

Stanford



David S. Hong

Associate Professor of Psychiatry and Behavioral Sciences (Interdisciplinary Brain Science Research)

Psychiatry and Behavioral Sciences - Interdisciplinary Brain Sciences

CLINICAL OFFICE (PRIMARY)

- **Psychiatry and Behavioral Sciences**

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Bio

CLINICAL FOCUS

- Psychiatry

ACADEMIC APPOINTMENTS

- Associate Professor - University Medical Line, Psychiatry and Behavioral Sciences - Interdisciplinary Brain Sciences
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

PROFESSIONAL EDUCATION

- Medical Education: Albert Einstein College of Medicine (2004) NY
- Fellowship: Stanford University - Dept of Psychiatry (2010) CA
- Board Certification: Child and Adolescent Psychiatry, American Board of Psychiatry and Neurology (2011)
- Board Certification: Psychiatry, American Board of Psychiatry and Neurology (2009)
- Residency: Stanford University - Dept of Psychiatry (2007) CA

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Hong is a child and adolescent psychiatrist and clinician-scientist. His responsibilities span clinical care, teaching/mentorship, and research, with a unifying theme of advancing a developmental cognitive framework as applied to psychiatric conditions. Using this core premise, he work encompasses multiple domains: specialized clinical care, fellowship training, research mentorship, and elaborating the role of sex-specific determinants of development, one of the greatest contributors to individual developmental variation.

His lab investigates genetic and hormonal influences underlying sex differences in child psychiatric conditions. Sex has emerged as a critical variable driving differences in the phenomenology, course, and treatment of many mental health disorders. Unfortunately, an understanding of the biological mechanisms driving these effects are limited. By applying innovative neuroimaging and multiomic approaches, Dr. Hong seeks to provide a deeper understanding of the connection between sex-specific effects and complex psychiatric diseases. To do so, research in the Hong Lab focuses on the role of genes on the X and Y chromosomes, as well as circulating sex hormones on brain development, cognition, and behavior. The lab broadly aims to elucidate the changing nature of these mechanisms across various stages of development.

Another area of focus is the implementation of clinical informatics in child psychiatry and the development of digital mental health tools. As co-Director of the Mental Health Technology and Innovation Hub, Dr. Hong is helping to develop clinical and research infrastructure within the Department of Psychiatry and Behavioral Sciences to advance development of mobile mental health resources that will improve efficacy and access to mental health care.

Teaching

COURSES

2023-24

- Developmental Psychopathology, Psychotherapy and Psychopharmacology and Neuroscience: PSYC 211 (Aut)

2022-23

- Developmental Psychopathology, Psychotherapy and Psychopharmacology and Neuroscience: PSYC 211 (Aut)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Javad Ansarifar, Ilang Guiroy

Publications

PUBLICATIONS

- **Identifying a stable and generalizable factor structure of major depressive disorder across three large longitudinal cohorts.** *Psychiatry research*

Tseng, V. W., Tharp, J. A., Reiter, J. E., Ferrer, W., Hong, D. S., Doraiswamy, P. M., Nickels, S.
2023; 333: 115702

- **Anxiety levels and structural brain connectivity in early pubertal transgender and cisgender youth**

Gerwig, P., Tang, Y., Hong, D. S., Karipidis, I. I.
SPRINGER WIEN.2023

- **Adolescent brain development in girls with Turner syndrome.** *Human brain mapping*

Lozano Wun, V., Foland-Ross, L. C., Jo, B., Green, T., Hong, D., Ross, J. L., Reiss, A. L.
2023

- **Longitudinal investigation of cognition, social competence, and anxiety in children and adolescents with Turner syndrome.** *Hormones and behavior*

Jordan, T. L., Klabunde, M., Green, T., Hong, D. S., Ross, J. L., Jo, B., Reiss, A. L.
2023; 149: 105300

- **General Anxiety Disorder-7 Questionnaire as a marker of low socioeconomic status and inequity.** *Journal of affective disorders*

Nunes, J. C., Carroll, M. K., Mahaffey, K. W., Califf, R. M., Doraiswamy, P. M., Short, S., Shah, S. H., Swope, S., Williams, D., Hernandez, A. F., Hong, D. S.
2022

- **Biological and clinical correlates of the patient health questionnaire-9: exploratory cross-sectional analyses of the baseline health study.** *BMJ open*

Califf, R. M., Wong, C., Doraiswamy, P. M., Hong, D. S., Miller, D. P., Mega, J. L.
2022; 12 (1): e054741

