

Cancer Research Training and Education Coordination

Office of Cancer Career Enhancement & Training (OCCET)

April 2, 2025



CHANGING MEDICINE.
CHANGING LIVES.®

OCCET Aims & Structure

Aims

1. **To establish and maintain a robust cancer career enhancement and training infrastructure** at the HCCC by fostering the career enhancement infrastructure responsible for the training of HCCC trainees, faculty, staff, and community providers and integrating these efforts into wider programs at both UI and within the HCCC catchment area.
2. **To assure quality training and mentoring of trainees at all stages** of training by supporting the development of a cancer workforce through training initiatives at every career stage.
3. **To facilitate educational and career enhancement opportunities for trainees, faculty, clinicians, and staff** of the HCCC and across Iowa by facilitating existing, and generating new, opportunities for learning and scientific discussion at all levels including trainees, faculty, clinicians, and staff at the HCCC, as well as at other stakeholders both within and outside the HCCC catchment area.



Jon Houtman, PhD

Associate Director,
Career Enhancement

- Professor and Vice Chair of Microbiology and Immunology
- PI for the American Cancer Society Institutional Research Grant (ACS IRG), DICR Summer Internship, & DICR Postbac Fellowship
- PI for the NCI R25 YES
- Board Member, Cancer Biology Training Consortium (CABTRAC)
- External Advisory Board Member (2022-2024), Mayo Clinic Comp. Cancer Center

ROLE

- Oversee the successful execution of all OCCET activities
- Chair, Career Enhancement Advisory Committee



Megan Meyer, MBA

Assistant Director,
Career Enhancement

- 0.8 FTE

ROLE

- Collaborate with AD to oversee all OCCET activities
- Develop new and expand existing OCCET efforts
- Chief idea strategist
- Seek new funding sources



Amy Candelario

Program Associate
OCCET

- 1.0 FTE (started July 2024)

ROLE

- Administrate ICARE Postbaccalaureate Research Fellowship Program
- Administrate HCCC Research Seminar Series



Alicia Denman

Program Associate
OCCET

- 1.0 FTE

ROLE

- Administrate Cancer Biology PhD Program
- Administrate Cancer Research Opportunities at Iowa Summer Undergraduate Program



