

Amar Ojha
Center for Neuroscience
University of Pittsburgh
amo80@pitt.edu

EDUCATION & TRAINING

- 2019- **Center for Neuroscience**
University of Pittsburgh
Ph.D. Candidate
- 2019- **Center for the Neural Basis of Cognition**
Carnegie Mellon University and University of Pittsburgh
Graduate Certificate Training Program
- 2013-2017 **Bates College**
B.A. in Neuroscience
B.A. in Philosophy (Honors)

RESEARCH EXPERIENCE

- 2019-present **University of Pittsburgh**
Graduate Student Researcher
Advisors: Beatriz Luna & Cecile Ladouceur
- 2017-2019 **Stanford University**
MRI Research Coordinator
Advisor: Ian Gotlib
- 2016 **Georgetown University**
Undergraduate Research Assistant
Advisor: Adam Green
- 2015-2016 **Mandell Center for Multiple Sclerosis**
Part-time Research Assistant
Advisor: Elizabeth Triche

AWARDS

- 2024 **Wisconsin Symposium on Emotion Travel Award**
Award: \$300
- 2023 **Pitt Psychiatry Research Day Poster Award**
- 2023 **CNBC Travel Award**
Award: \$500
- 2022-2023 **Behavioral Brain (B2) Research Training Grant (T32GM142630)**

2021-2022	Award: \$26,352 (one year of stipend support) Behavioral Brain (B2) Research Training Grant (T32GM081760)
2019	Award: \$25,826 (one year of stipend support) AAAS/Science Program for Excellence in Science
2017	Bates College Honors Program
2017	Bates College Dean's List

PUBLICATIONS (14 total: 4 first, 10 co-author)

1. **Ojha, A.**, Jones, N.P., Henry, T., Versace, A., Lindstrom, R., Gnagy, E.M., Joseph, H.M., Molina, B.S.G.*, Ladouceur, C.D.* (in press). "Altered lateral prefrontal cortex functioning during emotional interference resistance is associated with affect lability in adults with persisting symptoms of ADHD from childhood." *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.
2. Ravindranath, O., Perica, M.I., Parr, A.C., **Ojha, A.**, McKeon, S.D., Montano, G., Ullendorf, N., Luna, B., Edmiston, E.K. (2024). "Adolescent neurocognitive development and decision-making abilities regarding gender-affirming care." *Developmental Cognitive Neuroscience*, 101351.
3. Belov, V., Erwin-Grabner, T., Aghajani, M., Aleman, A., Amod, A.R., Basgoze, Z., Benedetti, F., Besteher, B., Bülow, R., Ching, C.R.K., Connolly, C.G., Cullen, K., Davey, C.G., Dima, D., Dols, A., Evans, J.W., Fu, C.H.Y., Saffet Gonul, A., Gotlib, I.H., Grabe, H.J., Groenewold, N., Hamilton, J.P., Harrison, B.J., Ho, T.C., Mwangi, B., Jaworska, N., Jahanshad, N., Klimes-Dougan, B., Koopowitz, S., Lancaster, T., Li, M., Linden, D.E.J., MacMaster, F.P., Mehler, D.M.A., Melloni, E., Mueller, B.A., **Ojha, A.**, Oudega, M.L., Pozzi, E., Reneman, L., Sacchet, M.D., Sämann, P.G., Schranke, A., Sim, K., Soares, J.C., Stein, D.J., Thomopoulos, S.I., Uyar-Demir, A., van der Wee, N.J.A., van der Werff, S.J.A., Völzke, H., Whittle, S., Wittfeld, S., Wright, M.J., Wu, M., Yang, T.T., Zarate, C., Veltman, D.J., Schmaal, L., Thompson, P.M., Goya-Maldonado, R., & the ENIGMA Major Depressive Disorder working group (2024). "Multi-site benchmark classification of major depressive disorder using machine learning on cortical and subcortical measures." *Scientific Reports*. 14(1), 1084.
4. Cabral, L., Calabro, F., Foran, W., Parr, A., **Ojha, A.**, Rasmussen J., Ceschin, R., Panigrahy, A., Luna, B. (2023). "Multivariate and regional age-related change in basal ganglia iron in neonates." *Cerebral Cortex*, 34(1), bhad456.
5. Ladouceur, C.D., Henry, T., **Ojha, A.**, Shirtcliff, E.A., Silk, J.S. (2023). "Fronto-amygdala resting state functional connectivity is associated with anxiety symptoms among adolescent girls more advanced in pubertal maturation." *Developmental Cognitive Neuroscience*, 60, 101236.

