## AAUW Fund Event October 23, 2021



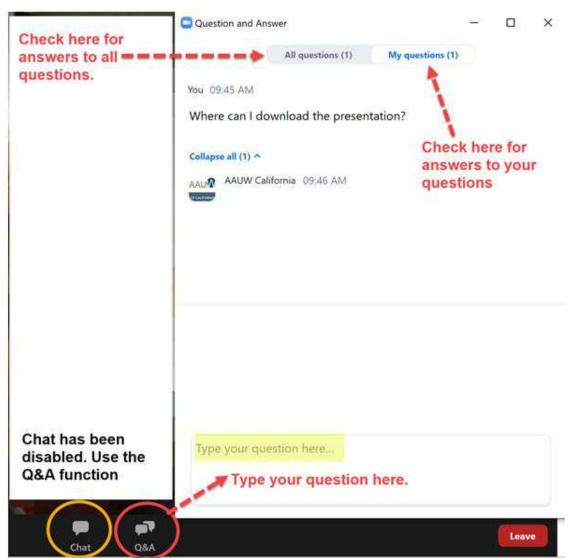


#### Presentation materials:

- Download the presentation from the AAUW California website home page.
- The meeting recording, a summary Q&A document and example documents will be posted following the meeting.

#### Questions:

- Use the Q&A function to pose a question. We'll stop periodically to answer general questions.
- Chat has been disabled.





2

#### Welcome and Introductions



**Lynne Batchelor** Chair, AAUW California Fund Committee



**Dianne Owens** AAUW California President



Katrina Sun Breese AAUW Senior Director of Institutional Advancement



## Katrina Sun Breese

#### **AAUW Senior Director of Institutional Advancement**



Research Publication G<u>rant</u>

## Reem Al Olaby, Ph.D.



Elucidating the Role of Heat Shock Proteins in Fragile X-Associated Tremor/Ataxia Syndrome

California NorthState University Cell and Molecular Biology



•••••

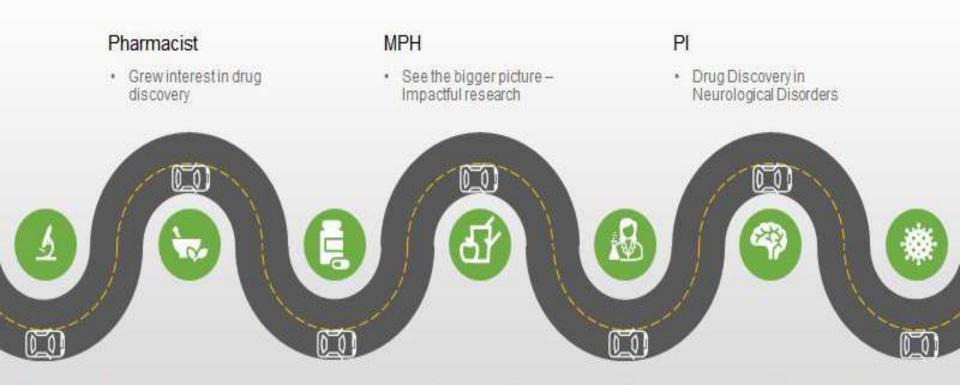




## My Journey into Drug Discovery

Reem Al Olaby, MPH, PhD

## The Beginning of the Journey



9 YO Birthday

Small Lab

#### M.Sc. & PhD in Biotech

 Drug Discovery – HCV & Malaria

#### Postdoctoral Phase

- Breast Cancer Research
- Neurological Disorders

#### COVID Pandemic

· Time to help in the fight

## **Two Projects**

#### Elucidating the Role of HSPs in FXTAS

**Orphan Disease** 

Patients – Altered quality of life

Need for pharmacological interventions

Protein stabilizing machinery - drug targets

#### Identifying Drug Leads Against COVID19

Pandemic / Public Health Burden

No FDA approved drug

Targeting the entry phase

Identification of small molecule inhibitors that block the entry of the virus





**Teaching Through Research** 







#### Not Only Results But Engagement!

Community Action Grant

#### Jodi Diamond



#### Boys & Girls Clubs of Oceanside -

#### **STREAMing Ahead**





1952-2022

**GREAT FUTURES START HERE.** 



## **Our Mission**

To inspire, develop and enrich young people to reach their fullest potential as confident, responsible, caring members of society.







### **Our Vision**

To be the premier youth organization where every child becomes an exemplary member of society.





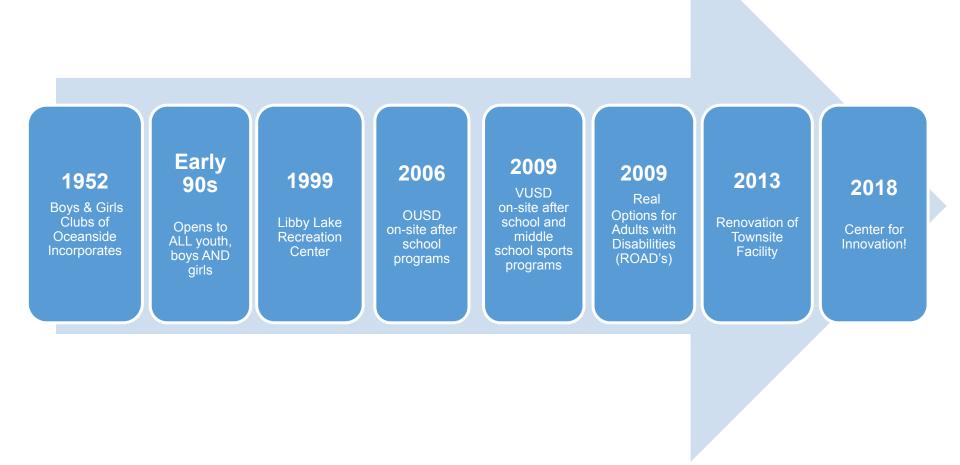


In a Harris Survey, 90% of Club alumni reported they earned a high school diploma or equivalent.



