

Stanford



Lara Foland-Ross

Senior Research Scholar, Psychiatry and Behavioral Sciences - Interdisciplinary Brain Sciences

Curriculum Vitae available Online

Bio

BIO

I am a neuroscientist in the Division of Interdisciplinary Brain Sciences in the Department of Psychiatry and Behavioral Sciences at Stanford University. I use a variety of imaging modalities -including EEG, fNIRS and fMRI- to examine the neurobiology of mood and cognition in adolescents. The primary aim of my work is to understand how neurodevelopment is altered in adolescents with clinical and metabolic disorders, and the neuropsychiatric consequences of these alterations. Current projects include the study of adolescents with disordered puberty, type 1 diabetes, and Fragile-X syndrome. Moreover, I'm examining the neural basis of imposter syndrome and stereotype threat in women. I deeply value the process of acting on curiosity, learning from challenges, and applying creative solutions to both highlight and address gaps in our understanding of the brain and cognition.

EDUCATION AND CERTIFICATIONS

- Ph.D., University of California, Los Angeles , Neuroscience (2010)
- Postdoctoral Fellowship, Stanford University , Psychology (2015)

Publications

PUBLICATIONS

- **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
- **Impact of dysglycemia and obesity on the brain in adolescents with and without type 2 diabetes: A pilot study.** *Pediatric diabetes*
Snyder, L. L., Foland-Ross, L. C., Cato, A., Reiss, A. L., Shah, C., Hossain, J., Elmufiti, H., Nelly Mauras
2022
- **Towards assessing subcortical "deep brain" biomarkers of PTSD with functional near-infrared spectroscopy.** *Cerebral cortex (New York, N.Y. : 1991)*
Balters, S., Schlichting, M. R., Foland-Ross, L., Brigadoi, S., Miller, J. G., Kochenderfer, M. J., Garrett, A. S., Reiss, A. L.
2022
- **A Pilot randomized trial to examine effects of a hybrid closed-loop insulin delivery system on neurodevelopmental and cognitive outcomes in adolescents with type 1 diabetes.** *Nature communications*
Reiss, A. L., Jo, B., Arbelaez, A. M., Tsalikian, E., Buckingham, B., Weinzimer, S. A., Fox, L. A., Cato, A., White, N. H., Tansey, M., Aye, T., Tamborlane, W., Englert, et al
2022; 13 (1): 4940
- **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

- **Prefrontal cortex and amygdala anatomy in youth with persistent levels of harsh parenting practices and subclinical anxiety symptoms over time during childhood. *Development and psychopathology***

Suffren, S., La Buissonniere-Ariza, V., Tucholka, A., Nassim, M., Seguin, J. R., Boivin, M., Kaur Singh, M., Foland-Ross, L. C., Lepore, F., Gotlib, I. H., Tremblay, R. E., Maheu, F. S.

2021; 1–12

- **Impact of Type 1 Diabetes in the Developing Brain in Children: A Longitudinal Study. *Diabetes care***

Mauras, N., Buckingham, B., White, N. H., Tsaklikian, E., Weinzimer, S. A., Jo, B., Cato, A., Fox, L. A., Aye, T., Arbelaez, A. M., Hershey, T., Tansey, M., Tamborlane, et al

2021

- **Brain Function Differences in Children With Type 1 Diabetes: An fMRI Study of Working Memory. *Diabetes***

Foland-Ross, L. C., Tong, G. n., Mauras, N. n., Cato, A. n., Aye, T. n., Tansey, M. n., White, N. H., Weinzimer, S. A., Englert, K. n., Shen, H. n., Mazaika, P. K., Reiss, A. L.

2020

- **Early Life Stress, Frontoamygdala Connectivity, and Biological Aging in Adolescence: A Longitudinal Investigation. *Cerebral cortex (New York, N.Y. : 1991)***

Miller, J. G., Ho, T. C., Humphreys, K. L., King, L. S., Foland-Ross, L. C., Colich, N. L., Ordaz, S. J., Lin, J. n., Gotlib, I. H.