6. **Ojha, A.**, Parr, A., Foran, W., Calabro, F., Luna, B. (2022). "Puberty contributes to adolescent development of fronto-striatal functional connectivity supporting inhibitory control." *Developmental Cognitive Neuroscience*, 58, 101183.
7. **Ojha, A.**, Teresi, G.I., Slavich, G.M., Gotlib, I.H., Ho, T.C. (2022). "Social threat, fronto-cingulate-limbic morphometry, and symptom course in depressed adolescents: a longitudinal investigation." *Psychological Medicine*, 1-15.
8. Richie-Halford, A., Cieslak, M., Ai, L., Caffarra, S., Covitz, S., Franco, A.R., Karipidis, I.I., Kruper, J., Milham, M., Averlar-Pereira, B., Roy, E., Sydnor, V.J., Yeatman, J.D., **The Fibr Community Science Consortium**, Satterthwaite, T.D., Rokem, A. (2022). "An analysis-ready and quality controlled resource for pediatric brain white-matter research." *Scientific Data*, 9, 616.
9. van Velzen, L.S., Dauvermann, M.R., Colic, L., Villa, L.M., Savage, H.S., Toenders, Y.J., Zhu, A.H., Bright, J.K., Campos, A.I., Salminen, L., Ambroggi, S., Ayasa-Arriola, R., Banaj, N., Başgöze, Z., Bauer, J., Blair, K., Blair, R.J., Brosch, K., Cheng, Y., Colle, R., Connolly, C.G., Corruble, E., Couvy-Duchesne, B., Crespo-Facorro, B., Cullen, K.R., Dannlowski, U., Davey, C.G., Dohm, K., Fullerton, J.M., Gonul, A.S., Gotlib, I.H., Grotegerd, D., Hahn, T., Harrison, B.J., He, M., Hickie, I.B., Ho, T.C., Iorfino, F., Jansen, A., Jollant, F., Kircher, T., Klimes-Dougan, B., Klug, M., Leeher, E.J., Lippard, E.T.C., McLaughlin, K.A., Meinert, S., Miller, A.B., Mitchell, P.B., Mwangi, B., Nenadić, I., **Ojha, A.**, Overs, B.J., Pfarr, J., Piras, F., Ringwald, K.G., Roberts, G., Romer, G., Sanches, M., Sheridan, M.A., Soares, J.C., Spalletta, G., Stein, F., Teresi, G.I., Tordesillas-Gutiérrez, D., Uyar-Demir, A., van der Wee, N.J.A., van der Werff, S.J., Vermeiren R.R.J.M., Winter, A., Wu, M., Yang, T.T., Thompson, P.M., Renteria, M.E., Jahanshad, N., Blumberg, H.P., van Harmelen, A., Schmaal, L. (2022). "Structural brain alterations associated with suicidal thoughts and behaviors in young people: Results across 21 international studies from the ENIGMA suicidal thoughts and behaviors consortium." *Molecular Psychiatry*, 1-11.
10. **Ojha, A.**, Miller, J.G., King, L.S., Davis, E.G., Humphreys, K.L., Gotlib, I.H. (2022). "Dispositional and parental empathy are differentially associated with mothers' brain activation and toddlers' social behavior." *Developmental Psychobiology*, 64, e22313.
11. Ho, T.C., Teresi, G.I., Segarra, J.R., **Ojha, A.**, Walker, J.C., Gu, M., Spielman, D.M., Sacchet, M.D., Jiang, F., Rosenberg-Hasson, Y., Maecker, H.T., Singh, M.K., Gotlib, I.H. (2021). "Higher levels of pro-inflammatory cytokines are associated with higher levels of glutamate in the anterior cingulate cortex in depressed adolescents." *Frontiers in Psychiatry*, 12.
12. Ho, T.C., Teresi, G.I., **Ojha, A.**, Walker, J.C., Kirshenbaum, J.S., Singh, M.K., Gotlib, I.H. (2020). "Smaller caudate gray matter volume is associated with

greater implicit suicidal ideation in depressed adolescents.” *Journal of Affective Disorders*, 278, 650-657.