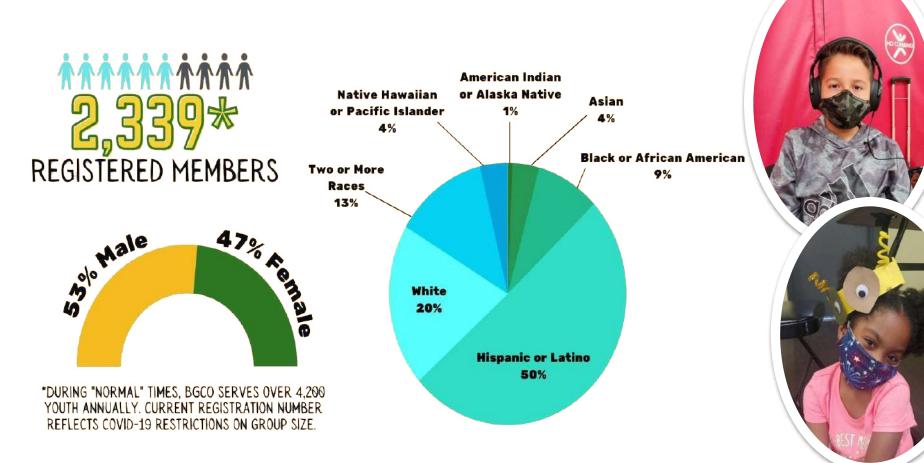


## **History Highlights**



## **Our Members**

2020 Total Registered Members: 2,339\* Average Daily Attendance in Afterschool Programs: 250\*



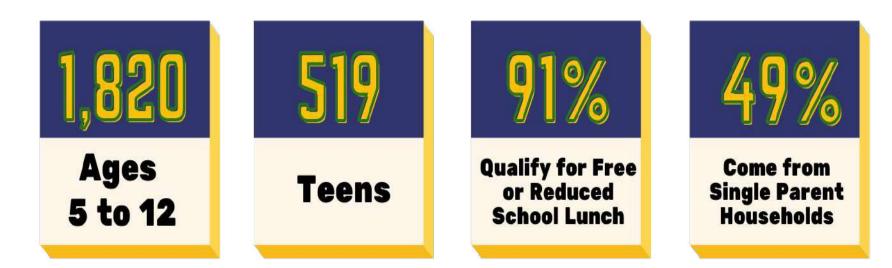


## **Our Members**

2020 Total Registered Members: 2,339\* Average Daily Attendance in Afterschool Programs: 250\*



#### MEMBER DEMOGRAPHICS



## Emergency Food Program

# More than **55,000** meals served!





#### **Scholarships**

Fiscal Year	Number of Members	Total Scholarship Amount
2020-2021		\$160,000
2018-2019	710	\$81,800
2017-2018	678	\$86,958
2016-2017	648	\$63,726
2015-2016	672	\$76,644
2014-2015	629	\$61,793
2013-2014	686	\$78,965
2012-2013	620	\$60,938















#### 2020 California Nonprofit of the Year



2020

California







## Thank YOU for the opportunity to share!



American Fellowship

## Allison Dziuba



Feeling Like We Belong: Student Publications and Extracurricular Rhetorical Education

University of California-Irvine English

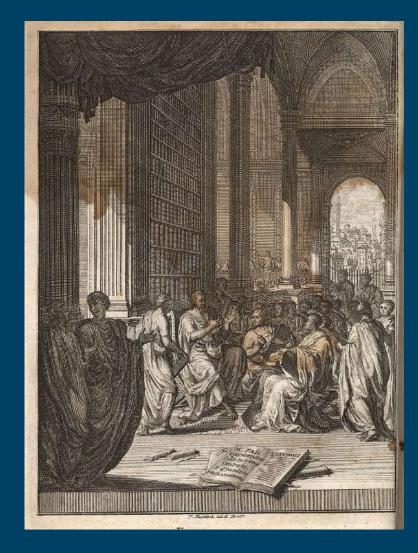


## Rhetorical Education in the Extracurriculum

Allison Dziuba University of California, Irvine <u>adziuba@uci.edu</u>

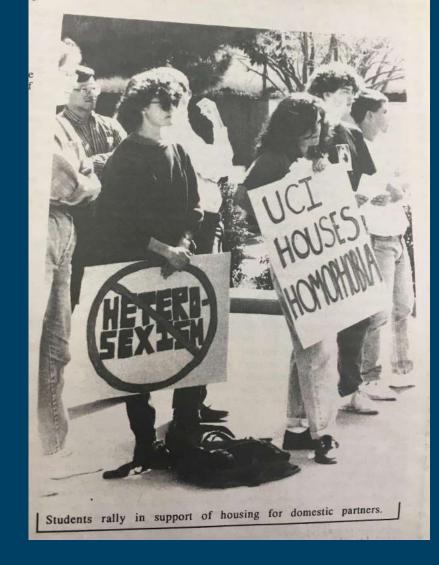
## How to write and communicate

Rhetorical education from ancient Greece to the contemporary U.S. university

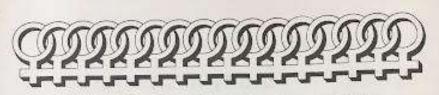


## Beyond the college classroom

Student newspapers, organizations, and activism



## *The Womyn's Quarterly*, 1987–1994



The Womyn's Quarterly is a creative forum written by a radical women's collective which insists upon a critical revisioning of the world. This revisioning entails challenging not only patriarchal, capitalist, white supremacist, heterosexist, ageist, and all other oppressive institutions, but also the deficient ideologies of liberalism and white feminism. This creative movement is rooted in a desire to give rise to the voices of the oppressed -- voices which have been forced underground. The Womyn's Quarterly functions as a medium for women's expressions in order to celebrate the resistive actions pending our inevitable liberation.

#### Thank you!

Allison Dziuba University of California, Irvine <u>adziuba@uci.edu</u>

American Fellowship

## Jessica Gutierrez Masini, Ph.D..



Native American Indigeneity Through Danza in Southwest Powwows: A Decolonized Approach

University of California-Riverside Ethnomusicology



#### Native American Indigeneity through Danza in Southwest Powwows: A Decolonized Approach

Jessica Margarita Gutierrez Masini University of California, Riverside jguti045@ucr.edu 2021-2022 AAUW American Dissertation Fellow Introduction and Permission

#### **Key Questions**

Why are danzantes invited to powwows and how do they choose what events to participate in? What are the arguments both for and against Danza's presence at powwows? How has Danza in powwow spaces changed intertribal relations in the Southwestern United States, including notions of Indigenous identity and decolonial praxis?



UC Riverside 38th Annual Powwow with my Danza group taken on May 25th 2019.

#### UC Riverside Powwow moment May 26, 2018





# A'chama. Thank you.

(in Cahuilla)

American Fellowship

## Dana Landress, Ph.D.



Gardens for Health and Wealth: Pellagra and Women's Public-Health Work in the New Deal South

#### University of California-Berkeley History



#### The "Other" Pandemic: Pellagra

•What?

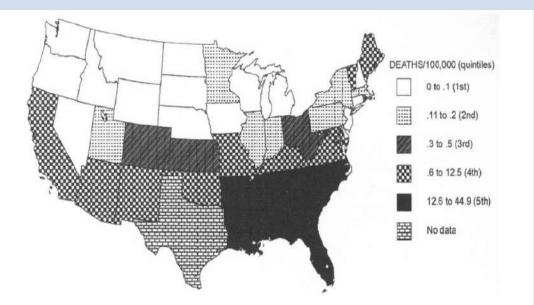
•Who?

