Grace Hansen
MD/PhD Candidate
University of Chicago

gthansen@uchicago.edu
757-620-4686

Research Experience

Graduate Student, Department of Genetics, Genomics, and Systems Biology
Nobrega Lab, University of Chicago
September 2017-present
Research areas: complex trait genetics, gene splicing, obesity

IRTA Post-baccalaureate fellow, National Institute of Mental Health
Clinical and Translational Neuroscience Branch
July 2013-May 2016
Research areas: schizophrenia, copy number variation, longitudinal brain development, gene expression.

Research Manager, University of Utah
Visual Perception and Spatial Cognition Lab
August 2012-May 2013
Research areas: perception, data interpretation, uncertainty, decision-making, embodied cognition

Experiment Director, College of William and Mary
Cognitive Psychophysiology Lab
September 2011- May 2012
Research area: semantic memory

Research Assistant, College of William and Mary
Cognitive Psychophysiology Lab
June 2011- May 2012
Research areas: autism, mismatch negativity, mild cognitive impairment, mu rhythm desynchronization

Education

University of Chicago Medical Scientist Training Program
PhD specialization: Genetics

FAES Graduate School at NIH

College of William and Mary, 2008-2012
Degrees:
Bachelor of Science, Cognitive Neuroscience
Bachelor of Arts, English

Honors and Awards

- Top Poster Award, Society of Biological Psychiatry Annual Meeting 2016
- Top Abstract Award, NIMH Training Day 2015
- Magna Cum Laude, College of William and Mary
- Honors in Psychology
- Honors Thesis Award: High Honors
  (possible awards: No Honors, Honors, High Honors)
- Dean's List, College of William and Mary

Presentations and Publications

Publications

Creem-Regehr, S., Payne, B., Rand, K. and Hansen, G. (2013). Scaling space with the mirror illusion: The influence of body plasticity on perceived affordances. *Psychonomic Bulletin and Review*.

Helling, B.S., Sobreira, D.R., Hansen, G.T., ... & Ober, C.A. (2020). Transcriptional and Chromatin Responses of Bronchial Epithelial Cells to RV are Altered in Asthma. *Communications Biology.*

Montefiori, L. E., Sobreira, D. R., Sakabe, N. J., Aneas, I., Joslin, A. C., Hansen, G. T., ... & Nobrega, M. A. (2018). A promoter interaction map for cardiovascular disease genetics. *eLife,* 7, e35788.

Padilla, L., Hansen, G., Ruginski, I., Kramer, H., Thompson, W., and Creem-Regehr, S. (2014). The influence of different graphical displays on non-expert decision making under uncertainty. *The Journal of Experimental Psychology: Applied*.

Presentations

Hansen, G., Kippenhan, J.S., Giedd, J., Gregory, M., Kolochana, B., Rapoport, J., and Berman, K.F. Williams Syndrome gene *LIMK1* impacts regional human gray matter developmental trajectories in healthy children. Presentation given at the 2015 National Institute of Mental Health Training Day, Bethesda, MD.

Posters

Gregory, M., Marenco, S., Hansen, G., Kuo, S., Meyer, C., Callicott, J.H., Eisenberg, D.P., Apud, J., Berman, and K.F. Structural Brain Imaging of Myelin in Patients with Schizophrenia and Healthy Adults using mcDESPOT. Poster presented at the 2014 Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ.

Hansen, G., Nguyen, T., Kippenhan, J. S., Kolachana, B., Mattay, A., Weinberger, D. and Berman, K.F. Different oxytocin receptor polymorphisms are associated with independent effects on gray and white matter volume in the human brain. Poster presented at the 2014 Society for Neuroscience Annual Meeting, Washington, DC.

Hansen, G., Nguyen, T.V., Reuter, J., Lipska, B., Kleinman, J., Schmidt, P., and Berman, K. Developmentally-specific interactions between the expression of genes coding for prosocial peptides and dopamine D2 receptor gene expression in the postmortem human brain. Poster presented at the 2014 Society for Biological Psychiatry Annual Meeting, New York, NY.

