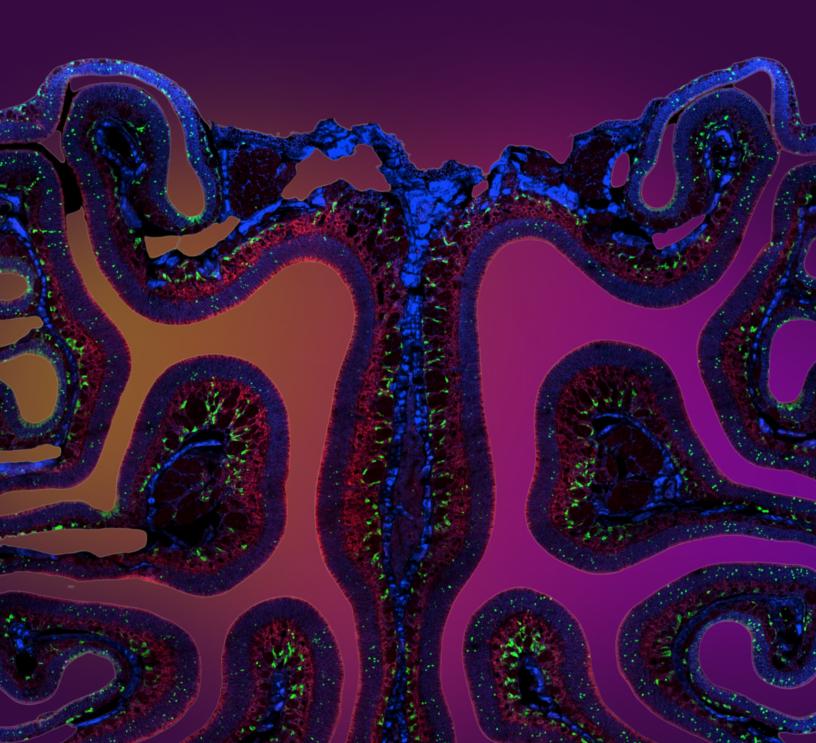


# The Marlin Lab 2022 in Review





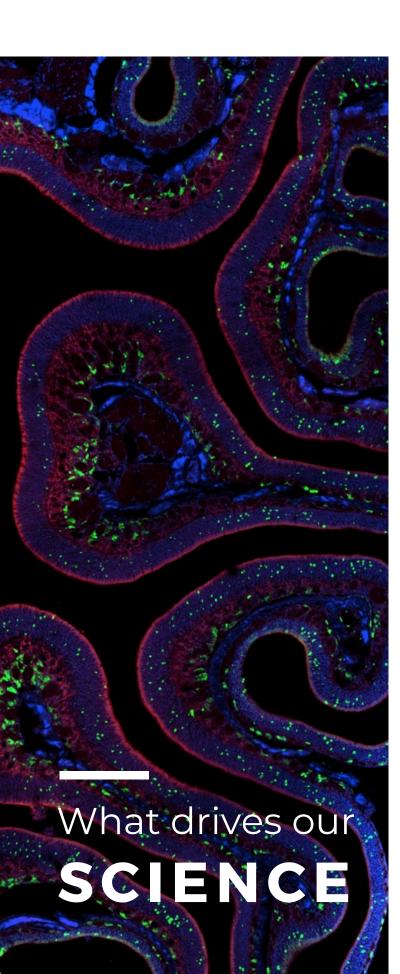


## TABLE OF CONTENTS

- Message from Bianca
- The Marlin Lab Team
- Sci Comm, Talks & Presentations
- Awards & Funding
- Community Engagement
- Media Coverage
- 08 Team Fun
- 09 Major Milestones
- Looking Forward to 2023
- Closing Message







## MESSAGE FROM BIANCA

The Marlin Lab examines the relationship between the innate and the learned. We explore how organisms unlock *innate* behavior at the appropriate times (e.g., parental instinct), and how *learned* information is transmitted to subsequent generations via transgenerational epigenetic inheritance.

It is a joy and a privilege to share the Marlin Lab's 2022 "Wrapped". We had a dynamic year, with lab members Alexis Kim translating her research to patient care, Yasmine Ayman starting her graduate career at Harvard, and Will Foster entering graduate school at Columbia. We also gained postdoctoral fellows, Dr. Thiago Arzua and Dr. Nour Mimouni!

The work that we do is motivated by the world that we live in. Our research program is fueled by the systemic inequity of resources, education, health, and safety in the United States and in our society. It is our mission and privilege to combat these influences and to lay the scientific groundwork for the future we are striving for.