- **Effect of sex chromosome number variation on attention-deficit/hyperactivity disorder symptoms, executive function, and processing speed.** *Developmental medicine and child neurology*
Green, T., Flash, S., Shankar, G., Bade Shrestha, S., Jo, B., Klabunde, M., Hong, D. S., Reiss, A. L.
2021
- **Importance of Social Determinants in Screening for Depression.** *Journal of general internal medicine*
Califf, R. M., Wong, C., Doraiswamy, P. M., Hong, D. S., Miller, D. P., Mega, J. L., Baseline Study Group
2021
- **Neurodevelopmental Effects of Cannabis Use in Adolescents and Emerging Adults with ADHD: A Systematic Review.** *Harvard review of psychiatry*
Cawkwell, P. B., Hong, D. S., Leikauf, J. E.
2021
- **Cortical gray matter structure in boys with Klinefelter syndrome.** *Psychiatry research. Neuroimaging*
Foland-Ross, L. C., Gil, M., Shrestha, S. B., Chromik, L. C., Hong, D., Reiss, A. L.
2021; 313: 111299
- **Effects of X Chromosome Monosomy and Genomic Imprinting on Observational Markers of Social Anxiety in Prepubertal Girls with Turner Syndrome.** *Journal of autism and developmental disorders*
Hall, S. S., Riley, M. J., Weston, R. N., Lepage, J., Hong, D. S., Jo, B., Hallmayer, J., Reiss, A. L.
2021
- **IDIOPATHIC AUTISM SPECTRUM DISORDER**
Hong, D. S.
ELSEVIER SCIENCE INC.2020: S82
- **Integrated functional genomic analyses of Klinefelter and Turner syndromes reveal global network effects of altered X chromosome dosage.** *Proceedings of the National Academy of Sciences of the United States of America*
Zhang, X., Hong, D., Ma, S., Ward, T., Ho, M., Pattini, R., Duren, Z., Stankov, A., Bade Shrestha, S., Hallmayer, J., Wong, W. H., Reiss, A. L., Urban, et al
2020
- **Specific learning disorders in sex chromosome aneuploidies: Neural circuits of literacy and mathematics.** *American journal of medical genetics. Part C, Seminars in medical genetics*
Karipidis, I. I., Hong, D. S.
2020
- **Dyslexia in Pediatrics: Simple Practices to Tackle a Complex Issue.** *Pediatrics*
Karipidis, I. I., Hong, D. S.
2020
- **Glucocorticoid regulation and neuroanatomy in fragile x syndrome** *Journal of Psychiatric Research*
Bruno, J. L., Hong, D. S., Lightbody, A. A., Hosseini, S., Hallmayer, J., Reiss, A. L.
2020
- **Brain Development in School-Age and Adolescent Girls: Effects of Turner Syndrome, Estrogen Therapy, and Genomic Imprinting.** *Biological psychiatry*
O'Donoghue, S. n., Green, T. n., Ross, J. L., Hallmayer, J. n., Lin, X. n., Jo, B. n., Huffman, L. C., Hong, D. S., Reiss, A. L.
2019
- **Neurodevelopmental Disorders** *AMERICAN PSYCHIATRIC ASSOCIATION PUBLISHING TEXTBOOK OF PSYCHIATRY, 7TH EDITION*
Hong, D. S., Fung, L. K., Hardan, A., Roberts, L. W.
2019: 225–55
- **Neuroanatomical abnormalities in fragile X syndrome during the adolescent and young adult years** *JOURNAL OF PSYCHIATRIC RESEARCH*
Sandoval, G. M., Shim, S., Hong, D. S., Garrett, A. S., Quintin, E., Marzelli, M. J., Patnaik, S., Lightbody, A. A., Reiss, A. L.
2018; 107: 138–44
- **Neuroanatomical abnormalities in fragile X syndrome during the adolescent and young adult years.** *Journal of psychiatric research*
Sandoval, G. M., Shim, S., Hong, D. S., Garrett, A. S., Quintin, E., Marzelli, M. J., Patnaik, S., Lightbody, A. A., Reiss, A. L.
2018; 107: 138–44