Carey Dieleman, MS

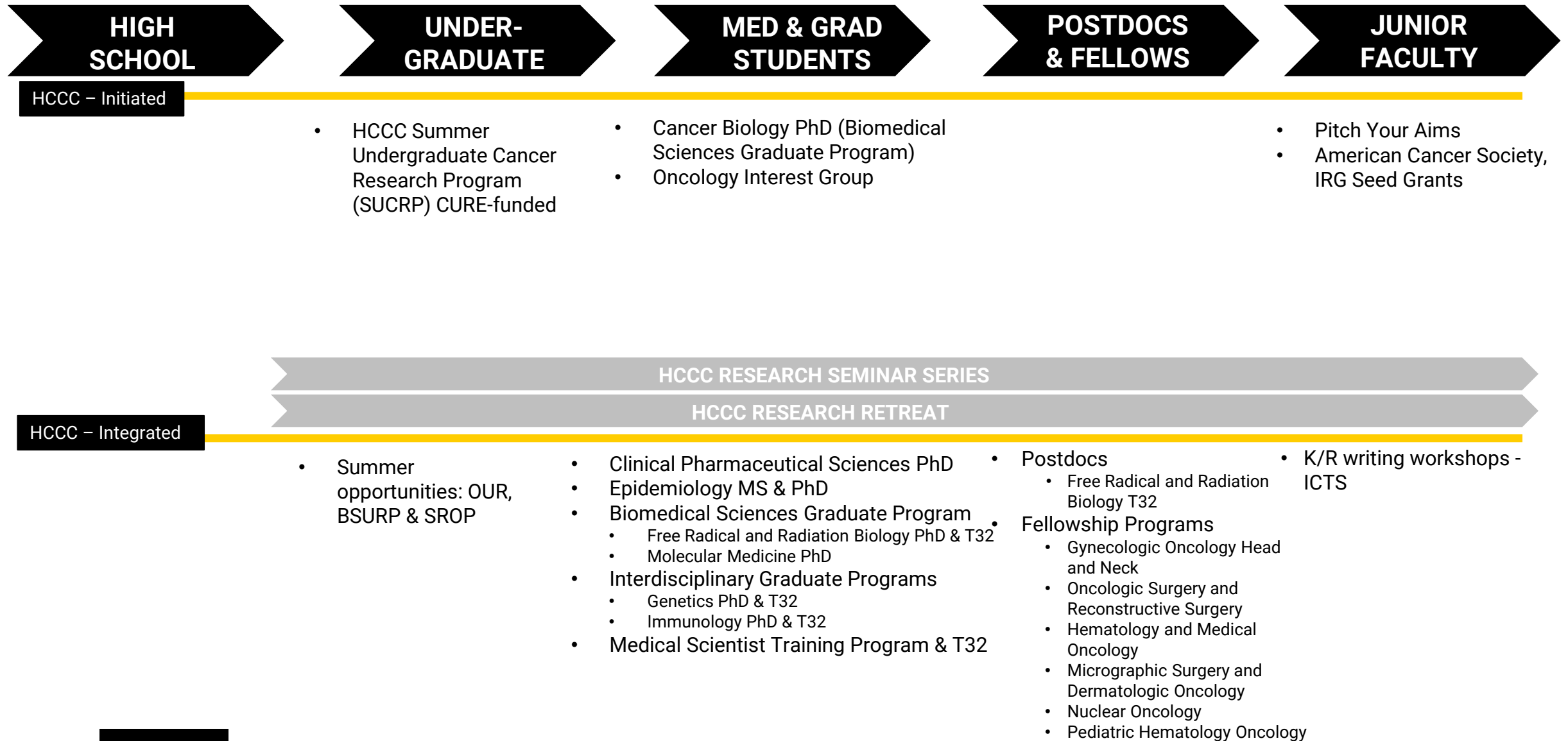
STEM K-12 Educator
OCCET + COE

- 1.0 FTE (started Jan. 2025)

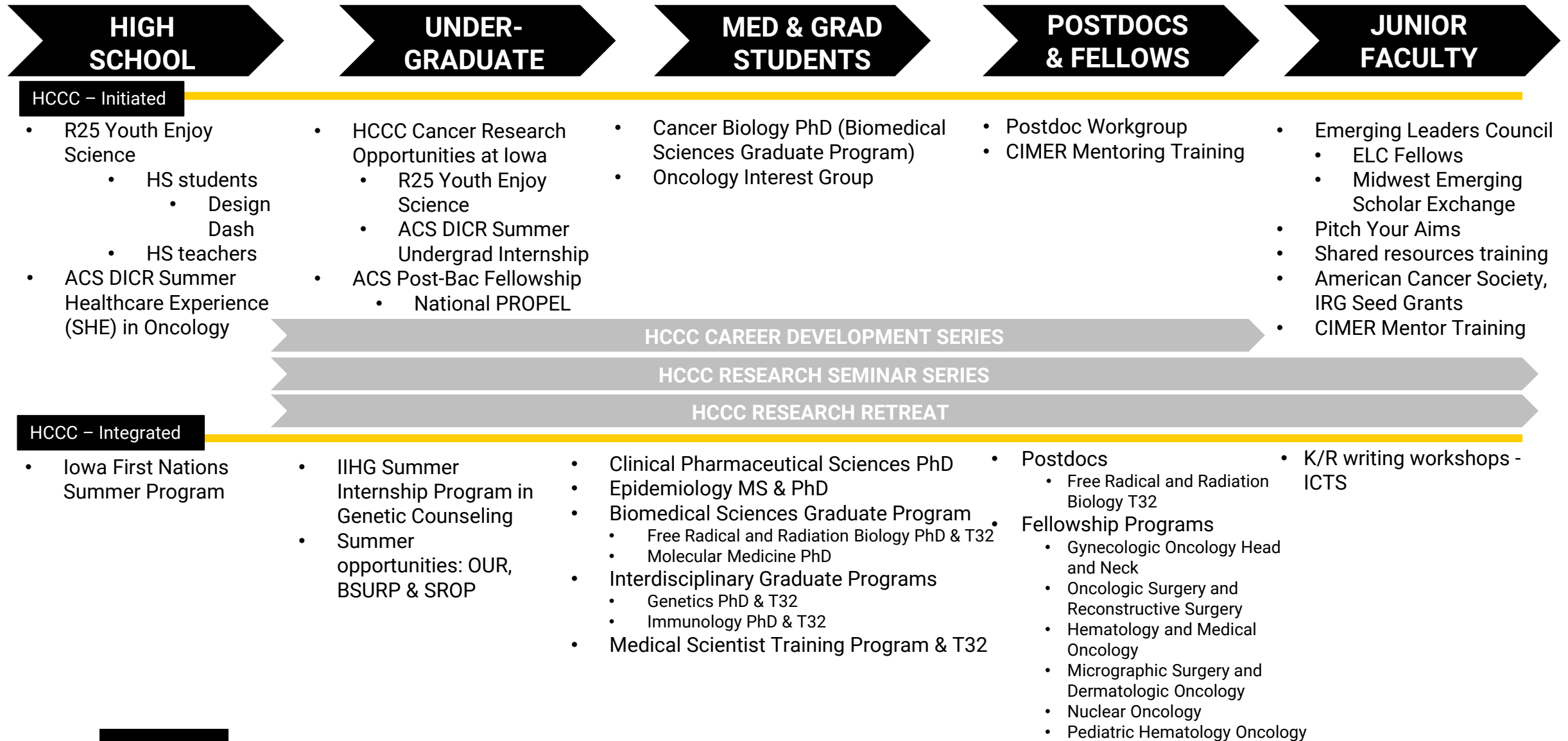
ROLE

- Administrate Cancer/STEM K-12 Statewide Outreach
- Administrate K-12 Educator Cancer/STEM Professional Development