•Where?

•When?

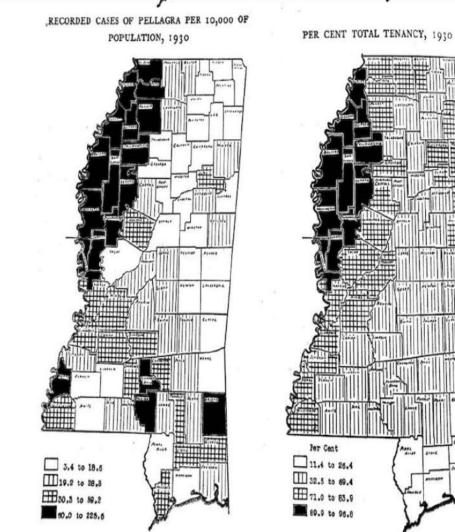
•Why?

- Pellagra deficiency (B3)
- 3.5 million recorded cases
  - The U.S. Deep South
  - 1906-1940s
    - Women's public health work





#### Why the American South?



TAL TENANCY, 1930



Map Comparing Pellagra Cases to Cotton Tenancy

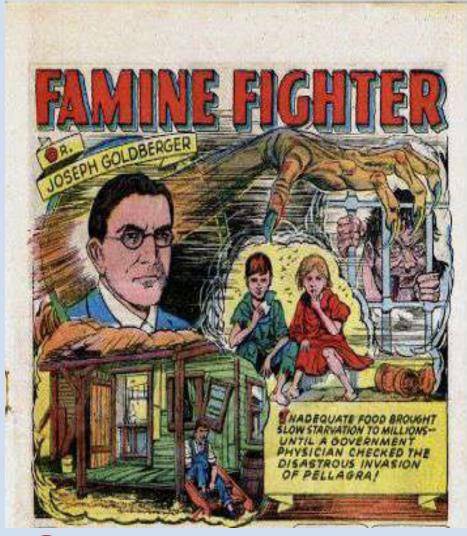
Howard W. Odum's "Southern Region of the United States,"

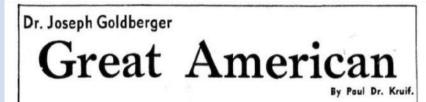
Published: 1936

First time in public health history that disease becomes linked with an economic system, namely, the southern sharecropping economy



#### **The Current Pellagra Story**





WHEN you believe enough in your own science to be ready to give up your own life to convince the world of it then with luck you have a chance to become a giant your country will remember. In 1916 Dr. Joseph Goldberger risked his life for truth. He was a lone-wolf searcher of our United States Public Health Service. He held the scientifically absolutely unorthodox belief that pellagra was not contagious. He knew it was a hidden hungerfor vitamins that had not then been discovered.

In his fight to solve the pellagra mystery, Dr. Goldberger faced this major obstacle that he had no laboratory animal to which he could give the sickness. His laboratory was our southland. He wandered out, in 1914, from the Hygienic Laboratory in Washington, out to a Georgia madhouse, to southern asylums, and into the hovels of southern havenots. His experimental animals in those early days were a red-rashed, weary, lazy, discouraged, often demented rag-tag-and-bobtall of American humanity.

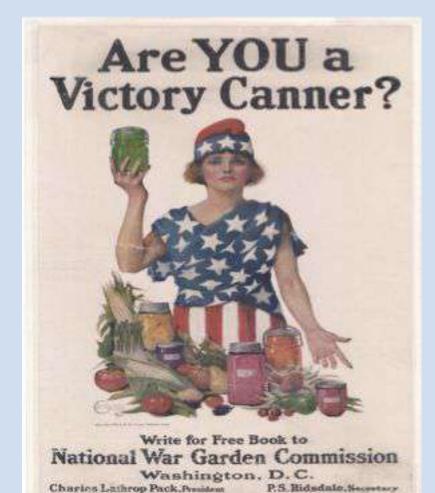
He was a gentle, woolgathering, and dreamy Jew, making his own observations, caring little for the opinion of so-called scientific authority. He was no high-pressure salesman of his own science. The scientific world could take it or leave it. His exact observations were from the first hooted down by physicians experienced in the pellagrous doom of human beings. Worst of all, why get het up about this pellagra, anyway? Dr. Goldberger's lowly mantal human subjects



DR. JOSEPH GOLDBERGER.



#### WWI: Fighting the Health Wars at Home



Food is 10n -Don't waste it.



#### Who's Missing? Or, Writing Women Back into the History of Public Health













#### "Gardens for Health and for Wealth"





## Thank you, AAUW!



International Fellowship

## Becky Mashaido, M.S.



Computer and Information Sciences -M.S., Artificial Intelligence and Computer Vision

Northeastern University Artificial Intelligence and Computer Vision



International Fellowship

## K'Ashe McKinney, M.S.

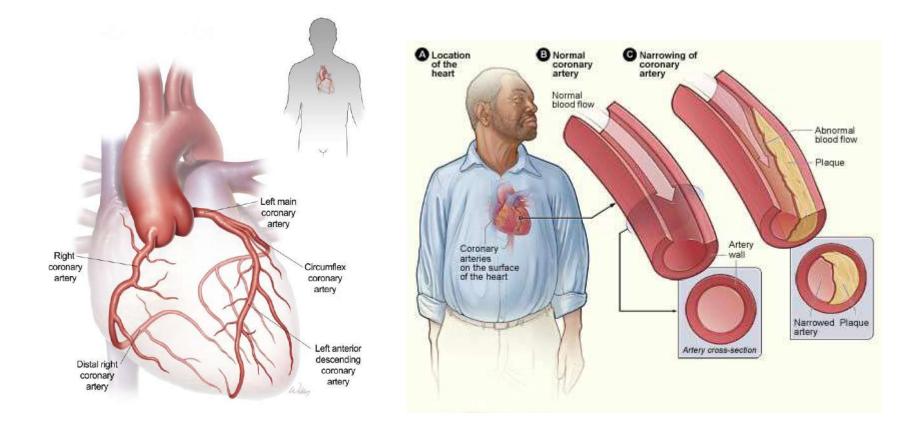


Drug Delivery Molecular, Cellular, and Tissue Therapeutics

University of California-Los Angeles Bioengineering



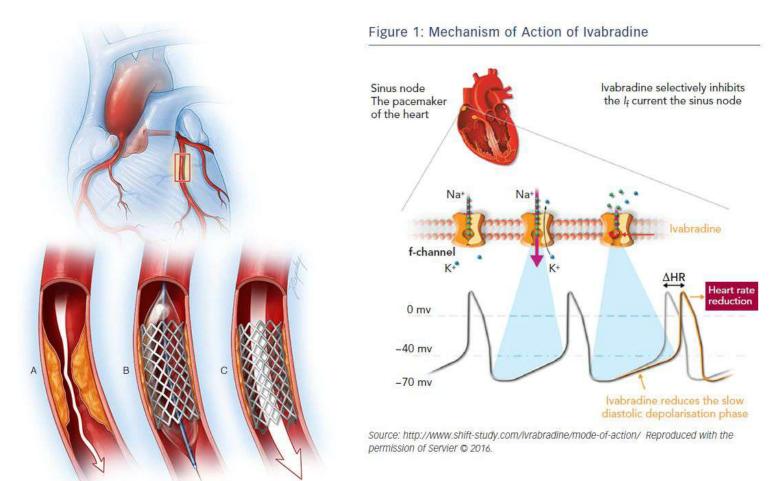
# Coronary Heart Disease is the leading cause of death in The Bahamas





https://www.bcm.edu/healthcare/specialties/cardiovascular-medicine/cardiothoracic-surgery/coronary-artery-disease-coronary-bypass

