

CURRICULUM VITAE

Rajpreet Chahal

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EDUCATION

University of California, Davis
Ph.D. student in Human Development
Entered in 2015 – Expected Graduation in 2019

University of California, Davis
Bachelor of Science in Psychology (emphasis in Biology), June 2012
Dean's Honor List Recipient

RESEARCH

Grants Awarded

Trainee Seed Grant Award
Consortium on the Development Science of Adolescence
University of California Office of the President
Amount awarded: \$7,500
March 1, 2016 – December 30, 2017

Graduate Student Travel Award
Human Development Graduate Group
University of California Davis
Amount awarded: \$700
September, 2016

Summer Poverty Research Engagement Experience
Center for Poverty Research
University of California Davis
Amount awarded: \$5,000
June 16, 2016 – August 12, 2016

TL1 Pre-Doctoral Clinical Training Scholar Award
Clinical and Translational Science Center
UC Davis Health System
Amount awarded: \$23,376 stipend, \$700 research supplies, \$1000 travel
June 2017 – May 2019

Graduate Student Association's Fall Travel Award
Graduate Student Association

University of California Davis
Amount awarded: \$500
August, 2017

Publications

Chahal, R., Rhoads, S., Marek, S., Keenan, K., Forbes, E.E., Hipwell, A.E., & Guyer, A.E. (in preparation). Brain network architectural development in puberty and associations with depressive symptoms.

Chahal, R., Vilgis, V., Keenan, K., Forbes, E.E., Hipwell, A.E., & Guyer, A.E. (in preparation). Pubertal timing and tempo: Associations with white matter tract development in adolescence.

Hawes, S.W., **Chahal, R.**, Hallquist, M.N., Paulsen, D.J., Geier, C.F., & Luna, B. (2017). Modulation of reward-related neural activation on sensation seeking across development. *Neuroimage*, 147, 763-771.

Luna, B., Marek, S., Larsen, B., Tervo-Clemmens, B., & **Chahal, R.** (2015). An integrative model of the maturation of cognitive control. *Annual Review of Neuroscience*, 38, 151-170.

Conference Presentations

Chahal, R., Keenan, K., Forbes, E.E., Hipwell, A.E., & Guyer, A.E. (September, 2017). Depressive symptomatology and brain network architecture in adolescent girls. Poster to be presented at the annual meeting of the *The Flux Congress* in Portland, Oregon.

Chahal, R. (August, 2017). Social sensitivity: Understanding the roles of puberty and neural development. Talk delivered at the UC Consortium on the Developmental Science of Adolescence Summer Institute in Los Angeles, CA.

Chahal, R., Rhoads, S., Marek, S., Keenan, K., Forbes, E.E., Hipwell, A.E., & Guyer, A.E. (June, 2017). Brain network architectural development is associated with pubertal timing and tempo. Poster presented at the annual meeting of the *Organization for Human Brain Mapping* in Vancouver, Canada.

Chahal, R. (April, 2017). Childhood economic disparity and alterations in white matter integrity in late adolescence. Talk delivered at the annual meeting of the *Society for Research in Child Development*, in Austin, TX.

Chahal, R., Vilgis, V., Grimm, K. J., Keenan, K., Forbes, E. E., Hipwell, A. E., & Guyer, A. E., (March, 2017). Pubertal timing and tempo: effects on white matter maturation. Poster presented at the annual meeting of the *Social & Affective Neuroscience Society* in Los Angeles, CA.

Chahal, R. (November, 2016). Neurobiological changes in puberty and implications of timing. Talk delivered at the *UC Consortium on the Developmental Science of Adolescence Puberty Workshop* in Davis, CA.

Chahal, R. (November, 2016). Associations between early pubertal maturation and brain development. Talk delivered at Developmental Brown Bag at University of California Davis.

