.

Korvell Russell  BS 2023; Will start a Research Technician position at Northwestern University.

Adaeze Olikagu  BS 2023; Scored 99% in Medical College Admissions Tests (MCAT). Adaeze is busy with the medical school application process.
Joyce Ache Gana and Kristy Mardis launched the SLOAN Foundation Grant Summer Program at CSU. Students spent six weeks at CSU and three weeks at Purdue University. Gana and Mardis took students on Field Trips to STEM related workforce sites including the US-EPA, MWRD, BESI, and BIG Marsh.

11 CSU students (nine Biology and two chemistry students) participated in the Summer Program.
Joyce Ache Gana and SLOAN mentees engaged in Dr. Patrice Boyles’ Continuing Education Summer Camp 2023 with greenhouse/pizza garden hands-on activity.

Faculty that led hands-on activities in the CSU-SLOAN Summer Program are:

Andrew Maselli (Biological Sciences): Light and Electron Microscopy/Pollen
Melvin Daniels (Biological Sciences): Microbiology/Bacteria
Yukto “Ty” Tsang (Biological Sciences): Cadaver/Human Anatomy
Valerie Goss (Chemistry): Atomic Force Microscopy
Rob Richter (Chemistry): Water Chemistry
Tekleab Gala (Geography): Remote Sensing
Elaina Khasawneh (Math): Data Science/Personal Finance
Arbor Day

Dr. Karel Jacobs with others organized the Arbor Day tree-planting event on May 28, 2023.

Leadership in Biological Society:
Past President: Korvell Russell
Past Vice President: Adaeze Olikagu
Current President: Vivian Cox
The following students did off campus summer internships/programs:

1. **Luis Garcia**: Northwestern University Core Facility
2. **Madalyne Juarez**: Northwestern University Core Facility Internship
3. **Alayjah Harshaw**: The Field Museum
4. **Trinity Thomas**: Northwestern University American Heart Association Internship
5. **Idris Mohammad**: University of Chicago, Neuroscience
6. **Quiana Smith**: University of Chicago, Environmental Health
7. **Denesha Gorman**: University of Chicago
8. **Vivian Cox**: Purdue University, West Lafayette
9. **Ebony Banks**: Mental Health Internship with the VA, through IAmAbel Foundation
10. **Xavier Lyon**: The Field Museum
11. **Christopher Northington** - The Field Museum
12. **Valeria Vizcaino** - Northwestern University (NU-CURE Program)
13. **SLOAN Mentees** - Chicago State University and Purdue University

- Oluchukwu Akujieze
- Kevin Bulley
- Zyra Clark
- Gabrielle Cole
- Meisha Daniels
- Meakaela Disanka
- Marco Garcia
- Tajanae Reed
- Destiny Span
- Kenya Williams
- Kaylynn Wilson
Joyce Ache Gana and Molly McDonough along with Biology students participated in the Calumet Is My Backyard (CIMBY) Earth Day Event at BIG MARSH Park on April 21, 2023 promoting the Biological Sciences Department to many of the high school students in attendance.
Biological Society Leaders Presenting at Different Events

Chicago Symposium Series

Field Museum Members Night

Tri-Beta Oral Presentation

Tri-Beta Poster Presentation

Tri-Beta Poster Inductees
Dominick George
Alayjah Harshaw
Ciarra Lindsey
Andrianna Malone
Adaeze Olikagu
Taylor Reese
Korvell Russell
Byeong Gyu Park, Yukto “Ty” Tsang, and Leonel Leoza engaged the Health Professions Explorers Summer Camp 2023 students with various hands-on activities, which included light microscopy, greenhouse, and human anatomy.
Faculty and Staff Activities

Grants (Submitted and/or Received)

**Grants Activities (Submitted, Approved, Mentoring)**

**Dr. Botanga** received NSF award of $695,538 to support postbaccalaureate for students to conduct research in STEM.

**Dr. Botanga** submitted two NSF proposals in December 2022 and January 2023 to the NSF, seeking $494,540 and $5,000,000; respectively.

**Dr. Botanga’s** continuation grants are:

- Botanga, C., "NSF INCLUDES Alliance: Engineering PLUS (Partnerships Launching Underrepresented Students)," Sponsored by National Science Foundation, Federal, $901,588.00. (July 29, 2021 - August 31, 2026).

- Botanga, C. (Co-Principal), Botanga, C. (Co-Principal), Scott, Z. (Principal), Morgan, D. (CoPrincipal), "Louis Stokes STEM Pathways and Research Alliances: The Illinois LSAMP STEM Pathway and Research Alliance (ILSPRA)," Sponsored by National Science Foundation, Federal, $4,000,000.00. (September 1, 2019 - August 31, 2026).

**Dr. Erhart** is faculty mentor for the NIH grant “Institutional Research and Academic Development Award at the University of Chicago” (CSU – University of Chicago joint project) (faculty mentor; funded September 2023 – August 2026).

**Dr. Erhart** is faculty participant for the NSF grant “Illinois post-baccalaureate research experiences for LSAMP students (IPRELS)” (faculty mentor; funded October 2022).

**Dr. Erhart** received a CSER pilot grant in January 2023 for the topic “mouse model for hereditary spastic paraplegia.”

**Dr. Maselli** submitted a collaborative National Institutes of Health, NINDS Interdisciplinary Team Science Grant titled “A projectome of the mouse brain” Co-PI (Submitted Oct. 2022).