#### Medication can be used as treatment for Coronary Heart Disease

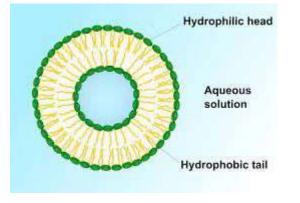


<sup>@</sup> MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.



https://www.mayoclinic.org/diseases-conditions/coronary-artery-disease/diagnosis-treatment/drc-20350619 https://www.mayoclinic.org/diseases-conditions/coronary-artery-disease/multimedia/coronary-artery-stent/img-20006378 https://www.cfrjournal.com/articles/complementary-and-synergic-role-combined-beta-blockers-and-ivabradine-patients-chronic

# Nanoparticles will be used to perform targeted drug delivery.



Nanoliposome



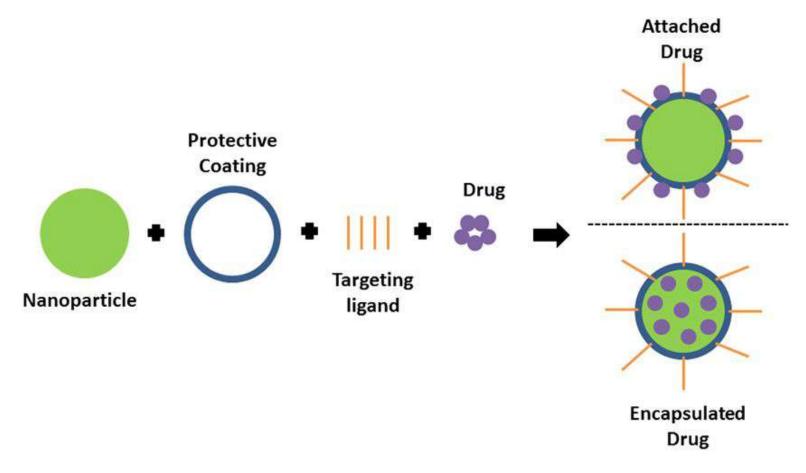
Rhodamine B



Rhodamine 6G



https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/nanocarriers https://commons.wikimedia.org/wiki/File:Rodamina\_B.png https://en.wikipedia.org/wiki/Rhodamine\_6G Therefore, the overall goal of my research project will be targeted drug delivery through the designing and imaging of fluorescent nanoliposomes to aid in cardiac diseases.





# Thank you for your time and attention!

K'Ashe McKinney University of California, Los Angeles <u>kashemckinney1999@gmail.com</u>



American Fellowship

## Brenna Mockler, Ph.D.



#### Probing Supermassive Black Holes with Tidal Disruption Events

University of California-Santa Cruz Astronomy & Astrophysics



"Black holes are simpler than forests..." — M. Rees

Black holes can be described with only a few variables

Black holes influence the evolution of entire galaxies and provide extreme examples of general relativity

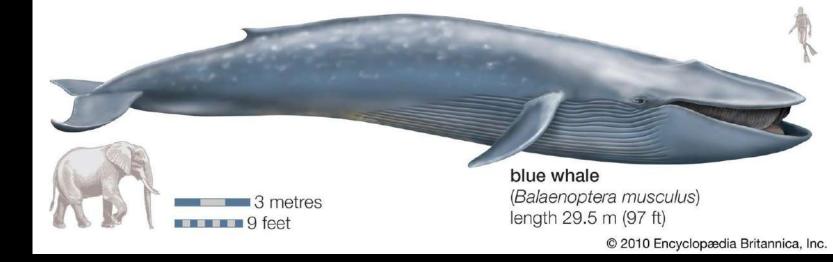
B. Mockler 12/2020

## Questions:

## How do black holes at the centers of galaxies get to be so big?

#### How can we find more black holes?

European Southern Observatory (ESO)



#### Supermassive Black Holes



B. Mockler 12/2020

## Watching black holes grow

Black holes are messy eaters, so we can use telescopes to discover black holes when they are pulling in surrounding mass

'mass accretion'