Cancer Career Enhancement Pathways (as of 2020 CCSG)



Cancer Career Enhancement Pathways (current)

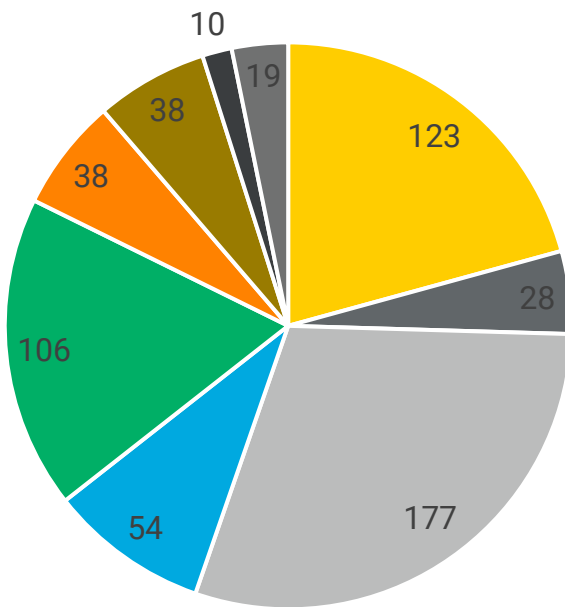


Addressing 2023 EAB feedback

FEEDBACK	RESPONSE & FUTURE DIRECTIONS	NCI 2020: Outstanding to Exceptional
Growth in funding portfolio	<ul style="list-style-type: none">• Renewed ACS, DICR Summer Undergraduate Internship (\$44,000/yr for 3 years)• Renewed ACS Institutional Research Grant (\$120,000/yr for 3 years) seed grants• 2025 Supplement for ACS, DICR Postbaccalaureate Fellowship Program (\$220,000, 4 slots)• ACS, SHE in Oncology (\$25,000; 1 year) for high schoolers• PROPEL, Solving for Science (\$10,000; 1 year) for CIMER Mentorship Training• NCI Free Radical and Radiation Cancer Biology T32 (5-year renewal, pending)	
Development of the Emerging Leaders Council	<ul style="list-style-type: none">• Collaborated with peer upper Midwest cancer centers for pilot Midwest Emerging Scholar Exchange	
Trainee tracking difficulty due to CC communication strategies	<ul style="list-style-type: none">• Contracted with Monicur for continuous trainee tracking	
Statewide anti-DEI laws may impact ability to implement educational research associated to pathway programming	<ul style="list-style-type: none">• Expanded pathway programs to include multiple funding sources so trainees from all backgrounds are admitted into programs, thereby securing future of programs despite the political environment	

Program Accomplishments: Trainee Tracking

Mentoring is ongoing, n=593



Undergrad Postbac Grad Student Postdoc Med Student
Resident Med Fellow Lab Tech Staff Scientist

Two-Step Trainee Data Tracking

1. Yearly Survey via **REDCap**, Mentoring data

- Identified trainee classifications for OCCET focus
- Targeted communication
- Award nominations and appreciation weeks

2. With trainee info collected in mentoring survey, invited trainees to establish (and update) **Monicur** profile

- On-going sign-up pushes occur throughout Q1 2025
- Ongoing longitudinal tracking of trainees through career

State Longitudinal Data System:

- We intend to track education and outcomes for high school students from Iowa through Iowa's State Longitudinal Data System

Program Accomplishments: High School STEM Programming



R25 Youth Enjoy Science (YES)

Led by PI: Jon Houtman, launching in 2025, HCCC will leverage their R25 YES grant for two initiatives:

- 1) Partner with Belin-Blank Center on the **Jumpstarting Student Research Fellowship**, to support the professional education of middle and high school from rural Iowa schools
- 2) Partner with the Jacobson's Institute for **Design Dash, powered by Holden Comprehensive Cancer Center**, where high school students solve cancer-related projects with an entrepreneurial spin



American Cancer Society Summer Healthcare Experience (SHE) in Oncology

Led by PI: Miles Pufall, launching summer 2025, HCCC has partnered with four other institutions to form the Rural Upper Midwest Consortium (RUMC-SHE). Goals of this two-week virtual summer program are to:

- 1) Spark the interest of high schoolers in rural schools across the catchment area. This includes research, education, cancer care, and patient support careers.
- 2) Raise awareness of the causes of cancer and cancer mortality in rural communities.
- 3) Help rural high school students to build networks that will help them to build careers in the cancer field. This will prepare them to enter the workforce in a profession that matches their skills and interests.