13. Walker, J.C., Teresi, G.I., Weisenburger, R.L., Segarra, J.R., **Ojha, A.**, Kulla, A., Sisk, L., Gu, M., Spielman, D.M., Rosenberg-Hasson, Y., Maecker, H.T., Singh, M.K., Gotlib, I.H., Ho, T.C. (2020). “Study protocol for Teen Inflammation Glutamate Emotion Research (TIGER).” *Frontiers in Human Neuroscience*, 14, 414.
14. Camacho, M.C., King, L.S., **Ojha, A.**, Garcia, C.M., Sisk, L.M., Cichocki, A.C., Humphreys, K.L., Gotlib, I.H. (2019). “Cerebral blood flow in 5- to 8-month-olds: Regional tissue maturity is associated with infant affect.” *Developmental Science*, 23(5), e12928.

CONFERENCE PRESENTATIONS (25 total: 17 first, 8 co-author)

1. **Ojha, A.**, Sydnor, V.J., Foran, W., Phang, N., Sista, A., Sorrells, S.F., Calabro, F.J., Luna, B. (submitted). Nuclei-Specific Functional Maturation of Fronto-Amygdala Circuitry Through Adolescence: Longitudinal Insights from 7 Tesla fMRI. University of Pittsburgh Psychiatry Research Day 2023.
2. **Ojha, A.**, Henry, T., Diler, R., Ladouceur, C.D. (accepted). Anhedonia is Associated with Altered Striatal Neurophysiology and Function in Adolescents Varying in Levels of Depression. Wisconsin Symposium on Emotion.
3. **Ojha, A.**, Jones, N.P., Shirtcliff, E.A., Ladouceur, C.D. (accepted). Pubertal Maturation and Hormones Influence Mesocorticolimbic Development in Youth: Implications for Sensitivity to Rewards and Punishments. Society of Biological Psychiatry.
4. Droeger A., Coury, S., **Ojha, A.**, Ho, T.C. (accepted). Higher Levels of Inflammation are Associated with Accelerated Brain Age in Adolescents. Society of Biological Psychiatry.
5. **Ojha, A.**, Jones, N.P., Shirtcliff, E.A., Ladouceur, C.D. (2023, December). Pubertal Maturation and Hormones Influence Mesocorticolimbic Development in Youth: Implications for Sensitivity to Rewards and Punishments. American College of Neuropsychopharmacology.
6. **Ojha, A.**, Jones, N.P., Shirtcliff, E.A., Ladouceur, C.D. (2023, November). Pubertal Maturation and Hormones Influence Mesocorticolimbic Development in Youth: Implications for Sensitivity to Rewards and Punishments. Developmental Affective Neuroscience Symposium.
7. **Ojha, A.**, Perica, M.I., Phang, N., Foran, W., Calabro, F., Luna, B. (2023, September). Characterizing Fronto-Amygdala Functional Connectivity Across

Adolescent Development: A High-Field Longitudinal Investigation. Flux: Society of Developmental Cognitive Neuroscience.

