



# The Women's Health Study

## *From Adolescence to Adulthood*

### 2023 NEWSLETTER



### Celebrating 10 Years of Research and Community



**Boston Children's Hospital**

Where the world comes for answers



**Brigham and Women's Hospital**  
Founding Member, Mass General Brigham



*Boston Center for Endometriosis*



# Letter from the Directors

Dear all,

**It's time to celebrate - *The Women's Health Study: From Adolescence to Adulthood (A2A)* is 10 years old!** Whether you've been participating since November 2012 or enrolled more recently, thank you. We want to take this opportunity to emphasize the progress we've made over the past decade, including highlighting some of our publications, telling you about our grant funding, and helping you get to know our team members, past and present. We are excited to share updates on our future plans, including new studies.

This newsletter is also your reminder that we will soon be emailing you a link to your annual health questionnaire. Please do not hesitate to contact the study team via secure email or phone with any questions or concerns. We are always here to help and answer any study-related questions. You can also stay in touch throughout the year by checking our [website](#) and [Facebook](#) page.

Without each and every one of your dedicated contributions toward research on women's health, we would not have reached Year 10 and achieved so much. Our women's health community would not be what it is without you all. We are very proud of all our accomplishments to date and are excited to continue working with you for women's well-being!



Marc Laufer, MD



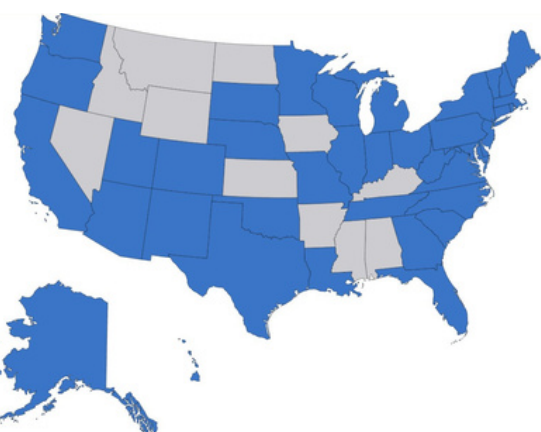
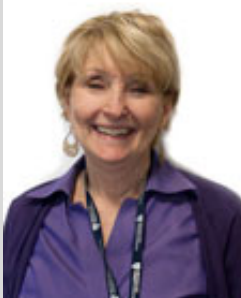
Stacey Missmer, ScD



**A2A participants have contributed more than 80,000 samples - enough to put one in every seat at Gillette Stadium, and then some!**

## A Note from our Longest Standing Team Members

While the A2A team has seen many faces over the years (see page 4), a few of us have been present for the entire journey. We (Cameron Fraer, Mary DePari, Jenny Sadler Gallagher, Allison Vitonis) helped to build the study from scratch in early 2012. We worked with investigators to design the first study questionnaire and develop protocols for collecting, shipping, and processing specimen kits. We also worked with the Hospitals' Institutional Review Boards on human subjects' protections and created a laboratory data management system to track all the donated biological samples. The first year was busy, challenging, and rewarding as we all worked together to build the logistics of the A2A study from the ground up. Since 2012, each year has brought new challenges, from changing our questionnaires to align with new internationally adopted surveys, to relocating our laboratory and moving thousands of samples. We feel lucky to be involved in a truly one-of-a-kind research project and know that our efforts are contributing to a better understanding of women's health.