Program Accomplishments: Cancer Research Opportunities at Iowa (CROI) Summer Undergraduate Program



Cancer Research Opportunities at Iowa Summer Undergraduates

2024 – 21 participants + 8 FLASH participants
2025 – 20-22 participants anticipated including
7 returning CROI interns



Sarina Murray

2018 Summer Undergrad Participant

- Bachelors of Science (Biology), Lincoln University, May 2020
- Completed three summer research internships, including Ulowa's
- Returned to University of Iowa for graduate school
- Cancer Biology 2025 PhD, mentored by Adam Dupuy and Chris Stipp
 - 3 Minute Thesis Finalist, 2023 "What does Michael Myers from the Halloween film and Uveal Melanoma have in common?"
 - R13 Travel Award for 2023 National Medical Association Annual Convention and Scientific Assembly
- 2025 National Cancer Institute Postdoctoral Cancer Prevention Fellow

Program Accomplishments: ICARE Postbaccalaureate Research Fellowship



**Iowa Cancer Summit
October 15, 2024 in Ankeny, Iowa**

All 12 ICARE fellows + 3 ICARE Admin attended the annual COE event to network with the cancer control leaders across the state.



**Kimberly Serrano, ICARE Fellow, 2023-2025
O'Rorke lab, Epidemiology**

Awards: ACS Annual Retreat 2024, Poster Award
ABCRMS 2024, Travel Award

Posters: ABCRMS 2024, ACS Annual Retreat 2024,
HCCC Scientific Retreat 2023 & 2024

Grad School:
Offers: Northwestern University, Emory University,
University of Minnesota & University of Iowa
Accepted Admission: TBD
(waiting on merit scholarship notifications)



**National Postbaccalaureate Research
Opportunities to Promote Equity in Learning**
Ran by UCSF, partnering for best practices in
administrating postbac programs. Received a
\$10K award from PROPEL for to facilitate
CIMER mentorship training.



Every cancer. Every life.™

ACS DICR Postbaccalaureate Fellowship Grant
Supplement confirmed for 2025 (4 slots)
Successfully renewed for 2026-2027 (4 slots)

EMERGING LEADERS COUNCIL

IOWA
HEALTH CARE

Holden Comprehensive
Cancer Center

Developing the next generation of cancer center leaders. Promising early career investigators and clinicians were selected from each research program to advise leadership on how to best leverage its resources to promote the success of early career faculty, how to accelerate the impact of their research, and providing them the opportunity to contribute in Holden decision-making.

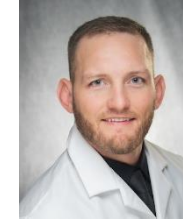
* Chair, ** Vice Chair



Po Hien Ear, PhD
Assistant Professor
Surgery



Colin Kenny, PhD
Assistant Professor
Surgery



Vincent Wagner, MD
Assistant Professor
Obstetrics & Gynecology



Nicole Fleege, MD
Clinical Assistant Professor
Internal Medicine



Jessica Gorzelitz, PhD*
Assistant Professor
Health & Human Physiology



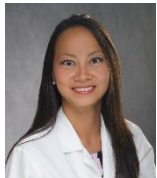
Helen Lillie, PhD
Assistant Professor
Communication Studies



Aaron Seaman, PhD
Assistant Professor
Internal Medicine



Whitney Zahnd, PhD
Assistant Professor
Health Management & Policy



Margaret Byrne, MD, MS
Clinical Assistant
Professor, Int. Medicine



Andrew Groves, MD
Clinical Assistant
Professor, Pediatrics



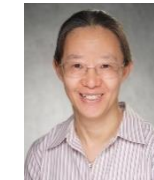
Kristina Guyton, MD
Clinical Assistant
Professor, Surgery



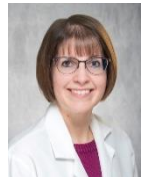
Adam Mailloux, PhD
Assistant Professor
Microbiology & Immunology