2020

- **Functional Near-Infrared Spectroscopy (fNIRS) detects increased activation of the brain frontal-parietal network in youth with type 1 diabetes. *Pediatric diabetes***

Mazaika, P. K., Marzelli, M. n., Tong, G. n., Foland-Ross, L. C., Buckingham, B. A., Aye, T. n., Reiss, A. L.

2020

- **Executive task-based brain function in children with type 1 diabetes: An observational study. *PLoS medicine***

Foland-Ross, L. C., Buckingham, B., Mauras, N., Arbelaez, A. M., Tamborlane, W. V., Tsaklikian, E., Cato, A., Tong, G., Englert, K., Mazaika, P. K., Reiss, A. L., Diabetes Research in Children Network (DiracNet)

2019; 16 (12): e1002979

- **Androgen treatment effects on hippocampus structure in boys with Klinefelter syndrome. *Psychoneuroendocrinology***

Foland-Ross, L. C., Ross, J. L., Reiss, A. L.

2018; 100: 223–28

- **Neural correlates of liraglutide effects in persons at risk for Alzheimer's Disease. *Behavioural brain research***

Watson, K. T., Wroolie, T. E., Tong, G., Foland-Ross, L. C., Frangou, S., Singh, M., McIntyre, R., Roat-Shumway, S., Myoraku, A., Reiss, A. L., Rasgon, N. L. 2018

- **Neural correlates of top-down regulation and generation of negative affect in major depressive disorder *PSYCHIATRY RESEARCH-NEUROIMAGING***

Davis, E., Foland-Ross, L. C., Gotlib, I. H.

2018; 276: 1–8

- **Longitudinal assessment of hippocampus structure in children with type 1 diabetes. *Pediatric diabetes***

Foland-Ross, L. C., Reiss, A. L., Mazaika, P. K., Mauras, N., Weinzimer, S. A., Aye, T., Tansey, M. J., White, N. H., Diabetes Research in Children Network (DiracNet)

2018

- **Hyperactivation in Cognitive Control and Visual Attention Brain Regions During Emotional Interference in Adolescent Depression. *Biological psychiatry: Cognitive neuroscience and neuroimaging***

Colich, N. L., Ho, T. C., Foland-Ross, L. C., Eggleston, C., Ordaz, S. J., Singh, M. K., Gotlib, I. H.

2017; 2 (5): 388–395

- **Like Mother Like Daughter: Putamen Activation as a Mechanism Underlying Intergenerational Risk for Depression. *Social cognitive and affective neuroscience***

Colich, N. L., Ho, T. C., Ellwood-Lowe, M., Foland-Ross, L. C., Sacchet, M. D., LeMoult, J. L., Gotlib, I. H.

2017

- **Hyperactivation in cognitive control and visual attention brain regions during emotional interference in adolescent depression *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging***

Colich, N., Ho, T., Foland-Ross, L., Eggleston, C., Ordaz, S., Singh, M., Gotlib, I.