- **X-Chromosome Effects on Attention Networks: Insights from Imaging Resting-State Networks in Turner Syndrome** *CEREBRAL CORTEX*
Green, T., Saggar, M., Ishak, A., Hong, D. S., Reiss, A. L.
2018; 28 (9): 3176–83
- **"Communities" of Conditions: Novel Methods for Classifying Psychiatric Disorders.** *Journal of the American Academy of Child and Adolescent Psychiatry*
Hong, D. S.
2018; 57 (4): 233–34
- **"Communities" of Conditions: Novel Methods for Classifying Psychiatric Disorders** *JOURNAL OF THE AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY*
Hong, D. S.
2018; 57 (4): 233–34
- **Attention-Deficit/Hyperactivity Disorder and Learning Disorders** *STUDENT MENTAL HEALTH: A GUIDE FOR PSYCHIATRISTS, PSYCHOLOGISTS, AND LEADERS SERVING IN HIGHER EDUCATION*
Chromik, L. C., Hong, D. S., Roberts, L. W.
2018: 197–212
- **NEUROIMAGING IN THREE SYNDROMES ASSOCIATED WITH AUTISM SPECTRUM DISORDER**
Hong, D. S.
ELSEVIER SCIENCE INC.2017: S20
- **Here/In This Issue and There/Abstract Thinking: The Growing, and Changing, Landscape of Child and Adolescent Mental Healthcare Delivery.** *Journal of the American Academy of Child and Adolescent Psychiatry*
Hong, D. S.
2017; 56 (9): 719–20
- **Identification of biotypes in Attention-Deficit/Hyperactivity Disorder, a report from a randomized, controlled trial.** *Personalized medicine in psychiatry*
Leikauf, J. E., Griffiths, K. R., Saggar, M., Hong, D. S., Clarke, S., Efron, D., Tsang, T. W., Hermens, D. F., Kohn, M. R., Williams, L. M.
2017; 3: 8-17
- **Linking ADHD to the Neural Circuitry of Attention** *TRENDS IN COGNITIVE SCIENCES*
Mueller, A., Hong, D. S., Shepard, S., Moore, T.
2017; 21 (6): 474-488
- **Here/In This Issue and There/Abstract Thinking: The First Year: Incorporating Maternal Mental Health Into Child Psychiatric Practice.** *Journal of the American Academy of Child and Adolescent Psychiatry*
Hong, D. S.
2017; 56 (3): 183-184
- **Multi-Table Differential Correlation Analysis of Neuroanatomical and Cognitive Interactions in Turner Syndrome.** *Neuroinformatics*
Seiler, C. n., Green, T. n., Hong, D. n., Chromik, L. n., Huffman, L. n., Holmes, S. n., Reiss, A. L.
2017
- **X-Chromosome Effects on Attention Networks: Insights from Imaging Resting-State Networks in Turner Syndrome.** *Cerebral cortex (New York, N.Y. : 1991)*
Green, T. n., Saggar, M. n., Ishak, A. n., Hong, D. S., Reiss, A. L.
2017: 1–8
- **Here/In This Issue and There/Abstract Thinking: The Data Revolution Has Arrived, but Are We Ready? A Call to Action for Child Psychiatry.** *Journal of the American Academy of Child and Adolescent Psychiatry*
Hong, D. S.
2016; 55 (9): 741-742
- **Sex Differences in Amygdala Shape: Insights from Turner Syndrome**
Green, T., Fierro, K. C., Raman, M., Foland-Ross, L., Hong, D. S., Reiss, A. L.
ELSEVIER SCIENCE INC.2016: 109S
- **Sex differences in amygdala shape: Insights from Turner syndrome.** *Human brain mapping*
Green, T., Fierro, K. C., Raman, M. M., Foland-Ross, L., Hong, D. S., Reiss, A. L.

2016; 37 (4): 1593-1601

- **Here/In This Issue and There/Abstract Thinking: Wielding Weapons: The Intersection Between Firearms and Child Psychiatry.** *Journal of the American Academy of Child and Adolescent Psychiatry*

Hong, D. S.

2016; 55 (3): 153-154

- **Here/In This Issue and There/Abstract Thinking: The Secret Lives of Adolescents: Are We Asking the Right Questions?** *Journal of the American Academy of Child and Adolescent Psychiatry*

Hong, D. S.

2015; 54 (9): 697-698

- **Elucidating X chromosome influences on Attention Deficit Hyperactivity Disorder and executive function** *JOURNAL OF PSYCHIATRIC RESEARCH*

Green, T., Shrestha, S. B., Chromik, L. C., Rutledge, K., Pennington, B. F., Hong, D. S., Reiss, A. L.

