

ABOUT CHAI

The Center for Human-Animal Interaction (CHAI) is a 501 (c)(3) charity that exists within Medical College of Virginia Foundation (assessed by Charity Navigator to be a 98%, 4-star rated charity). CHAI is generously housed within West Hospital by the Psychiatry Department of Virginia Commonwealth University's School of Medicine. Many of CHAI's staff and executive committee members are VCU professors and professionals with a passion for animals and the benefits of Human-Animal Interaction. But CHAI's greatest asset is its volunteers, both human and four-legged.

Mission

Improving health and well being through human-animal interaction.

To achieve our mission,

Our research goal is to increase knowledge of the benefits of the humananimal interaction through interdisciplinary research.

Our clinical goal is to enhance health and well being for patients and other members of our community through animal-assisted interventions.

Our educational goal is to improve understanding of the benefits of the human-animal interaction.

WHO WE ARE

2022 Executive Committee



Nancy Gee, Ph.D., C-AISS Committee Chair Director, Center for Human-Animal Interaction



Sharon Alexander, MPA Director of Workforce Initiatives, Virginia Hospital & Healthcare Association (VHHA)



Marjolein de Wit, M.D. Associate Professor of Internal Medicine, VCU School of Medicine



Carissa Etters, B.S.
Director of Executive and Enterprise
Communications,
VCU Health



Susan Kornstein, MD
Director of Clinical Research,
VCU School of Medicine Department of
Psychiatry
Co-Founder and Executive Director,
VCU Institute of Women's Health
Professor of Psychiatry and Obstetrics &
Gynecology, VCU School of Medicine



Kathleen O'Kane Kreutzer, M.Ed.
Director of Special Projects,
VCU School of Medicine
Assistant Professor, VCU
School of Medicine



Reuban B. Rodriguez, Ed.D Associate Vice Provost and Dean, Division of Student Affairs, VCU Assistant Professor, VCU



Gary Southard, Jr., MBA Senior Administrator, CHoR, VCU Health



Paul Wesolowski, MBA
Former Chief Operating Officer, VCU Health

2022 Research Affiliates

Randolph T. Barker, Ph.D., Professor Emeritus, Business, VCU
Sandra B. Barker, Ph.D., NCC, LPC, Professor Emeritus, Psychiatry, VCU

Gonzalo M.L. Bearman, M.D., MPH, Professor & Chair, Internal Medicine/Infectious Diseases, VCU
James Bjork, Ph.D., Associate Professor, Institute for Drug and Alcohol Studies, VCU
Pamela Dillon, Pharm.D., Associate Professor and Research Liaison,
Wright Center for Clinical and Translational Research, VCU
Jeffrey D. Green, Ph.D., Professor, Psychology, VCU
Lance J. Hampton, M.D., Associate Professor & Chair, Urology, VCU
Susan Kornstein, Ph.D., Professor, Psychiatry and Obstetrics and Gynecology, VCU
Ashlee R. Loughan, Ph.D., Assistant Professor, Neurology, VCU
Gretchen N. McCandless-Neigh, Ph.D., Associate Professor, Anatomy, VCU
Shelby E. McDonald, Ph.D., Director of Research, ASPCA
Lisa Townsend, LCSW, Ph.D., Associate Professor,
Department of Pediatrics - Adolescent Medicine/Child and
Adolescent Psychiatry



Nancy Gee, Ph.D., C-AISS

Professor of Psychiatry, VCU School of Medicine Bill Balaban Chair in Human-Animal Interaction Fellow, International Society for Human-Animal Interactions

It gives me great pleasure to share in this report the achievements of the Center for Human-Animal Interaction over the past year. As you will read, our research program has been very active, we have an exciting publication about to be released, we continue to provide educational opportunities both within and outside VCU, and our Dogs on Call teams have increased their presence throughout the VCU Health System - and beyond.



WHO'S ON THE TEAM?