Jennifer Strouse, MD
Clinical Assistant
Professor, Int. Medicine



Shujie Yang, PhD
Assistant Professor
Pathology



Jessica Zimmerman, MD, MS
Assistant Professor
Pediatrics



James Holmes, PhD
Assistant Professor
Radiology



Claudia Mello-Thoms, MS, PhD
Associate Professor
Radiology



Michael Petronek, PhD
Research Assistant Professor
Radiation Oncology



Sarah Short, PhD**
Assistant Professor
Internal Medicine

Research
Program:
Cancer
Genes &
Pathways

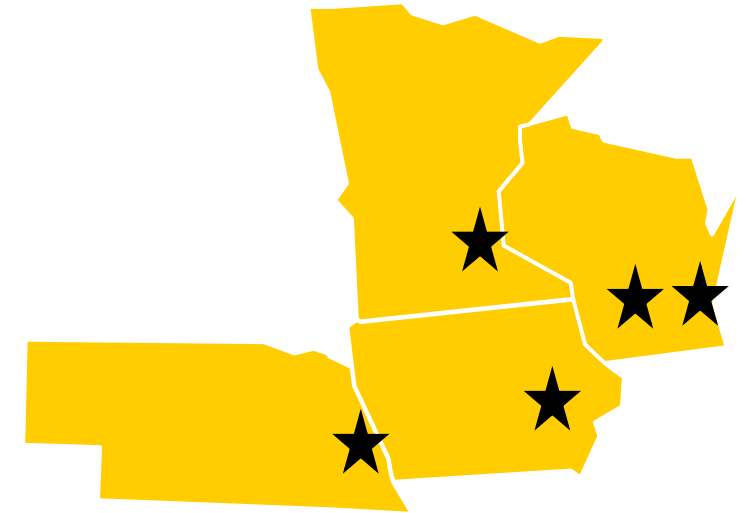
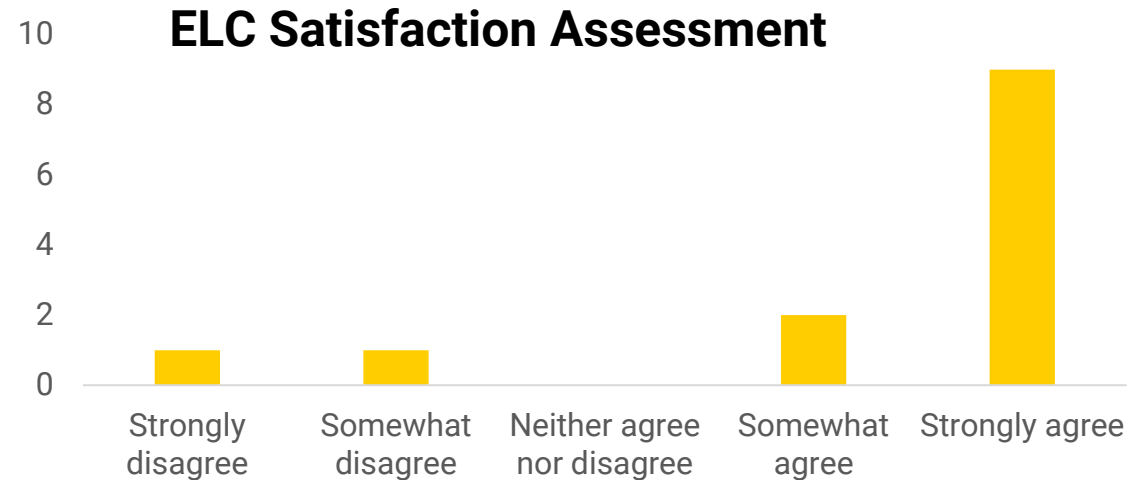
Research
Program:
Cancer
Epidemiology
& Population
Science

Research
Program:
Experimental
Therapeutics

Research
Program:
Free Radical
Metabolism &
Imaging

Program Accomplishments: Emerging Leaders Council

Midwest Emerging Scholar Exchange



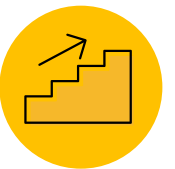
Mission:

Provide career development opportunities for early career faculty cancer center members via invited presentations at peer Midwest universities.

Progression of ELC future leaders:

Bi-directional relationship with early career leader and Associate Director or Research Program Leader

- Increase the involvement of junior faculty in Holden governance and community
- Reward leadership of junior faculty leaders with support for non-research activities
- Create opportunities for service that count toward academic program and tenure