image from EHT collaboration

B. Mockler 10/2021

## Accretion analogy: marbles in a wishing well





## computer model of black hole eating debris from a star

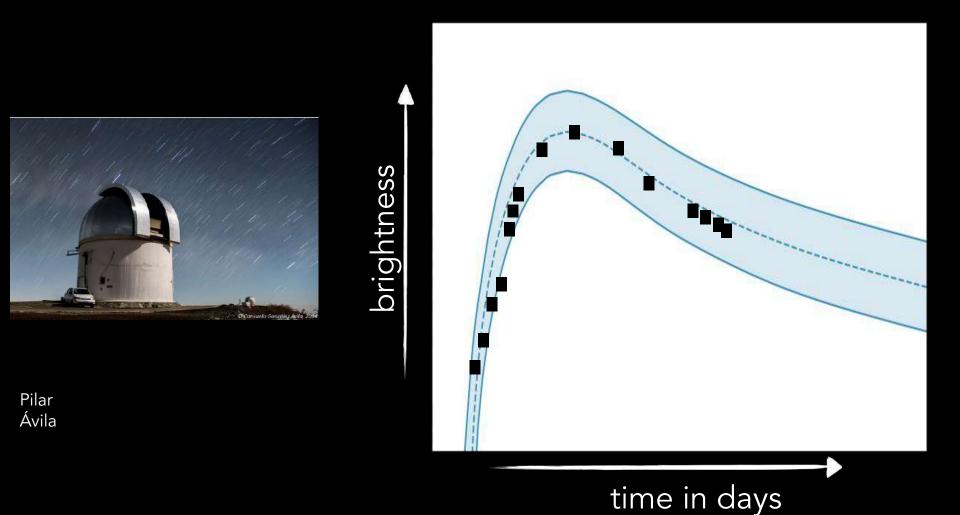
black

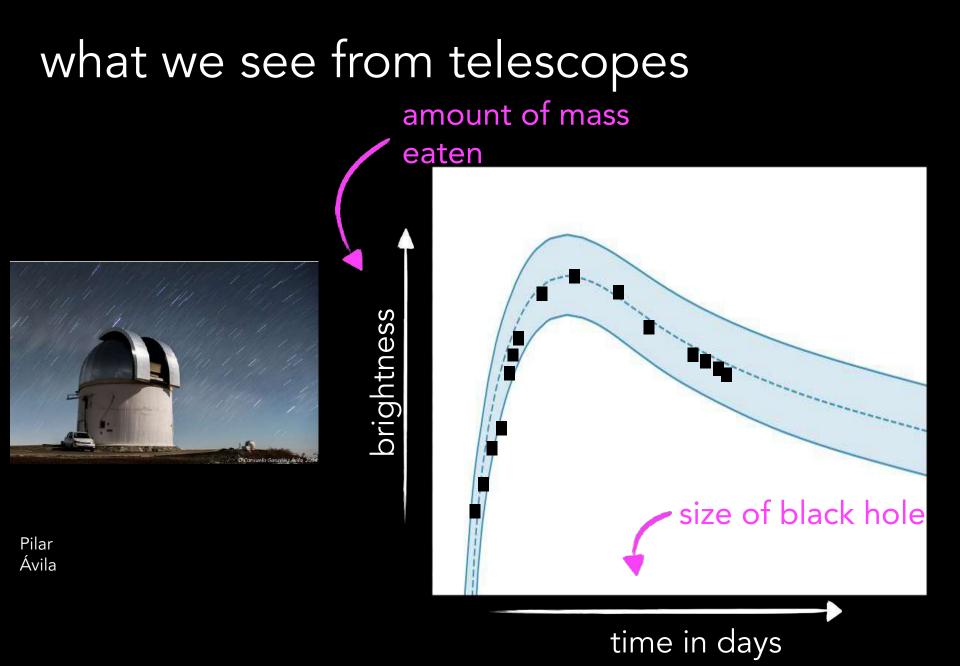
hole

simulation by C. Bonnerot

B. Mockler 10/2021

#### what we see from telescopes





Thank you!

American Fellowship

### Juily Phun, Ph.D.



#### **Contours of Care**

The Influenza Pandemic, Public Health and Asian American Communities in Southern California, 1918–1941

California State University-Los Angeles Asian/Asian American Studies



## Starting Points & Questions

My personal story

Historical Questions

How did communities of color care for themselves during the Influenza Pandemic (local)

How did Asian Americans participate in medicine (national, global)

## **Contour of Care**

#### Silences in the Archives



Letter to California Board of Medical Examiners, 1915

Juste Barbare and the lingeter. I have treated many of the lifet juste of the country let the beacher Los angeles Ca Brand of Madicel Brannie In go to spent the I woohld go where and I am returning the application and reference and collect new . in writing for myselfand my Incrimed made out as new as Deary remember the date const wish to say that ill Letter to California Board of M area and and the planation, conciring the dates Total Entry that of the surge to rach soil of me death Largeber Clay be

## Community and Commercial Care



Dr. Sakaye Shigekawa



## Medicine as a Bridge

Ethnic Studies Gender Studies Theory History Public Health and Medicine Radical Care

## Inspiration, Aspiration, and Care

- Mentorship of Young Women of Color
- Community Care
- Activism

Health writ broader
Merging Personal/Academic
AUW and publication

## Veronarindra Ramananjato, Ph.D.



Cascading impacts of the collapse of mutualistic interactions in tropical forests

University of California-Berkeley Integrative Biology



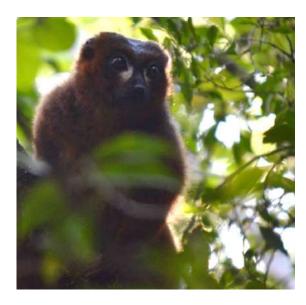
#### Animal-mediated seed dispersal at risk:

90% of plants rely on animals in the tropics
 at least 60% of frugivores are facing population decline

# Madagascar: Highly diverse and unique fauna and flora



## Madagascar: Island of Lemurs









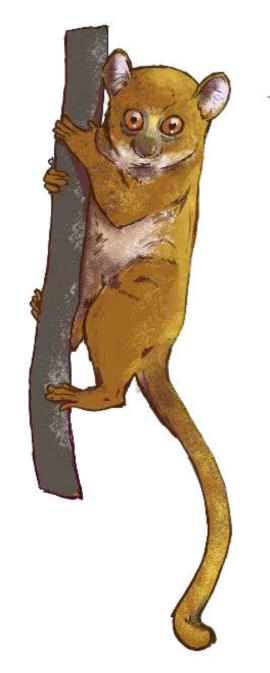




The world's smallest primate: Mouse lemurs

## Ph.D. Objectives and Questions

- Does the population decline of mouse lemurs change the effectiveness of the seed dispersal services? If so, how?
- Does habitat quality in fragmented forest landscape alter the effectiveness of seed dispersal services provided by the mouse lemurs? If so, how?
- Conservation purpose: Preservation of Dispersers and Forest restoration



## Ph.D. Preliminary data

- Seed dispersal differences between male and female mouse lemurs
- Seed dispersal differences between forest edges and forest interiors

Career Development Grant

## Maria Salgado, M.Ed.



#### **Enrollment Management & Policy**

University of Southern California Education

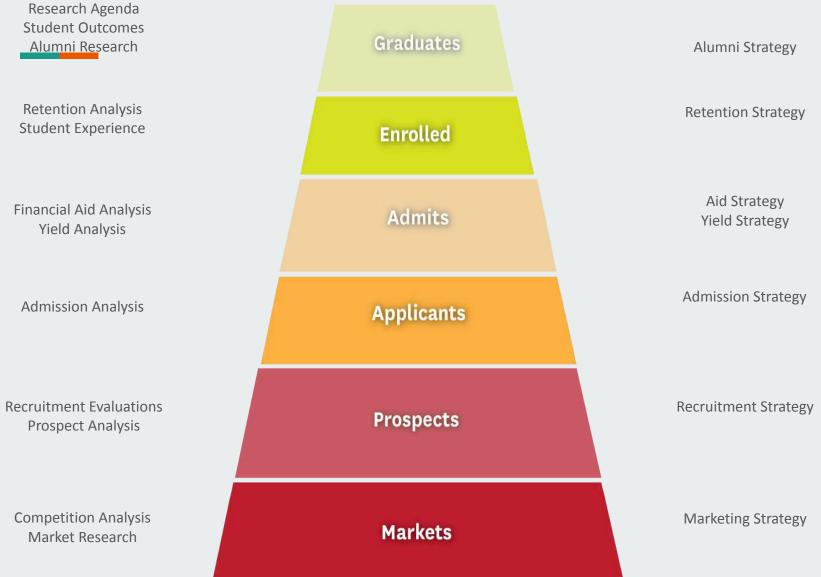


Enrollment Management: An Approach for Equitable College Access & Success Practices

