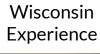


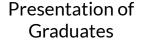
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History of



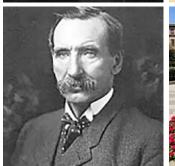


















01





The Department of Genetics Every student is part of our history!



The Department of Genetics was established as the "Department of Experimental Breeding" in **1910**. It was the first such department in the United States. The department owes its creation to the vision and persuasive powers of William D. Hoard, who was largely responsible for making Wisconsin "America's Dairyland."

Since then 110 years have passed.

Notable Achievements:

Nobel Prize by Joshua Lederberg

Nobel Prize by Oliver Smithies

20 faculty inducted into the National Academy of Sciences

John Doebley

John Doebley has been a staple in the Genetics department for over 20 years. As a plant geneticist John has studied the evolution of maize and its relatives. Specifically, he works on the genetics changes that have resulted in the emergence of maize from its apparent teosinte forebear, *Z. mays* ssp. *parviglumis*, a wild grass that grows in Mexico.

Throughout his time at UW, John has been a strong leader, highly regarded instructor, and well respected colleague and collaborator. As he transitions away from his role as Department Chair he will *slowly* ease into retirement. But we will still see him around the Genetics building as he teaches his final course, finishes research, and probably finds another project or two along the way.

We thank Professor Doebley for his teaching, leadership, mentorship, and dedication to UW all these years.



Faculty in Genetics since 1999, Department Chair from 2015 to 2020



Allen Laughon

Faculty in Genetics since 1987, Vice Chair since 2015

Al has been with the Department of Genetics since 1987 and will be retiring in the summer of 2020 after 33 years of dedicated service, teaching, leadership, and mentoring to hundreds of students and his fellow faculty. Al's research used *Drosophila* to understand the genetic regulation of pattern formation during embryogenesis. Specifically, studies cellular signaling by TGF-beta, which influences the activity of Smad proteins which, in turn, enter the nucleus and specifically regulate gene transcription.

Throughout his tenure AI has served on countless committees, supported graduate and undergraduate programs, taught a variety of courses, and assisted the department through many transitional times. We sincerely thank Professor Laughon for his wisdom, good humor, and dedication to the department for his entire career.