Lisa Townsend, LCSW, PhD

Clinical and Research Associate Associate Professor of Pediatrics and Psychiatry, VCU School of Medicine





J.T. Hosack, MAVolunteer Coordinator, Senior

Karl Dorn, MEd
Program Coordinator





OUR VOLUNTEERS

CHAI's 53 volunteers contributed a whopping 1,515 hours of service during 2022.

Administrative Volunteers

Our administrative volunteers (some of whom are also Dogs on Call team members) each bring unique skills to the table to support CHAI and Dogs on Call in meaningful ways.

Dr. Randolph T. Barker Dr. Sandra B. Barker Margaret Popik Kathy Albers Morgan Gossman Denice Ekey Barbara Klucik

Research Teams

A number of our Dogs on Call teams go above and beyond by helping CHAI conduct randomized clinical trials in the hospital to examine experimentally the impact of therapy dog visitation in a hospital setting. We are grateful for their commitment to the additional training and time commitments this work requires.

Anna w/Murphy
Beth & George w/ Maggie
Carmen w/ Weird Alf
Denise w/ Wiley
Jeanne w/ Zeke

Kathy w/ Hairy Harry Linda w/ Jag Marcia w/ Phoebe Margaret w/ Elsa Marcie w/ Harry Nancy w/ Allie Simone w/ Captain Jack Susie w/ Homer Tracy w/ Missy Wayne w/ Maxwell

DOGS ON CALL

by the numbers

In 2022, Dogs on Call continued to recover from, and adapt to, the challenges of the COVID-19 pandemic.

One area of focus was on improvements to the number of in-hospital visits completed. Roughly 1,500 more visits were completed in 2022 than in 2021.

Additionally, we are now completing roughly 90% of all visit requests successfully, compared to last year's 75%.

3,765

Total Visits

699

Requests Met

18

Teams Onboarded

49

Handlers



Dogs





DOGS ON CALL

activities and events







While Dogs on Call continues to focus on serving VCU Health patients, families, and staff, our teams enjoy providing support to VCU Health, VCU, and the community when time and resources allow.

Chesterfield County School Literacy Program (3/7 and 3/18).

The Dogs on Call program was happy participate in 2 kickoff events for a program dedicated to promoting literacy skills in children.

The Self-Care Experience (10/14).

Dogs on Call teams joined this event in support of survivors of domestic violence.

VCU De-stress Events.

In 2022, with fewer restrictions in place, the DOC program received many requests to participate in student de-stress events. Teams were able to meet over a dozen requests this year, including:

- the Cabell and Health Sciences libraries;
- the Schools of Pharmacy, Nursing, and Engineering; and,
- the Athletics Department

ANNUAL

fundraisers

The Center for Human-Animal Interaction is sustained in no small part by the generosity of the VCU Health community. We are grateful that so many friends and allies showed their support for our dogs and our mission at our fundraiser events.

Pups on the Plaza. Our first Pups on the Plaza since before the COVID-19 pandemic was a rockin' success. This block party-type fundraiser featured DJ'd music, dancing, and over a dozen Dogs on Call therapy dog teams as we sold meal tickets, t-shirts, and mugs to raise funds for our program.

Calendar Sales. Our Dogs on Call calendars, presenting photos of our Dogs on Call teams in action, were once again highly popular in the VCU/VCU Health community. This year's calendar was dedicated to the resiliency of the VCU Health staff in responding to, and rising above, the pandemic. Our 28 sponsors and those who purchased over 1,000 calendars once again made this a successful undertaking!

Love Lights. In 2022, the MCV Auxiliary selected Dogs on Call to be the beneficiary of its first post-COVID fundraiser. Members of the VCU Health community made donations in exchange for the opportunity to hang an ornament bearing a loved one's name on a tree in the Main Hospital lobby. Both Dogs on Call dogs and CHAI staff gladly made appearances daily across this week-long event.



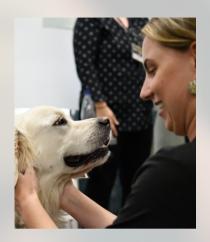






VCU HEALTH

impact & support



The Center and Dogs on Call program demonstrated their support for the VCU Health system in multiple ways during 2022.