#### **ENROLLMENT PYRAMID**

#### **RESEARCH AGENDA**

#### ENROLLMENT STRATEGIES



#### The Case for Better Equity & Accountability in Higher Education

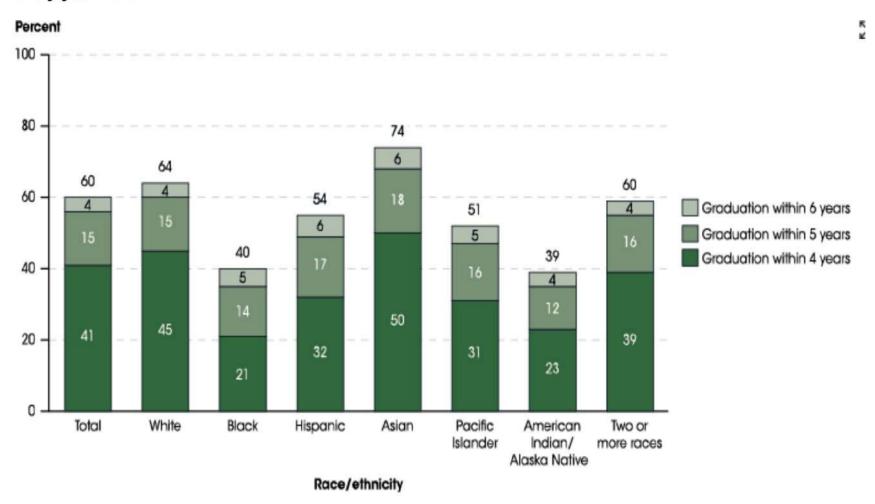
- Higher educational attainment increases earning potential which increases tax revenue
- The decline in traditional college bound population by more than 15% beginning in 2026. (Grawe, 2018)
  - Overwhelming growth in college bound populations will be from groups that have not traditionally enrolled in four-year institutions.
- Realize the promise of upward mobility for marginalized groups

## The Challenges

## Disparate Impact in College Admission & Enrollment

- Pell grant covers less than 30% of tuition and fees (NCAN)
- Standardized testing
- Legacy admissions
- Early Admissions
- Merit scholarships and Athletic scholarships for elite sports
- Overemphasis on prestige over college rankings

Figure 23.1. Graduation rates from first institution attended for first-time, full-time bachelor's degreeseeking students at 4-year postsecondary institutions, by race/ethnicity and time to completion: Cohort entry year 2010



National Center for Education Statistics (2019) https://nces.ed.gov/programs/raceindicators/indicator\_red.asp

86

#### **Diversity Mission & Vision**

#### What is Diversity

varied experiences, values, and worldviews that arise from differences of culture and circumstance, such as race, gender, religion, language, abilities/disabilities, sexual orientation, gender identity, socioeconomic status

#### Whys is it important

enriches the scholarly environment where students and faculty can develop the cultural intelligence to participate in a multicultural global society

## How will we know we succeeded

each member is empowered to bring their unique differences and talents and is welcomed with acceptance, belonging and the support needed to achieve their full academic, personal, and professional potential

### Admission Framework Performance + Eligibility + Environmental

\*\*\*Must meet these minimum requirements to be considered for admission

- 3.0 minimum cumulative GPA in core courses in 10th-11th grade.
- Completion of subject requirement courses with a C or better.

Admission Philosophy	Weight	Factors	Evaluation Criteria
Capacity to perform	20%	Academic Performance	Grades in 15 core curriculum courses. Rigor of courses completed, number courses beyond the minimum required. Recent, marked improvement in academic performance as demonstrated by academic GPA and the quality of coursework completed or in progress.
	20%	Character	Completion of special projects undertaken in the context of your high school curriculum or in conjunction with special school events, projects or programs. College Personal Potential Index (CPPI). Participation in student activity and sport.
Potential to Benefit	35%	Upward social mobility	Academic accomplishments in light of life experiences and special circumstances, including but not limited to: disabilities, low family income, first generation to attend college, need to work, disadvantaged social or educational environment, difficult personal and family situations or circumstances, refugee status or veteran status.
Potential to Contribute	25%	Leadership & Accomplishments Special skills	Special talents, achievements and awards in a particular field, such as visual and performing arts, communication or athletic endeavors; special skills, such as demonstrated written and oral proficiency in other languages; special interests, such as intensive study and exploration of other cultures; experiences that demonstrate unusual promise for leadership, such as significant community service or significant participation in student government; or other significant experiences or achievements that demonstrate the student's promise for contributing to the intellectual vitality of a campus.

#### **Equitable and Objective College Admission Factors**

 Table 1. Adapted from Perfetto's Taxonomy of Admission Decision Making (1999) and UC

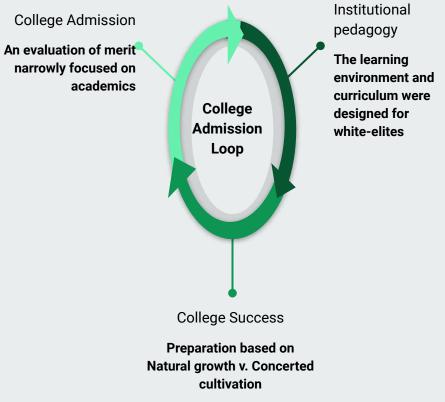
 Santa Barbara's Application Review Process retrieved from

 https://admission.universityofcalifornia.edu/how-to-apply/applying-as-a-freshman/how-applications-are-r

 eviewed.html

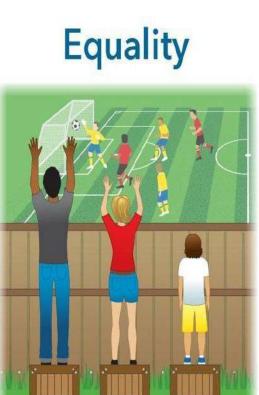
## **Evaluation & Selection**

- 2 review to method: Familiarity with applicant context of opportunity.
- Admission framework validation indicators
  - Test scores as diagnostic for class placement not admissions.
  - First year grades and course takings.
- Challenge the oppression loop in college admission status-quo.



#### Targeted Programming

- Cohort based courses
- Optimize the impact of financial aid dollars
- Space for identity development and self-affirmation
- Critical mass representation in student body and faculty of underrepresented communities
- Student retention taskforce



The assumption is that everyone benefits from the same supports. This is equal treatment. Equity



## Everyone gets the supports they need

(this is the concept of "affirmative action"), thus producing equity. Justice



All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed**. The systemic barrier has been removed.