Faculty and Staff Activities (continued)

Published Abstracts and Presentations


Dominick S. George, Narayanan 'Bobby' Kasthuri; Andrew G. Maselli. 2022. Cross-species Comparison of the Surface Density of Nuclear Pores in Adult Mouse and Macaque Cortical Neuron, November 2022 Annual Biomedical Research Conference for Minoritized Students (ABRCMS).


Dr. Botanga. 2023. Guest Speaker, Faculty & Staff Institute Day. (January 12, 2023).


Faculty and Staff Activities (continued)


Other Faculty and Staff Activities

Dr. Chris Botanga had a successful four-day Conference for the 2023 NSF LSAMP PIs/PDs from June 1-4, at the Capital Hilton Hotel, Washington D.C. In attendance were PIs/PDs from LSAMP Alliances across the country along with stakeholders. The conference covered many topics including best practices, funding, evaluation, sustainability, future directions, and recognition of the 20th anniversary of the NSF LSAMP Bridge to the Doctorate (BD) activity and the impact of the BD fellowship on the success of diverse STEM talent/workforce.

Dr. Chris Botanga and two undergraduate students attended and participated at the 13th International Undergraduate Research Symposium (IURS 13) held at Jaramogi Oginga Odinga University of Science and Technology (JOOST), Bondo, Kenya from June 12-17, 2023. The CSU biology student reported that this international experience was life changing for her.

Dr. Chris Botanga also gave the Keynote Presentation at IURS 13, in Kenya, June 2023.

Dr. Chris Botanga co-organized the Illinois LSAMP SYMPOSIUM held in Lisle IL (February 24 & 25, 2023).

Dr. Molly McDonough was a guest speaker at Darwin Day Celebration, Chicago, IL. On February 10, 2023.

Dr. Molly McDonough supervised six mentees (High school student and undergraduates) and one CSU graduate student in independent research projects at The Field Museum Summer 2023.

Dr. Molly McDonough spent one month conducting field research in Angola in the Namib Desert, Africa Summer 2023.

Dr. Mark Erhart participated as a panelist at the ILLSAMP on the topic Partnering with students to support stem success and inclusive learning spaces (February 24&25, 2023).

Dr. J A Gana participated in the recruitment mini college fair event at Malcom X College (March 22, 2023).
Dr. Mila Kellen Marshall


Dr. Mila Kellen Marshall is an environmental professional and journalist with a passion for advancing sustainability in all sectors. Her passion is directed towards urban food systems in segregated cities. Her work seeks to identify and communicate the importance of healthy air, land and water for people and agricultural commodities. She pivoted towards cannabis as the industry emerged in 2019, is the Education Committee VC of the National Cannabis Industry Association, creator of the BIPOC Banking & Cannabis Summit and current editor of Cannabis Corner for Chicago News Weekly.

Dr. Herve Nyenti

- 2014 CSU Biology M.Sc., graduated in 2023 summer with a Dr. of Clinical Laboratory Sciences degree from the University of Texas, Galveston. Herve works full time as a Technical Supervisor for blood bank and transfusion services at the University of Texas Medical Branch (UTMB) in Galveston.

Dr. Chiamaka Uche

2018 CSU BS Biology graduate; Graduated from Ohio State Medical School in May 2023 and started residency in the Department of Anesthesiology at Washington University in St. Louis.
Graduate Corner

Proposal Defenses:

Kevin Swier, as Chair of Richard Brown Master’s Thesis committee, along with faculty committee members (Andrew Maselli and Melvin Daniels) guided Richard through the master's thesis process to a successful Masters' thesis defense in July 2023.

Title of thesis: “Characterization of a Dictyostelium ADP-ribosyltransferase knockout.”

Richard Brown accepted a position as lab technician in the Dicty Stock Center at Northwestern University.

Joyce Ache Gana, Mark Erhart, and Andrew Maselli were Steven Philpott Master’s Thesis Committee members who mentored him through the master's thesis process to a successful Masters' thesis defense in May 2023.

Title of thesis: Using Cryo-SEM and Portable High-Performance Liquid Chromatography to Measure Variations in Trichome Morphology and Density compared to Cannabinodiolic Acid in Cannabis sativa L.

Steven Philpott was admitted to the Ph.D. Programs at Cornell University and North Carolina State University. Steven accepted the NC State University Provost’s Doctoral Fellowship and starts his Ph.D program this Fall 2023.

Joyce Ache Gana, Walid Al-Ghoul, George Smith Jr. are Nicholas Moody Master’s Thesis Committee members who guided him to give a department Thesis Progress Report Seminar in July 2023.


Nicholas Moody was accepted to do a summer research program at Northwestern University but later decided to pursue a summer program at the University of Chicago Hospital.

Retirement:

Mr. Darryl Frazier, Animal Facility Lab Technician, Retired May 2023.

Dr. Nicholas Halm-Lutterodt, Full-Time Lecturer, Retired May 2023.

Appointments:

Dr. Megan Garfinkel - came to CSU as an Assistant Professor, Tenure Track Facility Member, August 2023. Dr. Garfinkel will be teaching Ecology and Biometrics Fall 2023.

Mr. Leonel Loeza - was hired as a Natural Science Laboratory Assistant III, June 2023. Mr. Loeza will be working in the Animal Facility with Dr. Erhart and he will also be working in the Greenhouse.