



VANDERBILT KENNEDY CENTER

Thirteenth Annual Science Day
Tuesday, November 1, 2022

Celebrating 57 Years of Discovery

Vanderbilt Kennedy Center Science Day

Tuesday, Nov. 1, 2022

- 10:30 a.m. **Check-in, poster hanging begins; lunch available in Student Life Center lobby**
- 11:30 p.m. **Welcome and Opening Remarks**
- **Carissa Cascio, Ph.D.**, Science Day Chair
 - **Jeff Neul, M.D., Ph.D.**, Vanderbilt Kennedy Center Director
- 11:55 a.m. **Introduction of Keynote Speaker**
Carissa Cascio, Ph.D., Science Day Chair
- 12:00 p.m. **Keynote Address: *The Brain Cholinergic System and Cognitive Impairment: From Alzheimer's Disease to Down Syndrome***
Paul Newhouse, M.D., Jim Turner Professor of Cognitive Disorders; Professor of Psychiatry & Behavioral Sciences, Pharmacology, and Medicine; Director, Vanderbilt Center for Cognitive Medicine
- 1:00 p.m. **Poster Session 1**
- 2:00 p.m. **Poster Session 2**
- 3:00 p.m. **Introduction of VKC Data Blitz presenters**
Carissa Cascio, Ph.D., Science Day Chair
Data Blitz Presenters:
- **Jennifer Markfeld** (*Clinical/Behavioral/Educational/Intervention Research*): "Associations Between Caregiver Stress and Language Outcomes in Infants with Autistic and Non-Autistic Siblings"
 - **Camila Alviar** (*Clinical/Behavioral/Educational/Intervention Research*): "Trajectories of Visual Attention to Infant-Directed Song and Speech Across Development in Autism and Typical Development"
 - **Michelle Piazza**, (*Cellular & Molecular Neuroscience*): "Evaluation of the therapeutic potential of ketamine in a mouse model of Rett syndrome"
 - **Hee Jung Jeong** (*Systems Neuroscience*): "Environmental Stressors and Characteristics of Functional Networks"
 - **Jacob Feldman** (*Systems Neuroscience*): "Resting State EEG Predicts Later Language in Infant Siblings of Children with and without Autism"
- 4:00 p.m. **Announcement of 2022 VKC Science Day Poster Award winners, closing remarks**
- 2022 VKC Science Day theme committee members:
 - **Carissa Cascio, Ph.D.** (*Undergraduate, Science Day Chair*), Associate Professor of Psychiatry & Behavioral Sciences
 - **Sasha Key, Ph.D.** (*Systems Neuroscience*), Research Associate Professor of Hearing & Speech Sciences and Psychiatry & Behavioral Sciences; Director, VKC Psychophysiology Lab
 - **Rebecca Ihrle, Ph.D.** (*Cellular and Molecular Neuroscience*), Associate Professor of Cell & Developmental Biology and Neurological Surgery
 - **Jeff Hine, Ph.D.** (*Clinical/Behavioral Education/Intervention Research*), Assistant Professor of Pediatrics; TRIAD Director of Primary Care Outreach/Training
 - **Jeff Neul, M.D., Ph.D.**, VKC Director
- 4:30 p.m. **Posters Removed**

Science Day Goals

- To promote “centeredness” by providing a scientific forum for VKC faculty, their students, postdoctoral fellows, and trainees;
- To promote interdisciplinary research collaboration; and
- To provide faculty and trainees with an opportunity to present significant research findings and evidence-based service practices

In Grateful Appreciation

Vanderbilt Kennedy Center Science Day Faculty Planning Committee

- Carissa Cascio, Ph.D. (*Undergraduate, Science Day Chair*), Associate Professor of Psychiatry & Behavioral Sciences
- Sasha Key, Ph.D. (*Systems Neuroscience*), Research Associate Professor of Hearing & Speech Sciences and Psychiatry & Behavioral Sciences; Director, VKC Psychophysiology Lab
- Rebecca Ihrie, Ph.D. (*Cellular and Molecular Neuroscience*), Associate Professor of Cell & Developmental Biology and Neurological Surgery
- Jeff Hine, Ph.D. (*Clinical/Behavioral Education/Intervention Research*), Assistant Professor of Pediatrics; TRIAD Director of Primary Care Outreach/Training

Vanderbilt Kennedy Center Staff

- Science Day planning and coordination: Elizabeth Turner, Courtney Taylor, Jon Tapp
- Support: Laurie Fleming, Sue King

Vanderbilt Kennedy Center: Who We Are and Who We Serve

The Vanderbilt Kennedy Center for Research on Human Development has been transforming the lives of children and adults with disabilities through innovative research, training, and services for 53 years. Our mission is to facilitate discoveries and best practices that make positive differences in the lives of persons with developmental disabilities and their families. We support and apply scientific research to bring better services and training to our communities.