8. **Ojha, A.**, Perica, M.I., Foran, W., Calabro, F.J., Luna, B. (2023, June). Amygdala Nuclei Resting-State Connectivity with Cortex is Associated with Cingulate Glutamate as a Function of Age in Adolescents: A High-Field Longitudinal Investigation. University of Pittsburgh Psychiatry Research Day 2023.
9. **Ojha, A.**, Jones, N.P., Henry, T., Versace, A., Lindstrom, R., Gnagy, E.M., Pelham Jr., W.E., Molina, B.S.G., Ladouceur, C.D. (2023, April). Altered Lateral Prefrontal Cortex Functioning During Emotional Interference Resistance is Associated with Affect Lability in Adults with Persisting Symptoms of ADHD from Childhood. Society of Biological Psychiatry.
10. Coury, S., **Ojha, A.**, Teresi, G.I., Gotlib, I.H., Ho, T.C. (2023, April). Lower Striatal Morphometry and Higher Levels of Inflammation Among Depressed Adolescents with Anhedonia. Society of Biological Psychiatry.
11. **Ojha, A.**, Calabro, F., Foran, W., Perica, M., Luna, B. (2022, September). Characterizing Fronto-Amygdala Circuitry Development During Adolescence: Implications for Internalizing Symptoms. Flux: Society of Developmental Cognitive Neuroscience.
12. Ho, T.C., **Ojha, A.**, Teresi, G.I., Slavich, G.M., Gotlib, I.H. (2022, September). Social Threat, Fronto-Cingulate-Limbic Morphometry, and Symptom Course in Depressed Adolescents: A Longitudinal Investigation. Flux: Society of Developmental Cognitive Neuroscience.
13. **Ojha, A.**, Parr, A.C., Foran, W., Calabro, F., Luna, B. (2022, June). Puberty-Related Maturation of Adolescent Fronto-Striatal Resting-State Functional Connectivity is Implicated in the Development of Inhibitory Control. University of Pittsburgh Psychiatry Research Day 2022.
14. Ladouceur, C.D., Brosseau, P., Henry, T., **Ojha, A.**, Diler, R. (2021, December). Alterations in the functioning of striatal subregions are associated with anhedonia as a function of striatal dopamine concentrations in adolescents with depression. American College of Neuropsychopharmacology Annual Meeting.
15. **Ojha, A.**, Parr, A.C., Foran, W., Calabro, F., Ladouceur, C.D., Luna, B. (2021, October). Characterizing puberty-related changes in fronto-striatal resting-state functional connectivity in adolescence. University of Pittsburgh Psychiatry Research (Half) Day 2021.
16. Brosseau, P., Henry, T.R., **Ojha, A.**, Diler, R., Ladouceur, C.D. (2021, October). Alterations in the Functioning of Striatal Subregions are Associated with

Anhedonia as a Function of Striatal Dopamine Concentrations in Adolescents with Depression. University of Pittsburgh Research (Half) Day 2021.

17. **Ojha, A.**, Parr, A.C., Foran, W., Calabro, F., Ladouceur, C.D., Luna, B. (2021, September). Characterizing puberty-related changes in fronto-striatal resting-state functional connectivity in adolescence. Flux Society of Developmental Cognitive Neuroscience.
18. **Ojha, A.**, Miller, J.G., King, L.S., Davis, E.G., Humphreys, K.L., Gotlib, I.H. (2021, April). Dispositional and Parental Empathy are Differentially Associated with Mothers' Brain Activation and Toddlers' Social Behavior. Society for Research in Child Development.
19. Segarra, J.R., **Ojha, A.**, Rosenberg-Hasson, Y., Maecker, H.T., Gotlib, I.H., Ho, T.C. (2020, May). Elevated Concentrations of Inflammatory Cytokines Are Associated with Cortical Thickness of the Rostral Anterior Cingulate Cortex in Adolescents. Society of Biological Psychiatry.
20. Teresi, G., **Ojha, A.**, Walker, J.C., Singh, M.K., Gotlib, I.H., Ho, T.C. (2020, May). Dorsal Striatal Gray Matter Volume is Associated with Implicit Suicidal Ideation in Depressed Adolescents. Society of Biological Psychiatry.
21. **Ojha, A.**, Rosenberg-Hasson, Y., Maecker, H.T., Gotlib, I.H., Ho, T.C. (2019, September). Higher Concentrations of Interleukin-6 are Associated with Smaller Nucleus Accumbens Gray Matter Volume and More Severe Symptoms in Depressed Adolescents. Center for Neuroscience at the University of Pittsburgh Annual Retreat.
22. **Ojha, A.**, Walker, J.C., Ho, T.C., Gotlib, I.H. (2019, September). Experiences of Abuse and not Neglect are Associated with Decreased Amygdala Gray Matter Volumes in Depressed Adolescents. Flux Society of Developmental Cognitive Neuroscience.
23. **Ojha, A.**, Rosenberg-Hasson, Y., Maecker, H.T., Gotlib, I.H., Ho, T.C. (2019, May). Higher Concentrations of Interleukin-6 are Associated with Smaller Nucleus Accumbens Gray Matter Volume and More Severe Symptoms in Depressed Adolescents. Society of Biological Psychiatry.
24. **Ojha, A.**, Camacho, C.M., King, L.S., Humphreys, K.L., Gotlib, I.H. (2018, May). Infant Regional Cerebral Blood Flow is Associated with Maternal Sensitivity During Social Stress. Social and Affective Neuroscience Society.
25. Santos, S., **Ojha, A.**, Tuttle, L., Olson, K.M., Ruiz, J.A., Lo, A.C., Triche, E.W. (2015, September). Plan for the Development and Validation of Patient Centered Electronic Symptom Diary for Persons with MS. Saint Francis Hospital and Medical Center Annual Research Day 2015.