Once again, Dogs on Call participated in **Nurses Appreciation Week**, this time in person rather than virtually. For three successive days, our teams raised their paws in support of the tireless efforts of the nursing staff.



The CHAI staff, accompanied by Dogs on Call teams, presented a best practice model for wellness at a School of Medicine Alumni Wellness Event and again for VCU Health PACE Center medical professionals.

Our Dogs on Call teams were also happy to be on site for other events throughout the VCU Health system, including the VCU Adult Outpatient Pavilion Donor Reception, the Ryan White Center Holiday Party, and the VCU Health Integrative Medicine Resource Center.



As always, Dogs on Call lent our support to **Arts in Healthcare Day**, our partner program in VCU Health.

Dogs on Call made an appearance at VCU's Theta Delta Chi's fundraiser, in which they raised donations for the Children's Hospital Foundation.

Dr. Gee, accompanied by a Dogs on Call team, participated in the 2022 Radiothon in support of the Children's Hospital Foundation. Dr. Gee spoke about the benefits of HAI and CHAI's Dogs on Call program at this 11th annual 36 Hours for Kids radiothon, supported by multiple radio stations.

educational services

Presentations and Informational Sessions

While many of the presentations delivered by CHAI staff through the year are at conferences as part of the process of creating new scientific HAI knowledge (see the Research section), CHAI also educates by presenting and disseminating more general HAI information. In 2022, CHAI staff made the following formal and information educational presentations:

Formal Educational Presentations

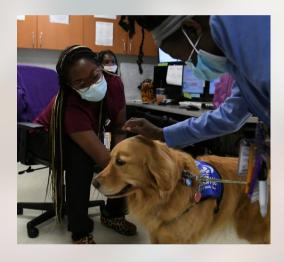
- Gee, N.R. (2022, February, 22). The Lincoln Education Assistance with Dogs (LEAD) risk assessment tool. Guest lecture to the Certificate Program in Human-Animal Interaction at Oakland University.
- Gee, N.R. (2022, March 8). Center for Human-Animal Interaction and Dogs on Call. Presentation to the Sheltering Arms Institute Servant Leadership Council. Richmond, VA, United States.
- Gee, N.R. (2022, March 17). Distinguishing Among Service/Assistance, Facility, Therapy and Emotional Support Animals. Presentation to VCU Staff Senate Sub-Committee for Accessibility and Inclusion. Richmond, VA, United States.
- **Gee, N.R.** (2022, April). *How Companion Animals Impact our Mental Health.* Presentation to British Society of Animal Science.
- **Gee. N.R.** (2022, April 23). *Medical Student Engagement and Wellness* [Panelist]. VCU School of Medicine's 2022 Reunion Weekend, Richmond, VA, United States.
- Gee, N.R. (2022, May 19). Evaluating the Impact of Dogs on Call on Loneliness and Related Health Outcomes. Presentation to Virginia Commonwealth University Department of Psychiatry First Annual Research Day, Richmond, VA, United States.
- Gee, N.R. (2022, August 11). Center for Human-Animal Interaction and Dogs on Call.
 Presentation to VCU Health PACE Center medical professionals. Richmond, VA, United States.
- **Gee, N.R.** (2022, November). *Companion Animals and Mental Health*. Presentation to the Pet Partners Board. Chicago, IL, United States.
- **Gee, N.R.** (2022, November). *The State of the Science*. Presentation to the Pet Partners Board. Chicago, IL, United States.
- **Townsend, L.** (2022, November). *Animals in Human Health Care.* Presentation given for the University of Illinois College of Veterinary Medicine chapter of Veterinarians as One Inclusive Community for Empowerment (VOICE).
- Townsend, L., Towsley, N., & Gee, N.R. (2021-Current). Basic Principles of Research Ethics for Community Engaged Researchers. Training delivered to Dogs on Call volunteer handlers. Richmond, VA, United States.