Instructors and Advising Team



Carin Loewen
Instructor / Academic Advisor



Lauren Foley Student Services Coordinator / Academic Advisor



Katie Vermillion Kalmon Director of Undergraduate Programs & Advisor



Kit Tilmann
Instructor / Academic Advisor



Qiang Chang John Doebley



Audrey Gasch



Chris Todd Hittinger



Akihiro Ikeda



Allen Laughon

Instructors and Advising Team









Patrick Masson

Bret Payseur

Francisco Pelegri

Nicole Perna













John Pool Tom Prolla

Steve Schroedi

David Schwartz

Nathaniel Sharp

Ahna Skop

Instructors and Advising Team









David Wassarman

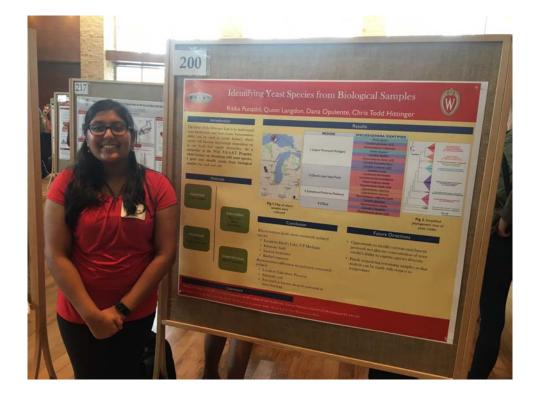
Donna Werling

Jerry Yin

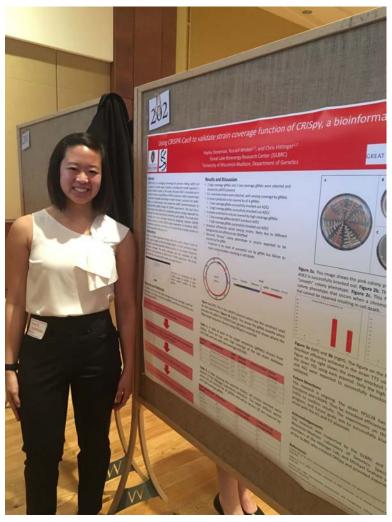
Xuehua Zhong

Your Wisconsin Experience





UndergraduateResearch



Hands-On Classes and World Class Research





Banking Animal Biodiversity in Costa Rica

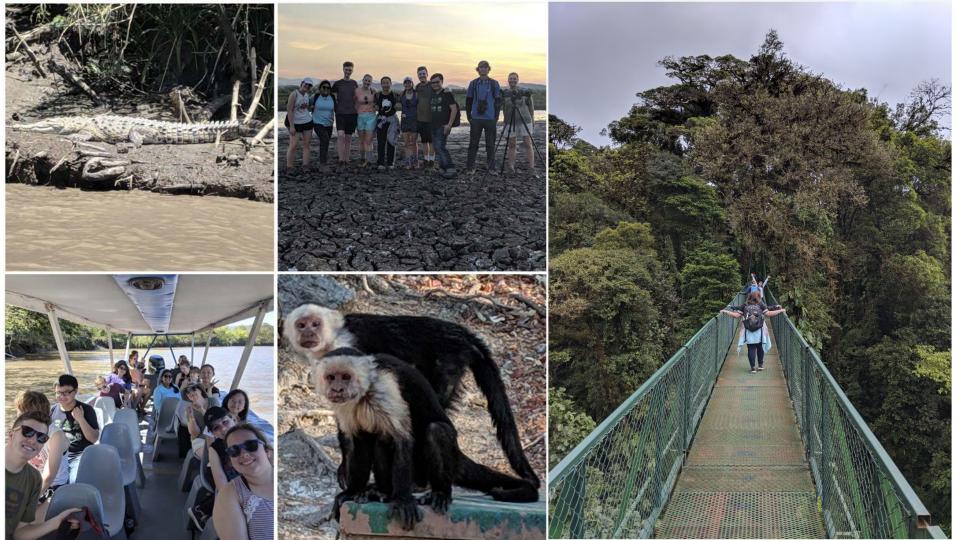


Developed and led by Professor Francisco Pelegri, this new experience for UW undergraduates allows study abroad participants the experience of a lifetime! This unique field-study program had its first cohort of students in 2019 travel abroad and wander through the cloud-forests of the jungle and learn about biodiversity and see animal species only found in this part of the world!



2019 Participants

Savannah Barry **Briana Crockett** Isabel Delo Lorena Diaz Mayalee Erfourth Sean Khor Katherine Klimpel Katherine Kudrna Ka Lor **Alexander Mathers** Colton Mowers Ritika Punathil Rebekah Schroeder Karen Simpson Jiameng Sun Liam Tomson-Moylan Ben Veire Vanessa Writt









"We often say that UW is a place that changes lives. But the university is just a collection of buildings on a beautiful lake.

It's the *people* at the university who change lives."

Chancellor Blank

Your Favorite Courses taken at UW

American Indian Studies

Medical Genetics

Intro to Digital Printmaking

Acting

GENOMIC REVOLUTION

Anthropology

Food Science

Literature and Medicine

Human Sexuality Plant Genetics

Developmental
Genetics &
Conservation

Women and their Bodies in Health and Disease

Neurogenetics

Intro to Drawing

Medical History

Cartography

Cancer Genetics

Race and American Politics from the New Deal to the New Right

Art History

Intro to Animal Development







"Every one of you came to UW with your own dreams, and your own unique story. You brought your own skills and talents and interests. And each of you has had different experiences here.

But there is one thing I hope every one of you discovered on this campus.

By identifying skills, passions and abilities you may not have known you possessed, you discovered *opportunity*."

Chancellor Blank, 2019



Now presenting the Class of 2020...

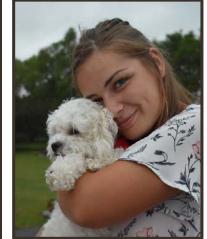
Ritika Punathil

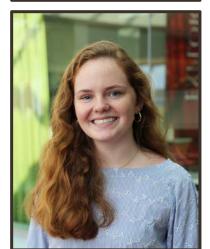
Menomonee Falls, WI

Favorite Genetics Memory: Field trip to visit Dr. Francisco Pelegri's Dartmoor ponies

Favorite Genetics Course: Neurogenetics







Taylor DohertyNew Holstein, WI

Favorite place on campus: Memorial Union Terrace

Favorite Genetics Course: Developmental Genetics for Conservation and Regeneration



Favorite Genetics Memory:
Ripping out invasive coffee
plants in Costa Rica with our
bare hands (the very definition
of hands on involvement)



Virginia Wise

Wilmette, IL

Most important thing I've learned at UW: How to be confident in the choices I have made

Certificate: French

Jenna VanDenAvond
Cottage Grove, MN
Favorite spot on campus:
Memorial Union Terrace





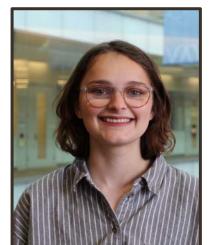
Teja Mallela
Green Bay, WI
Favorite Genetics Memory:
Getting ice cream with
Genetics 545 lab peers and Kit

Jenna Ehlert Sussex, WI

Most important thing I've learned: I am learning about the things that make me happy and make me who I am. Life is about constant growth and I feel that I am on the right trajectory right now.

