ISLAND LAB
Newsletter



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A Letter to Caregivers

We are excited to release our sixth edition of our annual newsletter. These past two years have been filled with exciting accomplishments from our team.

We would like to extend a special thank you to our families who make our research possible. Keep reading to learn more about new members of the team, updates on current projects, and recent publications from our studies.

We Moved!

We are very excited to share that ISLAND Lab has moved to **Columbia University**! Dr. Natalie Brito began as an Associate Professor at Columbia University the summer of 2025. At this time, our team will continue to conduct studies out of both NYU and Columbia. Congratulations Dr. Brito! We look forward to sharing more updates in the future with you!

Our Team



Natalie Brito, PhD
Principal Investigator



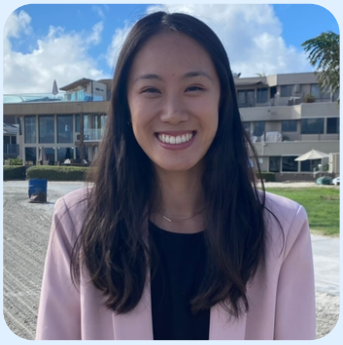
Yihui Gong, PhD
Postdoctoral Fellow



Lissete Giménez
Graduate Student



Gianina Peréz
Graduate Student



Maggie Zhang
Graduate Student



Alejandra Lemus
Research Associate



Chloe Rice
Lab Manager

Our Research Assistants



Paulina Chin-Wong



Massiel Velarde



Sabrina Du



Chiara Smith



Ashley Cuzco



Liani Cruz Reyes



Yadira Gonzalez

Our Commitments

At the ISLAND Lab, we are committed to fostering an inclusive, equitable, and supportive environment where people of all backgrounds and identities are valued and respected. As students and researchers, we recognize our responsibility to challenge bias and inequity, engage in ongoing self-reflection, and foster inclusive practices in our research, academic community, and everyday lives.

Spring 2026 Inclusivity Discussion

We read the paper **"Studying caregiver-infant co-regulation in dynamic, diverse cultural contexts: A call to action"** by Andrea C. Buhler-Wassman, & Leah C. Hibel who are researchers at the *University of California, Davis*.



Overall Takeaways

Three key takeaways from the paper and lab discussion



Daily Experiences

We discussed the different types of methodologies that would allow us to capture day-to-day changes in emotions, routines, support and stressors for families.



Family Context

Family culture and everyday experiences shape caregiving and family dynamics. We discussed why considering these contexts is important for understanding infant co-regulation and caregiver stress.



At-Home Studies

Conducting studies in the home may be more accessible for families to participate in research and provide valuable insight into how home dynamics may influence infant co-regulation.

What is co-regulation? Co-regulation describes the process of how caregivers and infants respond and adapt to each other's behavior and physiology (Butler & Randall, 2013).

Our New Lab Members



Yihui Gong, PhD

Yihui (Yvonne) Gong is a Postdoctoral Research Scientist who joined the lab in June 2026! She received her Ph.D. in Human Development and Family Science from The Ohio State University. Her research examines parent-child interactions through the lens of physiological, behavioral, and neural synchrony. She is especially interested in how parents' psychological and physiological characteristics may shape the ways they engage with their young children. She combines psychophysiology, hyperscanning neuroimaging, and direct observation to study these processes in both laboratory and daily life settings.



Chloe Rice

Chloe Rice joined the lab in September 2025 as new lab manager for the Brito Baby lab. She graduated from the University of Bath in 2025 with a BSc in Psychology, which including a research placement year at Yale University from 2023-2024. She is particularly interested in how early adverse and positive experiences, as well as caregiver-child interactions, influence memory and attention. Chloe is excited to continue explore these research interests whilst learning more about research methods the lab uses, such as EEGs and eye-tracking (with OWLET).

Celebrating Our Team



Amy Hume

After graduating from the University of Bath, Amy joined ISLAND as a Research Associate from 2022 - 2025. She is currently a PhD researcher at the Institute for the Science of Early Years and Youth (ISEY) at the University of East London. Her PhD explores how the complexity of screen media shape children's physiological responses and engagement during viewing across development. Using computational approaches, her work looks at both the rapidly changing sensory features of media as well as the predictability and information content of language and visual scenes. We are so proud of you Amy and excited for the next steps in your PhD journey.



