

BRET Office of Career Development  
**ASPIRE Annual Report**  
2024-2025





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## About Us

The Biomedical Research Education and Training (BRET) Office of Career Development ASPIRE Program provides career and professional development enrichment activities for Vanderbilt University School of Medicine graduate students and postdoctoral fellows. The office was recognized in 2013 for its commitment to career development for biomedical sciences PhD students and postdocs through a BEST award, a \$1.2 million, 5-year grant from the NIH Common Fund. The ASPIRE Program subsequently was awarded four Burroughs Wellcome grants for a business module, a data science module, a life design module, and a project management module.

Dr. Kim Petrie is Assistant Dean of Biomedical Career Development, Dr. Ashley Brady is Assistant Dean of Biomedical Career Engagement and Strategic Partnerships, Kate Stuart is Associate Director, and Angela Zito is Assistant Director. Mary Gray Lindstrom lends event and logistical support as Program Manager. Jan Varadarajan, PhD, is Assistant Director of Postdoc Support.



**Kim Petrie, PhD**  
Assistant Dean for Biomedical  
Career Development  
Associate Professor of Medical  
Education and Administration



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**Kate Stuart**  
Associate Director



**Angela Zito, M.Ed.**  
Assistant Director



**Mary Gray Lindstrom**  
Program Manager



**Janani Varadarajan, PhD**  
Assistant Director, Postdoc Support

## Trainees We Serve

*The ASPIRE Program serves PhD students and postdoctoral fellows in the biomedical and life sciences. ASPIRE activities and individual advising are tailored for BRET-affiliated PhD graduate students and postdocs, and our events are open to the Vanderbilt community.*

**738**  
Graduate  
Students

**405**  
Postdoctoral  
Fellows  
49% US Citizens/  
Permanent Residents

**1143**  
Total

### PhD Programs served

Biochemistry  
Biological Sciences  
Biomedical Informatics  
Biostatistics  
Cancer Biology  
Cell & Developmental Biology  
Chemical & Physical Biology  
Epidemiology  
Health Policy & Health Services Research  
Hearing & Speech Sciences  
Human Genetics  
Interdisciplinary Graduate Program  
Microbe-Host Interactions  
Molecular Pathology & Immunology  
Molecular Physiology & Biophysics  
Neuroscience  
Pharmacology  
Quantitative & Chemical Biology Program

### Postdoctoral Departments served

Allergy/Pulmonary  
Anesthesiology  
Biochemistry  
Biomedical Informatics  
Biostatistics  
Cardiac Surgery  
Cardiology/Cardiovascular  
Cell & Developmental Biology  
Clinical Pharmacology  
Diabetes/Endocrinology  
Emergency Medicine  
Epidemiology  
Gastroenterology  
Genetic Medicine  
Health Policy  
Hearing & Speech Sciences  
Hematology/Oncology  
Infectious Disease  
Medicine  
Molecular Physiology & Biophysics  
Nephrology  
Neurological Surgery  
Neurology  
Obstetrics & Gynecology  
Ophthalmology & Visual Sciences  
Orthopaedic Surgery  
Otolaryngology - Head and Neck Surgery  
Pathology, Microbiology and Immunology  
Pediatrics  
Pharmacology  
Plastic Surgery  
Psychiatry and Behavioral Sciences  
Rheumatology  
Surgery  
Urology  
Vanderbilt Kennedy Center  
Vanderbilt University Institute of Imaging Science



# Career Exploration and Decision-Making

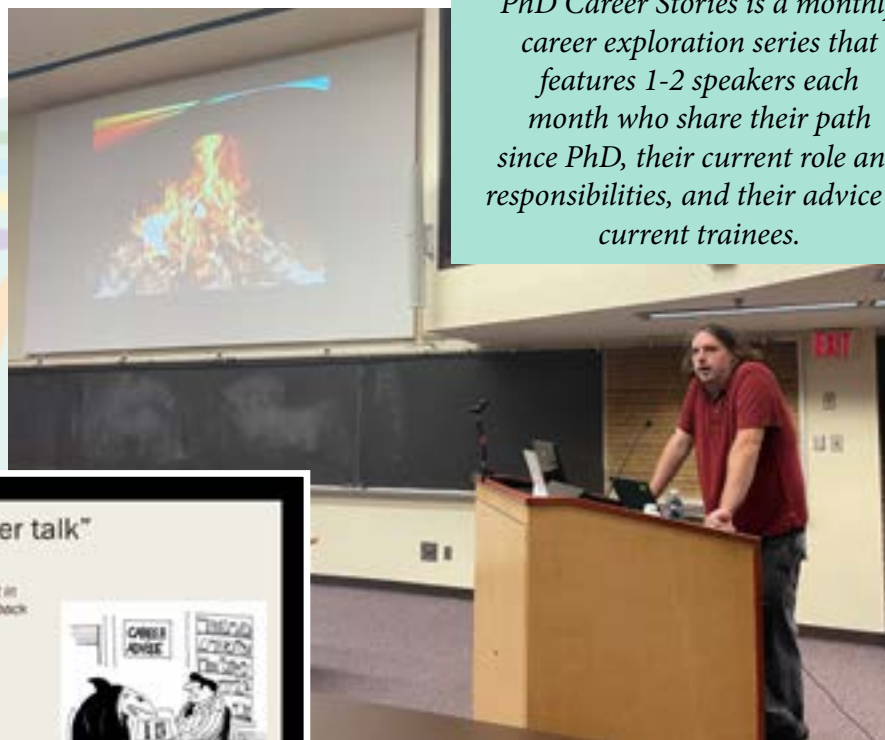
*PhD student Darian Carroll takes notes during the 2025 ASPIRE annual career symposium. (Photo by Peter Newsom.)*

*Providing opportunities to explore careers is paramount to the ASPIRE program. Many of the foundational activities of the office are aimed at instilling confidence and facilitating career decision-making.*



# PhD Career Stories: 2024-2025

PhD Career Stories is a monthly career exploration series that features 1-2 speakers each month who share their path since PhD, their current role and responsibilities, and their advice to current trainees.



Above, alumnus Dave Westover, PhD, Senior Scientist, Merck, shares about his career path at Merck. Left, Efrain Garcia, PhD, Health Scientist/Project Officer, Biomedical Advanced Research and Development Authority, HHS, discusses his time from Vanderbilt to BARDA and his role in government administration. Below, PhD Career Stories speakers meet in a small-group setting with students and postdocs after the session.



Above, alumnae Rachel Fischer, PhD, Scientific Program Manager at the Foundation for NIH, and Roslin Thoppil, PhD, Senior Scientific Program Manager at AACR, share their roles in nonprofit administration. Right, Dr. Thoppil explains the daily tasks in her role.



Above, Lori Rudolph-Owen, PhD, and JJ Owen, PhD, Partner, IntelliSight Partners, talk with trainees during a post-seminar discussion. Below, Casey Butrico, PhD, and Todd Townsend, PhD, share advice for pursuing medical science liaison jobs.



Top and below, Diana Mitrea, PhD, explains her role as an Associate Director, Dewpoint Therapeutics. Above left, Lori Rudolph-Owen, PhD, Chief Development Officer, 4:59 NewCo, a 5am Ventures Company, talks about the biotech industry. Above, Casey Butrico, PhD, and Todd Townsend, PhD, discuss their roles as medical science liaisons.





# Basic science alumni give a glimpse inside the world of medical science liaisons during BRET's career series

By Alex Scammell

The Office of Biomedical Research Education and Training hosted a PhD Career Stories presentation focused on medical affairs and the role of medical science liaisons. The November 8th event, moderated by postdoctoral research fellow Leah Mann, featured Vanderbilt University alums Casey (Butrico) Hatfield and Todd Townsend. They provided insights into their career paths, responsibilities, and experiences as medical science liaisons working to provide and connect scientific and medical knowledge with stakeholders such as healthcare providers.

Hatfield is currently a scientific affairs manager at Kuros Biosciences, a biopharmaceutical company that commercializes and develops technologies for tissue repair and bone regeneration. She earned her PhD in microbe-host interactions in 2023.

As a recent grad, she garnered a laugh from the audience, "Imposter syndrome is real!" Despite that, she already has a plethora of experience under her belt—she has worked at the pharmaceutical company Janssen and biotech giant Pfizer. Hatfield emphasized the importance of effective communication in bridging the gap between healthcare providers and the pharmaceutical industry—something she has learned quickly in her roles. She highlighted her responsibility in building relationships with key opinion leaders and educating physicians in orthopedic and neurosurgical specialties.

Townsend serves as the regional medical scientific director for cardio-metabolic diseases at Merck, where he has worked since 2017. He received his PhD in pharmacology in 2008 under the tutelage of Joey Barnett. Before joining Merck, Townsend was a staff fellow and principal investigator at the



U.S. Food and Drug Administration's National Center for Toxicological Research, where he was honored with the 2016 Individual Award for Outstanding Service. He discussed his transition from regulatory roles to medical affairs, underscoring the value of adaptability and continuous learning in career development.

To attendees, he said, "You can link your scientific experience to so many positions," adding that soon-to-be graduates should "cast a broad net" when looking for jobs as medical science liaisons or similar roles.

Not only did Hatfield and Townsend provide attendees with a comprehensive understanding of the medical science liaison profession, including the challenges and rewards of careers in medical affairs, but they also discussed the pros and cons of working for larger or smaller companies, when to apply for jobs, measuring success in their roles, and more. Participants engaged in a dynamic Q&A session, exploring topics such as salary and benefits, the skills that have served them, work-life balance, and more.

The pair had great advice for attendees. Hatfield recommends that students nearing graduation and looking for a job should "think about what [they] are doing on a day-to-day basis, and reflect on what aspects [they] enjoy doing." Townsend also added that his job search including looking for "what I didn't enjoy," explaining that that knowledge can be just as useful as identifying interests.

In the end, one of the biggest pieces of advice that Hatfield had was, "Be around people who challenge you and teach you." Townsend added his own parting wisdom. "Enjoy what you are doing and immerse yourself," he said. "If you are happy in life, it shows."