2015; 68: 217-225

- **Elucidating X chromosome influences on Attention Deficit Hyperactivity Disorder and executive function.** *Journal of psychiatric research*

Green, T., Bade Shrestha, S., Chromik, L. C., Rutledge, K., Pennington, B. F., Hong, D. S., Reiss, A. L.

2015; 68: 217-225

- **Proceedings from the Turner Resource Network symposium: the crossroads of health care research and health care delivery.** *American journal of medical genetics. Part A*

Backeljauw, P. F., Bondy, C., Chernausek, S. D., Cernich, J. T., Cole, D. A., Fasciano, L. P., Foodim, J., Hawley, S., Hong, D. S., Knickmeyer, R. C., Kruszka, P., Lin, A. E., Lippe, et al

2015; 167A (9): 1962-1971

- **Proceedings From the Turner Resource Network Symposium: The Crossroads of Health Care Research and Health Care Delivery** *AMERICAN JOURNAL OF MEDICAL GENETICS PART A*

Backeljauw, P. F., Bondy, C., Chernausek, S. D., Cernich, J. T., Cole, D. A., Fasciano, L. P., Foodim, J., Hawley, S., Hong, D. S., Knickmeyer, R. C., Kruszka, P., Lin, A. E., Lippe, et al

2015; 167 (9): 1962-1971

- **Here/In This Issue and There/Abstract Thinking: The Art (and Science) of Psychotherapy.** *Journal of the American Academy of Child and Adolescent Psychiatry*

Hong, D. S.

2015; 54 (3): 157-158

- **Aberrant parietal cortex developmental trajectories in girls with Turner syndrome and related visual-spatial cognitive development: a preliminary study.** *American journal of medical genetics. Part B, Neuropsychiatric genetics : the official publication of the International Society of Psychiatric Genetics*

Green, T., Chromik, L. C., Mazaika, P. K., Fierro, K., Raman, M. M., Lazzeroni, L. C., Hong, D. S., Reiss, A. L.

2014; 165B (6): 531-540

- **Aberrant parietal cortex developmental trajectories in girls with turner syndrome and related visual-spatial cognitive development: A preliminary study.** *American journal of medical genetics. Part B, Neuropsychiatric genetics : the official publication of the International Society of Psychiatric Genetics*

Green, T., Chromik, L. C., Mazaika, P. K., Fierro, K., Raman, M. M., Lazzeroni, L. C., Hong, D. S., Reiss, A. L.

2014; 165 (6): 531-540

- **Here/In This Issue and There/Abstract Thinking: Learning Disorders and ADHD: Are LDs Getting the Attention They Deserve?** *Journal of the American Academy of Child and Adolescent Psychiatry*

Hong, D. S.

2014; 53 (9): 933-934

- **Influence of the x-chromosome on neuroanatomy: evidence from turner and klinefelter syndromes.** *journal of neuroscience*

Hong, D. S., Hoeft, F., Marzelli, M. J., Lepage, J., Roeltgen, D., Ross, J., Reiss, A. L.

2014; 34 (10): 3509-3516

- **Aberrant neurocognitive processing of fear in young girls with Turner syndrome** *SOCIAL COGNITIVE AND AFFECTIVE NEUROSCIENCE*

Hong, D. S., Bray, S., Haas, B. W., Hoeft, F., Reiss, A. L.

2014; 9 (3): 255-264

- **Cognitive and neurological aspects of sex chromosome aneuploidies** *LANCET NEUROLOGY*

Hong, D. S., Reiss, A. L.