Program Integration

- **Program 1: Cancer Genes and Pathways**
 - Invited external speakers to HCCC Research Seminar Series
 - Mentoring: 16 CBIO grad, 8 summer undergrad, 5 ICARE Postbacs
 - Emerging Leaders Council: 3 members 2024-2025
- **Program 2: Experimental Therapeutics**
 - Invited external speakers to HCCC Research Seminar Series
 - Mentoring: 9 CBIO grad, 7 summer undergrads, 4 ICARE Postbacs
 - Emerging Leaders Council: 7 members 2024-2025 (Vice Chair)
- **Program 3: Free Radical Metabolism and Imaging**
 - Invited external speakers to HCCC Research Seminar Series
 - Mentoring: 2 CBIO grad, 2 summer undergrads, 2 ICARE Postbacs
 - Emerging Leaders Council: 4 members 2024-2025
- **Program 4: Cancer Epidemiology and Population Science**
 - Invited external speakers to HCCC Research Seminar Series
 - CEPS-focused keynote speaker at 2024 HCCC Scientific Retreat
 - Mentoring: 3 summer undergrads, 1 ICARE Postbac
 - Emerging Leaders Council: 5 members 2024-2025 (Chair)
- **Shared Resources integration with OCCET**
 - AD for Shared Resources presented to ELC in December 2024
 - Targeted communication to trainee lists to advertise shared resources capabilities
 - In conversation with AD for Shared Resources on Bioinformatics Cross-Training Summer Bootcamp

COE & CRTEC Integration



Members of the Emerging Leaders Council are participating in the 99 Counties Project



CAB provides input on CRTEC programming



COE provides input on speakers for CRTEC-led seminar & retreat



CRTEC collaborates with COE on STEM education and outreach

Activities	COE	CRTEC
Community Advisory Board	☆	✓
Communication Training	☆	✓
UI COE/HCCC COE Speaker Event	☆	✓
CRTEC Advisory Board	✓	☆
Emerging Leaders Council	✓	☆
HCCC Scientific Retreat	✓	☆
HCCC Research Seminar Series	✓	☆
ACS Institutional Research Grant	✓	☆
ACS DICR SHE in Oncology	✓	☆
Career Development Series	✓	☆
Annual Researcher Survey	✓	☆
Regular Meetings/Communication	☆	☆
Strategic Planning	✓	✓
Iowa Cancer Consortium	✓	✓
99 Counties Project	✓	✓

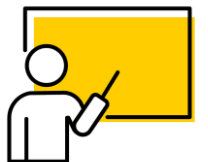
Key

☆ = Leading activity

✓ = Collaborating in activity

Future Directions and Goals

- **Expand STEM outreach to K-12 in catchment area**
 - Develop cohort model high school program within R25 YES, goal 50-60 in cohort
 - 10-12 for high school summer cohort research experience
 - Develop cancer-related programming for high school teachers they can use back in their classroom
 - Develop cancer-related curriculum for virtual learning for middle and high school learners in catchment area
- **Enhance programming for medical residents, fellows, junior faculty, and clinical trials staff**
 - Facilitate greater bi-directional communication with oncology residents and fellows and HCCC leadership
 - Establish Medical Training Leaders Council
 - Broaden scope of training opportunities for clinical trialists
- **Integrate ELC future leaders into more aspects of HCCC**
 - Extend opportunities to more “graduating” ELC members
- **Collaborate with campus partners for enhanced postdoc experience**
 - Interdisciplinary professional development offerings, guest speakers, and postdoc retreat with poster session
- **Establish mentorship training program with Center for the Improvement of Mentored Experiences in Research (CIMER)**
 - Also include facilitator training for long-term program sustainability



<https://cancer.uiowa.edu>

Discussion

→ hccc-occet@uiowa.edu



**Office of Cancer Career
Enhancement & Training**

Career Enhancement Advisory Committee

Meets twice per year to review evaluations of current initiatives and advise on future plans



Jon Houtman, PhD, Chair
Assoc. Dir. for Career Enhancement



Adam Dupuy, PhD
Director, Cancer Biology
Grad Program



Andrian Burnett, PhD
Director, Free Radical &
Radiation Biology
Grad Program



Ryan Carnahan, MS, PharmD
Director of Graduate Studies,
Epidemiology



Colleen Campbell, PhD, MS, LGC
Director of Genetic Counseling
Operations



Gail Bishop, PhD
Assoc. Dir. for
Basic Research



Rodrigo Bayon, MD
Director, Head and Neck
Oncologic Surgery
Fellowship



David Dickens, MD
Director, Pediatric
Hematology/Oncology
Fellowship



Michael Goodheart, MD
Director, Gynecologic
Oncology Fellowship



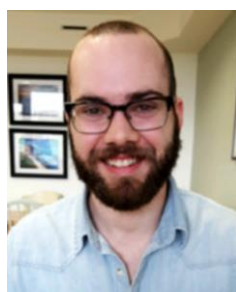
Aaron Smith
Undergraduate
Researcher



Jaaliyah Heard
Postbaccalaureate
Fellow, Int. Med.