**We have A2A participants in 42 states and 15 countries!**

# A Look Back at 10 Years of

## The Women's Health Study: From Adolescence to Adulthood

2012

- Funding from the J Willard and Alice S Marriott Foundation
  - Establishes the Boston Center for Endometriosis
  - Launches the A2A (Women's Health Study: from Adolescence to Adulthood). Funding was renewed in 2015, 2018 & 2021
- First A2A participant enrolled
- A2A biorepository established and begins storing first samples



2013

- 100th A2A participant enrolled
- First participants enrolled in the "Measuring Endometriosis Progression" sub-study funded by the Marriott Daughters' Foundation

2016

- 1,000th A2A participant enrolled



2017

- A2A's 5 year Anniversary
- A2A researchers present at the World Congress on Endometriosis, Vancouver

2018

- 1,500th A2A participant enrolled
- A2A enrollment closes
- Investigators receive first grant funding from National Institutes of Health. WisE (What is Endometriosis?) sub-study launches.
- Investigators receive first international collaboration funding from the European Union, for the TRiPP (Translational Research in Pelvic Pain) substudy



2019

- Investigators receive multiple grants from an inaugural Congressionally Directed Medical Research Program to study
  - protein biomarkers and endometriosis
  - chronic pain development in endometriosis
  - ovarian cancer risk
- NOTE (Novel Treatments for Endometriosis) clinical trial launches with funding from this inaugural federal program



2020

- A2A biorepository expands into new freezer space
- A2A survives and thrives during pandemic changes with tireless teamwork



2021

- Investigators awarded federal funding
  - endometriosis and COVID-19 study
  - expanding the WisE substudy

2022

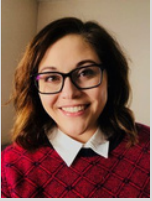
- NOTE clinical trial expanded to multiple sites in Northeast through Marriott Foundation expansion funding
- A2A's 10 year Anniversary





# Previous Team Members' Accomplishments

As we look back on the past 10 years of research, we want to take a moment to thank all of our previous team members for their individual contributions to the study, and to highlight the success they've found after moving on from the A2A Research Team.



**Sarah Karevicius** (Research Assistant from 2013-2016) left the team to attend the MGH Institute of Health Professions. She is now working as a Pediatric Nurse Practitioner.



**Emily Andreeva** (2013-2014) attended Emory School of Medicine. She is now finishing a Residency in Emergency Medicine at Boston Medical Center.



**Tegan Gomez** (2013-2015) attended medical school at the University of Illinois, Chicago and is now pursuing her Residency in Radiology at UColorado.



**Christina Nichols** (2014-2016) completed a Master's in Public Health in Epidemiology from the University of North Carolina. After working as a high school math teacher, decided to stay home with her young daughter, and is working as a math tutor.



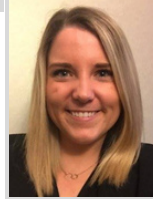
**Sarah Miller** (2015-2018) received her Master's as a Nurse Practitioner in Women's Health at Boston College. She now works at Planned Parenthood in Salt Lake City, Utah.



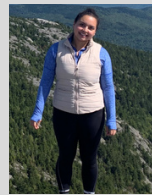
**Kelsey Mehegan** (2015-2017) received her master's degree in Nursing as a Family Nurse Practitioner from Boston College. She is now a Nurse Practitioner in the electrophysiology division at Beth Israel Medical Deaconess Center and is also mom to a one-year-old girl.



**Jerri Miller** (2015-2018) left the team to attend Bryant University to train as a Physician Assistant. She then completed a fellowship in Pediatric Emergency Medicine at Columbia University Irving Medical Center. She now works in the Pediatric Critical Care Unit.



**Sheila Egan** (2016-2018) left to pursue a Master's of Science in Reproductive Science and Medicine program from Northwestern. After working at fertility-startup NuBundle, she then moved on to Strata Decision Technology.



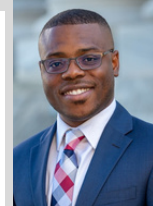
**Irma Vlasac** (2017-2019) graduated from the Guarini School of Graduate and Advanced Studies at Dartmouth College, and is on a PhD track, focused on epigenetics and cancer biology.



**Roshni Dave** (2017-2018) trained as a Physician Assistant at South University in Georgia and is now a Hospitalist Physician Assistant in Portland, ME.



**Madeline Schneider** (2017-2019) is a student at the Geisel School of Medicine at Dartmouth. She is applying for Residency in Psychiatry.