Hansen, G., Kippenhan, J.S., Giedd, J., Gregory, M., Kolochana, B., Rapoport, J., and Berman, K.F. Williams Syndrome gene *LIMK1* impacts regional human gray matter developmental trajectories in healthy children. Poster presented at the 2015 Society for Biological Psychiatry Annual Meeting, Toronto, CA.

Hansen, G.T. Sobriera, D.R., Joslin, A.C., Shah, A., Zeng, T.K., Li, Y. & Nobrega, M.A. Systematic Identification of Genes Underlying Obesity Risk in Adipocytes. Poster presented at the 2018 American Society for Human Genetics Annual Meeting, San Diego, CA.

Raab, H., Nguyen, T.V., Hansen, G., Gregory, M., Nash, T., Turner, N., Boyle, D.E., Brady, S., Wei, S., Martinez, P., Kippenhan, J.S., Turkbey, E.B., Gu, J., Soldin, S., Marenco, S., Schmidt, P.J., and Berman, K.F. Steroid hormone levels and physical maturation are associated with distinct parameters of pubertal white matter development. Poster presented at the 2014 Society for Neuroscience Annual Meeting, Washington, DC.

Clinical Experience

Sexual Assault Crisis Counselor, *Resilience*
May 2019-Present
Provide emergency legal and medical counseling for individuals

presenting to emergency rooms in the Chicago area as the result of a sexual assault.

Volunteer, Bridgeport Free Clinic
September 2016-Present
Provide free primary care services to individuals presenting to the clinic for medical care, including taking histories of present illness, providing physicals, and performing point-of-care medical testing.

Volunteer, New Life Volunteering Society
September 2016-Present
Provide free primary care services to individuals presenting to the clinic for medical care, including taking histories of present illness, providing physicals, and performing point-of-care medical testing.

NIMH Inpatient Unit Clinical Program
October 2013-May 2016
Training in clinical inpatient unit administration and management, inpatient care. Education on occupational therapy, recreational therapy, social work, group therapy, and psychiatry on a psychiatric inpatient unit. Participation in and supervision of group therapy, individual therapy, and recreational therapy. Observation of physician care, medication management, and diagnosis.

NIH ICU Rounds
November 2013-May 2016
Observation of NIH internal medicine physicians during care of inpatients on protocol at the NIH in critical condition. Exposure to treatment for acute organ failure, postsurgical care, managed recovery from acute health crises, and end-of-life health care.

Teaching Experience

Teaching Assistant, September 2018-December 2018
Course Title: Human Genetics
Mentored junior graduate students as they developed a mock grant in human genetics. Developed scientific writing skills, evaluated the scientific design of proposed projects, suggested improvements to the design of proposed research.

Teaching Assistant, September 2018-September 2019
Course Title: Quantitative Bootcamp
Taught basic programming in R and Unix to 90 incoming biological science graduate students. Introduced students to

data visualization, version control, and other topics.

Software Carpentry Assistant, January 2019
Assisted students in the biological sciences and medicane as they learned basic programming in R, version control, and data visualisation.

Leadership Experience

Dean's Council, University of Chicago Biological Sciences Division, 2017-2019
Student Health Advisory Board, University of Chicago, 2017-2018
Senior Fellow, Section on Integrative Neuroimaging, 2014-2015
Editor-in-Chief, William and Mary Review, 2011-2012
Organizing Fellow, Obama for America, 2008

References

Marcelo Nobrega
Professor of Human Genetics, University of Chicago
mnobrega@bsd.uchicago.edu

Marcus Clark
Professor of Medicine and Pathology, University of Chicago
Chair, University of Chicago Medical Scientist Training Program
mclark@medicine.bsd.uchicago.edu

Karen Berman, MD
Chief, Section on Integrative Neuroimaging
National Institute of Mental Health
karen.berman@nih.gov

Shane Kippenhan, Ph.D
Senior Investigator, Section on Integrative Neuroimaging
National Institute of Mental Health
kippenhs@mail.nih.gov