Casey Butrico Hatfield, PhD, and Todd Townsend, PhD, discuss their roles as medical science liaisons while serving on a panel for the PhD Career Stories seminar.

## CV/Resume Drop-In Clinic

**78**  
Drop-Ins

The ASPIRE Program hosts a weekly CV/Resume Drop-In Clinic for VU and VUMC biomedical sciences PhD students and postdoctoral fellows. The members of the ASPIRE team will review CVs, NIH biosketches, resumes, LinkedIn profiles, or other professional documents used in a job search. No appointment is needed.

*In April 2025, CV/Resume Drop-in Clinic expanded its reach by providing a satellite location at 2525 West End Avenue where many BRET trainees work. Offered on the third Thursday of each month, the goal is to reach those across campus who may not be able to easily attend the regular weekly clinic in Light Hall.*

## Individual Advising

The ASPIRE Team meets with graduate students and postdoctoral fellows by appointment. Topics include any aspect of the professional development or job search journey:

- preparing and applying for academic positions and post-docs
- writing fellowship applications
- graduate school survival skills
- salary negotiation
- presentation skills and interview tips
- writing CVs, resumes, and cover letters
- opportunities for scientists outside the academe

**269**  
Individual  
Appointments

168 PhD Students  
70 Postdocs  
31 Alumni or Other



## Beyond the Lab Podcast Alumni Interview Series

With ever-increasing career options for our PhD students and postdocs, many struggle to understand the wide variety of career paths available to them in academia, government, non-profit, or industry. Hearing from alumni and learning what they have done helps current trainees identify which types of roles would be a good fit and where to begin in their own career search.

The Beyond the Lab podcast is aimed to help trainees better understand career options at a pace that they can choose. Beyond the Lab was first launched in 2013 as a YouTube video series and then transitioned to a successful podcast in 2017 to make the series even more widely available. The series has nearly 120 episodes in which biomedical scientist alumni are interviewed about their professional journey and career. Interviewees talk about their time in training, the transition to their next role, and the actual details of their workday. Episodes foster insight into skill building, networking, job search strategies, and reflection about how time in their PhD or postdoctoral training prepares them for their careers.

**119**  
Episodes  
**29**  
Career Fields  
Represented  
**>25,000**  
All Time  
Downloads



# Annual Career Symposium Inspires Next Generation of Biomedical Leaders

By Alex Scammell

The 2025 ASPIRE Annual Career Symposium, hosted by the Vanderbilt University Office of Biomedical Research Education and Training, brought together graduate students and postdoctoral fellows to explore the diverse spectrum of careers in biomedical science from professionals. Held on May 30 in the Student Life Center, the event—themed “A Kaleidoscope of Biomedical Science Careers”—offered insights into a rapidly evolving professional landscape, with a special emphasis on industry innovation, artificial intelligence, and personal career growth.

The day-long symposium featured panels, workshops, and a compelling keynote address by Renee Iacona, PhD’98, vice president and chief operating officer of oncology R&D at AstraZeneca and valued member of the School of Medicine Basic Sciences Council of Visitors. Her keynote captivated the audience with a mix of humor, humility, and high-level insight.

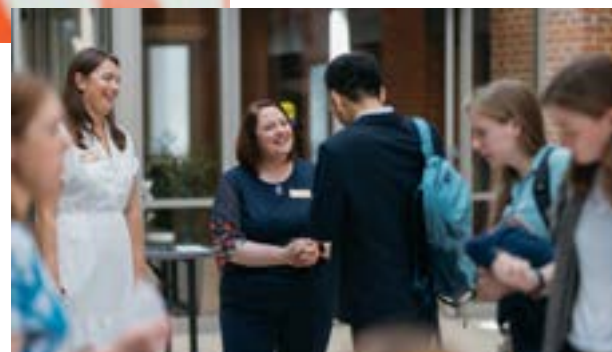
A first-generation college student from Hendersonville, Tennessee, she recounted her path from the University of Tennessee at Martin to earning a Ph.D. and at Vanderbilt—a journey marked by grit, mentorship, and bold career moves.

“I dreamed of going to Vanderbilt, but my family couldn’t afford it at first,” she told the audience. “So, I took a full ride to UT Martin and eventually made it to Vanderbilt for grad school. And I think I did it in the right way [for me].”

Her transition into industry came not through a traditional postdoc, but a leap of faith: applying cold to an AstraZeneca listing in the paper. Despite lacking direct industry experience, she persuaded



Above, Senior Associate Dean Walter Chazin, PhD, welcomes trainees to the annual event. Below, program manager Mary Gray Lindstrom and Assistant Dean for Career Development Kim Petrie, PhD, welcomes alumni speaker Siwei He, PhD.



Above, the 2025 career symposium speakers. Below, keynote speaker Renee Iacona, PhD, inspired trainees through her career story.



the company to take a chance. “What did I have to lose?” she asked. That risk ultimately launched a 25-year career at AstraZeneca, where she is now overseeing numerous employees across multiple global sites.

Iacona emphasized leadership skills, adaptability, and lifelong learning as tools that helped her meet her career milestones. Her rise to a global biomedical executive involved strategic mentoring, learning to lead teams, and never losing her scientific fluency. “I could talk science, and I could also talk statistics. That was like gold to [AstraZeneca],” she said.

Her advice for aspiring professionals? “One of the things I learned along the way is say yes to even what looks to be the most mundane opportunity.”

To allow attendees to get a sense of all the career paths one might say “yes” to, the symposium brought in alums and leaders in various fields to help showcase the breadth of careers available to biomedical PhD’s beyond academia.

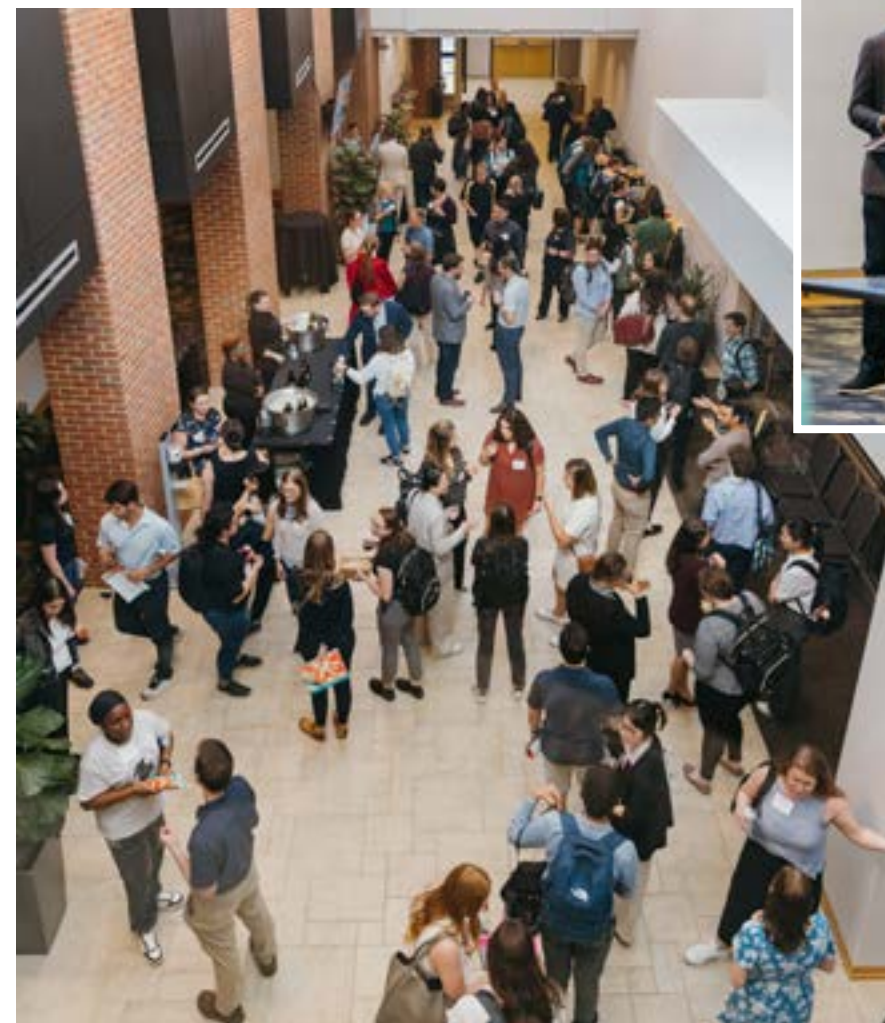
“This year’s symposium [was] jam-packed with alumni advice from many different parts of the biomedical research enterprise,” Walter Chazin said. Chazin is the Chancellor’s

Professor of Medicine and senior associate dean for BRET. “Our goal is to provide attendees with insights from personal perspectives to assist them in their career exploration and show that their training is preparing them for any number of productive and valuable careers in the future.”

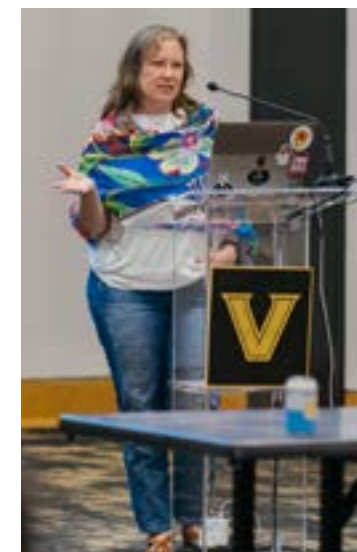
Panel sessions included “Careers in Science Policy and Advocacy,” “Science Communication and Medical Writing,” and “Navigating Biotech Startups.” Attendees could meet one-on-one with professionals in breakout networking tables to gain tailored advice on fields ranging from public health to regulatory affairs.

As the day concluded with a networking reception, the message was clear: The future of biomedical science is dynamic, interdisciplinary, and full of opportunity.