BIANCA JONES MARLIN, PHD



CLARA LIFF Lab Manager



STEPHEN CADIEUX Lab Coordinator



THIAGO ARZUA, PHD Postdoctoral Scientist



NOUR MIMOUNI, PHD Postdoctoral Scientist



BEKA STECKY Graduate Student



VALENTINE ANDREU Graduate Student



BRIANA MCRAE Graduate Student



MIRI JONAS Undergraduate Student



TQ Eberhart EE Just Summer Intern Senior, Morehouse College



WILL FOSTER Research Technician PhD Student, Columbia University Neurobiology and Behavior

## 2022 LAB ALUMNI



YASMINE AYMAN Research Technician PhD Student, Harvard University Neuroscience



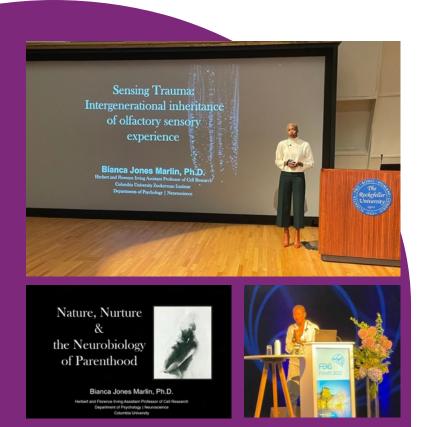
ALEXIS KIM Research Technician Patient Care Technician, Beth Israel Deaconess Medical Center



CHRISTINA JUSTE Undergraduate Student Graduated, Barnard College with Honors



# We love SHARING SCIENCE



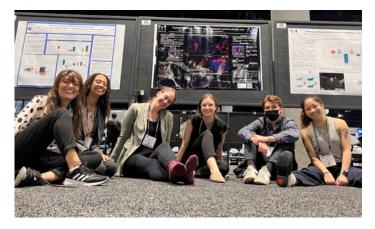


## **Departmental Talks**

- Parental Brain (PSYC GU4491) guest lectures
- Lab meetings

## 2022 Invited Talks

- Salk Institute Seminar Series
- Rockefeller University Lecture Series
- Borough of Manhattan Community College STEM Event Keynote
- Caltech Diverse Minds Seminar
- Optogenetics Gordon Research Conference
- FENS Forum
- Iowa Neuroscience Institute Seminar
- Parental Brain Meeting on the Neuroscience of Parenting
- University College London Department of Cell and Developmental Biology
- Columbia Journalism School Lecture
- Emotions Brain Forum
- Allen Institute Showcase
- IACUC Conference



**Society for Neuroscience** *First Marlin Lab in-person conference!* Poster presentations on "Marlin Row"



# Awards & Funding

BEKA STECKY



CHINWEIKE OKEGBE MEMORIAL AWARD (Columbia University Biological Sciences Dept)

### VALENTINE ANDREAU



BOEHRINGER INGELHEIM FONDS (BIF) PHD FELLOWSHIP

THIAGO ARZUA, PHD







# HYPOTHESIS

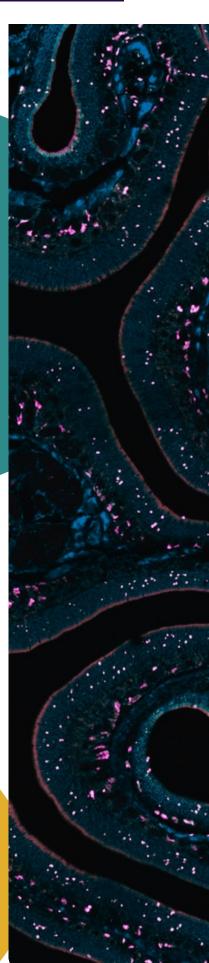
HITEHALL FOUNDATIO

## OFFICE OF THE PROVOST Junior Faculty Grants

RESEARCH INITIATIVES IN SCIENCE AND ENGINEERING (RISE)

VANDERBILT School *of* Medicine NEW INVESTIGATOR AWARD

COLUMBIA | ZUCKERMAN INSTITUTE Mortimer B. Zuckerman Mind Brain Behavior Institute









### **BLACK PEOPLE SPACE**



Marlin Lab core values

Women in Science at Columbia SColumbia University



Columbia Doctoral Program In Neurobiology and Behavior



Advancing Chicanos/Hispanics & Native Americans in Science



SOCIETY for NEUROSCIENCE

ZUCKERMAN INSTITUTE TRAINEE ADVISORY COMMITTEE





COLUMBIA 🎃 NEUROSCIENCE SOCIETY



Black Undergraduate Mentorship Program





SATURDAY SCIENCE





Best Friends Animal Society



## Media Coverage



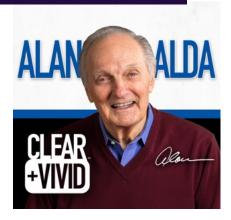
BLENDING IN STORIES ABOUT TRYING TO BELONG



Why Viral Death-Defying Videos Make You Wince (The Wall Street Journal, 2022)