**Ayo Fadayomi** (2017-2019; Statistical Programmer) is in his final year of Residency in Anesthesiology at the University of Massachusetts Medical School.



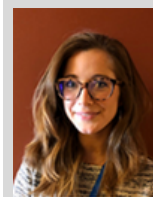
**Laura Pavitt** (2019) is pursuing a Doctor of Occupational Therapy at the University of Texas Health Science Center in San Antonio.



**Andrea Klein** (2019-2020) is attending an accelerated bachelor's program in Nursing at MGH Institute of Health Professions.



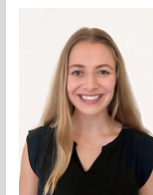
**Annie Kapral** (2019-2021) is a student at the University of Pennsylvania School of Nursing. She is also working as an RA for HIV Prevention Research and other vaccine research trials at Penn Medicine.



**McKenzie Goodwin** (2019 – 2021) is pursuing a Master's in Public Health at Boston University. She is also working as a Program Coordinator at Pathfinder International.



**Britani Wallace** (2019-2021; Statistical Programmer) is working as a Data Scientist at Bamboo Health.



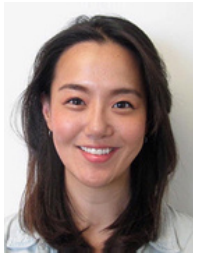
**Emma Singleton** (2020-2022) is now attending medical school at the University of Utah.

## Current Research Staff



### Emma Draisin, BS

Emma graduated from Tufts University with a BS in Biopsychology. In her time at Tufts, Emma was an undergraduate researcher in the Neurocognition of Language lab, and worked as a Biology Teaching Assistant. She joined the BCE team in 2022.



### Esther Kim, BS

Esther earned her BS degree from Syracuse University. She started her career in television media, with a focus on healthcare and biotech industries. She then decided to pursue a passion for medicine. She joined our Research Assistant team in 2021.



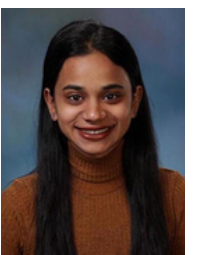
### Ashley Laliberte, MPH

Ashley graduated from the University of Connecticut in 2020 with a B.S. in Biological Sciences and went on to earn her Master of Public Health at Boston University in 2022. Ashley joined our Data Team in 2022 and is responsible for statistical programming and data management.



### Shruthi Sudhakar, BA

Shruthi graduated from Boston University in 2020 with a BA in French Studies. She has certificates in Medical Interpreting and Biotechnology Management. She previously worked on the All of Us Research Program Team at Massachusetts General Hospital before joining the A2A team.



### Sukanya Shukla, BA

Sukanya graduated from Bates College in 2020 with a BA in Psychology and Theater. Her previous academic and volunteer experiences before A2A led to an interest in women's sexual and reproductive health. She joined the A2A team in 2020.



### Amanda Moreas, Gordon College

Amanda is a senior at Gordon College and is interning with the A2A study. She'll be learning about our longitudinal cohort study and helping with data entry, participant outreach, and a couple fun projects.

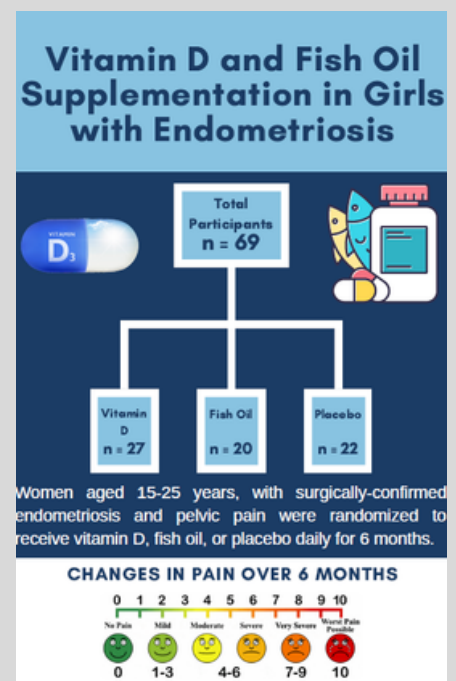
Over the years, BCE has also hosted students from Boston high schools through the Brigham and Women's Student Success Jobs Program. Students have helped with data entry, lab work, and have been an integral part of our team for many years. We are very grateful for their support!