Sasha Andrews

Sasha graduated from the University of Denver in 2022 with a double major in Psychology and Spanish. She joined ISLAND as a lab manager from 2023-2026. She is an incoming first-year Clinical Psychology Ph.D. student at Fairleigh Dickinson University. Her research interests include the biological basis of psychopathology and early interventions, with particular interests in eating and substance use disorders. She is also passionate about improving the implementation and accessibility of evidence-based treatments and integrated behavioral healthcare. Congratulations, Sasha! We are very proud of you!

Celebrating Milestones!



Congratulations to **Dr. Denise Werchan** on completing her 1st year as **Assistant Professor at UC Irvine!**



Congratulations to **Dr. Sarah Vogel** on completing her 1st year as **Assistant Professor at the University of Massachusetts Boston!**

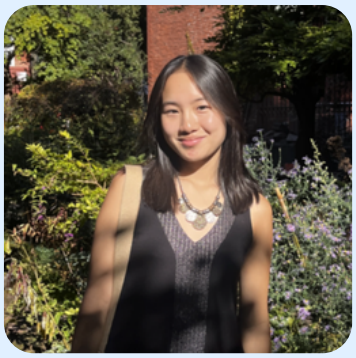
ISDP Bethany Reeb-Sutherland Mid-Career Award



We are very proud of **Dr. Natalie Brito** for receiving the **ISDP Bethany Reeb-Sutherland Mid-Career Award**! This award recognizes outstanding researchers and celebrates their contributions to the field of developmental psychobiology. Congratulations!

Our Graduating Research Assistants

Thank you so much to our research assistants for all of their hard work!



Sophia Ho

Congratulations Sophia on graduating from Columbia University this summer!

After graduation, Sophia will be joining the Chung Lab in the Department of Molecular and Cellular Biology at Harvard University as a full-time Research Assistant. We're excited to see her explore neural function and disease through the role of lipid dorplets in the brain.



Carolyn Zazueta

Congratulations Carolyn on graduating from NYU this summer!

Carolyn will be working for Brooklyn Nature Days as a Co-Teacher and will provide forest school classes for children in Prospect Park. She is looking forward to playing with the children and is excited to help the kids improve their fine motor skills, independence and emotional-regulation.



Angelina Grzybowski

Congratulations Angelina on graduating from NYU this summer!

After graduation, Angelina will be joining the Division of Gastroenterology and Hepatology at Weill Cornell Medicine as an Assistant Research Coordinator. We're excited to see her continue building on the research skills she developed in the Lab while supporting important work focused on maternal and liver health.

SNAPSHOTS OF OUR YEAR

ISLA
Infant Studi
Neurocogniti









2025 – 2026

T	W	T	F	S	S
	2 Conference	3	4	5	
8	9	10	11		
15	16	17	18 Celebration		
21	22	23	24	25	26
28	29	30	31 Pottery		













Publication Highlights

Dyadic physiological synchrony and maternal anxiety regulate infant autonomic and neural function (2026) *Annie Aitken, Maggie Zhang, Stephen Braren, Amy Hume, & Natalie H. Brito*

This study examined how mothers' anxiety and mother–baby physiological synchrony relate to babies' early stress regulation and brain activity. These relationships changed as babies grew: synchrony was more important at 3 months, while maternal anxiety was more strongly related to babies' outcomes by 9 months. Ultimately, these findings highlight how timing and context of physiological synchrony may shape infant regulation and brain development.

*Physiological synchrony = how caregivers and baby's bodies naturally coordinate together (e.g., heart rate)

Exploring the impact of unpredictability of household resources on infant attention (2026) *Lissete A. Giménez, Denise M. Werchan, Chloe J. Rice, Massiel Velarde Perez, Natalie H. Brito*

This study explored how changes in families' resources may relate to babies' attention. Babies in homes with more unpredictable resources looked back and forth more often during an attention task, suggesting that early experiences may shape how babies take in and respond to their surroundings.

**Resource unpredictability definition: Flucutations in access to resources (e.g., food, housing, paying bills)*

Stress and resilience factors characterizing pandemic experiences of low-income pregnant and postpartum Latine mothers (2025) *Alejandra Lemus, Gianina Perez, Samantha A. Melvin, Maya Metser, Moriah E. Thomason, Natalie H. Brito*

This paper explored how pregnant and new Latina mothers experienced and coped with stress during the pandemic. Mothers shared how their mental health, social support, unequal access to resources and immigration-related concerns contributed to their stress, while spirituality, family time, and mental health support helped them cope during this unpredictable time.

