# Michael I. Demidenko, M.S.

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#### **EDUCATION**

## **Doctor of Philosophy** (Expected 2022)

Developmental Psychology University of Michigan (UM), Ann Arbor, Michigan Advisors: Dr. Daniel Keating & Dr. Adriene Beltz

#### **Data Scientist Certificate** (2021)

Michigan Institute for Data Science UM, Ann Arbor, Michigan

## Master of Science (2019)

Developmental Psychology UM, Ann Arbor, Michigan Advisor: Dr. Daniel Keating

#### **Bachelor of Science** (2012)

Psychology Portland State University, Portland, Oregon

# **Associate of Arts** (2010)

Psychology Clackamas Community College, Oregon City, Oregon

#### AWARDS AND RECOGNITIONS

Rackham Graduate Student Candidate Research Grant, UM (2021)
Coombs Scholarship in Mathematical Psychology, UM (2020)
NICHD Developmental Psychology Training Grant Fellowship, UM (2019-2021)
Rackham Conference Travel Award, UM (2019, 2018)
Graduate Research Fellowship Program, National Science Foundation *Honorable Mention* (2018)

Graduate Research Fellowship Program, National Science Foundation *Honorable Mention* (2018 Institute for Social Research-Rackham Summer Training Grant, UM (2018) Rackham Conference Travel Award, UM (2018, 2019, 2020)

#### RESEARCH PUBLICATIONS

- 1. Constante, K., **Demidenko, M.I.**, Rivas-Drake, D., Huntly, E.D., Keating D.P & Beltz, A.M. (Under Review). Personalized neural networks underlie ethnic identity exploration and resolution. *Developmental Science*.
- 2. **Demidenko, M.I.**, Huntley, E.D., Weigard, A.S., Keating, D.P., & Beltz, A.M. (Under Review). Neural heterogeneity underlying late adolescent reward processing is linked to individual differences in behavioral sensation seeking. *Journal of Neuroscience Research*.
- 3. Beltz, A.M., **Demidenko, M.I.**, Wilson, S.J., & Berenbaum, S.A. (2021). Prenatal

- androgen influences on the brain: A review, critique, and illustration of research on congenital adrenal hyperplasia. *Journal of Neuroscience Research*. http://doi.org/10.1002/jnr.24900
- 4. **Demidenko, M. I.**, Weigard, A. S., Ganesan, K., Jang, H., Jahn, A. A., Huntley, E., & Keating, D.P. (2021). Interactions Between Methodological and Interindividual Variability: How Monetary Incentive Delay (MID) Task Contrast Maps Vary and Impact Associations with Behavior. *Brain & Behavior*. [Preregistered] https://doi.org/10.1002/brb3.2093
- 5. **Demidenko, M.I.**, Ip, K.I., Kelly, D., Constante, K., Goetschius, L.G., & Keating, D.P. (2021). Ecological stress, amygdala reactivity, and internalizing problems in preadolescence: is parenting a buffer? *Cortex.* [*Registered Report*] https://doi.org/10.1016/j.cortex.2021.02.032
- 6. Ip, K.A., Constante, K., Hardi, F., Goetschius, L., **Demidenko, M.I**, & Gee, D.G. (Revise & Resubmit). The protective role of familism on the effects of socioeconomic disadvantages and executive functions in youth. *Child Development*. [*Invited Stage 1 Registered Report*].
- 7. **Demidenko, M.I.,** Huntley, E.D., Jahn, A., Thomason, M.E., Monk, C.S., & Keating, D.P. (2020). Cortical and subcortical response to the anticipation of reward in a longitudinal sample of high and average risk-taking adolescents. *Developmental Cognitive Neuroscience*. https://doi.org/10.1016/j.dcn.2020.100798
- 8. **Demidenko, M.I.,** Huntley, E.D., Martz, M.E., Keating, D.P. (2019). Adolescent Health Risk Behaviors: Convergent, Discriminant and Predictive Validity of Self-Report and Cognitive Measures. *Journal of Youth and Adolescence*, 48, 1765-1783. <a href="https://doi.org/10.1007/s10964-019-01057-4">https://doi.org/10.1007/s10964-019-01057-4</a>.
- 9. Sterling, M., Smith, C.L., Dobscha, S., Morasco, B.J., **Demidenko, M.I.,** Meath, T.H.A., & Lovejoy, T.I. (2018). Changes in Pain Intensity Following Discontinuation of Long-Term Opioid Therapy for Chronic Non-Cancer Pain. *Pain*, 2097-2104. <a href="https://doi.org/10.1097/j.pain.0000000000001315">https://doi.org/10.1097/j.pain.00000000000001315</a>
- 10. Lovejoy, T.I., Morasco, B.J., **Demidenko, M.I.**, Meath, T.H.A., & Dobscha, S.K. (2018). Clinician Referrals for Non-opioid Pain Care Following Discontinuation of Long-term Opioid Therapy Differ Based on Reason for Discontinuation. *Journal of General Internal Medicine*. Epud Ahead of Print. <a href="https://doi.org/10.1007/s11606-018-4329-6">https://doi.org/10.1007/s11606-018-4329-6</a>
- 12. **Demidenko, M.I.**, Dobscha, S.K., Morasco, B.J., Meath, T.H.A., Ilgen, M.A., Lovejoy, T.I. (2017). Suicidal ideation and suicidal self-directed violence following clinician-initiated prescription opioid discontinuation among long-term opioid users. *General Hospital Psychiatry*, 47, 29-35. https://10.1016/j.genhosppsych.2017.04.01
- 13. Nugent, S.M., Dobscha, S.K., Morasco, B.J., **Demidenko, M.I.**, Meath, T.H.A., Frank, J.W., Lovejoy, T.I. (2017). Substance use disorder treatment referral and engagement following clinician-initiated discontinuation of long-term opioid therapy resulting from an aberrant urine drug test. *Journal of General Internal Medicine*, 32, 1076-1082.
- 14. Wyse, J.J., Morasco, B.J., Dobscha, S.K., **Demidenko, M.I.**, Meath, T.H.A., Lovejoy, T.I. (2017). Provider Reasons for Discontinuing Long-Term Opioid Therapy Following Aberrant Urine Drug Tests Differ Based on the Type of Substance Identified. Journal of Opioid Management. *Journal of General Internal Medicine*, 32, 1076-1082.