Informal Educational Sessions

- Gee, N.R., Townsend, L.D., & Dorn, K. (2022, June 5). Informational tabling at FETCH-a-Cure's 12th Annual Mutt Strut. Richmond, VA, United States.
- Hosack, J.T. (2022, October 8). Informational tabling at Barktoberfest. Clarksville, VA, United States.
- Townsend, L.D. (2022, October 13). Informational tabling with the VCU Staff Senate Accessibility
 and Inclusion Working Group. Richmond, VA, United States.
- Townsend, L.D. & Dorn, K. (2022, November 9). Informational tabling with VCU Arts in Healthcare. Richmond, VA, United States.

student and resident educational opportunities







CHAI provides educational opportunities each year for a variety of students and residents ranging from undergraduate students, to those finishing professional school, to those completing a residency.

Fourteen medical students in their fourth year (M4s) completed an elective rotation at CHAI. During their time at CHAI they split their time between working with CHAI's Director on research projects and helping with CHAI's daily functioning. They supported and photographed Dogs on Call teams, helped prepare and distribute stuffed animals, and performed a variety of other mutually-beneficial tasks.

Four psychiatry residents worked with the Director on more extended research related to human-animal interaction.

Four other students received support from our Director toward their educational goals. Two worked on PhD dissertations, one completed an undergraduate independent study, and one completed a 10-week practicum in MPH program.

RESEARCH COMMUNICATIONS

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Randomized **Controlled Trial Experiments** Running





Journal **Publications**



Edited Books & Chapters



Conference Presentations







research

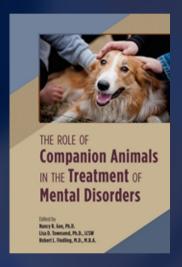
Publications

CHAI staff's publication efforts in 2022 were focused heavily on the book *The Role of Companion Animals in the Treatment of Mental Disorders*, soon to be published by the American Psychiatric Association. As noted below, in addition to editing, Drs. Gee and Townsend authored many of the chapters within the volume.

2022 Edited Books and Chapters

- Dr. Gee, Dr. Townsend, and Dr. Robert Findling edited a volume on the relationship between human-animal interaction and mental disorders, published by the American Psychiatric Association.
 - Gee, N.R., Townsend, L., & Findling, R. (Eds). (in press). The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
 - Gee, N.R., Townsend, L. & Findling, R. (in press). Introduction. The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
 - Townsend, L., Meuller, M. (in press). Companion animals involved in the treatment of at-risk and adjudicated youth. The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
 - **Townsend, L., Gee, N.R.,** & Kornstein, S. (in press). Companion Animals in the Treatment of Depression. *The role of companion animals in the treatment of mental disorders*. American Psychiatric Association.
 - Friedmann, E., Gee, N.R., & Levenson, J.L. (in press). Companion Animals in the Treatment of Stress and Anxiety. The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
 - Townsend, L. & Buckley, P. (in press). Companion Animals in the Treatment of Mental Illness. The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
 - Townsend, L. (in press). Companion Animals Assisting Patients in Hospice. The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
 - Gee, N.R., Bibbo, J., & Dunn, L. (in press). Companion Animals in the Treatment of Dementia and Aging Related Concerns. The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
 - Gee, N.R., Townsend, L. & Thakre, T. (in press). How Dog Visitation
 Programs May be Beneficial to Hospital Patients and Staff. The role of
 companion animals in the treatment of mental disorders. American
 Psychiatric Association.
 - Gee, N.R., Townsend, L., & Findling, R. (in press). Conclusion. The role of companion animals in the treatment of mental disorders. American Psychiatric Association.
- **Gee, N.R.** (in press). Animals in education. In A. Fine, M. Mueller, Z. Ng, J.M. Peralta, & A. Beck (Eds.) *The handbook on human-animal interactions, interventions and anthrozoology*. Routledge Press.







