

## Schedule: Day 1

2022 QSB annual retreat: Vista	Ranch, 7326 East Highway 140, Merced CA 9	5340; https://vistaranch.com/		
Tuesday 5/17/2021	Graduate Students	Faculty	Notes	
10:00-10:30 a.m.	Mix and Mir	ngle socialize		
10:30-11 a.m.	IVIIA GIIG IVIII	Mix and Mingle, socialize		
11 - 11:15 a.m.	Quick announcements; Jessica Wi	Quick announcements; Jessica Wilson UC Merced Grad Slam Winner		
11:15 - 12 noon	Student/postdoc to	Student/postdoc talks (Grand Oak Ctr)		
12-12:30 p.m.			Farmers Market Salad ; Chicken Pesto; Sliced	
12:30-1 p.m.	Lu	Lunch		
1-1:30 p.m	Recognition of Graduates - Good N	Recognition of Graduates - Good News, State of the Program (Chris A)		
1:30-2 p.m	Student breakout sessions: (1) Navigating grad school (Jan Zarate and Jourjina Alkhouri); (2)			
2-2:30 p.m	Teaching Tips (Jackie Shay)	racary meeting (crane out cary		
2:30-3 p.m	Student/postdoct	Student/postdoc talks (Grand Oak Ctr)		
3-3:15 p.m.	Studenty postuoc a			
3:15-4 p.m.				
4-4:30 p.m.	Poster	Poster viewing		
4:30-5 pm	Student/postdoct	Student/postdoc talks (Grand Oak Ctr)		
5-5:30 p.m.	Studenty postuoc a	Student/ postdoc talks (Grand Oak Ctr)		
5:30-6 pm	Closing and	Closing announcements		
6 pm-10 pm	Dinner, entertainm	Dinner, entertainment (karaoke, music)		





# Quantitative and Systems Biology at UC Merced

Interdisciplinary program for addressing biological programs using quantitative and systems biology approaches.

Currently, 121 graduate students, 67 faculty (from 8 Departments)

- Molecular, Cellular and Developmental Biology
- Evolution and Ecology
- Biochemistry, Biophysics and Bioengineering
- Computational and Mathematical Biology
- Microbiology and Immunology
- Biology Education and Research Pedagogy

QSB went up 31 spots in the latest US News and World Report assessment of graduate programs in Biology

# **QSB** Executive Committee

Chris Amemiya (MCB) — Chair of Grad Group Fred Wolf (MCB) — Academic Policy, Vice Chair Jessica Blois (LES) — Recruitment Susan Ge (MCB) - Admissions Chi Wen Ni (BioE) — Treasurer Michael Bemen (LES) — Secretary Stephanie Woo (MCB) — Awards Chair Juris Grasis (MCB) — Seminar Chair

Deepika Gunasekaran — Student Representative

School of Natural Sciences Staff: Jan Zarate – Grad Student Coordinator Sharee Sok – Grad Programs Assistant Paul Roberts – Director of Graduate Programs

Also, thanks to many of you who helped with admissions, interviews, fellowship applications, and reviewing of fellowship applications, and to students and faculty for candid feedback

Retreat committee:

Deepika Gunasekaran, Nat Brown, Lucia Jean Bazan Williamson

# Please welcome Jessica Wilson (Rudy Ortiz's lab)

GradSlam finalist (1st place) at UC Merced



CBD: Wonder Drug or Dud?