# **In-prep/ongoing projects**

- 1. **Demidenko, M.I.,** Huntley, E.D., Estor, C., Si, Y., Wagner C., Clarke, P., & Keating D.P. (in prep). Alcohol and Marijuana Use: Differences in Individual- and Community-level Developmental Adversities in a Longitudinal sample of Adolescents.
- 2. Kelly, D., Dzera, J., **Demidenko, M.I.**, Weigard, A.S., Foster, K., Beltz, A.M. (in prep). Pubertal Timing and Daily Adult Alcohol Consumption: Examining Mediating Effects of Alcohol Beliefs by Gender.
- 3. Beltz, A.M., **Demidenko, M.I.**, & Chaku, N. (in prep). Personalized neuroendocrine networks underline mental rotations performance: An illustration of stability and change in men and women with different hormonal milieus.

#### **BOOK/ENCYCLOPYDIA CHAPTERS**

- 1. Keating, D.P., **Demidenko, M. I.**, & Kelly, D. (In Press). Cognitive and Neurocognitive Development in Adolescence and Young Adulthood. In *APA Handbook of Adolescent and Young Adult Development*.
- 2. Keating, D. P., **Demidenko, M. I.,** & Kelly, D. (2019). Cognitive and Neurocognitive Development in Adolescence In *Reference Module in Neuroscience and Biobehavioral Psychology*, The Netherlands: Elsevier.
- 3. Diulio, A.R., **Demidenko, M.I.**, Lovejoy, T.I. (2016). Multidisciplinary pain clinics. In: Fellers JC, Matthews AM, eds. Treating comorbid opioid use disorder and dependence in chronic pain. New York, NY: Springer.
- 4. Gill, S., **Demidenko, M.I.**, Lovejoy, T.I. (2016). Hepatitis C and cognitive functioning. In: Gellman M, Turner JR, eds. Encyclopedia of Behavioral Medicine, 2<sup>nd</sup> Edition. New York, NY: Springer.
- 5. Gill, S., **Demidenko, M.I.**, Lovejoy, T.I. (2016). HIV and cognitive functioning. In: Gellman M, Turner JR, eds. Encyclopedia of Behavioral Medicine, 2<sup>nd</sup> Edition. New York, NY: Springer.