Unpredictable caregiving is associated with disrupted neurophysiological measures of attention and autonomic function in three-month-old infants (2026) *Denise M. Werchan, Annie Aitken, Lissete A. Giménez, Stephen Braren, Natalie H. Brito*

This study looked at how predictable caregiver interactions may support babies' early attention and ability to regulate stress. As early as 3 months, babies who experienced less predictable patterns of caregiver speech, touch, and visual cues showed differences in brain and heart activity, highlighting the importance of examining predictability in early caregiver interactions for infant development.

ORCA Online Remote Child Assessment project

The aim of the Online Remote Child Assessment (ORCA) study is to **make participation in research studies more accessible** in order to better understand how diverse early experiences impact child development.

Families are mailed study materials that include **non-invasive heart rate devices** that caregivers and their infants wear during the visit while **watching videos** and **playing together**. Our study follows families across the first year of life.



Thank you to all of the families that have participated thus far. This research would not have been possible without you!

300+ Families

4 Month Visit

8 Month Visit

250+ Families

230+ Families

12 Month Visit

PEACH STUDY

Postpartum Ecological Assessment of Cognitive Health



Dr. Annie Aitken

Study Overview:

The study seeks to better understand mothers' mental health during the early postnatal period. This fully remote study uses low-burden methods to explore mothers' real-world experiences while caring for their new infants.

Thank you to the 85+ families who participated in the study!



Participants received a Fitbit to track daily sleep, activity and heart rate levels.



Participants answer brief surveys (took about a minute) three times a week.



Maternal Mental Health & Infant Emotion Regulation

Pérez, G., Aitken, A., Zhang, M., Thomason, M. E., & Brito, N. H. (2025). Exploring associations between maternal mental health and infant regulatory behaviors at 6 months in the home environment: Zooming in on maternal anxiety. Infant Behavior and Development, 81, 102151.

1 Rationale & Key Terms

Maternal Mental Health



1 in 5 women experience postpartum depression or anxiety

Infant Emotion Regulation

How babies respond to and cope with stress or frustration



Caregivers help infants regulate their emotions

2 Study Question

How does maternal mental health influence infant emotion regulation?
This study looks at maternal anxiety and depression separately

Maternal mental health may influence:

- Responses to the infant
- Consistency of soothing and support

3 Measures

Maternal Mental Health:

Edinburgh Postnatal Depression Scale (EPDS)
Moms completed a short maternal mental health questionnaire

Infant Emotion Regulation:

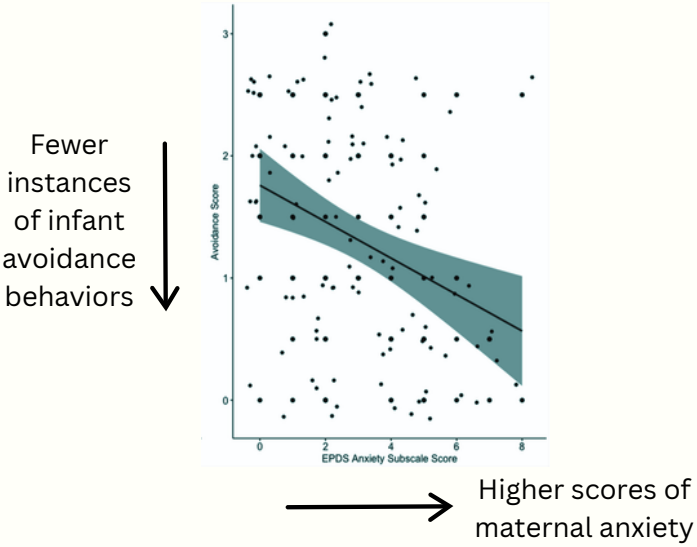
Arm Restraint Task
The purpose of this task was to see how babies respond to situations where their movement is restricted (similar to everyday moments, like being placed in a car seat).



Scan for online resources from Postpartum Support International (PSI)

4 Results

Finding #1: Mothers with higher anxiety had babies who showed **fewer avoidance behaviors** during the arm restraint task, indicating **better regulation skills.**



Finding #2: Maternal depression was **not linked** to babies' emotional responses in this study.

Overall takeaway:
Differences in maternal anxiety and depression may contribute to infant emotion regulation in distinct ways

ISLAND LAB
Infant Studies of Language & Neurocognitive Development

HELP US UNDERSTAND HOW CHILDREN LEARN

We have upcoming studies for NYC families with **babies 0-12 months old** or **children 6-12 years old**. If you are interested in, please **email us** at **BritoLab@Columbia.edu**!



www.britobabylab.com

BritoLab@Columbia.edu