

Therapeutic Sciences Graduate Program



BROWN

Division of Biology and Medicine

April 2024, Issue 7

TSGP News:

3rd Year Talks

The TSGP “3rd Year Student Showcase” featured inspiring presentations by the 3rd Year PhD students in the Therapeutic Sciences Graduate Program.

The students presented their research at Brown’s Laboratories for Molecular Medicine on Ship Street in downtown Providence. Following the talks, TSGP students, faculty and staff enjoyed a “Spring Fling” reception at the Narragansett Brewery.



Center: Ryan Puterbaugh

Left to Right: Carmelissa Norbrun,
Jasmine Clark and José Mercado Ortiz



Congratulations!

Jacqueline Real successfully defended her Biotechnology Masters Thesis on March 28th, 2024.
Congratulations, Jackie!

Jackie gave a presentation entitled
“The role of cytomegalovirus in glioblastoma tumor microenvironment and angiogenesis.”
Her advisor, Dr. Sean Lawler, leads the Brain Cancer Therapy Lab in the
Department of Pathology and Laboratory Medicine at Brown.



BROWN

Biotechnology Masters Program
Thesis Defense Presentation

Yannick Johnson

Advisor: Dr. Jonathan Kurtis



*“Anti-PfGBP130
antibodies
inhibit
P.falciparum
growth in vitro.”*

Monday, April 8, 2024
11:00 AM

Via ZOOM

<https://us05web.zoom.us/j/82351641597?pwd=kag2l8f6XYnKxe1xfix4D1wuT3uGrj.1>

All are welcome to attend this presentation.



BROWN

Biotechnology Masters Program Thesis Defense Presentations

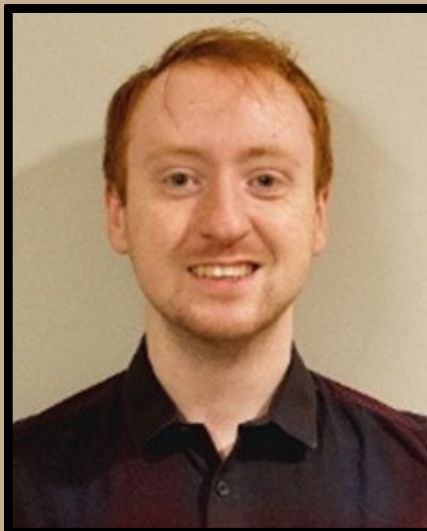


11:00am - 11:25am

Olivya Caballero

Advisor: Dr. Alan Morrison

“Aging impairs VEGF-A mRNA stability and consequent inflammatory Arteriogenesis.”



12:30pm - 12:55pm

Douglas Dubosky

Advisor: Dr. Mamiko Yajima

“Metabolic activity regulates embryonic patterning in the sea urchin.”

Wednesday, April 10, 2024

Thomas Watson Center for Information Technology (CIT), Room 165

All are welcome to attend these presentations.



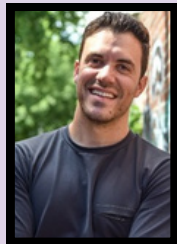
Biotechnology Masters Program Thesis Defense Presentations



12 NOON: Yifei Li

Advisor: Dr. Alexander Fleischman

"Patient characteristics of normal pressure hydrocephalus cases with indeterminate surgical decisions: high-volume tap test ordered vs. not ordered."



12:30 PM: Alex von Eckartsberg

Advisor: Dr. Justin Fallon

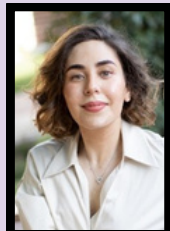
"Characterizing behavioral phenotypes using computer vision-based monitoring in an Alzheimer's Disease mouse model."



1:00 PM: Chengjie Xi

Advisor: Dr. Justin Fallon

"Localization of MuSK expression in the neurogenic niches of the adult brain."



1:30 PM: Nazrin Rustamzade

Advisor: Dr. Jonathan Kurtis

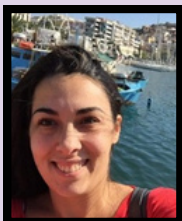
*"Efficacy of a novel anti-malarial against multi-drug resistant *P. falciparum*."*



2:00 PM: Yu Liu

Advisor: Dr. Eric Morrow

"Molecular mechanisms underlying cellular growth defects in glutamate pyruvate transaminase 2 (GPT2) deficiency."