Future plans: Applying to Medical School





Renee Engels

Muskego, WI

Favorite Genetics Memory:
Watching genetics-related
movies with UGA

Favorite non-science course at UW: The Female Body in the
World

Waconia, MN
Favorite place on campus: Top
floor of the WID

Most important thing I've learned: Have friends that support your goals and the importance of having an education that encompasses science as well as law, gender and women's studies, and global health.





Kayla Rogan
Wausau, WI
Future plans: Become a PA
Volunteer Involvement:
American Family Children's
Hospital

Abigail Draves

De Pere, WI

Favorite Memory: My senior year capstone group and all of our group meetings < 3

Most important thing I've learned: To always remember to be comfortable in your genes.





Ashley Doherty
Menomonee Falls, WI
Accomplishment I am most
proud of: Becoming president of
UW- Madison's premedical
chapter of the American Medical
Student Association.

Julia Oelke Merrill. WI

Most proud of: Continuing my coursework for the spring 2019 semester while I spent most of my time in the hospital or at doctor's appointments due to having multiple health issues.

Favorite non-science course:

Ballet







Mikaela Koller

Eau Claire, WI

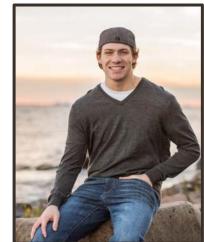
Most important thing learned: Some people understand things more quickly than others and that's okay.

Favorite memory: The genetics unit in intro biology being the one that clicked the most with me. Made me feel reassured that I was in the right degree.



Minnetonka, MN

Accomplishment I am most proud of: Last fall I published a first authorship reviewing the epigenetic mechanisms of neurodegenerative disease and acute brain injury, citing over 500 different studies



Christina Riehle

Edgar, WI

Involvement/Activities while at UW: Marching Band

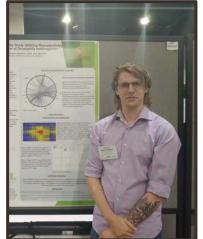
Favorite Place on campus: Lakeshore Path

Alexandra Oldenburg

Appleton, WI

Favorite non-science course taken at UW: Athenian Democracy. If I hadn't majored in science, I would have been a History major with a focus on Ancient Greece. This class was amazing and taught me so much.





Timothy Biewer-Heisler
West Allis, WI
Plans after graduation:
Graduate school at
Bloomington Indiana.

Research Involvement: John Pool Lab

Ben Noyes

Franklin, WI

Most important thing I learned at UW: I'd rather be dumb and hardworking than smart and lazy





Matthew Wakai

Middleton, WI

Accomplishment I am most proud of: Joining a research lab my sophomore year researching age-related diseases. It helped spark my interest in age-related diseases, and I was able to earn authorship on several published papers.

Gabriella Geiger

Milwaukee, WI

Favorite Genetics course taken at UW: Cancer Genetics

Plans for after graduation: Apply to medical school this summer to attend in Fall 2021





Hoffman Estates, IL

Additional Major: Psychology

Most important thing I've
learned at UW: You will be
most successful doing what

Hannah Sheriff

makes you happy

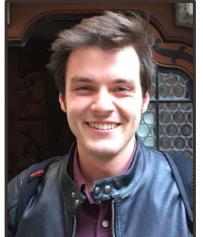
Kali Denis

Hudson, WI

Favorite Genetics memory:
Taking a field trip in
Developmental Genetics and
Conservation to Francisco's
pony farm

Favorite place near campus: Favorite place NEAR campus: Vintage Spirits and Grill





Will Whisler
Minneapolis, MN
Study Abroad: Sevilla, Spain

Sheida Pourdashti
Waukesha, WI
Favorite place on campus:
Memorial Union Terrace
Plans after graduation:
Attending medical school in
August





Lake Zurich, IL

Favorite Genetics memory:
Having Genetics Seminar on the grass in Henry Mall

Michael Mussar

Favorite place on campus: The WID

Laura Seitz Racine, WI

Plans after graduation: Pharmacy
School at UW-Madison
Most important thing I've
learned at UW: Every part of our
time as badgers is special and has
given us memories that we'll carry
with us for the rest of our lives!





Stuart Fass Madison, WI

Most important thing I've learned at UW: Doing things by yourself is an inefficient use of your time and on campus resources. Just get help.