2017

- **Relationships Between Altered Functional Magnetic Resonance Imaging Activation and Cortical Thickness in Patients With Euthymic Bipolar I Disorder.** *Biological psychiatry : cognitive neuroscience and neuroimaging*
Joshi, S. H., Vizueta, N., Foland-Ross, L., Townsend, J. D., Bookheimer, S. Y., Thompson, P. M., Narr, K. L., Altshuler, L. L.
2016; 1 (6): 507-517
- **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
- **Neural Aspects of Inhibition Following Emotional Primes in Depressed Adolescents.** *Journal of clinical child and adolescent psychology*
Colich, N. L., Foland-Ross, L. C., Eggleston, C., Singh, M. K., Gotlib, I. H.
2016; 45 (1): 21-30
- **Concordant Patterns of Brain Structure in Mothers with Recurrent Depression and Their Never-Depressed Daughters** *DEVELOPMENTAL NEUROSCIENCE*
Foland-Ross, L. C., Behzadian, N., LeMoult, J., Gotlib, I. H.
2016; 38 (2): 115-123
- **Cortical thickness predicts the first onset of major depression in adolescence.** *International journal of developmental neuroscience*
Foland-Ross, L. C., Sacchet, M. D., Prasad, G., Gilbert, B., Thompson, P. M., Gotlib, I. H.
2015; 46: 125-131
- **Neural Markers of Familial Risk for Depression: An Investigation of Cortical Thickness Abnormalities in Healthy Adolescent Daughters of Mothers With Recurrent Depression** *JOURNAL OF ABNORMAL PSYCHOLOGY*
Foland-Ross, L. C., Gilbert, B. L., Joormann, J., Gotlib, I. H.
2015; 124 (3): 476-485
- **Neural markers of familial risk for depression: An investigation of cortical thickness abnormalities in healthy adolescent daughters of mothers with recurrent depression.** *Journal of abnormal psychology*
Foland-Ross, L. C., Gilbert, B. L., Joormann, J., Gotlib, I. H.
2015; 124 (3): 476-485
- **HPA-axis reactivity interacts with stage of pubertal development to predict the onset of depression** *PSYCHONEUROENDOCRINOLOGY*
Colich, N. L., Kircanski, K., Foland-Ross, L. C., Gotlib, I. H.
2015; 55: 94-101
- **HPA-axis reactivity interacts with stage of pubertal development to predict the onset of depression.** *Psychoneuroendocrinology*
Colich, N. L., Kircanski, K., Foland-Ross, L. C., Gotlib, I. H.
2015; 55: 94-101
- **Concordance of mother-daughter diurnal cortisol production: Understanding the intergenerational transmission of risk for depression** *BIOLOGICAL PSYCHOLOGY*
LeMoult, J., Chen, M. C., Foland-Ross, L. C., Burley, H. W., Gotlib, I. H.
2015; 108: 98-104
- **Telomere length and cortisol reactivity in children of depressed mothers.** *Molecular psychiatry*
Gotlib, I. H., LeMoult, J., Colich, N. L., Foland-Ross, L. C., Hallmayer, J., Joormann, J., Lin, J., Wolkowitz, O. M.
2015; 20 (5): 615-620
- **Identification of a direct GABAergic pallidocortical pathway in rodents** *EUROPEAN JOURNAL OF NEUROSCIENCE*
Chen, M. C., Ferrari, L., Sacchet, M. D., Foland-Ross, L. C., Qiu, M., Gotlib, I. H., Fuller, P. M., Arrigoni, E., Lu, J.
2015; 41 (6): 748-759
- **Support vector machine classification of major depressive disorder using diffusion-weighted neuroimaging and graph theory** *FRONTIERS IN PSYCHIATRY*
Sacchet, M. D., Prasad, G., Foland-Ross, L. C., Thompson, P. M., Gotlib, I. H.
2015; 6
- **Support vector machine classification of major depressive disorder using diffusion-weighted neuroimaging and graph theory.** *Frontiers in psychiatry*

Sacchet, M. D., Prasad, G., Foland-Ross, L. C., Thompson, P. M., Gotlib, I. H.
2015; 6: 21-?