### Thank you for listening

Maria Salgado University of Southern California <u>marias25@usc.edu</u>

American Fellowship

## Maritza Sanchez, Ph.D.



Development of Cubic Morphologies of Perovskite Materials for Enhanced Creep Resistance

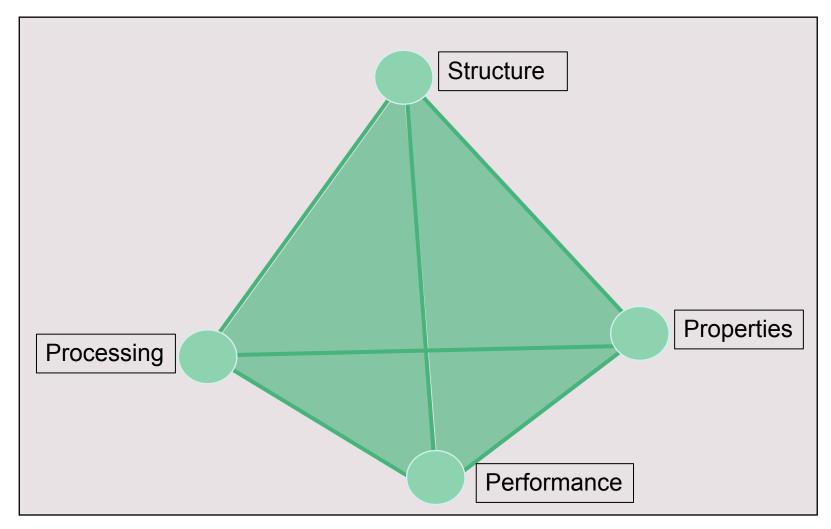
University of California-San Diego Materials Science and Engineering



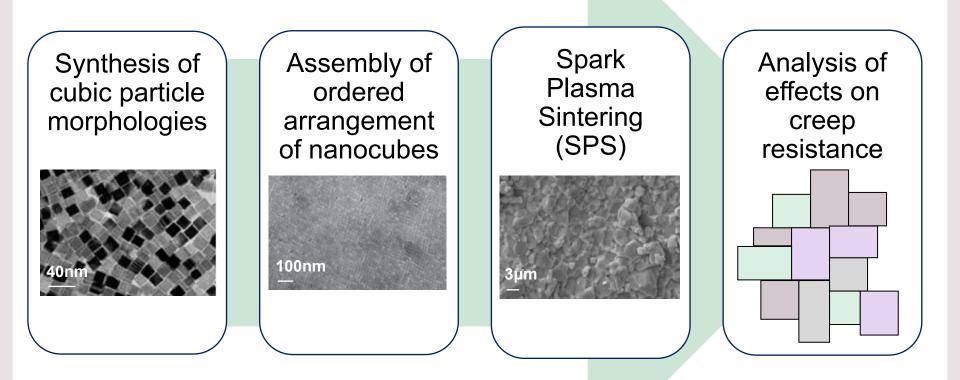
#### DEVELOPMENT OF CUBIC MORPHOLOGIES OF PEROVSKITE MATERIALS FOR ENHANCED CREEP RESISTANCE

Maritza Sanchez PhD Candidate University of California, San Diego

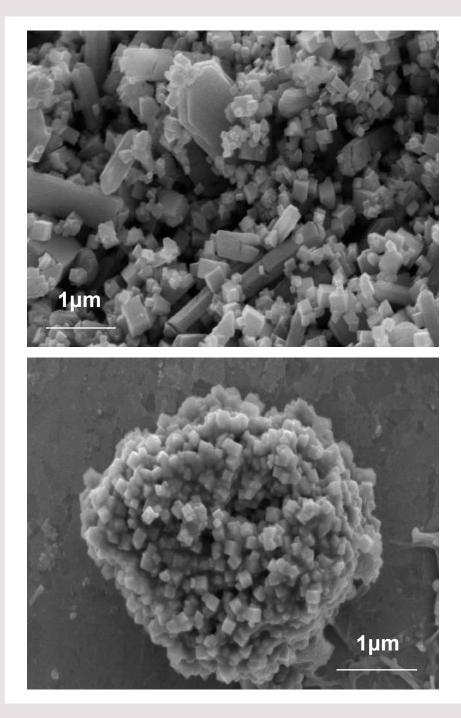
# The Materials Paradigm: Developing New Materials



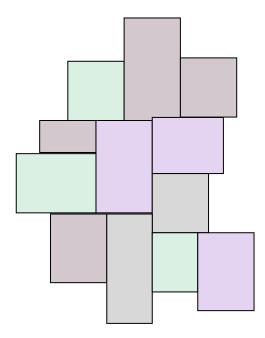
#### **Project Goal and Objective**



J. Lee, et al., *Langmuir*, 2006. K. Kato et al., *J. Mater. Res.*, Nov. 2013.



#### Barium and Strontium Titanate Cubic Particles



Ordered arrangements of cubic perovskite/spinel particles sintered by SPS will enhance the creep resistance by hindering grain boundary sliding through interlocking of grains produced by highly faceted particles. Materials for High-Temperature Applications

- High strength
   High toughness
  - 3. Oxidation Resistance
- 4. Creep Resistance



C. Malek, "Advanced nuclear reactors hold promise of clean energy for Gulf countries," Arab News, 15-Jul-2019. [Online].

## A Little Bit About Myself















#### THANK YOU FOR LISTENING!



Maritza Sanchez UC San Diego mas003@ucsd.edu

American Fellowship

## Kelly Subramanian, Ph.D.

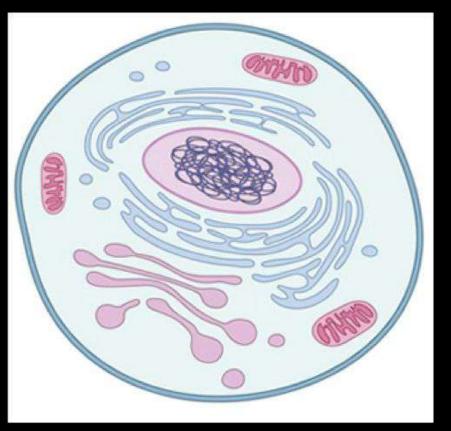


Spatial Organization of Metabolic Complexes and Instructor Talk in Laboratory Courses

University of California-Davis Cell Biology and Biology Education



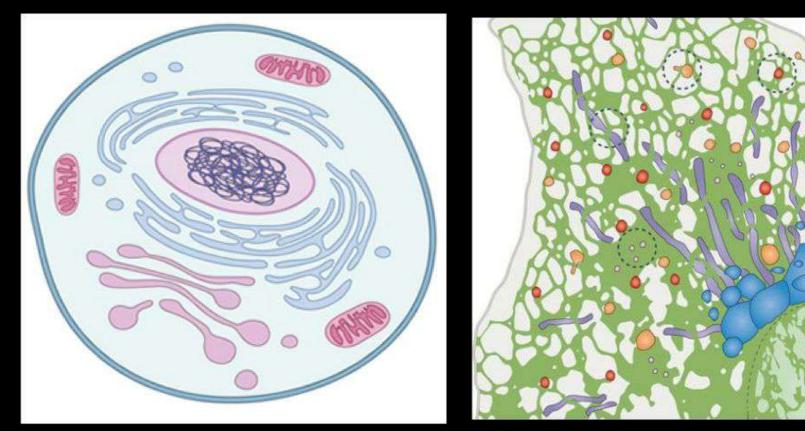
#### Where are mitochondria?