Vanderbilt Kennedy Center contacts:

Science Day-related questions: Elizabeth Turner, elizabeth.turner@vumc.org

General information: 615-322-8240

Tennessee Disability Pathfinder (*disability services information & referral*): 615-322-8529

Vanderbilt Autism Resource Line: 615-322-7565

Website: <https://vkc.vumc.org>

**Follow the VKC on Facebook (@VanderbiltKennedyCenter)
and Twitter (@Vanderbilt_KC)!**

Vanderbilt Kennedy Center Travel Awards

Attention: Poster Presenters

Thank you for taking part in Vanderbilt Kennedy Center Science Day! All poster presenters will be appointed as a Vanderbilt Kennedy Center Affiliate. All Affiliates may compete for VKC Travel Awards.

Vanderbilt Kennedy Center Travel Awards—Eligibility and Application Process

VKC Travel Awards supplement other funding sources. Applications (letter of request) will be considered for travel to present at scientific conferences or meetings beginning Nov. 2, 2022. A Travel Award will not exceed \$250, and an Affiliate is eligible for a single Award between annual Science Days. Travel Awards are available on a first-come, first-served basis until funds set aside for this purpose are fully committed.

Eligibility

Graduate students and postdoctoral fellows:

- Who are engaged in research with a VKC Investigator or Member
- Who are VKC Affiliates (i.e., who presented a poster at Vanderbilt Kennedy Center Science Day, Nov. 1, 2022)
- Who will use the funds to travel to a research conference at which the Affiliate is making a presentation

Process

- The VKC Affiliate submits a letter of request, co-signed by the VKC Investigator or Member with whom the trainee is conducting research. The letter should describe how the travel award would be used (conference title, location, dates, presentation title), and how the trainee's research interests and research training would be served.
- Letter of request should be submitted to Elizabeth Turner, Associate Director of VKC Communications, for review and decision: elizabeth.turner@vumc.org; (615) 322-8238; 1207 17th Ave. S., Suite 202, Nashville 37212.
- VKC Communications will notify Affiliate of decision. If a Travel Award is made, instructions for payment will be included in award letter.

Attention: Students Attending Science Day

Students often look for positions in research labs or programs, and in turn, researchers often are looking for interested students to become involved in their research. We hope you will use VKC Science Day as an opportunity to explore the range of research in many disciplines, to talk with trainees and faculty engaged in research, and to identify labs or research programs you may want to contact in the future.

Poster Abstracts

Poster abstracts are available on the VKC website at vkc.vumc.org/vkc/scienceday/.

1 - Adler 3 - Alviar 5 - Bae 7 - Bahrami 9 - Baxter 11 - Burgess 13 - Chen 15 - Compton 17 - Delgado
2 - Agnes 4 - Archer 6 - Baggeroer 8 - Barrett 10 - Buchanan 12 - Calvosa 14 - Chalkley 16 - Conley 18 - Deneny

19 - EMPTY 21 - Dong 23 - Duncan 25 - L. Durham 27 - Eberwein 29 - Espinoza 31 - Feller 33 - Fitzpatrick 35 - Fram
20 - DiMartini 22 - EMPTY 24 - K. Dunham 26 - Durrani 28 - Elchos 30 - Feldman 32 - Finley 34 - Formento 36 - Francois

37 - Furukawa 39 - Green 41 - Hilsen 43 - Honaker 45 - EMPTY 47 - Huerta 49 - Jackson 51 - Jeong 53 - Kaiser
38 - Gowda 40 - Grim 42 - Harriott 44 - Hong 46 - Houpert 48 - Huizinga 50 - Jagarlamudi 52 - Jin 54 - Kasdan

55 - Kim 57 - Lee 59 - Li 61 - Marino 63 - Martinez-Lincoln 65 - Marritt 67 - Miceli 69 - Miletic Lanaghan 71 - Mirpuri
56 - Kiemel 58 - LeMaster 60 - Lynn 62 - Markfeld 64 - McDonald 66 - Mesches 68 - Miles 70 - Millager 72 - Munoz Lavanderos

73 - Nguyen 75 - Piazza 77 - Pickren 79 - Rathan Kumar 81 - Reimann 83 - EMPTY 85 - Sangimino 87 - Scudder 89 - C. Song
74 - Oyerinde 76 - Pak 78 - Quinde Zilbut 80 - Rbeiz 82 - M. Rodgers 84 - Rowley 86 - Scotti 88 - Y. Song 90 - Srinvasan

91 - Amy Stahl 93 - Adriana Tienda 95 - Shane Watson 97 - Dallas Whitehead 99 - E. Williams 101 - Zhang 103 - Zoltowski
92 - Sullivan 94 - Vassall 96 - Walkingstick 98 - Z. Williams 100 - Wu 102 - Zilinskaite