#### **PUBLISHED ABSTRACTS**

- 1. Lovejoy, T.I., **Demidenko, M.I.**, Morasco, B.J., Meath, T.H.A., Dobscha, S.K. (2017). Suicidal ideation and behaviors following clinician-initiated prescription opioid discontinuation among long-term opioid users. *Journal of Pain*, 18, S36.
- 2. Lovejoy, T.I., Morasco, B.J., **Demidenko, M.I.**, Meath, T.H.A., Frank, J.W., Dobscha, S.K. (2016). Reasons for discontinuation of long-term opioid therapy in patients with and without substance use disorders. *Journal of Pain*, 17, S87. <a href="https://doi.org/10.1016/j.jpain.2016.01.430">https://doi.org/10.1016/j.jpain.2016.01.430</a>
- 3. Fonareva, I., Demidenko, M., & Oken, B. (2012). Evaluating the role of expectancy during stress-reducing aromatherapy in healthy older adults. *BMC Complementary and Alternative Medicine*, 12(Suppl 1), P158. https://doi.org/10.1186/1472-6882-12-S1-P158

# **CONFERENCE PRESENTATIONS**

#### **Symposium**

1. Beyond the mean teen: Illuminating adolescence with personalized models of time series data. (2020). <u>Symposium Accepted</u> to the 2020 Society for Research on Adolescence Biennial Meeting, San Diego, California. *Conference Cancelled: COVID-19* 

2. Keating, D.P., Huntley, E.D., & **Demidenko, M.I**. Adolescent Risk Behavior Typology: Neurodevelopmental, Psychosocial, and Behavioral Mechanisms. Symposium Submitted to the 2020 American Academy of Child & Adolescent Psychiatry Annual Meeting, San Francisco, California.

#### **Posters**

- 1. Dzera, J., Kelly, D., Weigard, A., **Demidenko, M.I.,** Stone, S., Foster, K.T., & Beltz, A.M. Persisting effects of pubertal timing on alcohol expectancies and use in adulthood. Poster Accepted to the 2020 Association for Psychological Science Annual Meeting, Chicago, Illinois.
- 2. **Demidenko, M.I.,** Huntley, E.D., Jahn, A., Monk, C.S., Thomason, M., & Keating, D.P. Differences in Cortical and Subcortical Activation to Reward Anticipation in High- & Average-Risk Taking Adolescents. <u>Poster Accepted</u> to the 2020 Society for Research on Adolescence Biennial Meeting, San Diego, California. *Conference Cancelled: COVID-19*
- 3. Nasi, H.\*, Huntley, E.D., **Demidenko, M.I.,** Wagner, C., Churchill, S., & Keating, D.P. The Effect of Insufficient Sleep on Neural Reward Activation in Adolescents. <u>Poster Accepted</u> to the 2020 Society for Research on Adolescence Biennial Meeting, San Diego, California. *Conference Cancelled: COVID-19*.
- 4. **Demidenko, M.I.,** Huntley, E.D., & Keating, D.P. (2019, October). Effects of Early Life Adversity on Alcohol and Marijuana use in a Longitudinal Sample of Adolescents. <u>Poster Presented</u> at the 2019 Society for Study of Human Development Conference in Portland, Oregon.
- 5. Wagner, C.\*, **Demidenko, M.I.,** Huntley, E.D., & Keating, D.P. (2019, October). Effects of Early Life Adversity on Sexual Behaviors in Adolescents over Transitional Period into Adulthood. <u>Accepted Poster</u> 2019 Society for the Study of Emerging Adulthood Conference in Toronto, Canada.
- 6. **Demidenko, M.I.**, Huntley, E.D., Hatfield, J.R.B, & Keating, D.P. (2019, March). Nucleus Accumbens Activation Differs Across Sensation-seeking and Age. <u>Poster Presented</u> at the 2019 Society for Research on Child Development Biennial Meeting, Baltimore, MD.
- 7. **Demidenko, M.I.**, Huntley, E.D., Hatfield, J.R.B, & Keating, D.P. (2018, April). Group Differences in Performance on Balloon Analogue Risk Task in Adolescents Using Alcohol and/or Marijuana in last 12-months. <u>Poster presented</u> at the 2018 Society for Research on Adolescence Biennial Meeting, Minneapolis, MN.
- 8. **Demidenko, M.I.,** Huntley, E.D., Hatfield, J.R.B, & Keating, D.P. (2018, April). Group Differences in Performance on Balloon Analogue Risk Task in Adolescent Binge Drinkers and/or Marijuana Users in last 30-days. <u>Poster presented</u> at the 2018 Society for Research on Adolescence Biennial Meeting, Minneapolis, MN.
- 9. Lovejoy, T.I., Morasco, B.J., Frank, J.W., **Demidenko, M.I.**, Meath, T.H.A, Dobscha, S.K. *Reasons for Discontinuation of Long-Term Opioid Therapy for Patients with and Without Substance Use Disorders*. Poster presented at 2016 OHSU Research Week, Portland, Oregon May 2.
- 10. Lovejoy, T.I., **Demidenko, M.I.** A Pilot Study of Group Acceptance and Commitment Therapy for Chronic Pain in Patients with Comorbid Substance Use Disorders. Poster presented at the 2015 OHSU Research Week, Portland, Oregon May 5. [Presenter]
- 11. Lovejoy, T.I., Tee, M., Turk, D., Dobscha, S.K., Hauser, P., **Demidenko, M.I.**, Morasco, B.J. *Pain anxiety mediates the relationship between depression and pain in patients with hepatitis C.* Poster presented at the 2014 OHSU Pain Day, Portland, Oregon April 11.
- 12. Fonareva, I., **Demidenko, M.I.**, Oken, B.S. Evaluating the Role of Expectancy during