## Check Your Mailbox!

Although most of your study participation is online, every year we like to send participants a New Years card and a small gift through the mail. Please make sure you use the Contact Information Update Form or call or email us with any changes to your mailing address.

## Visual Abstracts



Throughout the year, we release new visual abstracts on our website. These are short infographics our research team creates to help you learn more about the exciting research we're publishing in scientific journals. In each visual abstract, we highlight the key findings of each study, and how the research is relevant to patients and providers. Find them all on our [website](#), and check the next page for a list of some of our key publications from the past 10 years.



# BCE Studies Now Recruiting

## Diverse Narratives of Endometriosis Diagnosis

Dr. Amy Shafrir is leading the “Diverse Narratives of Endometriosis Diagnosis” study. Participants in WHS:A2A may be eligible to participate in this study looking at facilitators and barriers to being diagnosed with endometriosis. Researchers will conduct in-depth interviews with Latina, non-Latina Black, non-Latina Multiracial, and non-Latina White adults with surgically-diagnosed endometriosis. More information is available on our research [website](#).



## The NOTE Study is Expanding!

The expansion of the “Novel Treatments for Endometriosis (NOTE)” clinical trial is launching! This clinical trial, led by Co-Scientific Director Dr. Amy DiVasta, is expanding to three new sites: Columbia University, Thomas Jefferson University, and Beth Israel Deaconess Medical Center. This expansion is generously funded by the J. Willard and Alice S. Marriott Foundation. This multi-site clinical trial will recruit eligible participants, 15-40 years old with endometriosis-associated pain, at each new site. We will also continue to enroll participants from Boston Children’s Hospital and Brigham and Women’s Hospital. More information on the NOTE-2 study at Boston Children’s Hospital and the NOTE Trial Expansion is available on our [website](#), or scan the QR code.



## Key Publications

**Prevalence of migraines in adolescents with endometriosis. Miller JA, Missmer SA, Vitonis AF, Sarda V, Laufer MR, DiVasta AD. Fertil Steril. 2018 Apr;109(4):685-690. doi: 10.1016/j.fertnstert.2017.12.016. Epub 2018 Mar 28. PMID: 29605402**

Adolescents with endometriosis were more likely to experience migraines, and there was a suggestion that participants with endometriosis may have higher pain sensitivity to migraines compared to those without endometriosis. This reinforces the need to better understand endometriosis and multiple aspects of pain.

**Co-occurrence of immune-mediated conditions and endometriosis among adolescents and adult women. Shafrir AL, Palmor MC, Fourquet J, DiVasta AD, Farland LV, Vitonis AF, Harris HR, Laufer MR, Cramer DW, Terry KL, Missmer SA. Am J Reprod Immunol. 2021 Jul;86(1):e13404. doi: 10.1111/aji.13404. Epub 2021 Feb 25.**

In this study of endometriosis and immune conditions, A2A participants with endometriosis were more likely to be diagnosed with autoimmune and/or inflammatory diseases, allergies, asthma, chronic fatigue and/or fibromyalgia. These findings help us to understand the impact of endometriosis on whole health and also highlight the importance for clinicians who care for people with these conditions to also consider the possibility of endometriosis.