Favorite place on campus: QQ's

Megan Mills

Racine, WI

Plans after graduation: Doctor
of Pharmacy program at the
Medical College of Wisconsin
Involvement at UW: Kappa
Alpha Theta Scholarship
Director, Badger Volunteers, UW
Health Radiology, and and
conducted research in a
bioinformatics/genetics lab at
the WID

Abbie Rogers

Verona, WI

Involvement at UW: UW Women's Rugby Football Club

Research Experience: Andrew Bent's lab









Maya Erfourth

Mount Horeb, WI

Favorite Memory: Going to Costa Rica with Francisco Pelegri for the DGC study abroad!

Accomplishment I'm most proud of: My work as president of Pre-Students of Osteopathic Medicine on Campus

Sydney Bruggeman

Neenah, WI

Research Involvement: Parks lab

Plans after graduation:
Working as a Genetic
Counseling Assistant with the
goal of going to Genetic
Counseling school

Katherine Batten

Waterville, ME

Favorite spot on campus: Any coffee shop! Bloom, Grace, Barriques, Crescendo, Ancora (just to name a few)







Accomplishment I'm most

proud of: Illustrating 2 science

coloring books for kids and the

Allie Andreski

Pewaukee, WI

Most important thing I've learned at UW: Perseverance

Accomplishment I'm most proud of: I independently wrote and presented the Maternity center project and received a check to be donated to the construction of a Maternity center in the Grace Center in Malawi, Africa





Scott Cameron

Caitlin Marks

Madison, WI

Bloomington, MN

Favorite place on campus: Any Dock on Lake Mendota

Most important thing I've learned at UW: Prioritize time for the people you care about

Lorena Diaz Chicago, IL

Favorite place on campus: The floating tables in Microbial Sciences

Favorite Genetics course taken at UW: Genetics 527 Developmental Genetics for Conservation





Gus Hermberg
Sussex, WI
Involvement while at UW:
Marching Band
Favorite place on campus:
Microbial Sciences Building



Favorite Genetics memory: Working with flies genetics 545 lab

> Favorite place on campus: Memorial Union Terrace





Olivia Steidl

Milwaukee, WI

Accomplishment I'm most proud of: Receiving the Sophomore Research Fellowship and the Hilldale Fellowship to support my research in Caitilyn Allen's lab Most important thing I've learned: The importance of collaboration and effective communication, especially within STEM fields

Gabriella Voit
Milwaukee, WI
Accomplishment I'm
most proud of: Being
able to get a paper
published through my
lab





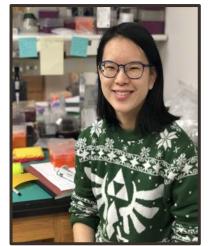
Molly Hensel

Cambridge, WI

Favorite place on campus:
Discovery Building

Linda Wang
Madison, WI
Favorite Genetics course
taken at UW: Animal
Developmental Genetics
Favorite non-science

course taken at UW: History of Science 202





Austin Stram Mt. Horeb, WI

Madolyn Holten
Oak Creek, WI

Favorite Genetics
memory: Working on my IP
Project for Specific
Methylation Sites Differing
For High vs. Low Fertility
Bull Sperm

Favorite Genetics course:
Animal Development





Emily Johnson

Anoka, MN

Favorite Genetics memory:
Learning about stem cell

Learning about stem cell research and investigating usage in NTP 670

Plans after graduation: Hopefully medical school in Australia

& Additional Graduates



Jessica Berry Andi Pan

Conrad Blosch Lucian Parece

Anastasia Bravos Daniella Puccio

Ryan Brown Yadely Quinones Villalpando

Noah Carrillo Jack Schaefer

Jackie Chang Amanda Scharenbrock

Nikhil Desen Erin Seablom

David Grau Carl Simmons

Hannah Hahn Chris Stein

Meaghan Hannon Austin Stram

Evan Hoffins Claude Vandevender

Lucy Kronzer Carissa Waldo

Jonathan Le Hunter Walton

Lucas Moyer Megan Wysocki

What would you tell your younger self and all the future Badgers?

Do things outside of your comfort zone. Join that club you were thinking about, take that dance class you always wanted to take, and most importantly go have fun with your friends and peers. These four years will go by so quickly, but those lasting memories and life-long friendships will be there with you forever.

-Teja Mallela

Time passes faster than you think.
Do it before it's too late. You'll regret not doing it later.

-Molly Hensel

Don't be afraid to put yourself out there and go after your goals! -Gabriella Voit

Work hard,
play harder.