You can watch her talk at the UC-wide competition here

# Student and Postdoc Talks

		Name of PI	Title of Presentation	
1	Cal Larnerd	Fred Wolf	Different forms of ethanol tolerance are encoded by distinct transcriptional programs and brains regions	
2	Juan Camilo Sanchez Arcilla	Kirk Jensen	A forward genetics screen for vaccination reveals a single locus required for protective immunity against the highly virulent Toxoplasma gondii strain GUY-DOS	
3	Daravuth Cheam	Michele Nishiguchi	Strain-specific responses to protozoan predation on Vibrio fischeri biofilms	
4	Josephine Sami	Mike Cleary	The Effect of N6-methyladenosine (m6A) and mRNA Decay in Drosophila Neurogenesis	
5	Brian Wang	Fred Wolf	Connectomic Tools Reveal an Interaction Between Thirst and Courtship	
6	Tyrome Sweet	Mark Sistrom and Suzanne Sindi	Going through phages: A Computational approach to Revealing the role of prophage in Staphylococcus aureus	
7	John Thompson	Stefan Materna	Single-cell Profiling of Endoderm and Dorsal Forerunner Cells During Zebrafish Gastrulation	
8	Sammy Villa	Fred Wolf	The Drosophila Deubiquitinase, OTUD6, Regulates Ribosomal Ubiquitination	

# **QSB** Poster Presentations

Name	Faculty advisor	Title	
Tyrome Sweet	Mark Sistrom and Suzanne Sindi	Going through phages: A Computational approach to Revealing the role of prophage in Staphylococcus aureus	
Laura Garcia Lopez	Kirk Jensen	CD8 T cell IFN- $\gamma$ differentiation in Toxoplasma gondii requires NLRP3-dependent inflammasome-independent pathway	
Jesselynn LaBelle	Stephanie Woo	Zebrafish endodermal cells use contact inhibition of locomotion to achieve rapid dispersal and even distribution	
Gloria Denise Ligunas	Stefan Materna	Tagging proteins of interest with split fluorescent proteins in zebrafish	
Christi Waer	Dr. Katrina Hoyer	CXCR5+CD8+ T Cell Function in Autoimmunity	
Eva Cai	Susan Ge	Regulation of Hedgehog signaling by ciliary PKA	
Feng Yu	Shahar Sukenik	Linking disordered protein sequence and ensemble using interaction maps	
Jingyi Zhang	Xuecai Ge	Mechanistic study of Smo signaling in Hh pathway	
Xiaoliang Liu	Xuecai (Susan) Ge	Cilium proteomics reveals Numb as a positive regulator of the Hedgehog signaling pathway	
Ambarish C. Varadan	Juris A. Grasis	Bacteriophage-mediated IL-8 activation in Human Intestinal Epithelial Cells	
Leesa Strasser	Stephanie Woo	The Woo Lab: Investigating the cell biology of gut epitheium formation	
Brian Wang	Fred Wolf	Thirst Interneurons that Promote Water Seeking, Limit Feeding, and Encode Positive Valence	
Julia Alvarez	Kirk Jensen	Sugar Modifications to the GPI Sidechain Modulate T. gondii Virulence	
Daravuth Cheam	Michele Nishiguchi	Transferring the GFP Gene by Triparental Mating to Visualize Vibrio fischeri Biofilms	
Brian Pipes	Nishiguchi	sgRNA Delivery in a Vibrio fischeri CRISPRi System	

What's new in QSB?

# Newest QSB Faculty Members



Sora Kim
Life & Env Sciences
Core Member



Frederik Schulz Joint Genome Inst Affiliate Member

## Student Awards – Quantitative & Systems Biology

Student	Award		
Laura Lopez (Jensen)	Miguel Velez Scholarship		
Negar Tehrani (Spencer)	Lakireddy Fellowship		
Carlos Vazquez (W-C Chin)	Central Valley Fellowship		
Daphney Sihwa (Muñoz)	Genentech Internship		
Kris Troy (Kranzfelder, Garcia-Ojeda)	NSF Graduate Research Fellowship		
Karen Cornejo (Saha)	Selected for a platform presentation at a Keystone meeting		
Maria Mendoza (McCloskey)	Genentech Internship		
Feng Yu (Shahar Sukenik)	Research Achievement Award		
Nadia Delgadillo Miranda (Hoyer)	National Lab in Residence Fellowship		
Jingyi Zhang (Susan Ge)	Contributed to Nature Structural Biology paper		
Jasper Toscani Field (McTavish)	Pub on "Extensiphy" computational method, Meth Ecol and Evol		
Julia Alvarez (Jensen)	2 <sup>nd</sup> best talk at Woods Hole Immuno-Parasitology meeting		
Oscar Davalos (Hoyer)	Biotech internship for summer		
John Thompson (Materna, Woo)	NIH diversity supplement		
Leesa Strasser (Woo)	Awarded CCBM fellowship in spring 2022		
Marie Brache Smith (Sogin)	Admitted to a summer course at the Marine Biol Lab (Woods Hole)		