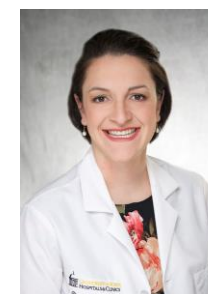
Travis Fischer
Graduate Student
Cancer Biology



Michael Schrodtt, PhD
Postdoctoral Fellow
Internal Medicine



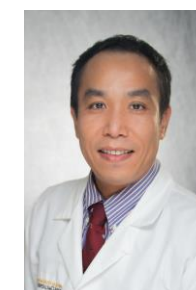
Ashley Way, MD
GME Resident 3
Radiation Oncology



Keely Ulmer, MD
Fellow Physician 7
Gynecologic Oncology



Erin Talbert, PhD
Assistant Professor
Health & Human
Physiology (CLAS)



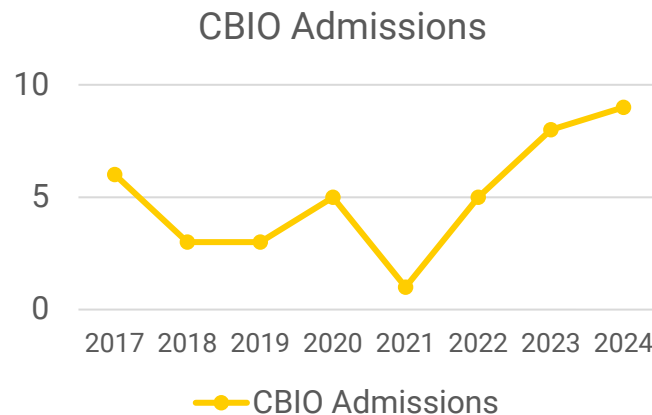
Grek Sutametwagul, MD
Director, Hematology
and Medical Oncology
Fellowship

Program Accomplishments: Cancer Biology Graduate Program (CBIO)



Kaitriana (Katie) Colling, BS

- Mentor: Kristi Thiel, PhD (Obstetrics & Gynecology)
- Research: Focuses on repurposing progestins for the treatment of early endometrial cancer using patient derived organoids as a model system
- Award: 2023-2024 Iowa Innovation Leadership Fellowship, UI Ventures
- 2024 Finalist, Ulowa's 3 Minute Thesis
- Publications: 1 first author paper during 1st year in lab
- Posters: 2 invited external posters



- 2024 cohort is largest incoming cohort at 9 admissions
- Current census is 30 students with steady increases each year
- Average time-to-degree = 4.5 years

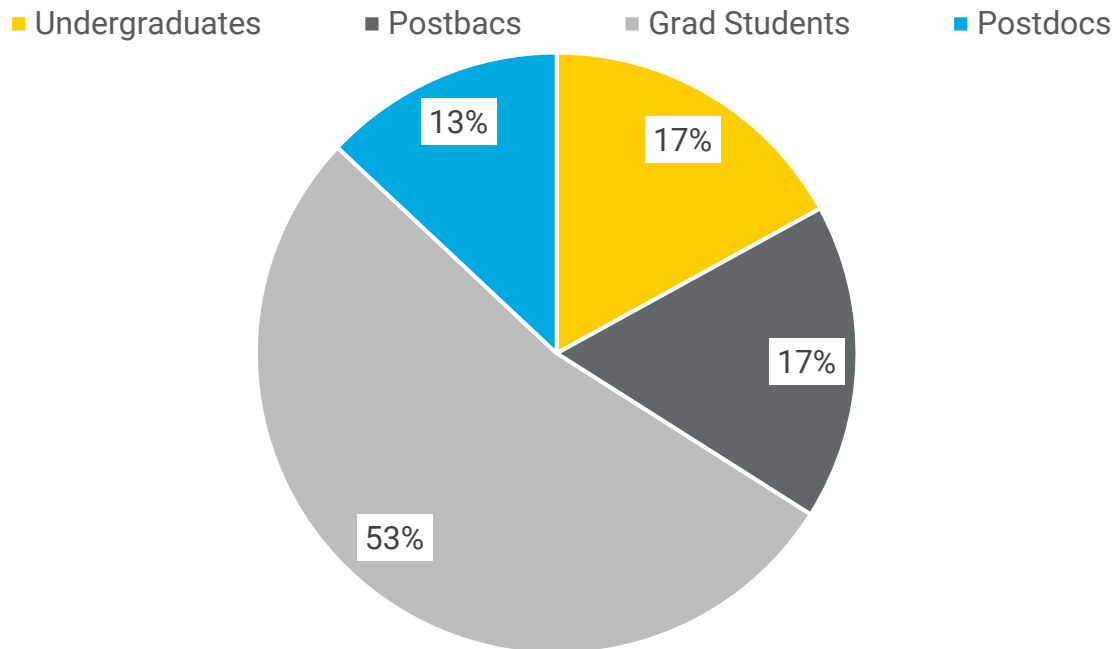


CBIO Program Director Transition, Summer 2025

- Adam Dupuy, PhD
 - Associate Professor of Anatomy and Cell Biology
 - HCCC Associate Director for Shared Resources
 - Established and lead CBIO since it started in 2017
- Miles Pufall, PhD
 - Associate Professor of Biochemistry and Molecular Biology
 - PI, ACS DICR SHE in Oncology grant
 - New CBIO Director as of Summer 2025