- **Coping with having a depressed mother: The role of stress and coping in hypothalamic-pituitary-adrenal axis dysfunction in girls at familial risk for major depression** *DEVELOPMENT AND PSYCHOPATHOLOGY*
Foland-Ross, L. C., Kircanski, K., Gotlib, I. H.
2014; 26 (4): 1401-1409
- **Coping with having a depressed mother: the role of stress and coping in hypothalamic-pituitary-adrenal axis dysfunction in girls at familial risk for major depression.** *Development and psychopathology*
Foland-Ross, L. C., Kircanski, K., Gotlib, I. H.
2014; 26 (4): 1401-1409
- **Recalling happy memories in remitted depression: A neuroimaging investigation of the repair of sad mood** *COGNITIVE AFFECTIVE & BEHAVIORAL NEUROSCIENCE*
Foland-Ross, L. C., Cooney, R. E., Joormann, J., Henry, M. L., Gotlib, I. H.
2014; 14 (2): 818-826
- **Recalling happy memories in remitted depression: a neuroimaging investigation of the repair of sad mood.** *Cognitive, affective & behavioral neuroscience*
Foland-Ross, L. C., Cooney, R. E., Joormann, J., Henry, M. L., Gotlib, I. H.
2014; 14 (2): 818-826
- **CHARACTERIZING WHITE MATTER CONNECTIVITY IN MAJOR DEPRESSIVE DISORDER: AUTOMATED FIBER QUANTIFICATION AND MAXIMUM DENSITY PATHS.** *Proceedings. IEEE International Symposium on Biomedical Imaging*
Sacchet, M. D., Prasad, G., Foland-Ross, L. C., Joshi, S. H., Hamilton, J. P., Thompson, P. M., Gotlib, I. H.
2014; 11: 592-595
- **ELUCIDATING BRAIN CONNECTIVITY NETWORKS IN MAJOR DEPRESSIVE DISORDER USING CLASSIFICATION-BASED SCORING.** *Proceedings. IEEE International Symposium on Biomedical Imaging*
Sacchet, M. D., Prasad, G., Foland-Ross, L. C., Thompson, P. M., Gotlib, I. H.
2014; 2014: 246-249
- **Activation of the medial prefrontal and posterior cingulate cortex during encoding of negative material predicts symptom worsening in major depression.** *Neuroreport*
Foland-Ross, L. C., Hamilton, P., Sacchet, M. D., Furman, D. J., Sherdell, L., Gotlib, I. H.
2014; 25 (5): 324-329
- **Understanding Familial Risk for Depression: A 25-Year Perspective** *PERSPECTIVES ON PSYCHOLOGICAL SCIENCE*
Gotlib, I. H., Joormann, J., Foland-Ross, L. C.
2014; 9 (1): 94-108
- **Understanding Familial Risk for Depression: A 25-Year Perspective.** *Perspectives on psychological science*
Gotlib, I. H., Joormann, J., Foland-Ross, L. C.
2014; 9 (1): 94-108
- **Structural abnormality of the corticospinal tract in major depressive disorder.** *Biology of mood & anxiety disorders*
Sacchet, M. D., Prasad, G., Foland-Ross, L. C., Joshi, S. H., Hamilton, J. P., Thompson, P. M., Gotlib, I. H.
2014; 4: 8-?
- **The Neural Basis of Difficulties Disengaging From Negative Irrelevant Material in Major Depression** *PSYCHOLOGICAL SCIENCE*
Foland-Ross, L. C., Hamilton, J. P., Joormann, J., Berman, M. G., Jonides, J., Gotlib, I. H.
2013; 24 (3): 334-344
- **Neurobiological markers of familial risk for depression.** *Current topics in behavioral neurosciences*
Foland-Ross, L. C., Hardin, M. G., Gotlib, I. H.
2013; 14: 181-206
- **ADHD comorbidity can matter when assessing cortical thickness abnormalities in patients with bipolar disorder** *BIPOLAR DISORDERS*
Hegarty, C. E., Foland-Ross, L. C., Narr, K. L., Sugar, C. A., McGough, J. J., Thompson, P. M., Altshuler, L. L.
2012; 14 (8): 843-855

- **Deficits in inferior frontal cortex activation in euthymic bipolar disorder patients during a response inhibition task** *BIPOLAR DISORDERS*
Townsend, J. D., Bookheimer, S. Y., Foland-Ross, L. C., Moody, T. D., Eisenberger, N. I., Fischer, J. S., Cohen, M. S., Sugar, C. A., Altshuler, L. L.
2012; 14 (4): 442-450
- **Anterior cingulate activation relates to local cortical thickness** *NEUROREPORT*
Hegarty, C. E., Foland-Ross, L. C., Narr, K. L., Townsend, J. D., Bookheimer, S. Y., Thompson, P. M., Altshuler, L. L.
2012; 23 (7): 420-424
- **Cognitive and neural aspects of information processing in major depressive disorder: an integrative perspective.** *Frontiers in psychology*
Foland-Ross, L. C., Gotlib, I. H.
2012; 3: 489-?
- **Cognitive and neural aspects of information processing in major depressive disorder: an integrative perspective** *FRONTIERS IN PSYCHOLOGY*
Foland-Ross, L. C., Gotlib, I. H.
2012; 3