2:30 PM: Sophia Chaviari

Advisor: Dr. Jessica Plavicki

"Identifying the molecular mechanisms mediating aryl hydrocarbon receptor induced developmental toxicity."

Thursday, April 11, 2024

The Swearer Center, 2 Stimson Avenue, Room 111

All are welcome to attend these presentations.



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Biotechnology Masters Program Thesis Defense Presentations



11:30 AM: Olivia Perez

Advisor: Dr. Barry Lester

"Using musical theory for the analysis of newborn pain and non-pain cries."



12:30 PM: Yashvi Deokule

Advisor: Dr. Edith Mathiowitz

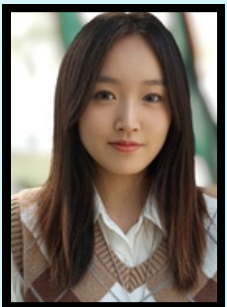
"Induction of mesphase in polyethylene glycol and polyethylene oxide."



1:00 PM: Bishouy Sharoubim

Advisor: Dr. Edith Mathiowitz

"Process analytical technologies for small-scale cell culture: ARACUS amino acid analyzer."



1:30 PM: Jiaying Yan

Advisor: Dr. Edith Mathiowitz

"Evaluating diffusion and mucus penetrating efficiency of bio-coated polymeric nanoparticles."

Friday, April 12, 2024

Thomas Watson Center for Information Technology (CIT), Room 165

All are welcome to attend these presentations.



BROWN

Biotechnology Masters Program
Thesis Defense Presentation

Christian Muñoz

Advisor: Dr. John Marshall



*“Syn3 and D-Syn3
attenuate brain infarct
volume loss after
hypoxic-ischemic
brain injury
in neonatal rats.”*

Monday, April 15, 2024

1:00 PM

Via Zoom

<https://brown.zoom.us/j/93320694033>

All are welcome to attend this presentation.



BROWN

Biotechnology Masters Program
Thesis Defense Presentation

Sheryn Bentata

Advisor: Dr. Amanda Jamieson



*“Monitoring cell activity
in human airway
epithelium during viral
lung infection through in
vitro models.”*

Wednesday, April 17, 2024
2:00 PM

Via ZOOM

<https://brown.zoom.us/j/85691876170>

All are welcome to attend this presentation.



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Biotechnology Masters Program Thesis Defense Presentations



1:00 PM: Jiayu "Jessi" Hu

Advisor: Dr. Jun Feng

"Spike proteins on cardiac microvascular endothelial dysfunction."



2:00 PM: Alyce Brady

Advisor: Dr. Shuping Tong

"Impact of mutations in the preS2 region of Hepatitis B genome on surface antigen secretion."



2:30 PM: Katlyn Reynolds

Advisor: Dr. Mamiko Yajima

"Functional contributions of p53 and MYC in Strongylocentrotus Purpuratus Embryogenesis."

Thursday, April 18, 2024

Stephen Robert '62 Campus Center (Room 201), Petteruti Lounge

All are welcome to attend these presentations.



Biotechnology Masters Program Thesis Defense Presentations



11:00 AM: Yiwen Yang

Advisor: Dr. Suzanne de la Monte

“Alcohol-related neurodegeneration: mechanistic links to impaired metabolic function in white matter and potential strategies for non-invasive detection and monitoring with disease progression or treatment.”



12 NOON: Megan Fife

Advisor: Dr. Suzanne de la Monte

“Novel Therapeutic Targeting and Potential Non-Invasive Liquid Biopsy Diagnostic Detection and Monitoring of Aspartyl-Asparaginyl-b-Hydroxylase in Chondrosarcoma.”



12:30 PM: Xinran "Evelyn" Qi

Advisor: Dr. Daniel Spade

“Investigating spermatozoa RNAs in clinical male infertility and as potential biomarkers.”



1:00 PM: Sei Hyun Choi

Advisor: Dr. Justin Fallon

“Characterization of MuSK transcripts and proteins in neural stem cells.”

Friday, April 19, 2024

Sidney Frank Hall for Life Sciences, Marcuvitz Auditorium (Room 220)

All are welcome to attend these presentations.



BROWN

Biotechnology Masters Program
Thesis Defense Presentation

Yanxi Li

Advisor: Dr. Michelle Dawson



*“Biomechanics of
paclitaxel-induced
polyploid giant cancer
cells in murine
breast cancer.”*

**Friday, April 19, 2024
11:30 AM**

Via ZOOM

<https://us05web.zoom.us/j/8752716780?pwd=VS96SXBmcWdXdHd0WlFXTFZtK2xsdz09&omn=81369571936>

All are welcome to attend this presentation.