2022 Journal Publications

- **Townsend, L.**, Heatwole, J.K., **Gee, N.R.** (2022). Reactivation of a Hospital-Based Therapy Dog Visitation Program during the COVID-19 Pandemic. *Animals*, 12(14). https://doiorg/10.3390/ani12141842
- Meints, K., Brelsford, V.L., Dimolareva, M., Maréchal, L., Pennington, K., Rowan, E., Gee, N.R. (2022). Can dogs reduce stress levels in school children? effects of dog-assisted interventions on salivary cortisol in children with and without special educational needs using randomized control trials. PLOS ONE 17(6): e0269333. https://doi.org/10.1371/journal.pone.0269333
- Howell, T.J., Nieforth, L., Thomas-Pino, C., Samet, L., Agbonika, S., Cuevas-Pavincich, F., Fry, N.E., ... Gee, N.R. et al. (2022). Defining terms used for animals working in support roles for people with support needs. *Animals*, 12(15). https://doi.org/10.3390/ani12151975
- Brelsford, V.L., Dimolareva, M., Rowan, E., Gee, N.R., Meints, K. (2022). Can dog-assisted and relaxation interventions boost spatial ability in children with and without special educational needs? A longitudinal, randomized controlled trial. Frontiers in Pediatrics 10. https://doi.org/10.3389/fped.2022.886324
- Friedmann, E. Gee, N.R., Simonsick, E.M., Barr, E., Resnick, B., Werthman, E., & Adesanya, I. (2022). Pet ownersship and maintenance of physical function in older adults evidence from the Baltimore longitudinal study of aging (BLSA). *Innovation in Aging*. https://doi.org/10.1093/geroni/igac080

Conference Presentations

- Gee, N.R. (2022, April 12). How Companion Animals Impact our Mental Health [Keynote speaker]. British Society of Animal Science Annual Conference 2022, Nottingham, UK.
- Gee, N.R. (2022, July 7). Ecological Momentary Assessment (EMA) as a Tool for Assessing Human-Animal Interaction Across Contexts [Symposium chair]. International Society for Anthrozoology 31st Annual Conference.
- Townsend, L.D., Heatwole, J., & Gee, N.R. (2022, July 9). *Utilization of a Hospital-based Therapy Dog Visitation Program* [Conference presentation]. International Society for Anthrozoology 31st Annual Conference.
- Friedman, E., Gee, N.R., Simonsick, E.M., Barr, E., Resnick, B., Werthman, E., Adesanya, I. (2022, July 9). Pet Ownership and Maintenance of Physical Function in Older Adults Evidence from the BLSA [Conference presentation]. International Society for Anthrozoology 31st Annual Conference.
- **Gee, N.R.** (2022, September 4). *Looking behind the academic curtain* [Panelist]. 30th Annual Conference of the International Association of Human-Animal Interaction Organizers.
- Gee, N.R. (2022, September 30). Best Practice Standards in Animal Assisted Interventions: Risk Assessment [Speaker]. 2022 Animal Assisted Intervention International Virtual Conference.

externally funded research projects

The Center for Human-Animal Interaction does not only apply and disseminate existing HAI knowledge - CHAI creates new knowledge by conducting rigorous research. Three randomized-controlled trials examining the impacts of therapy dog intervention on loneliness, depression, anxiety, and related health outcomes are currently underway for three vulnerable inpatient populations: older adults, adults with mental illness, and children.

During 2022, the fourteen Dogs on Call teams listed on Page 5 began patient visits at the Sheltering Arms Institute and other locations throughout the VCU Health system, accompanied by human research assistants collecting data from the patients. This is a demanding form of research, but our teams are up for it!

These trials are possible thanks to grants provided by:













CHAI SOCIAL MEDIA REACH

What would the "rock stars of the hospital" be without their social media?



4,900 Facebook Page Likes



Top Posts of 2022:

- 149 Hearts Dogs on Call is for EVERYONE! (above)
- 127 Hearts The Cardiology Consultation Team agree unanimously that Homer's heart is overflowing with love. (below)



public relations

CHAI staff and programs again garnered a steady stream of media coverage in 2022.