Nature Ed. 2010



#### Where are mitochondria?

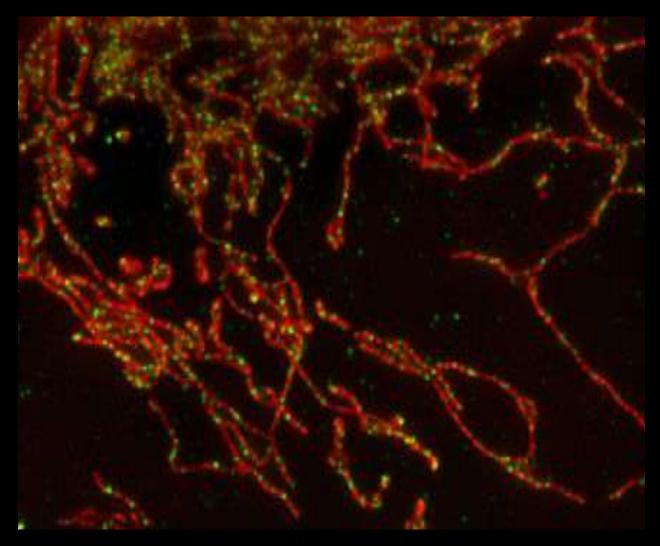


Nature Ed. 2010

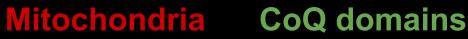
Phillips & Voeltz, 2016



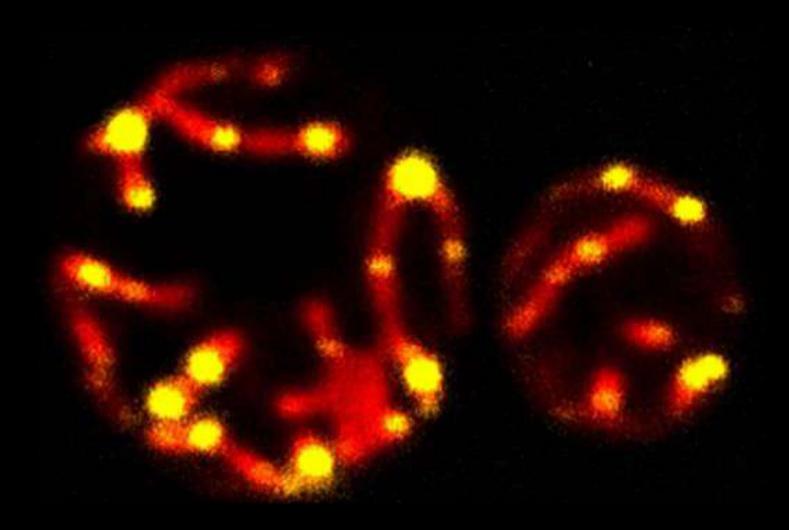
#### **Specialized domains in mitochondria**







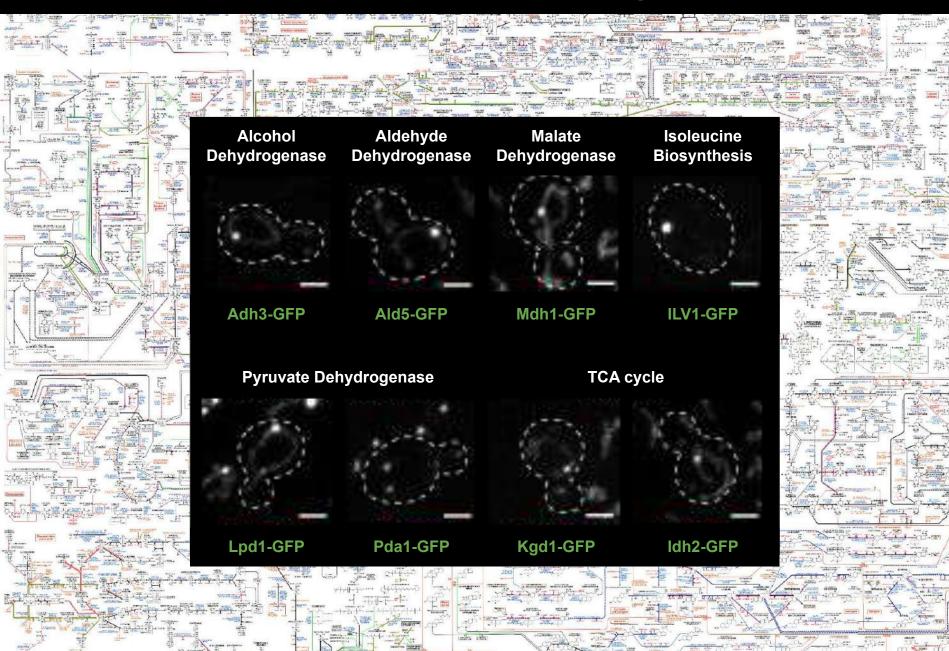
#### **Specialized domains in mitochondria**





#### Mitochondria Nucleoids

#### How are metabolic complexes organized in cells?



#### **Course-based Undergraduate Research Experiences**

- Increase students' retention and graduation in STEM compared to "traditional" lab instruction (Rodenbusch et al., 2016; Hanauer et al., 2017)
- Features include: discovery, iteration, ownership (Hanauer et al., 2017; Corwin et al., 2018)





# Do the ways instructors talk with students impact student outcomes in life science lab courses?

• Characterize instructor talk in life science lab courses (CURE, inquiry, traditional)

• Relate instructor talk to students' scientific integration and to indicators of their motivation to continue in science





## Legacy Circle

**Judy Horan** 



## Mooneen Lecce Giving Circle

**Sharon Schuster** 



## AAUW Fund Chair Board Secretary

Lynne Batchelor





Make a <u>donation</u> to AAUW Fund and note that it is "In honor of AAUW California Fund Event."