For trainees navigating the next steps in their careers, Iacona’s story offered both inspiration and realism. “You are your biggest advocate,” she reminded them. “You can also look for mentors who can help you and advise you, but at a certain point, you have to drive your development yourself, and you make those opportunities happen. You have to do some of the work.”



Far left, attendees enjoy the networking reception with speakers. Left, Sheridan Carrington, PhD, talks about his role in business development as Director of Portfolio Strategy & Management at Bristol Myers Squib. Below left, Jennifer Malinowski, PhD, Senior Director, Market Access and Medical Policy, LabCorp describes her path leading to her current role. (Photos by Peter Newsom.)





Alumnus Rich Gustin, PhD, Senior Director, Innovation and Strategic Initiatives (back, center) welcomed the ASPIRE on the Road program to Neurelis, Inc, and shared the beautiful San Diego views from the company patio.



# Traveling Westward: ASPIRE on the Road Visits San Diego

This April, a group of Vanderbilt biomedical graduate students and postdocs packed their bags and headed west for the 2025 edition of ASPIRE on the Road, landing in sunny San Diego, California.

Over three packed days, trainees explored the vibrant biotech and pharmaceutical ecosystem of Southern California, connecting with alums, industry leaders, and innovative companies that are shaping the future of science. They were accompanied by Ashley Brady, PhD, and Mary Gray Lindstrom.

“ASPIRE on the Road is a high-value program in our Office of Career Development,” said Walter Chazin, senior associate dean of BRET. “By taking trainees to biotech hubs, they obtain an in-depth understanding of the organization and inner workings of companies of all sizes. The trip introduces trainees to the multitude of career opportunities available in industry and the range of different cultures present, and gives them a chance to meet with PhD’s in roles ranging from scientific staff to leadership. Each attendee also begins to build a network with the companies they have visited and connects with our alums in the area. This event provides a truly transformative experience for our trainees.”

## Day 1: From Nashville to Neurelis

The journey began with a flight from Nashville to San Diego. Once on site, the trainees kicked off their professional immersion at Lilly Gateway Labs, where Kathleen Lin, senior director and site head, welcomed them with insights into how Lilly supports biotech start-ups through their innovative accelerator model.

Next, the group headed to Neurelis, a clinical stage company where Vanderbilt alumnus Richard Gustin, PhD’10, senior director of innovation and strategic initiatives, and colleagues offered a deep dive into the company’s journey and its flagship product, VALTOCO.

“When setting the agenda for the visit, we wanted to ensure that the trainees would gain an appreciation for the scope of opportunities that exist for biomedical PhD’s within the pharmaceutical industry and the value that they can bring, cross-functionally, at a biotech or pharmaceutical company,” Gustin said.

“It was so inspiring to see a company that puts helping patients front-and-center in their company culture, and it really motivated me to get more involved in the communities for my disease of interest here in Nashville,” said Margaret “Maggie” Fye, a PhD candidate in cell and developmental biology who attended.

A standout moment at Neurelis was the career panel, featuring leaders from clinical development, corporate strategy, and human resources, who shared candid advice on navigating careers in industry. “It gave me a great example of what kind of company I’d like to work at and what to look for in a potential workplace. Their commitment to the patient really shows and makes me glad that there are places like that where I can work in the future,” Fye said.

“The team at Neurelis really enjoyed spending time with the Vanderbilt group,” Gustin said. “They were impressed with the breadth and depth of research being conducted by the trainees and the level of engagement they had throughout their visit.”

The day wrapped with a thoughtful discussion on the cross-functional nature of biotech work and the real-world impact on patients.

## Day 2: From molecules to market

Tuesday began with breakfast and a short ride to Eli Lilly’s San Diego site. Lina Aboulmouna, BE ’11, research scientist at the Medicines Innovation Hub, hosted a session on the company’s research pipeline and career opportunities.

The group then visited Biocom California, where Miguel Motta, vice president of strategic operations and San Diego head, provided an overview of the region’s biotech landscape and Biocom’s role in supporting innovation.

The afternoon was spent at Radionetics Oncology, where trainees toured labs, met with scientists across disciplines, and participated in breakout sessions with small teams. The visit offered a rare behind-the-scenes look at how early-stage oncology research is translated into clinical strategies.

The day concluded with a BRET Alumni Happy Hour at Viewpoint Brewing Company in Del Mar, where current trainees mingled with Vanderbilt alums now thriving in San Diego’s life sciences sector. “The excitement and warmth of the alums at the happy hour were contagious!” said Chiamaka Okoye, a graduate student in the Microbe-Host Interactions graduate program. “Their passion for sharing their journeys—raw, unfiltered, and deeply personal—created an atmosphere of openness and connection that left a lasting impression on me.”

“I was blown away by how helpful and engaged the Vanderbilt alumni community was. It was encouraging to see how the skills that they developed at Vanderbilt, both on and off the bench, are now being applied to their jobs in a diverse range of positions,” Anna

Schwarzkopf, a PhD student in cell and developmental biology, said. “Connecting with them helped me to feel more confident that I have the skills I need to be successful in a career in industry [research and development].”

## Day 3: Wrapping up with Neurocrine Sciences

Wednesday morning trainees visited Biolabs, a shared lab space supporting biotech startups. Abu Jalloh, site head, shared how Biolabs fosters innovation through flexible lab infrastructure and community support and brought in members of two of the resident start-ups to share their career stories and answer questions.

The final stop of the trip was Neurocrine Biosciences, where trainees toured the new and expansive campus and met with various scientists, including Elijah Trefts, PhD’19, and Ana Sias. The visit highlighted Neurocrine’s focus on neurological and endocrine disorders and offered a glimpse into the company’s collaborative culture.

After a whirlwind three days, the group flew back to Nashville, energized by new connections, fresh perspectives, and a deeper understanding of the diverse career paths available in the life sciences.

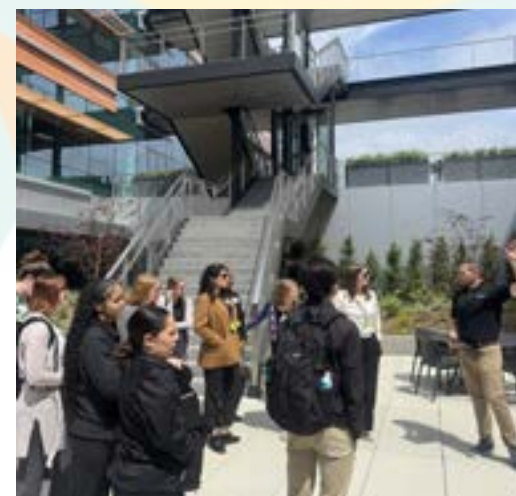
“This trip was truly one of the most valuable experiences I’ve had so far in grad school,” said Jaybree Lopez, a graduate student in the neuroscience program. “I got to hear from people with different job titles at various sized companies and about what impacts the field. I came away from this trip very confident that I could develop and refine the skills I learned to be valuable on our visits and leverage the network I made from this trip when I start applying for jobs soon. Ashley and Mary Gray were such great leaders and people to interact with. I couldn’t recommend this program/trip more!”



The ASPIRE group gathers at Neurelis, Inc. following a day of learning about innovative approaches to neurological disorder treatment. Below, Kathleen Lin, PhD, site head at Lilly Gateway Labs, welcomes ASPIRE participants and shares insights on biotech innovation in an incubator setting.



Above, ASPIRE participants tour Radionetics Oncology to learn about cutting-edge radiopharmaceutical research. Below, a guided campus tour of Neurocrine Biosciences introduces ASPIRE participants to the company’s state-of-the-art research facilities.





PhD graduate students and postdocs embraced the experience in Washington D.C., learning more about STEM policy and the innerworkings of government advocacy.



# Vanderbilt Graduate Students, Postdocs Explore Intersection of STEM and Public Policy in Washington, D.C

STEM professionals play an important role in shaping public policy. Their expertise ensures that decisions on issues related to health care, technology, and federal research funding are guided by scientific knowledge and experience.

To learn about ways to contribute to public policy, 18 Vanderbilt graduate students and postdoctoral researchers traveled to Washington, D.C., in October to participate in Vanderbilt's Federal STEM Policy and Advocacy Seminar. This two-day event is designed to provide STEM professionals with an inside look at the federal policymaking process, the importance of advocacy in advancing science and research priorities and to explore careers in science policy.

## Leveraging expertise for policy impact

The participants, representing a diverse range of STEM disciplines across the university, were eager to learn how to communicate their research to broader audiences and translate their skills into real-world applications. Many wanted to explore how their scientific expertise could shape policy decisions, especially concerning federal funding for research.

"I have been interested in science policy for years but

haven't yet gotten the opportunity to apply this interest to actual practice," said Katherine Webb, a PhD student in biomedical engineering. "I loved the opportunity to network with Vanderbilt alumni and learn about the day-to-day responsibilities of those in federal relations and science policy positions."

## Insights from industry leaders

The seminar featured five panels with 14 speakers, including four Vanderbilt alumni. Most speakers had backgrounds in science before transitioning to policy roles, offering participants firsthand insights into how they could apply their scientific expertise to the policy arena.

These discussions provided an overview of the history of science policy and the federal research budget, highlighting the critical need for scientists and engineers to engage in advocacy to secure continued support for research and innovation.

Participants heard from federal agency officials and congressional staff involved in crafting health care, science and engineering policy. They learned how clear, effective communication of compelling scientific data can shape policy outcomes. The panels also provided insider information on how to pursue congressional and federal

jobs, offering guidance on the types of roles scientists and engineers play on Capitol Hill and in federal agencies.

The seminar included discussions with advocates from professional associations like the Association of American Universities and the American Association for the Advancement of Science. These conversations emphasized the power of coalition building in advocating for federal research funding. The seminar also helped participants see how their scientific expertise can contribute to advancing national research and education priorities, both through direct advocacy and by pursuing policy-focused career paths.

"This program was an invaluable resource to my understanding of science policy and how we as academics can leverage our skills and research toward creating actionable solutions," said Katrina Rbeiz, a PhD student in psychology. "I thoroughly enjoyed interacting with all of the speakers, panelists and alumni, and found the seminar to be a treasure trove of connections, ideas and insights into the world of advocacy."