REVIEWER

JOURNAL REVIEW

Ad-hoc Reviewer: *Psychological Medicine, Current Research in Neurobiology, Children, Biological Psychiatry: Cognitive Neuroscience and Neuroimaging; Journal of Mental Health and Clinical Psychology, Developmental Cognitive Neuroscience*

AWARDS/GRANTS REVIEW

Reviewer: 2022 APS Student Grant Competition, 2021 APS Student Grant Competition, 2020 APS Student Research Award

PROFESSIONAL MEMBERSHIPS

Society for Research in Child Development, Flux Society for Developmental Cognitive Neuroscience, Social and Affective Neuroscience Society, Society of Biological Psychiatry, American Association for the Advancement of Science (AAAS), Association for Psychological Science (APS)**

*awarded full membership

RESEARCH SKILLS AND QUALIFICATIONS

Programming & Software	<u>General:</u> Shell scripting, R, Matlab <u>Neuroimaging:</u> AFNI, FreeSurfer
Neuroimaging Techniques	SPGR/MPRAGE, DWI, qT1, BOLD (task/rest) fMRI, ASL, MRS (clinical + nonclinical, infants to adults)

MENTORSHIP

2023-	Arshia Sista, B.S. (expected 2027) Neuroscience, University of Pittsburgh
2022-	Natalie Phang, B.S. (expected 2024) Neuroscience, University of Pittsburgh
2018-2019	Julia Gillette, B.A. Psychology (2020), Stanford University Current: M.D. Candidate at Brown University
2017-2019	Artenisa Kulla, B.S.

	Human Biology (2020), Stanford University Current: M.D. Candidate at UFCOM
2017-2019	Victoria Franco, B.A. Psychology (2020), Stanford University
2018	Serena Wu, B.A., M.Sc. Neuroscience and Behavior (2020), Columbia University Neuroscience (2021), McGill University
2018	Symona Stans, B.A. Psychology (2020), Cornell University Current: UCLA Public Affairs M.A. Student
2017-2018	Tammie Hsu, B.A. Post-Baccalaureate Research Assistant, Stanford University Current: Web Producer at Gap Inc.
2017-2018	Johanna Walker, B.A. Post-Baccalaureate Research Assistant, Stanford University Current: Research Coordinator at Stanford University
2017-2018	Melanie Ngan, Post-Baccalaureate Research Assistant, Stanford University
2017-2018	Neel Rao, B.S., M.S. Computer Science (2021), Stanford University Symbolic Systems (2022), Stanford University Current: Teach for America

TEACHING

2020	Graduate Teaching Assistant , Brain and Behavior, University of Pittsburgh
2020	Guest Lecturer , Brain and Behavior ("Stress, Emotions, and Neurodevelopment"), University of Pittsburgh
2017-2019	Verbal Tutor , Compass Prep Education
2017	Redesigned Course , Intro to Neuroscience (faculty advisor: Jason Castro), Bates College
2017	Writing & Teaching Assistant , Biomedical Ethics, Bates College

2015 **Tutor**, Intro to Neuroscience, Bates College

MISCELLANEOUS

2016-2017 **Editor-in-Chief**, *The Bates Student*
2015-2016 **Managing Forum Editor**, *The Bates Student*
2014-2015 **Assistant Forum Editor**, *The Bates Student*

REFERENCES

Beatriz Luna, Ph.D.

Staunton Professor of Psychiatry and Pediatrics
Professor of Psychology
University of Pittsburgh
lunab@upmc.edu

Cecile Ladouceur, Ph.D.

Associate Professor
Departments of Psychiatry and Psychology
University of Pittsburgh
ladouceurcd@upmc.edu

Ian H. Gotlib, Ph.D.

Majorie Mhoon Fair Professor
Department of Psychology
Stanford University
ian.gotlib@stanford.edu

Tiffany C. Ho, Ph.D.

Assistant Professor
Department of Psychology
University of California, Los Angeles
tiffanycho@ucla.edu