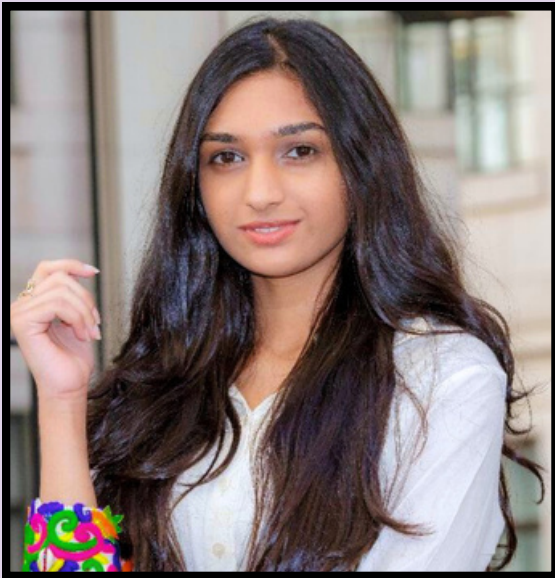


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Biotechnology Masters Program
Thesis Defense Presentation

Palli Kheni

Advisor: Dr. EceUzun



*“Development of
machine learning-based
and
deep learning models
to predict breast cancer
recurrence data.”*

Tuesday, April 23, 2024
12 NOON

Via ZOOM

<https://www.google.com/url?q=https://brown.zoom.us/j/99124801624&sa=D&source=calendar&ust=1710182242539091&usg=AOvVaw3TkhZwddEyAa93K35v1MuN>

All are welcome to attend this presentation.



BROWN

Biotechnology Masters Program Thesis Defense Presentations



12:30 pm - 12:55pm

Priyanka Bedi

Advisor: Dr. Amanda Jamieson

"The role of Neuropeptide 'Substance P' in the neuroimmunomodulation of wound healing."



1:30pm - 1:55pm

Yutong "Linda" Xia

Advisor: Dr. Wafik El-Deiry

"The anti-tumor efficacy of combining Ceralasertib, an oral ATR kinase inhibitor, with imipridones, in prostate cancer treatment."

Tuesday, April 23, 2024

Sciences Library (Room 720), 201 Thayer Street, Providence, R.I.

All are welcome to attend these presentations.



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Biotechnology Masters Program Thesis Defense Presentations

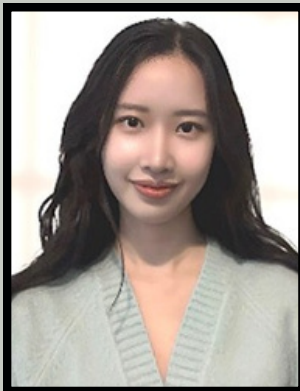


12:00noon - 12:25pm

Madeleine Marx

Advisor: Dr. Jeffrey Morgan

"Visualization and Quantification of Collagen Damage in a 3D Microtissue Model of the Human Extracellular Matrix."



1:30pm - 1:55pm

Hongyu Ma

Advisor: Dr. Jeffrey Bailey

"Single-cell RNA-seq characterization of Burkitts' Lymphoma cell lines."

Wednesday, April 24, 2024

Thomas Watson Center for Information Technology (CIT), Room 165

All are welcome to attend these presentations.

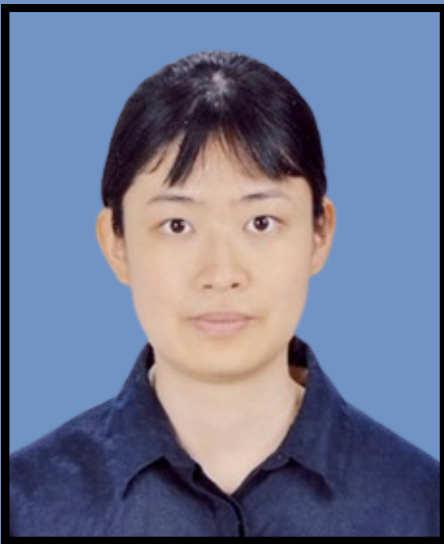


BROWN

Biotechnology Masters Program
Thesis Defense Presentation

Peiling He

Advisor: Dr. Richard Bennett



"Examining how changes to the WOR1 Locus or the WOR1 Protein impact the white-opaque switch in Candida albicans."