## A collaborative learning experience

Hosted by Vanderbilt University's Office of Federal Relations and the Vanderbilt University Medical Center Office of Federal Relations, the seminar brought together key partners, including the Vanderbilt Graduate School, the BRET Career Development ASPIRE Program, the Office of Postdoctoral Affairs, the Russell G. Hamilton Graduate Leadership Institute, and the Vanderbilt University Career Center.

Right, trainees try on the role of Congressional budget negotiations with an interactive activity. Below, the STEM policy in DC participants and BRET Director of Postdoc Support, Jan Varadarajan, PhD, arrive at the offices of VU Office of Federal Relations.



Left, trainees enjoyed the post-workshop networking at the alumni reception. Below, participants learn about the federal budget process.



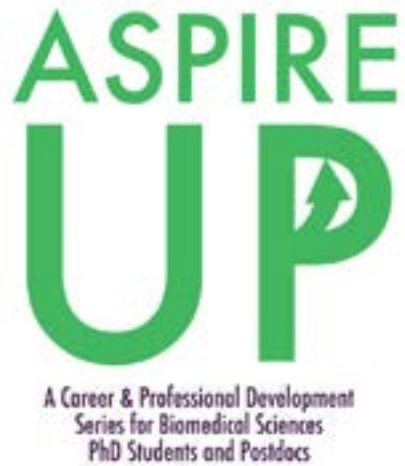
Above, participants went to Capitol Hill for a panel discussion with Congressional staffers.





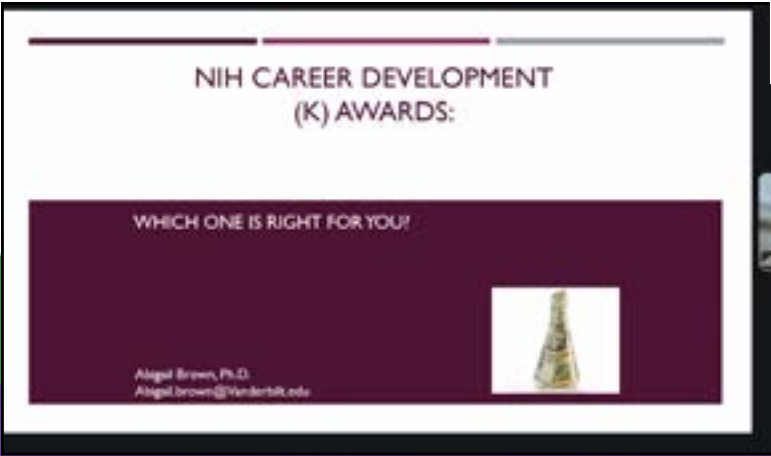
# Trainee Professional Development

First year IGP and QCB students complete an activity during the CliftonStrengths session at Orientation, led by Kate Stuart.



## ASPIRE Up

ASPIRE Up is a monthly workshop series for biomedical PhD students and postdoctoral scientists to aid in advancing their career and professional skills. Topics included navigating career choices, grant writing, job search skills, writing a teaching philosophy, and others. Featuring a combination of invited instructors and the ASPIRE team, this year included new sessions on ChatGPT. The various offerings were intended to elevate the trainees' preparation experience for both the industry and academic job market.



Top left and above, Lauren Celano, CEO of Propel Careers, shares about navigating career choices for the kickoff ASPIRE Up event in September. Left, Abigail Brown, PhD, discusses the K Award grant application process. Bottom photos, the IGP/QCB Orientation session from ASPIRE provides first year grad students an opportunity to explore their strengths, led by Kate Stuart.





# Workshop on Preparing for a Faculty Career and Job Search



Top, Jan Varadarajan, PhD, moderates the international faculty search panel. Middle, Chris Smith, PhD, Postdoctoral Affairs Program Administrator at Virginia Tech, shares data on postdoc trends in the postdoc to faculty transition during the keynote talk. Bottom, Kathy Gould, PhD, Professor, Cell & Developmental Biology, discusses strategies for negotiating your start-up package.

Each August, the ASPIRE team gathers biomedical science faculty to share their expertise about the academic faculty job search process. Eric Skaar, PhD, shared his insights on planning an independent research career, and later a panel of faculty described their experience serving on hiring committees. The keynote speaker -- postdoc alumnus Chris Smith, PhD, Postdoctoral Affairs Program Administrator at Virginia Tech -- spoke about his research on postdoc experiences in the academic job market. Other topics covered during the day-long workshop included negotiating start-up packages and a panel of faculty drawing on their experience as international scholars navigating the academic job search in the US.



## Storing Funding Success: ASPIRE Grant Repository

The ASPIRE team maintains a repository of example grant applications written by Vanderbilt graduate students. Access is granted to current trainees who are in the process of writing a grant application.

Currently the repository contains 56 grants including example F31 NIH NRSA, AHA, and NSF GRFP grant applications.

This upcoming year, the repository will be expanded to include examples of postdoctoral award applications.

Most trainees who used this resource have contributed their application materials to the repository to help others!

279 Trainees have accessed the repository since 2021  
104 Trainees have requested access this year

- 24 NSF GRFP examples (15 awarded)
- 23 F31s
- 2 Diversity Supplements
- 3 F30s
- 4 American Heart Association





The 2025 APMM Summer Retreat was held on campus in the Zeppos tower. APMM leaderships, trainees, and their mentors were invited to participate.

# ASPIRE Path in Molecular Medicine

By Lauren Moffett

The ASPIRE Path in Molecular Medicine (APMM) is an innovative training program dedicated to integrating graduate students' and postdoctoral fellows' research with clinical applications. It aims to bridge the gap between basic science and clinical practice, fostering breakthroughs in clinical research. Participants can select from multiple APMM tracks, including CORE APMM, Intermediate, Advanced, and Advanced with Clinical Project, providing flexibility to meet varying academic goals.

## What is APMM?

APMM offers a comprehensive curriculum featuring seminars, experiential-based courses, and core components like clinical contact hours, didactic coursework, seminars, bench-to-bedside symposia, and an annual retreat. This curriculum is collaboratively designed by trainees and mentors, promoting multidisciplinary learning.

Program Director, Dr. Mark de Caestecker, MBBS, PhD, summarizes the program as "providing a unique opportunity to bridge the gap between the bench and the bedside."

The APMM is open to graduate students and postdoctoral fellows in basic sciences, bioinformatics, and epidemiology programs at Vanderbilt and VUMC. Trainees participate in the structured, modular program that takes advantage of the collaborative partnerships between clinicians and basic sciences at Vanderbilt. Through direct interactions with clinicians, patients, and medical teaching, participants are exposed to a broad array of clinical cases, clinical research and management issues over the course of a two-to-three-year program that provides a clinically grounded perspective on human disease that complements their research training.

## Program Structure and Components

- CORE APMM: Completion of clinical contact hours, seminar attendance, and the course "Introduction to Clinical and Translational Research" (2 years).
- Intermediate APMM: Builds on CORE with 2 additional credit hours of coursework (2 years).
- Advanced APMM: Extends Intermediate with 4 credit hours of coursework (2 years).

- Advanced APMM with Clinical Project: Incorporates a clinical research project presented during program events (2-3 years).

"The APMM structure is designed to offer flexibility while still providing a strong foundation. Each track builds on the last, allowing trainees to engage at a level that aligns with their goals and interests. Our aim with this tiered approach is to ensure students gain valuable experiences that enhance their scientific work," shares Mary Gray Lindstrom, APMM Program Manager.

## Application and Eligibility

Applicants submit a CV, mentor information, personal statement, research outline, and mentorship support letter. PhD students from numerous interdisciplinary programs, or postdocs within early stages of their positions, are eligible, emphasizing diverse academic backgrounds.

## Importance of APMM

APMM offers unique value by extending beyond traditional research training to equip students with practical clinical skills, preparing them for impactful careers. Dr. Abigail Brown, PhD, Co-Director, explains, "APMM participants gain experience that prepares them for future research

and research-related careers in the academic, for-profit, government, and nonprofit sectors. Many alumni employed in these sectors are in roles directly related to their APMM exposure to clinical care, translational research, and clinical research."

The APMM program is instrumental in nurturing the next generation of biomedical researchers, ensuring a vibrant learning environment. By completing this two-to-three-year program, trainees are gaining transferrable skills relevant to a range of research- and research-related careers in translational and clinical science. PhD students and new postdocs are encouraged to take advantage of this opportunity to delve further into their respective fields and to prepare themselves for success.



## APMM Leadership Team



**Mark de Caestecker, MBBS, PhD**  
Program Director



**Abigail Brown, PhD**  
Co-Program Director



**Rachelle Johnson, PhD**  
Co-Program Director



**Matt Luther, PhD**  
Co-Program Director



**Christopher S. Wilson, PhD**  
Program Assistant Director



**Mary Gray Lindstrom**  
Program Manager



APMM participants Arathi Nair, Harsh Shah, Ritika Raghavan, Jacey Marshall, Haswitha Sabbineni at an APMM event.



Harrison Parent receives his APMM Program Certificate of Completion.