- Interviews with Dr. Barker
 - Hurt, A.E. (2022, April). In an emergency, you may want to see Dr. Dog. Science News Explores.
 https://www.snexplores.org/article/terapy-dog-reduces-pain-anxiety-emergency-room
 - Bolster, J. (2022, April). Pets May Be Good for Brain Health. Brain & Life. https://www.brainandlife.org/articles/pets-may-be-good-for-brain-health
- · Interviews with Dr. Gee
 - Lastoe, S. (2022, April). 6 Potential Health Benefits of Owning a Pet. Everyday Health. https://www.everydayhealth.com/health-living/potential-health-benefits-of-owning-a-pet/
 - McCann, A. (2022, August 9). 2022's Most Pet-Friendly Cities.
 WalletHub. https://wallethub.com/edu/most-pet-friendly-cities/5562
 - McConnell, S. (Executive Producer). (2022, October 14). The Pets We Love [Audio podcast episode]. In With Good Reason. Virginia Humanities. https://www.withgoodreason.org/episode/the-pets-we-love/
- Selected 2022 News Articles about Dr. Barker's Research
 - Kelley, T.L. (2022, September 7). Office Pets Can Make You Less Stressed, Studies Say, and Furry Co-Workers Rank High at Some Companies. Yahoo!. https://www.yahoo.com/lifestyle/office-pets-less-stressed-studies-135747435.html
- Selected 2022 News Articles about Dr. Gee's Research
 - Altmetric. (2022). Can dogs reduce stress levels in school children?
 Effects of dog-assisted interventions on salivary cortisol in children
 with and without special educational needs using randomized
 controlled trials overview of attention for article published in PLOS
 ONE, June 2022. https://plos.altmetric.com/details/139749387/news
 - Altmetric. (2022). Defining Terms Used for Animals Working in Support Roles for People with Support Needs Overview of Attention for article published in Animals, August 2022. https://mdpi.altmetric.com/details/133633872/news
- Other
 - Dogs on Call volunteer Kim Maxey featured as a "Hometown Hero"
 for her work with Dogs on Call and other therapy dog organizations
 - Allen, Allen, Allen, & Allen. (2022). Allen & Allen Hometown Heroes 2022. https://www.allenandallen.com/about/communityinvolvement/hometown-heroes-2022/
 - VCU mascot Rodney the Ram thanks Dogs on Call
 - Office of Alumni Relations [vcualumni27]. (2022, August 25).
 Black&Gold&You: Rodney gives thanks! [Video]. YouTube.
 shorturl.at/lvxT9
 - Dr. Gee speaks about the benefits of HAI and CHAI's Dogs on Call program at the 11th annual 36 Hours for Kids radiothon. The radiothon is supported by several radio stations.
 - VCU Empowerment Committee's December Newsletter features Dogs on Call dogs.







OUR GRATITUDE

It truly takes a village, and we are immensely grateful to the community of people who have come together in supporting CHAI's mission. We give our thanks and deep appreciation to the following:

Our Calendar Sponsors

Children's Hospital of Richmond at VCU
Denice, David, and Darcy Ekey
Greg & Rebecca Felton
Holiday Barn Pet Resorts
Iron Bridge Animal Hospital
Karl's Aunt Gail
Dr. Lisa Townsend, Dr. Robert Findling, Ro

Dr. Lisa Townsend, Dr. Robert Findling, Roo, and Minnie Dr. Nancy Gee

Dr. Nancy Gee
Attorney Paul Hux; Reese; and Allen, Allen, Allen, & Allen
Drs. Randy and Sandy Barker
Mr. and Mrs. Richard T. Robertson (and their Frenchies)
Richmond Dog Obedience Club
River City Veterinary Hospital
Sheltering Arms Institute

Town & Country Veterinary Clinic
Transtar Moving Systems
VCU Dean of Students Office
VCU Department of Psychiatry
VCU Health Arts in Healthcare
VCU Health Community Memorial Hospital
VCU Health Department of Pathology
VCU Medical Center MCV Hospital Auxiliary
VCU Medical Rehabilitation Services
VCU Police
VCU School of Medicine
Virginia Book Company
Virginia Veterinary Medical Association
Wellesley Animal Hospital











Other Program Sponsors

Children's Hospital of Richmond
Petsmart
Shirley Gibson, Interim Vice-President of Support Services
Tony Stewart Foundation
VCU
VCU Health
VCU Department of Psychiatry