Chahal, R., Vilgis, V., Grimm, K. J., Keenan, K., Forbes, E. E., Hipwell, A. E., & Guyer, A. E. (September, 2016). Pubertal timing is associated with white matter tract development in late adolescence. Poster presentation at the annual *Meeting of the Flux Congress*, St. Louis, Missouri.

Chahal, R. (August, 2016). Neural indices of social influence as measured by the SIT: implications for puberty. Talk delivered at the UC Consortium on the Developmental Science of Adolescence Summer Institute in Los Angeles, CA.

Chahal, R., & Hallquist, M.N., (2014, June). Deficits in inhibitory control are associated with traits of personality dysfunction. Poster presented at *Western Psychiatric Institute and Clinic Research Conference*. Pittsburgh, PA.

Chahal, R., Foran, W., Ponting, A., & Luna, B., (2013, June). Incentive influence on cognitive control in development. Poster presented at *Western Psychiatric Institute and Clinic Research Conference*. Pittsburgh, PA.

Chahal, R., Stankevich, B., & Geng, J., (2012, June). Prioritization of attention based on reward. Poster presented at UC Davis Undergraduate Research Conference. Davis, CA.

Research Experience

Human Experiences and Affective Development Lab (UC Davis). 2015-Present.

Conducting behavioral, psychophysiological, and neuroimaging studies of mood, anxiety, risk-taking, and cognitive control in children, adolescents, and young adults. Processing and analyzing longitudinal datasets to examine interactions between pubertal maturation and brain development. Examining neurobiological risk for depression using diffusion tensor imaging, structural and functional imaging, and resting-state functional MRI.

PI: Amanda E. Guyer, Ph.D.

Laboratory of Neurocognitive Development (University of Pittsburgh). 2012-2015.

Coordinated recruitment efforts and aided in experimental design for multiple longitudinal studies investigating typically-developing, at-risk, and Schizophrenic populations. Led design of imaging protocols. Trained research assistants and graduate students in neuroimaging acquisition, tested subjects on behavioral and imaging protocols using eye-tracking, fMRI, MEG, and PET. Collected, coded, scripted, and analyzed multimodal data in R, Matlab, AFNI, and FSL. Examined neural influences on incentive processing and inhibitory control leading to two manuscripts and two posters.

PI: Beatriz Luna, Ph.D.

Laboratory for Developmental Personality Neuroscience (University of Pittsburgh). 2013-2015.

Coordinated study investigating neurodevelopmental origins of emotion dysregulation and impulsivity in Borderline Personality Disorder. Conducted structural clinical interviews using SCID and SIDP in children, adolescents, and adults. Designed and carried out neuroimaging sequences. Preprocessed and analyzed neuroimaging data leading to a poster presentation.

Mentored undergraduate students in studies examining relationships between personality traits and cognitive functioning.

PI: Michael N. Hallquist, Ph.D.

Integrated Attention Lab (UC Davis). 2011-2012.

Recruited participants and administered eye-tracking studies exploring incentive influences on attentional control in young adults. Analyzed behavioral data and presented poster on findings.

PI: Joy Geng, Ph.D.

Longitudinal Methods Lab (UC Davis). 2011-2012.

Coded longitudinal data in study examining longitudinal growth of cognition and emotion from early childhood to adulthood.

PI: Kevin J. Grimm, Ph.D.

TECHNICAL TRAINING

Neuroimaging

Expertise in use of fMRI, MEG, EEG, PET, DTI, processing and analyses

NIH Analysis of Functional Neuroimaging (AFNI) Bootcamp, September 2014

Operator Training and Safety Training at UC Davis Imaging Research Center, September 2015

Expertise in AFNI, FSL, Structural Analysis (Volumetric, DTI), Functional Analysis (Resting-state, Task-based)

Electrocardiogram and impedance cardiography

Biolab, Acknowledge software

Statistical software and programming environments

R, Python, Matlab, SPSS, SAS, E-prime, Bash, SQL

SERVICE

Professional Activities

UC Davis Human Development Faculty Search Committee, Fall 2016

Ad hoc reviewer, *Child Development*