## 2024-25 APMM Activities

- September 10 Fall Orientation
- September 18 Clinical Orientation
- October 2 Welcome Reception
- October 16 Speed Meeting Icebreaker
- October 23 Happy Hour
- November 6 Bench to Bedside Symposium – Andreana Holowatyj, PhD, MSCI  
*The enigma of early-onset colorectal cancer—reproductive health*
- November 20 Seminar Series – Mona Mashayekhi, MD, PhD  
*GLP-1 Receptor Agonists: What we know and what we don't!*
- December 4 Happy Hour
- December 11 Seminar Series – Chris Wilson, PhD  
*Targeting Type 1 : A Multi-Modal Approach to Predicting Anti-CD3 Therapy Response"*
- December 18 Holiday Party
- January 15 Clinical Case Study and Quiz
- January 22 Happy Hour
- February 26 Bench to Bedside Symposium – Dr. Andrew Jallouk and Dr. Olalekan Oluwole  
*CAR-T Treatment for Lymphoma*
- March 5 Seminar Series, APMM Student Talk – Harrison Parent and Dr. Alex Mohler  
*Neurodevelopmental Disease Neurofibromatosis Type 1*
- March 19 Bench to Bedside Symposium - Dr. Elise Boos and Dr. Ally McCarthy  
*Challenges (and solutions) to managing the complications of pregnancy in Tennessee*
- March 26 Happy Hour
- April 2 Seminar Series, APMM Student Talk– Hannah Waterman  
*Hepatic Exposure*
- April 16 Bench to Bedside Symposium – Bo N. Lovvorn, MD, FACS & Dan Benedetti, MD  
*When Developmental Overgrowth Signals Cancer Risk - A Case of Beckwith-Wiedemann Syndrome and Wilms Tumor Predisposition*
- April 23 Happy Hour
- May 7 Bench to Bedside Symposium – Dr. Jamey Young  
*<sup>13</sup>C flux analysis in metabolism research: from cells to multi-tissue in vivo models*
- May 21 Bench to Bedside Symposium – Dr. Aaron Aday and Dr. Quinn Wells  
*Heritable Thoracic Aortic Disease*
- May 28 Happy Hour
- June 27 Summer Retreat



APMM Director Mark de Caestecker, PhD, awards Lauren Emmerson and Andrew Beaudoin as best 2025 Student Retreat Presentations.



Chiamaka Okoye, a graduate student in Microbe-Host Interactions and a participant of APMM, presents at the 2025 Retreat.



# Campus Partnerships and Faculty Outreach



*The BRET Office of Career Development strives to maintain partnerships with departments and programs across campus. We provide presentations and programming on a variety of professional and academic development topics and serve on university committees.*

## ASPIRE Partnership Roles

*The ASPIRE Team serves in a variety of capacities to advise and partner across campus:*

- Graduate Development Network
- Basic Sciences Council of Visitors
- Career Center Graduate and Postdoctoral Scholars Team
- Office of Postdoctoral Affairs
- VU Science Policy Student Group Faculty Advisor
- Vanderbilt Postdoctoral Association
- Vanderbilt University Advanced Degree Consulting Club
- VU Corporate Partnerships Advisory Board

## Partnership Events

Diverse Does Table (Grad School)  
National Postdoc Association Cookie Event (OPA)  
PhD Career Stories Lunch with Speaker (VPA)  
VPA Symposium Resource Fair (VPA)  
VSPG Speaker Event (VSPG)  
Friday Fuel event (VU Career Center, Grad School)  
Women in STEM Symposium Networking (VUWiSE)  
Graduate Student Appreciation Week (Grad School)



**Postdoc Appreciation Week**

*Postdocs get a break during National Postdoctoral Appreciation Week with a cookie from BRET!*

## Decoding Your Story... with a card game!

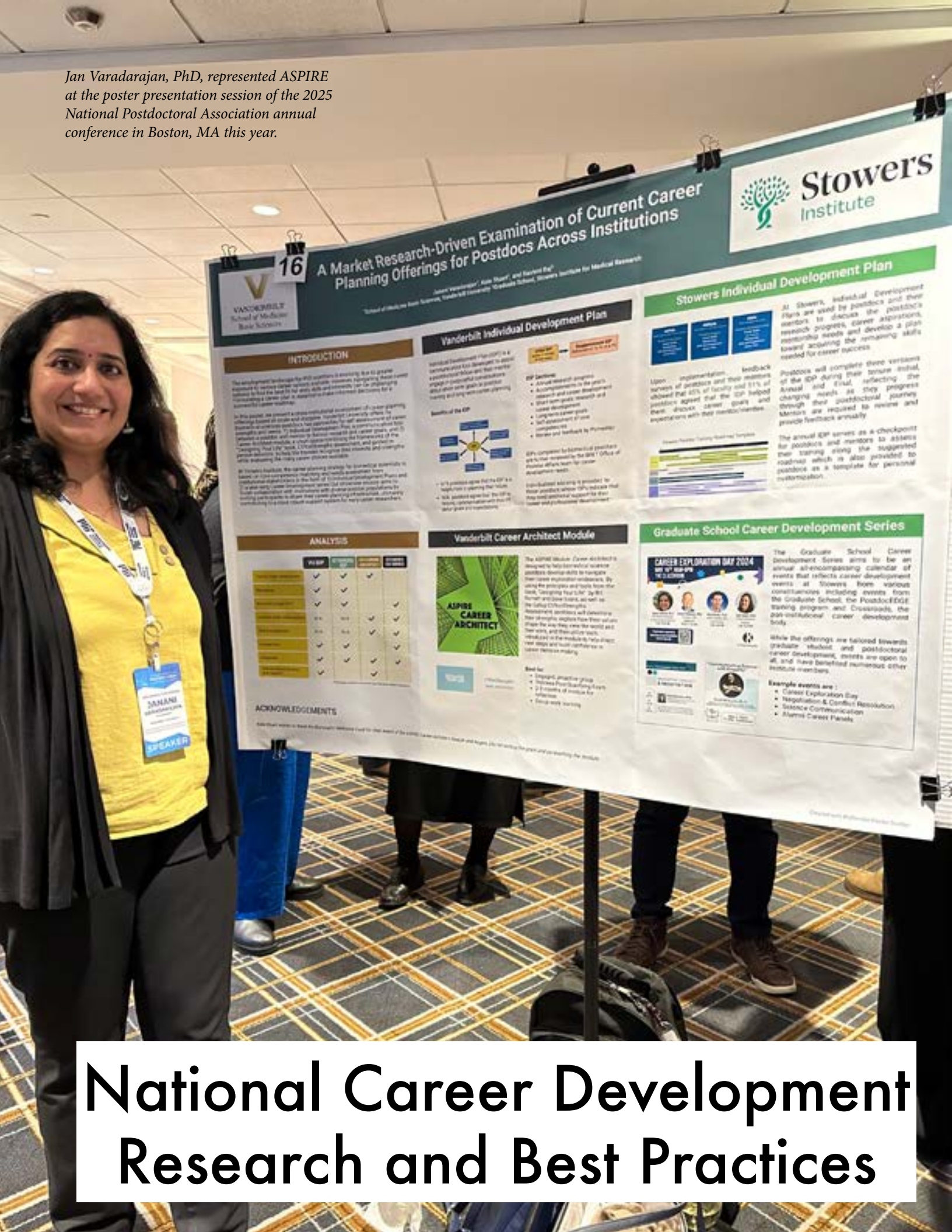
In April, the ASPIRE Team partnered with the Vanderbilt Career Center Graduate and Postdoctoral Scholars (GPS) team for graduate students and postdoctoral fellows to practice interviewing for jobs in the fun setting of the Overcup Oak ("The Pub"). This event gamified the storytelling experience of interviewing.



*Above and left, grad students and postdocs from across campus enjoyed a Friday afternoon at the Overcup Oak for food and a card game that helped participants practice interviewing skills in a relaxed atmosphere. The event was co-sponsored by the VU Career Center GPS team.*



Jan Varadarajan, PhD, represented ASPIRE at the poster presentation session of the 2025 National Postdoctoral Association annual conference in Boston, MA this year.



# National Career Development Research and Best Practices

Career and professional development best practices and trends are constantly evolving. To continue to provide outstanding services and remain at the forefront of graduate and postdoctoral career development, the ASPIRE Program cultivates partnerships and participates in professional organizations to learn and share our work.

## 2024 AAMC GREAT Conference

BRET Team member Madhvi Venkatesh, PhD, director of the BRET Interdisciplinary Graduate Program, shares her work on implementing a competency-based curriculum for 1st year biomedical science PhD students at the 2024 AAMC GREAT Conference in September. Kim Petrie, PhD, also attended and presented about PhD career outcomes.



## Graduate Career Consortium



The Graduate Career Consortium (GCC) is a national professional society of career services offices at institutions across the country who provide professional development opportunities to Master's, PhD, and professional students and postdocs. Several ASPIRE team members hold leadership positions within GCC and present annually at the summer conference.

Kate Stuart served as the Regional Director for the Southeast Region of the Graduate Career Consortium, fostering interactions and best practices among graduate training institutions in the southeast.

### Professional Development Highlights

*The ASPIRE Team is involved nationally to learn, innovate, and contribute. Learning as well as giving back provides impact for our best practices and commitment to growth.*

- 2025 Graduate Career Consortium Annual Meeting
- 2025 Graduate Career Consortium Regional Meeting
- 2025 National Postdoctoral Association Annual Conference
  - 2024 AAMC GREAT Group Annual Conference
    - RedCap Day 2024
- Review Committee, UVA EXPAND Program External Review
  - NACRA Industry Career Readiness Committee
- Invited Reviewer, pd|hub Professional Development Hub
  - 2025 Leadership Alliance Annual Conference

### GCC Leadership

Jan Varadarajan, PhD, is the Co-Chair of the Finance Committee.

Kate Stuart is the Director of Southeast Region and Regional Conference Committee Chair.

Ashley Brady, PhD, is a member of the Professional Development Committee.



Ashley Brady is all smiles at the 2025 BIO annual conference.



# Employer Relations and Workforce Development

ASPIRE partners with companies and organizations lead to exciting exploratory visits, internships, and externships for our trainees. Employer Relations and Workforce Development also includes:

- Meetings with employers to develop new partnerships and opportunities
- Hosting employer information sessions
- Speaking at conferences and giving invited talks
- Serving on committees to represent Vanderbilt biomedical trainees

## ASPIRE Internship Program

The ASPIRE Program facilitates opportunities for graduate students and postdoctoral fellows to conduct internships and gain hands-on experience with a project in a professional work environment. From remote work as a planner for a large scientific conference or a business development analyst for a local biotech company, the internship program offers experiential learning opportunities with depth and breadth.