2014; 13 (3): 306-318

- **Here/In this issue and there/abstract thinking: personalized psychiatry: are we almost there?** *Journal of the American Academy of Child and Adolescent Psychiatry*
Hong, D. S.
2014; 53 (3): 263-264
- **Brain morphology in children with 47, XYY syndrome: a voxel- and surface-based morphometric study.** *Genes, brain, and behavior*
LePage, J., Hong, D. S., Raman, M., Marzelli, M., Roeltgen, D. P., Lai, S., Ross, J., Reiss, A. L.
2014; 13 (2): 127-134
- **Brain morphology in children with 47,XYY syndrome: a voxel-and surface-based morphometric study** *GENES, BRAIN AND BEHAVIOR*
Lepage, J., Hong, D. S., Raman, M., Marzelli, M., et al
2014: 127-34
- **Aberrant Functional Network Recruitment of Posterior Parietal Cortex in Turner Syndrome** *HUMAN BRAIN MAPPING*
Bray, S., Hoeft, F., Hong, D. S., Reiss, A. L.
2013; 34 (12): 3117-3128
- **Here/In this issue and there/abstract thinking: adolescence to adulthood: are some children falling into the gap?** *Journal of the American Academy of Child and Adolescent Psychiatry*
Hong, D. S.
2013; 52 (9): 885-886
- **Cortical Brain Morphology in Young, Estrogen-Naive, and Adolescent, Estrogen-Treated Girls with Turner Syndrome** *CEREBRAL CORTEX*
Lepage, J., Mazaika, P. K., Hong, D. S., Raman, M., Reiss, A. L.
2013; 23 (9): 2159-2168
- **Genomic imprinting effects of the x chromosome on brain morphology.** *journal of neuroscience*
Lepage, J., Hong, D. S., Mazaika, P. K., Raman, M., Sheau, K., Marzelli, M. J., Hallmayer, J., Reiss, A. L.
2013; 33 (19): 8567-8574
- **Impact of cognitive profile on social functioning in prepubescent females with Turner syndrome** *CHILD NEUROPSYCHOLOGY*
Lepage, J., Dunkin, B., Hong, D. S., Reiss, A. L.
2013; 19 (2): 161-172
- **White Matter Aberrations in Prepubertal Estrogen-Naive Girls with Monosomic Turner Syndrome** *CEREBRAL CORTEX*
Yamagata, B., Barnea-Goraly, N., Marzelli, M. J., Park, Y., Hong, D. S., Mimura, M., Reiss, A. L.
2012; 22 (12): 2761-2768
- **Cortical Brain Morphology in Young, Estrogen-Naive, and Adolescent, Estrogen-Treated Girls with Turner Syndrome.** *Cerebral cortex (New York, N.Y. : 1991)*
Lepage, J. F., Mazaika, P. K., Hong, D. S., Raman, M., Reiss, A. L.
2012
- **Cognition and behavior in Turner syndrome: a brief review.** *Pediatric endocrinology reviews : PER*
Hong, D. S., Reiss, A. L.
2012; 9: 710-712
- **Genomic Imprinting Effects on Cognitive and Social Abilities in Prepubertal Girls with Turner Syndrome** *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*
Lepage, J., Hong, D. S., Hallmayer, J., Reiss, A. L.
2012; 97 (3): E460-E464
- **Contribution of Executive Functions to Visuospatial Difficulties in Prepubertal Girls With Turner Syndrome** *DEVELOPMENTAL NEUROPSYCHOLOGY*
Lepage, J., Dunkin, B., Hong, D. S., Reiss, A. L.
2011; 36 (8): 988-1002
- **Reduced Functional Connectivity during Working Memory in Turner Syndrome** *CEREBRAL CORTEX*
Bray, S., Dunkin, B., Hong, D. S., Reiss, A. L.
2011; 21 (11): 2471-2481

- **Psychosocial Functioning and Social Cognitive Processing in Girls with Turner Syndrome** *JOURNAL OF DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS*
Hong, D. S., Dunkin, B., Reiss, A. L.
2011; 32 (7): 512-520
- **White Matter Aberrations in Non-Mosaic and Estrogen-Naive Girls with Turner Syndrome**
Yamagata, B., Barnea-Goraly, N., Park, Y., Hong, D. S., Reiss, A. L.
ELSEVIER SCIENCE INC.2011: 84S
- **Neuroanatomical spatial patterns in Turner syndrome** *NEUROIMAGE*
Marzelli, M. J., Hoeft, F., Hong, D. S., Reiss, A. L.
2011; 55 (2): 439-447
- **COGNITIVE PROFILE OF TURNER SYNDROME** *DEVELOPMENTAL DISABILITIES RESEARCH REVIEWS*
Hong, D., Kent, J. S., Kesler, S.
2009; 15 (4): 270-278
- **Posttraumatic stress disorder following traumatic injury: Narratives as unconscious indicators of psychopathology** *BULLETIN OF THE MENNINGER CLINIC*
Hashemi, B., Shaw, R. J., Hong, D. S., Hall, R., Nelson, K., Steiner, H.
2008; 72 (3): 179-190
- **EOSINOPHILIC MENINGOENCEPHALITIS: PSYCHIATRIC PRESENTATION AND TREATMENT** *INTERNATIONAL JOURNAL OF PSYCHIATRY IN MEDICINE*
Hong, D. S., Bernstein, M., Smith, C., Gans, H., Shaw, R. J.
2008; 38 (3): 287-295