Program Accomplishments: Career Development Series

Attendance (May 2022 to present)



GREAT FUTURES START *here*

Career Development Series

Hosted by Holden Comprehensive Cancer Center,
Office of Cancer Career Enhancement and Training

IOWA
HEALTH CARE

Holden Comprehensive
Cancer Center

This virtual career development series for HCCC trainees is intended to keep in the forefront of minds the spectrum of scientific careers and career development resources. This series brings together key speakers who have strong ties to Iowa, and who have developed careers in industry research, academics at small colleges or large universities, government funding agencies, Intellectual Property law, and clinical laboratories. The series will be Q&A roundtable conversations.

February 18th at 11:30am CST
<https://uiowa.zoom.us/j/97721782677>

“Leveraging Leadership Opportunities to Stand Out When Entering the Job Market”

Henry J. Henderson III, PhD

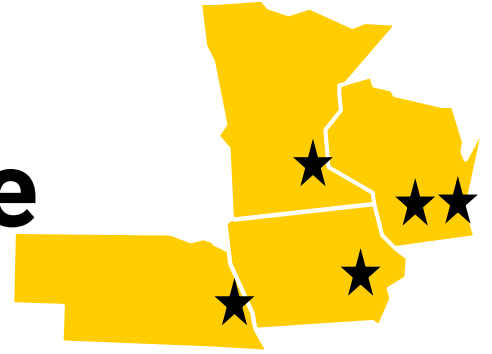
Co-Founder & Director of Cancer Awareness, Black in Cancer
Senior Manager, Medical Science Liaison | Medical Affairs
Foundation Medicine



→ cancer.uiowa.edu

Individuals with disabilities are encouraged to attend all University of Iowa-sponsored events. If you are a person with a disability who requires an accommodation in order to participate in this program, please contact megan-meyer@uiowa.edu in advance.

Program Accomplishments: Midwest Emerging Scholar Exchange



Mission:

Provide career development opportunities for early career faculty cancer center members via invited presentations at peer Midwest universities.

- Develop relationships with potential research collaborators, mentors and sponsors
- Hone oral presentation skills
- Bolster CVs in preparation for promotion

Eligible Faculty Members:

- Assistant Professors generally, in first ~5-7 years of their appointment, must be Cancer Center members
- Individuals who are in the final years of building their CV for promotion (within 24-36 months of promotion)

Program Components:

- Partnering institutions (Holden/Uiowa, Masonic/UMinnesota, Mayo/Rochester, MCW, Carbone/UWMadison, Buffet/UNMC) will host two speakers and two speakers from each partnering institution will be selected to travel and speak at a partnering institution.
- Two faculty are hosted at each center AND two faculty are selected from each center.
- Selected faculty will be invited to give a talk at one of the hosting institutions (i.e., Research Seminar Series, Grand Rounds or other Program Seminar, this will be determined by the hosting institution) in Spring/Summer/Fall 2025.

American Cancer Society Institutional Research Grant Junior Faculty Seed Grants



SUMMARY OF APPLICATIONS	RECEIVED	FUNDED
2024	7	57%
2023	12	33%
2022	10	40%

1977

Continuously funded

For 48 years

26 & 112

Publications (2017 – 2024)

- 26 publications directly related to the ACS IRG
- 112 total publications

244

ACS Seed Grants

Funded to junior investigators since 1977

13 & 49

Funded Grants (2017 – 2024)

- 13 funded grants directly related to the ACS IRG
- 49 total grants from NIH, CDC, DOD, NSF, etc.

Rebecca Dodd, PhD (2016 ACS IRG) is an Associate Professor of Internal Medicine – Hematology, Oncology, and Blood and Marrow Transplantation at the University of Iowa. Work from her 2016 ACS IRG seed grant “CRISPR/Cas9-mediated mouse models of tumor suppressor function” has been published in *Genes* in 2020. Pilot data gathered from her ACS IRG award has subsequently led to:

- ACS Research Scholar Grant (01/2020 – 12/2023)
- Department of Defense New Investigator Award (07/2018 – 06/2021 & 04/2021 – 03/2024)
- National Institute of Neurological Disorders and Stroke R01 (04/2022 – 03/2027)
- Department of Defense NF230081 (04/2024 – 03/2027)