-Jenna
VanDenAvond

Constantly be pushing yourself out of your comfort zone and don't be afraid to lean on people.

-Will Whisler

The hardest part of college isn't the academics. The hardest parts are when life is just happening and doesn't seem to care that it's finals week, or that your have three papers due. How you face those challenges, which are impossible to predict, will shape you and strengthen you as a person. My advice is to remember that you are much more capable, much more resilient than you think you are, and these hard points in life can bring that to light.

-Isabel Delo

Treat college kinda like highschool! You gotta wake up early and stay disciplined, if you can do that you just beat college. Also save caffeine until the last two years.

-Ben Noyes

Do everything you love when you can because it might be taken away from you before you realize. Life goes by in a heartbeat. Buy season tickets to Football, Hockey, Basketball. Stay up all night with friends. Go on roadtrips. Hike Devil's Lake and Picnic Point. Watch the sunrise over frozen Mendota. Make it to all the bars. Picnic on Bascom. Buy a hammock and use it every day you can in the spring when it's over 45 degrees. Eat the entire Babcock ice cream freshman 15 with your roommate. Get excited about the first snow. Don't take anything for granted because your lasts might be your lasts before you're ready for them to be. -Alexandra Oldenburg

Breathe, eat healthy food, move, take breaks and breathe more.
You will be ok.
-Katherine Batten

Andi Pan



Senior Class Award Recipients **Mario Bertogliat**



2020 2020

Final Thoughts...

Dear Graduates of 2020,

Oh, what a way to go! You are about to graduate in a way, and at a time, that no other person, or very few others ever have. And as we face this unprecedented time I strongly believe that the training, experiences, knowledge, and education you have gained here at the University of Wisconsin-Madison will bring you promise, and success in an increasingly genetic world. Your degree in Genetics and Genomics is unique, as are the current circumstances in life. I challenge you to find the silver lining in each of the days ahead, and continue to pursue the dreams you have. I am strong believer in that whatever your goals are in life, you can achieve them. It may take extra hurdles, strides, and strength, but all things are possible for those with the determination to reach their goals. I have been fortunate to get to know many of you during your time here at UVV-Madison. I have enjoyed the conversations, discussions, classes, and meetings that have allowed me to see the amazing talent and intelligence within you, as well as the caring and compassionate people that you are.

I hope that as you move through life you will reflect fondly on your time here at UVV-Madison as a Genetics and Genomics major, and that you will keep in touch as you go out, and change the world. And whether I have had the opportunity to meet you or not, please know that we are here for you always. A question about graduate schools, job prospects, changes in the field, or just life questions, we are here for you.

I know that the senior year did not end as planned, but the resilience and adaptability you are putting forth right now will also help you achieve your goals and dreams in life. Congratulations on this momentous achievement in life, you my friend, have graduated from college!

Congratulations again,

Katie Vermillion Kalmon



May 8, 2020

Laboratory of Genetics
College of Agriculture and Life Sciences School
of Medicine and Public Health University of
Wisconsin - Madison
425 Henry Mall, Madison, WI 53706

Dear Genetics and Genomics Class of 2020,

Congratulations! You have just successfully completed a difficult four-year course of study and earned, through your hard work, a Bachelors of Science degree in Genetics and Genomics. Be proud! You have learned much, and you are prepared for the next phase of your life whether you are going directly into the workforce or pursuing a higher degree. Be confident!

Our community, our State, our nation and our world are now facing the global pandemic of Covid-19, a challenge on par with greatest challenges ever faced by our nation such as the 1918 flu epidemic and Great Depression. Responding to such challenges requires a workforce of highly trained medical professionals and biomedical research scientists. Our nation and the world need you, and you are ready. There was never a more appropriate time to say, "Think globally, act locally."

On a personal note, let's us say that we have delighted in our opportunity to participate in your education. Whether you took General Genetics, Clinical Cases in Medical Genetics, Animal Developmental Genetics or Developmental Genetics for Conservation with us, we both feel honored to have had the opportunity to help you explore the fascinating world of genetics. It was our privilege! We sincerely thank you for your participation in our undergraduate program.

Finally, as you open the door to the next chapter of your life, please take the opportunity to look back and reflect on how you arrived at this juncture. Many people have helped you. You have much for which to be thankful and many people to thank. In the days and weeks ahead, reach out to those who helped you succeed – your teachers, your friends, your family and your parents – and tell them "Thank you." Your success is their reward.

Be well, Be safe, On Wisconsin,

John Doebley, Chair

Francisco Pelegri, Chair-Elect

CONGRATULATIONS FROM ALL OF US IN THE DEPARTMENT OF GENETICS