### 2024-2025 Internship Hosts

Alzheimer's Association  
BioCentury, Inc.  
Boudicca Dx  
CSNK2A1 Foundation  
Jackalope Brewing Company  
VI4, PMI, VUMC

Since the ASPIRE Program began in Fall 2015,

**216 trainees**  
(155 graduate students, 61 postdocs)

have completed internships with 50 partner companies and non-profit hosts.



ASPIRE on the Road -- and the employer relations efforts made to make the trips possible -- was recognized for its solid efforts of creative collaborations. Vanderbilt Director of Corporate Partnerships Matt Seaton presented the award to Kathy Gould, PhD, Ashley Brady, PhD, and Mary Gray Lindstrom.

## Employer Relations

Developing relationships with local and national organizations keeps the ASPIRE pipeline flowing with talent and opportunities! Establishing partnerships yields employer information sessions for biomedical sciences PhD trainees, conference meetups, internship opportunities, and other connections for the trainee population to embed into the scientific ecosystem.

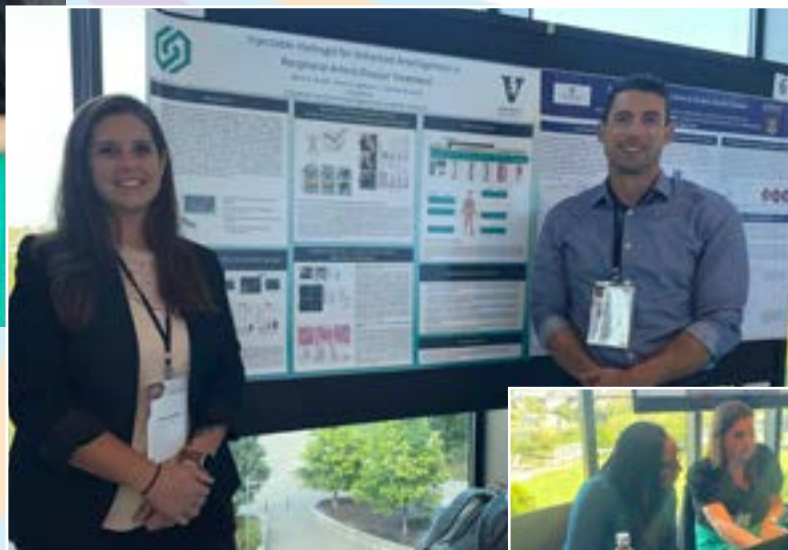
82

Employer Partner Meetings





## BioCentury



Above, Ashley Brady, PhD, enjoys the poster session and networking reception at the 2024 BioCentury Grand Rounds conference held in Nashville, TN, along with alumnae Danielle Golovin, PhD, Senior Biopharma Analyst (left) and Sara Winn, PhD, Associate Product Manager (right), who both work for BioCentury.



Above, Karrie Dudek, PhD, ASPIRE to Innovate Fellow and Ethan Lipmann, PhD, Associate Professor of Chemical and Biomolecular Engineering, present a poster at the 2024 BioCentury Grand Rounds conference highlighting the technology underpinning their newly founded company, Eupalinos, Inc., which Dudek launched through her ASPIRE to Innovate fellowship. Left, Ölöf Ísberg, PhD, postdoctoral fellow, Cell and Developmental Biology, and Naome Mwesigwa, PhD, postdoctoral fellow, Clinical Pharmacology, enjoy the happy hour and poster session at the 2024 BioCentury Grand Rounds conference after volunteering to help with the conference registration and session moderation. Above left, alumna Sara Winn, PhD, Associate Product Manager at BioCentury, demonstrates their proprietary business intelligence platform to a conference attendee.



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## LST-CON



Above, Ashley Brady, PhD, and a group of current biomedical PhD graduate students and postdoctoral fellows attend the 2024 LSTCON, Life Science Tennessee's annual conference in Nashville, TN which brings together members of Tennessee's life sciences ecosystem and national industry leaders to discuss topics impacting life sciences companies across the state.



## BIO Boston

Ashley Brady, PhD, attended the 2025 Biotechnology Innovation Organization (BIO) annual international conference in Boston, MA (above) where she participated in partnering meetings with biotechnology and pharma industry leaders, networked with colleagues, and learned about key advances and challenges impacting the industry. While there, she met alumnus Sareina Wu, PhD, Founder and CEO/CSO at GenomeFrontier Therapeutics, Taiwan, (center), and reconnected with alumnus, Chris Tan, PhD, Executive Director, Business Development and Licensing, Merck, far right.







*Trainees chat with symposium speaker Nick Warren, PhD, the evening before the annual event.*

# Alumni Relations, Outcomes, and Development



## Symposium Networking Huddles



The 2025 ASPIRE Annual Career Symposium featured Networking Huddles, small-group networking tables that provide opportunities for graduate students and postdocs to connect with professionals in biomedical science careers. These huddles offer a chance to learn about different career paths, gain insights from experienced professionals, and build connections while in a small group setting that is informal and fun, proving the event's theme - A Kaleidoscope of Biomedical Science Careers - is applicable!



*Top, career symposium attendees chat with speaker Sheridan Carrington, PhD, Director of Portfolio Strategy & Management at Bristol Myers Squibb, during the Networking Huddles event. Above, left, and below, colorful balloons help guide attendees to meet their selected speakers during the five huddle rotations.*







*In October 2024, the Vanderbilt School of Medicine Basic Sciences Council of Visitors lunch with current graduate students and postdoctoral fellow who sought advice and insight with the alumni and industry leaders.*

# Alumni Relations, Outcomes, and Development

## SOMBS Council of Visitors

The School of Medicine Basic Sciences Council of Visitors is an esteemed group of alumni and industry leaders who supports and fosters the achievement of excellence in all aspects of research, teaching, and career development for the students, staff, and faculty members of our departments, programs, and centers. During their annual in-person meeting, the group takes a break to enjoy lunch with current trainees. These interactions - strategically paired based on trainee career interest - are often a time of great insight, encouragement, and even a bit of laughter! "This is one of my favorite parts of the day," reflects Dr. Renee Iacona, PhD, Vice-President of Oncology Biometrics and Chief Operating Officer R&D at AstraZeneca. Trainees appreciate this rare opportunity to casually interact with industry leaders.

*The BRET Office of Career Development continues to engage with biomedical PhD graduate students and postdoctoral trainees even after they complete their training. Alumni volunteer their time at career exploration and professional development events, host interns, facilitate site visits at their workplace, and mentor current trainees. The alumni network helps the office better understand career outcomes, informs career programming, and shapes the trajectories of current trainees.*



*Alumnus Laurent Audoly, PhD (center) meets with Brighter Ventures awardees while he visits campus. Dr. Audoly and his wife Olga Granaturova established the fund to support PhD students interested in the application of artificial intelligence to biomedical research.*



# Biomedical Sciences Graduates Pursue a Variety of Career Paths



*By Bill Snyder*

Among the 114 students who earned PhDs in the biomedical sciences from the Vanderbilt University School of Medicine during the 2024-2025 academic year, two women are staking out very different career paths.

Rebecca Buchanan, PhD, has landed her first job out of graduate school as a postdoctoral research scholar in Psychiatry and Behavioral Sciences at Stanford University Medical Center. She is pursuing a career in academia.

Ebony Hargrove-Wiley is interning in medical and scientific relations at the Alzheimer's Association while she seeks a position that would enable her to contribute to scientific and clinical affairs in the pharmaceutical industry.

Both are grateful for the support and resources they received through the medical school's Office of Biomedical Research Education and Training, and the ASPIRE Path in Molecular Medicine, a unique personalized approach that offers course work and disease-based clinical experiences. They also acknowledged their faculty mentors in both clinical and basic sciences.

"What really sold me (on Vanderbilt) was the BRET office and ASPIRE," said Buchanan, a University of Georgia graduate who earned her doctorate in Neuroscience. "It's not only unique but very well organized and comprehensive in terms of support for professional development. There's so much opportunity, it's almost overwhelming."

Hargrove-Wiley, a Tuskegee University graduate who earned her doctorate in Cancer Biology, agreed. The informational sessions offered through ASPIRE and the BRET office helped clarify her aptitude for scientific communication supporting the development of pharmaceutical products that potentially will help clinicians improve outcomes for their patients.

Buchanan, who is from Carrolton, Georgia, gravitated to neuroscience because of a long-standing interest in neurodegenerative disorders, including Alzheimer's disease.

Under the mentorship of Fiona Harrison, associate professor of Medicine, she focused her research on potentially modifiable risk factors for Alzheimer's disease. For her dissertation project, she explored the neurotoxic effects of overexposure to the trace mineral manganese in an animal model.

Currently, Buchanan is working in the laboratory of Erin Gibson, assistant professor in the Division of Sleep Medicine at Stanford, focusing on the role that glial cells in the brain play in regulating the body's circadian "clock" and in cognition.

Hargrove-Wiley, who is from Kansas City, Missouri,

chose research aimed at understanding the cellular and molecular mechanisms that drive cancer progression. She was mentored by Barbara Fingleton, associate professor of pharmacology, and previous director of the Interdisciplinary Graduate Program in Biological and Biomedical Sciences.

For her dissertation project, Hargrove-Wiley assessed sex-related differences in immune responses to male and female breast cancers. She is first author of a paper published last year that recommended more rigorous pre-clinical and translational investigations of male breast cancer biology.

According to Abigail Brown, director of Outcomes Research in the BRET office and co-director of the ASPIRE Program in Molecular Medicine, 71% of this year's PhD graduates are planning to pursue postgraduate training, while 27% have accepted or are in negotiations for jobs that don't require postdoctoral work.

During their years in graduate school, the students, on average, co-authored five research papers that were published in highly respected journals including Nature, Cell, Science, and the Journal of Clinical Investigation. They averaged two papers in which they were listed as first author.

External fellowships helped support the training of 48% of the graduate students. In 2024, for example, Buchanan was an ambassador in the Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART). The program provides professional development and networking opportunities.