Testosterone may promote 'cuddling', not just violence, animal study finds

### Thiago Arzua, PhD

Story Collider, The Biological Origins of Intergenerational

Trauma

Zuckerman Institute's Spotlight Forbes 30 Under 30 in Science Corpus Curiosum

### Bianca Jones Marlin, PhD

Allen Institute Announces 2022 Next Generation Leaders Medical News Today, Testosterone May Promote 'Cuddling', Not Just Violence, Animal Study Finds The Wall Street Journal, Here's How Viral Death-Defying Videos Make You Wince Clear + Vivid, Preparing Kids for Survival



### THE MARLIN LAB 2022

































# Major **Milestones**

2022 was a year of growth and maturation for our lab as we built our team and found our flow

- In lab we completed our first mouse fMRI scans, acquired our our first RNAseq datasets, first whole-brain cleared images, and first images on spinning disc microscope
- Thiago and Nour joined as our first two postdoctoral scientists
- We celebrated Valentine and Briana passing their qualifying exams and advancing to PhD candidacy
- We created the Marlin Lab logo and launched a new website



THIAGO ARZUA, PHD Postdoctoral Scientist



NOUR MIMOUNI, PHD Postdoctoral Scientist



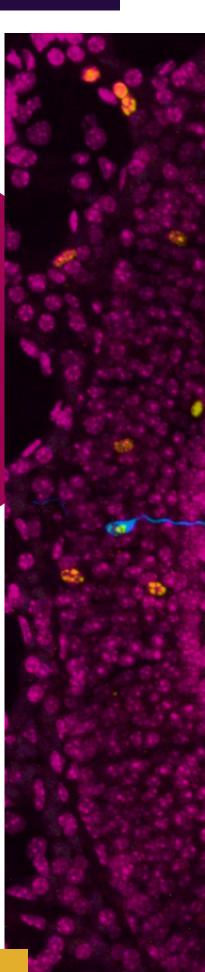
VALENTINE ANDREU Graduate Student



BRIANA MCRAE Graduate Student



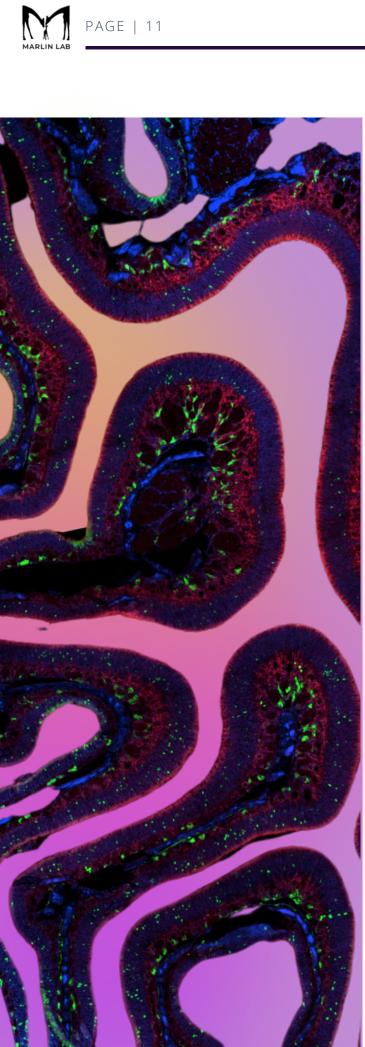








Lab 'level up'



## CLOSING Message

As another year comes to an end, I find myself reflecting on the progress of the Marlin Lab. 2022 marked the end of our second year, and I am proud to say that we have gained significant momentum in all areas of our research program.

The year included major accomplishments and milestones, which we are proud to share in this report. For example, being awarded both laboratory and individual funding, which will empower us to expand the scope and reach of our work. This support will be crucial in helping us to push the boundaries of what we thought was possible and establish new lines of inquiry.

We have also made progress in preparing several manuscripts for publication. These papers - the first from the Marlin Lab - will lay foundational elements for ongoing work and will make contributions to our understanding of the parental experience and how it impacts future generations.

Overall, this year has been an incredibly rewarding and productive one for our lab. I applaud the team for their hard work, passion for science, and ongoing dedication. I am excited to see what the future holds for the Marlin Lab - in 2023 and beyond!

Best, Bianca Jones Marlin, PhD