**Trends in pelvic pain symptoms over two years of follow-up among adolescents and young adults with and without endometriosis. Sasamoto N, Shafrir AL, Wallace BM, Vitonis AF, Fraer CJ, Gallagher JS, DePari M, Ghiasi M, Laufer MR, Sieberg CB, DiVasta AD, Schrepf A, As-Sanie S, Terry KL, Missmer SA. Pain. 2022 Aug 9. doi: 10.1097/j.pain.0000000000002747. Online ahead of print.**

We provided the first evidence of change in pelvic pain symptoms, with A2A participants’ reports from their first two years of follow-up in the study. For participants without endometriosis, severity and frequency of period pain and general pelvic pain did not change a lot from enrollment to Year 2. For participants with endometriosis, period pain severity stayed fairly consistent, but general pelvic pain improved. We are now studying what predicts improvement in pain during follow-up.

**Circulating proteomic profiles associated with endometriosis in adolescents and young adults. Sasamoto N, Ngo L, Vitonis AF, Dillon ST, Missmer SA, Libermann TA, Terry KL. Hum Reprod. 2022 Aug 25;37(9):2042-2053. doi: 10.1093/humrep/deac146.**

We investigated the levels of multiple proteins within the blood of A2A participants with and without endometriosis. Participants with endometriosis had higher levels of proteins related to making new blood vessels and the movement of cells. This increases our understanding of how endometriosis develops and progresses.

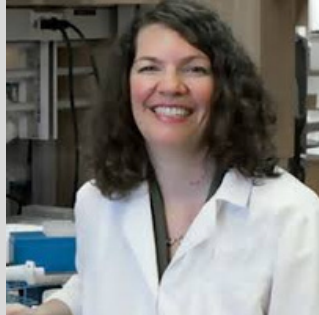
# Get to Know The Researchers

- 1) What's your go-to coffee order?
- 2) What's your favorite medical movie?
- 3) If you could put any print on your scrub cap, what would it be?
- 4) What's your dream vacation destination?
- 5) If you weren't an MD/ research scientist, what would you be?
- 6) Are you a dog person or a cat person?
- 7) What is your go-to mid-day snack?



**Marc Laufer, MD**

- 1) Cappuccino
- 2) *Awakenings*
- 3) Puppy Dogs
- 4) Turks & Caicos
- 5) Wood working
- 6) DOG!!!
- 7) Honey Crisp Apple



**Stacey Missmer, ScD**

- 1) Grande 2 pump no whip caffe mocha
- 2) *Outbreak*
- 3) DR. WHO
- 4) Florence, Italy
- 5) Copy editor
- 6) We've had both
- 7) Scrambled eggs



**Amy DiVasta, MD, MMSc**

- 1) Skinny Vanilla Latte
- 2) *The Fugitive*
- 3) Paisley
- 4) Belize
- 5) Librarian
- 6) Cat
- 7) Chocolate



**Kathryn Terry, ScD**

- 1) Tall flat white with oat milk
- 2) *Living Proof*
- 3) Sunflowers
- 4) Hawaii
- 5) Running coach or Travel Writer
- 6) Dog
- 7) Popcorn



**Ray Anchan, MD**

- 1) Grande nonfat Latte
- 2) *Lorenzo's Oil*
- 3) A rock band or boats
- 4) Vieques, Puerto Rico
- 5) Forest ranger
- 6) DOG!!!
- 7) Oatmeal raisin cookie or cashew nuts



**Michael Rogers, PhD**

- 1) Hot Chocolate
- 2) *At First Sight*
- 3) "Insert Knowledge Here"
- 4) Vienna
- 5) Pilot
- 6) Dog
- 7) Apple



**Naoko Sasamoto, MD, PhD**

- 1) Matcha Tea Latte
- 2) *Patch Adams*
- 3) Smiley faces
- 4) Maldives Island
- 5) Animator
- 6) Cat
- 7) Goldfish crackers



**Amy Shafrir, ScD**

- 1) Chai Tea
- 2) *Patch Adams*
- 3) Daisies
- 4) Hawaii
- 5) Veterinarian
- 6) Cat
- 7) Grapes, Crackers and Cheese

## We Love Hearing From You

Boston Children's Hospital:  
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Brigham and Women's Hospital:  
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