Hargrove-Wiley's outside experiences included a National Science Foundation Graduate Research Fellowship, an Endocrine Society FLARE (Future Leaders Advancing Research in Endocrinology) fellowship, and an internship in portfolio program management at the pharmaceutical company AbbVie.

As the first in her family to earn a PhD, Hargrove-Wiley had some advice for incoming graduate students.

"Always seek mentorship and a support system," she said. "You're more than capable. You wouldn't be here if you weren't capable."

But graduate school is stressful, she added. "Find what you need to see it through."

In his remarks to the graduates, C. André Christie-Mizell, Centennial Professor of Sociology, Vice Provost for Graduate Education, and Dean of the Graduate School, challenged them to "take the spirit of inquiry into everything you do. The pursuit of knowledge is never finished."





# Alumni Networking Happy Hours: Washington D.C. and San Diego



Washington  
D.C.  
Happy Hour  
October 2024

Top left, Kim Petrie, PhD, meets with former BRET trainees currently living and working in D.C. Above right, grad student Amelia Cephas chats with a D.C. alumna. Far left, alumna Hillary Hager Carter talks to two current trainees.



Right, Kim Petrie, PhD, catches up with alumni Efrain Garcia, PhD, and Kristen Herring, PhD. Other photos include alumni groups mingling at the Alumni Happy Hour in D.C.



Above, and top left, current trainees mingle with San Diego alumni at the ASPIRE on the Road Happy Hour. Left, Senior Associate Dean Walter Chazin, PhD, visits with San Diego alumna.

San Diego  
Happy Hour  
April 2025



Right, alumna Sheryl Anne Vermudez, PhD, chats with a current trainee in San Diego. Group photos include several Vanderbilt PhD alumni chatting with each other and the current trainees attending the San Diego ASPIRE on the Road.





# Appendix

## A1 PhD Career Stories

Date	Topic	Attendance	Speaker Details
September 20, 2024	Industry Science	65	David Westover, PhD, Senior Scientist, Merck
October 3, 2024	Career Evolution in Biopharma: From Drug Discovery to Drug Development, Executive Leader and Board Member	47	Lori Rudolph-Owen, PhD, Chief Development Officer, 4:59 NewCo, a 5am Ventures Company
November 8, 2024	Medical Affairs and Medical Science Liaisons	54	Casey Butrico, PhD, Scientific Affairs Manager, Kuros Biosciences Todd Townsend, PhD, Regional Medical Scientific Director, Merck
November 21, 2024	Science Communication	40	Diana Mitrea, PhD, Associate Director, Dewpoint Therapeutics
December 5, 2024	Government Research	60	Efrain Garcia, PhD, Health Scientist/Project Officer, Biomedical Advanced Research and Development Authority, HHS
January 24, 2025	Clinical Research and Development	45	Christopher Aluise, PhD, Director, Toxicology, Karuna Therapeutics Valerie Kramlinger, PhD, Senior Director, Amgen
February 21, 2025	From Consultancy to Business Strategies in Pharmaceutical Product Development	33	Marissa Jones, PhD, Business Development Manager, Biocrates Life Sciences Mallori Upshaw, PhD, Director, AstraZeneca
March 5, 2025	Regulatory Affairs in the Pharmaceutical Industry	51	Kelly Gordon, PhD, Founder & CEO, Precision Medicine Consulting Firm
		8	Lunch with speakers post-event
April 11, 2025	Careers in Nonprofits	58	Rachel Fischer, PhD, Project Manager, Foundation for the NIH Roslin Thoppil, PhD, Senior Scientific Program Officer, American Association of Cancer Research

## A2 Beyond the Lab Podcast

Season 8, Part I		
Date	Topic	Alumnus Guest
May 15, 2025	Scientific Publishing	Tony Chen, PhD, Publisher, Research Publishing, Springer Nature
May 22, 2025	Medical Writing	Emily Turner, PhD, Manager, Medical Writing, Clinical Development, Xenon Pharmaceuticals, Inc
May 29, 2025	Medical Director in Industry	Keeley Gilroy, PhD, Senior Medical Director, Global Medical Affairs, Agios Pharmaceuticals, LLC

## A3 2025 Annual Career Symposium

189 in attendance

	Ballrooms A&B		Ballroom C		Downstairs Classrooms 1&2
9:00am-10:15am	Welcome & Opening Keynote: Leadership in Science  Renee Iacona, PhD, COO, Oncology R&D, and Vice-President for Biometrics, Oncology, AstraZeneca				
10:25am-11:10am	Government, Policy, & Advocacy  Bryson Reynolds, PhD, Associate Director, Small Business Programs, Department of Defense  Nick Warren, PhD, Assistant Director, Federal Relations, Vanderbilt University Medical Center		Business Side of Science  Sheridan Carrington, PhD, Director, Portfolio Strategy, Bristol Myers Squibb  Jennifer Malinowski, PhD, Director of Market Access and Medical Policy, Genetic Testing, Labcorp		Fireside Chat: Renee Iacona, PhD (10:25am-11:05am)
11:20am-12:05pm	Industry Science at the Bench  Léolène Jean Carrington, PhD, Discovery Scientist, Interius BioTherapeutics  Matt Harlow, PhD, Senior Scientist, Triana Biomedicines		Academic Paths in Teaching-related Institutions  Patrice Cuff, PhD, Program Manager, LINC Scholars and Food Scholars, Spelman College  Allison Greenplate, PhD, Director of Strategic Alliances, Immunology and Immune Health, University of Pennsylvania		Consulting: Siwei He, PhD, Partner, Boston Consulting Group  Gabriela Santos, PhD, Consultant, Molekule Consulting
12:15pm-12:45pm	Lunch Pickup				Dual Career Search Léolène Jean Carrington, PhD Sheridan Carrington, PhD
12:50pm-1:20pm	Big Data/Bioinformatics  Tim Shaver, PhD, Associate Director, Bioinformatics, Naterra		Medical Affairs  Molly Seale, PhD, Global Pipeline Execution Lead, AbbVie		
1:40pm-3:20pm	Networking Huddles Huddle A: 1:40-2:00pm Huddle B: 2:00-2:20pm Huddle C: 2:20-2:40pm Huddle D: 2:40-3:00pm Huddle E: 3:00-3:20pm				
3:20pm-4:30pm	Networking Reception				

## A4 Additional Career Exploration Events

Date	Topic	Alumnus Guest
December 4, 2024	Breakfast with Alumni Co-sponsorship with VU Science Policy Group	Chad Jackson, PhD, and Leigh Miles Jackson, PhD



A5

## Modules

Course Title	Director	Participants	Frequency and Dates
Biomedical Research and the Media	Wayne Wood, <i>Executive Director of New Media, VUMC</i>	7	Fall 2024
Career Architect	Angela Zito and Kate Stuart, <i>ASPIRE Program</i>	20	Spring 2025

A6

## Becoming a Scientist: 1st Year Presentations

Date	Topic	Presenter	Group
8/13/24	Discovering Your Strengths with CliftonStrengths	Kate Stuart	IGP & QCB
8/13/24	Overview of the NSF Graduate Research Fellowship Program	Kim Petrie, PhD	IGP & QCB
8/23/24	Writing the NSF GRFP Personal Statement and Graduate Research Plan	Kim Petrie, PhD	IGP & QCB
9/11/24	Career Planning in Graduate School	Kim Petrie, PhD	Biological Sciences
9/11/24	Q&A with NSF GRFP Fellows and Initial Review of Essay Outlines or Draft Essays	Kim Petrie, PhD	IGP & QCB
10/23/24	CVs and Resumes	Kim Petrie, PhD	Biological Sciences
10/30/24	Building Your Biosketch	Ashley Brady, PhD	Biological Sciences
11/13/24	Overview of the NSF Graduate Research Fellowship Program	Kim Petrie, PhD	Biological Sciences
1/8/25	Networking	Ashley Brady, PhD	IGP & QCB
2/13/25	Funding 101	Kim Petrie, PhD	IGP & QCB
3/8/25	Building Your Biosketch	Ashley Brady, PhD	IGP & QCB
4/2/25	CVs and Resumes	Ashley Brady, PhD	IGP & QCB
4/9/25	CV and Biosketch Peer Review	Kim Petrie, PhD and Ashley Brady, PhD	IGP & QCB
6/2/25	Career Planning	Kim Petrie, PhD	IGP & QCB

A7

## Trainee Professional Development Additional Events

Date	Topic	Attendance	Notes
Tuesdays, Weekly	CV/Resume Drop-In Clinic	83	ASPIRE Team
Thursdays, Monthly	Satellite CV/Resume Drop In Clinic at 2525 West End Building	2	ASPIRE Team, started in April 2025
August 19, 2024	Preparing for a Faculty Career and Job Search ASPIRE Workshop	65	Faculty Panelists and ASPIRE Team
April 17, 2025	Headshot Day for Postdoctoral Fellows	42	Photographer Peter Newsom

A8

## ASPIRE Up

Date	Topic	Presenter	Attendance
8/13/24	Overview of the NSF Graduate Research Fellowship Program - Workshop #1	Kim Petrie, PhD	71
8/23/24	Writing the NSF GRFP Personal Statement and Graduate Research Plan - Workshop #2	Kim Petrie, PhD	13
9/11/24	Q&A with NSF GRFP Fellows and Initial Review of Essay Outlines or Draft Essays - Workshop #3	Kim Petrie, PhD	34
9/13/24	Navigating Your Career Choices	Lauren Celano, <i>CEO, Propel Careers</i>	44
10/1/24	Writing a Teaching Statement	Madhvi Venkatesh, PhD	17
11/18/24	Grant Writing	Kim Petrie, PhD; Abby Brown, PhD; Mike Stein, PhD	24
12/12/24	Interviewing 101	Ashley Brady, PhD and Kim Petrie, PhD	18
1/9/25	Negotiating a Job Offer	Ashley Brady, PhD	31
2/6/25	ChatGPT for Job-Seekers: The Right Way to Use AI to Accelerate Your Search	Jeremy Schifeling from The Job Insiders	77
2/20/25	K Awards: From K12 to K99!	Abby Brown, PhD	41
4/11/25	Telling Your Story	Lauren Celano, <i>CEO, Propel Careers</i>	32
4/11/25	Decoding Your Story	ASPIRE Team and Career Center GPS Team	26
5/15/25	Finding the Right Fit: Understanding Faculty Roles at US Institutions	Kathy Gould, PhD	37