### Joint Genome Institute Summer Internship

Nathaniel Brown (Muñoz)

Dararvuth Cheam (Nishiguchi)

Shari Larsen (Sistrom)

Irina Birskis Barros (Yeakel)

Tyrome Sweet (Sistrom, Sindi)

Feng Yu (Sukenik)

Yumary Vasquez (Bennett)

#### QSB students who "defended" in AY 2021-2022



**April Apostol** (Jensen/Beaudin)



Ashley Arevalo (Nobile)



Priyanka Bapat (Nobile)



(Escobar)



Maedeh Bazmi Betsabel Chicana (Manilay)



Anh Diep (Hoyer)



**Craig Ennis** (Nobile)



Jade Fee (Cleary)



**Anthony Lange** (Wolf)



Eli Maciel (Oviedo)



Keedrian Olmstead (Amemiya)



(Nobile)



Akshay Paropkari Diana Rodriguez (Nobile)



Thaddeus Seher (Nobile/Sindi)

## Incoming QSB students - 2022



Yazan Al-Issa Madaba, Jordan



Zahra Alitaneh Mashad, Iran



Shayna Bennett Merced, CA



Priosmita Biswas Kolkata, India



Cristina De Zaballa Málaga, Spain



Yinyue (Lisa) Du Guangxi, China



Josue Duque Fresno, CA



John Espinosa Merced, CA



Korenna Estes Fresno, CA



Taiwo Fagbayibo Akure, Nigeria



Abdullahi Jamiu Oyo, Nigeria



Eira Jardines Merced, CA



Jesselyn Labelle Dos Palos, CA



Miranda Luque Los Angeles, CA



Jazmin Reyes Escondido, CA



Reece (Riley) Riley Fresno, CA



HyeJoo Ro Seoul, S. Korea



Maryam Salemi Tehran, Iran



Nora Shamoon Turlock, CA



Guillermo Vasquez-Anaya; Modesto, CA



Andie Venegas Los Angeles, CA



Chantz Williams Oxnard, CA



Tahirah Williams Kingston, Jamaica

Korenna Estes – Eugene Cota Robles Fellowship

Jesselyn Labelle, Eira Jardines and Miranda Luque – G-RISE Fellowship

Tahirah Williams – Chancellor's Excellence and UC-HBCU Fellowships

Andie Venegas – John and Victoria Elia Fellowship

# **Academic Senate Faculty Award Winners**

Katrina Hoyer (MCB)



Distinguished Graduate Teaching & Mentorship

Patti LiWang (MCB)



Distinguished Service to the Academic Senate

Susan Ge (MCB)



Distinguished Early Career Research

Schedule: Day 2

Wednesday 5/18/2021	Graduate Students	Faculty	
9:00-9:30 a.m.	Mix and		
9:30-10:00 a.m.	R1 status and why I		
10:00-10:30 a.m. 10:30-11 a.m.	Breakout -So you think you want to start a company? - Mark Bold (UCM Innovation- Entrepreneurship Office)	Tips for faculty mentoring - Nish Nishiguchi (Grand Oak)	Fresh fruit, breads, coffee
11-11:30 am 11:30-12 noon	Navigating the mentee-mentor relationship - Nish Nishiguchi (Grand Oak)	Faculty Breakout - Jackie Shay: Teaching Commons; Resources and Tips	
12:00-12:25 pm	One postdoc talk, one student talk (Grand Oak)		
12:25-12:30	Closing comments; future of the program (Fred Wolf)		
12:30-1 pm			Sandwiches: smoked turkey, roast beef;
1 - 1:30 pm	Lunch		some Vegan Box options; Cash Bar (bring
1:30 - 2 pm			cash and your I.D.)
We have the space until 4 pm so feel free to stick around, socialize, have informal lab group discussions, toss the frisbee, play bocce, etc.			