Thursday, April 25th, 2024

9:00 AM - 9:25 AM

**Sciences Library, Room 520
201 Thayer Street, Providence, R.I.**

All are welcome to attend this presentation.



BROWN

Biotechnology Masters Program
Thesis Defense Presentation

Jilliana Zarzycki

Advisor: Dr. Elizabeth Chen



*“Investigating
COVID-19
vaccine adherence
in high need
adolescent population
in Rhode Island.”*

Friday, April 26, 2024
1:00 PM

Via ZOOM

[https://us05web.zoom.us/j/89823374331?
pwd=8Lg23gq9olM9FpKVLJOoStXufMu72S.](https://us05web.zoom.us/j/89823374331?pwd=8Lg23gq9olM9FpKVLJOoStXufMu72S.)

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All are welcome to attend this presentation.



BROWN

Biotechnology Masters Program
Thesis Defense Presentation

Rudra Trivedi

Advisor: Dr. Edith Mathiowitz



*“Ultra-Long releasing
pre exposure prophylaxis
(PrEP) implants of
dolutegravir for
HIV prevention.”*

Monday, April 29, 2024
12 NOON

Biomedical Center
Room 305
85 Brown Street, Providence, R.I.

All are welcome to attend this presentation.

Therapeutic Sciences
Graduate Program



BROWN
Division of Biology and Medicine

PhD Thesis Defense Presentation

Rachel Carley, PharmD, RPh

Advisor: Dr. Alan Morrison



*“Rac1 and NF- κ B
Signaling Regulates
Macrophage IL-1 β
Expression to Influence
Atherosclerotic
Calcification and SARS-
CoV-2 Infection.”*

Thursday, April 25th, 2024
11:00 AM EST

Location: Biomedical Center, BMC-291

Via Zoom: <https://brown.zoom.us/j/93541102544>



Therapeutic Sciences Seminar Series

Presents

Alexandra Naba, PhD

Associate Professor, Department of Physiology and Biophysics,
University of Illinois, Chicago

Affiliate Member, Richard and Loan Hill Department of
Biomedical Engineering, University of Illinois, Chicago

Member, University of Illinois Cancer Center

Hosted by: Dr. Jeffrey Morgan



“The Matrisome Project:
From proteomic
exploration
of the extracellular
matrix to translational
applications.”

Friday, April 26, 2024

12:00 PM EST

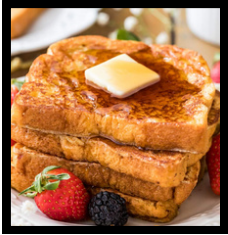
Marcuvitz Auditorium, Room 220

185 Meeting Street



Therapeutic Sciences Graduate Program

"TSGP Annual Retreat ~ May 3rd, 2024"



Welcome Breakfast & Faculty Talks

9:30am - 10:30am: Breakfast, Introductions and Program Highlights

10:40am - 11:40am: Faculty Talks



Box Lunches Outdoors

11:45am - 1:00pm: Lunch Outdoors with Yard Games and Time to explore the Audubon Nature Center Property



Keynote Speaker: Dr. Elizabeth Jonas

1:00pm - 2:00pm: Keynote Address given by Elizabeth Jonas, MD, Professor of Medicine & Professor of Neuroscience, Yale University

"Mitochondria in the synapse: Neurodevelopment and neurodegeneration."



Dr. Bene Carniero: Clinical Trial Rotations

2:00pm: Discussion of Clinical Trial Rotations by Benedito Carneiro, MD, Director of Clinical Research, Director of Cancer Drug Development, and Associate Director of Division of Hematology/Oncology, Lifespan

2:30pm - 3:30pm: Small Group "Breakout Sessions"



"Posters & Pints"

3:30pm - 4:30pm: TSGP Student Poster Session on the Patio (outdoors if weather permits) * Snacks and Beer & Seltzers will be served



Friday, May 3rd, 2024 9:00 AM - 5:00 PM EST

Audubon Nature Center and Aquarium

1401 Hope Street, Bristol, R.I. 02809



**Citywide ways to engage in
Earth Day
in April of 2024:**

<https://www.providenceri.gov/earthday/>

**If you have something you wish to highlight
in the newsletter, please email
ruth_mattson@brown.edu**