A9

## ASPIRE on the Road Trips

Date	Company/Event	Attendees
October 10, 2024	ASPIRE on the Road: Washington, DC	12
April 29, 2025	ASPIRE on the Road: San Diego	12

A10

## Employer Information Sessions

Date	Company/Event	Attendees	Guest
September 20, 2024	Merck Showcase and Employer Information Session (Virtual Showcase)	62	<b>David Westover, PhD</b> , Sr. Scientist, Analytical Research & Development <b>Caroline Kessell</b> , Manager, Quality Control Pharmaceutical Testing Laboratory, Pharmaceutical and Bioseparations <b>Kim West-Osterfield, PhD</b> , Senior Clinical Scientist Clinical Sciences and Study Management (CSSM) – Oncology <b>Christopher M. Tan, PhD</b> , Executive Director, Search & Evaluation, Infectious Diseases, Vaccines, & Oncology <b>Jennifer Rojas, PhD</b> , Senior Scientist, In Vivo Pharmacology <b>Nichole M. Lareau, PhD</b> , Associate Principal Scientist Merck Vaccines Analytical R&D <b>Monica Bomber, PhD</b> , Senior Scientist, Preclinical Development
February 24, 2025	EverGlade Employer Information Session	22	<b>Nathan Clark</b> , Director, EverGlade <b>Laura Powell, PhD</b> Director, EverGlade <b>Jennifer Shuman, PhD</b> , Consultant, EverGlade <b>Sirena Tran, PhD</b> , Consultant, EverGlade

A11

## Internships

Internship Host	Number of Trainees and Internship Roles
Alzheimer’s Association	1 Medical and Scientific Relations (Career Development) Intern 1 Medical and Scientific Relations (Podcast) Intern 1 Scientific Conference Programming Intern
BioCentury, Inc.	1 Distillery Writing Intern
Boudicca Dx	1 Regulatory Science Consulting Intern
CSNK2A1 Foundation	1 Scientific Conference Intern
Jackalope Brewing Company	1 Brewery Lab Intern
VI4, PMI, Vanderbilt University Medical Center	2 Science Communication Interns

A12

## Externships

Date	Company/Event	Attendees
April 16-18, 2025	AAAS-CASE (Catalyzing Advocacy in Science and Engineering) <i>A 3-day workshop for trainees interested in science advocacy and policy</i>	2

A13

## Alumni Happy Hours with ASPIRE on the Road

Date	Company/Event	Attendees
October 10, 2024	ASPIRE on the Road: Washington, DC	41
April 29, 2025	ASPIRE on the Road: San Diego	35

A14

## Invited National and Regional Talks and Posters

10

2024

October 7, 2024  
“The influence of identity on the career goals and outcomes of biomedical sciences PhD students”  
Lightning Talk  
AAMC GREAT Group Annual Meeting  
Kim Petrie

03

2025

March 22, 2025  
“A Market Research-Driven Examination of Current Career Planning Offerings for Postdocs Across Institutions”  
Poster  
National Postdoctoral Association Annual Conference  
Jan Varadarajan, PhD, Kate Stuart, Rashmi Raj, PhD

01

2025

January 15, 2025  
“A Holistic Approach to the Invited Speaker: How to Enhance the Content of your Career-Related Speaker with More Than Just Their Talk.”  
Lightning Talk  
Graduate Career Consortium Regional Meeting  
Kate Stuart

06

2025

June 13, 2025  
“Still Listening? A Comparison of Three PhD Podcasts and a Discussion of their Relevance in 2025”  
Member-Generated Session Presentation  
Graduate Career Consortium National Meeting  
Kate Stuart, Aubrie Stricker, PhD

January 15, 2025  
“ASPIRE on the Road: Opening Doors for Biomedical Graduate Students and Postdocs at Vanderbilt University Through a BioPharma Industry Site Visit Program”  
Lightning Talk  
Graduate Career Consortium Regional Meeting  
Ashley Brady, PhD



A15

Awards and Grants

Date	Award or Grant	Recipient
January 1-December 31, 2025	NIH Advancing Research Careers at Vanderbilt University (ARC-UE5)	Ashley Brady, PhD; Vivian Gama, PhD; Kathy Gould, PhD; Kim Petrie, PhD; Madhvi Venkatesh, PhD
May 22, 2025	Excellence in Corporate Collaborations, Corporate Partnerships at VU, Career Advancement & Engagement (CAE)	Ashley Brady, PhD; Kathy Gould, PhD; Mary Gray Lindstrom

A16

Professional Development Activities for ASPIRE Team

Date	Conference or Meeting	Attendee
September 9-11, 2024	36   86 Entrepreneurship Festival, Nashville, TN	Ashley Brady, PhD
September 9-11, 2024	Biocentury Grand Rounds, Nashville, TN	Ashley Brady, PhD
October 7-8, 2024	AAMC GREAT Group Annual Conference, Atlanta, GA	Kim Petrie, PhD, Madhvi Venkatesh, D.Phil
November 19, 2024	LST-CON, Life Science Tennessee, Nashville, TN	Ashley Brady, PhD
January 15, 2025	Graduate Career Consortium Southeast Regional Meeting (Virtual)	Ashley Brady, PhD; Kim Petrie, PhD; Kate Stuart; Jan Varadarajan, PhD; Angela Zito
March 21-22, 2025	National Postdoctoral Association Annual Conference, Boston, MA	Jan Varadarajan, PhD
May 13, 2025	GCC Mid-Career Professionals Virtual Conference	Aubrie Stricker, PhD
June 11-13, 2025	Graduate Career Consortium National Meeting, Minneapolis, MN	Aubrie Stricker, PhD
June 4-6, 2025	Biocentury Grand Rounds, Chicago, IL	Ashley Brady, PhD
June 16-19, 2025	BIO, Biotechnology Innovation Organization, Boston, MA	Ashley Brady, PhD

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Campus Partner Participation

Date	Event	Sponsoring Group
September 13, 2024	Diverse 'Dores Table	Vanderbilt Graduate School
September 20, 2024	National Postdoc Appreciation Week Cookie Event	Vanderbilt Office of Postdoctoral Affairs
October 14, 2024	Symposium Resource Fair	Vanderbilt Postdoctoral Association
November 13, 2024	Speaker Co-Sponsorship, featuring Heather Bloemhard, PhD	Vanderbilt Science Policy Group
November 15, 2024	Friday Fuel, tabling event with Vanderbilt Career Center	Vanderbilt Graduate School
March 21, 2025	Women in STEM Symposium Networking Talk and Session	VUWiSE
April 11, 2025	Graduate Student Appreciation Week Breakfast	Vanderbilt Graduate School

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Invited Internal Presentations

08

2024

August 9, 2024  
“Overview of BRET and its Resources”  
VU Basic Sciences New Faculty Orientation  
Ashley Brady, PhD

August 13, 2024  
“Exploring Your Strengths with CliftonStrengths”  
IGP/QCB Orientation  
Kate Stuart

August 30, 2024  
“BRET Office of Career Development & ASPIRE”  
Simple Beginnings Friends and Family Session  
Ashley Brady, PhD

09

2024

September 6, 2024  
“Navigating Your Strengths”  
School of Medicine Basic Sciences How To Series  
Kate Stuart and RC Stabile, EdD

September 9, 2024  
“NRSA Grant Pacing Workshop”  
Iniative for Maximizing Student Development Program  
Kim Petrie, PhD

September 13, 2024  
“BRET Career Development ASPIRE Program Resources for Postdocs and Fellows”  
Morehouse University Visiting Scholars Program  
Ashley Brady, PhD

September 30, 2024  
“BRET Office of Career Development Resources”  
Clinical Pharmacology Postdoctoral Fellows  
Jan Varadarajan, PhD

10

2024

October 18, 2024  
“Building Your Strengths”  
Medical Scientist Training Program Leadership Retreat  
Kate Stuart

11

2024

November 13, 2024  
“ASPIRE Internship Program”  
Human Genetics Student Association  
Ashley Brady, PhD

November 14, 2024  
“NRSA Grant Pacing Workshop”  
Pharmacology Department  
Kim Petrie, PhD

01

2024

November 2, 2023  
“BRET Career Development ASPIRE Program Resources for Postdocs and Fellows”  
Cancer Biology T32 Training Program  
Ashley Brady, PhD

January 10, 2025-March 10, 2025  
“BRET Office of Career Development & ASPIRE”  
IGP/QCB On-Campus Recruiting Visits  
Ashley Brady, PhD; Kim Petrie, PhD; Kate Stuart

January 16, 2025  
“NRSAs and Fellowships to Fund Your Research Training”  
Neuroscience Department  
Kim Petrie, PhD

02

2024

February 19, 2025  
“Professional Skills: Navigating Your Own Path”  
Fisk-Vanderbilt Master’s to PhD Bridge Program  
Ashley Brady, PhD; Christina Keeton, PhD

03

2024

March 21, 2025  
“Networking Strategies”  
VU-WiSE Symposium  
Ashley Brady, PhD

04

2024

April 28, 2025  
“ASPIRE for Career Planning”  
Biomedical Informatics Program  
Kim Petrie, PhD

06

2024

June 2, 2025  
“What Do PhDs Do?”  
V-Excel Program  
Ashley Brady, PhD

June 2, 2025  
“Leveraging LinkedIn”  
Vanderbilt Summer Science Academy  
Ashley Brady, PhD

June 18, 2025  
“Introduction to BRET and Training Grant Processes”  
Office of the Vice Provost for Research & Innovation  
Kim Petrie, PhD



ASPIRE Team  
Snapshots  
from the Year







**VANDERBILT**  
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Basic Sciences  
Biomedical Research Education and Training

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