Stress-Reducing Aromatherapy in Healthy Older Adults. Poster presentation at the 2012 International Research Congress on Integrative Medicine and Health, Portland, Oregon May.

#### RESEARCH EXPERIENCE

Co-lead, Psychology Graduate Student Research Group (2019 – Present)

UM, Ann Arbor, MI

Graduate Researcher (2017 – Present)

Adolescent Health Risk Behavior Lab

Institute for Social Research,

UM, Ann Arbor, MI

PI: Dr. Daniel Keating

Graduate Researcher (2018 – Present)

Methods, Sex Differences and Development Lab

Department of Psychology

UM, Ann Arbor, MI

PI: Dr. Adriene Beltz

Research Coordinator (2013 – 2017)

Health Service Research & Development

VA Portland Healthcare System, Portland OR

PI: Drs. Travis I. Lovejoy & Steven K. Dobscha

Research Assistant (2016 – 2017)

Developmental Brain Imaging Lab

Oregon Health & Sciences University, Portland OR

PI: Dr. Bonnie Nagel

Veterinarian Research Health Technician (2011 – 2013)

Department of Comparative Medicine,

Oregon National Primate Research Center, Hillsboro OR

Research Assistant (2011 – 2013)

Cognitive & Neurophysiology Lab

Oregon Health & Sciences University, Portland OR

PI: Drs. Irina Fonareva & Barry Oken

Research Assistant (2010 – 2011 & 2013-2014)

School of Social Work Regional Research Institute

Portland State University, Portland OR

PI: Karen Cellarius, MS & Dr. Debbie Elliott

Research Assistant (2010)

ADHD Research Center

Oregon Health & Sciences University, Portland OR

PI: Tracy Edinger

#### **TEACHING & MENTORSHIP EXPERIENCE**

#### Instructor

Guest Lecture, Psychology of Adolescence, UM (Winter 2020)

Guest Lecture, Advanced Research in Adolescent Psychology, UM (Fall 2019)

Graduate Student Instructor, Psychology of Adolescence, UM (Winter 2019)

Graduate Student Instructor, Introduction to Developmental Psychology, UM (Winter/Fall 2018)

# Mentorship

Christine Wager, University of Michigan Biopsychology, Cognitive & Neuroscience Major Hani Nasr, University of Michigan, Psychology Major

Caitlin Estor, University of Michigan, Statistics Major

Asavari Awasthi, University of Michigan, Biopsychology, Cognitive & Neuroscience Major

#### INVITED TALKS

Neuroimaging Imaging Initiative, UM (Fall 2019)

Topic: Neural Differences of Reward in Risk-Taking Adolescents

Psychology Interdisciplinary Methodology Group, UM (Winter 2020)

Topic: How do we align theory and data in psychological science? A focus on adolescent

brain and behavior.

#### **SERVICE**

#### University

Social Committee, Developmental Psychology Area, UM (2017-2018)

Developmental Brownbag Committee, UM (2018-2020)

Psychology Student Academic Affairs Committee, UM (2020-2021)

Admissions Committee, Developmental Psychology, UM (2021-2022)

Mentor, Psychology Students Tacking Advanced Research (STAR) Scholars, UM (2020-2021)

#### Ad-hoc reviewer:

Panel Reviewer, Society for Research on Adolescence

Cortex

Journal of Research on Adolescence

### STATISTICAL AND SOFTWARE TRAINING

#### **Statistical Training**

Linear/Logistic Regression

Structural Equation Modeling

Univariate fMRI

Connectivity fMRI

Group Iterative Multiple Model Estimation (GIMME)

Exposure to Dimensionality Reduction & Predictive Modeling

#### **Software Training**

R-Studio, Mplus, SPSS, some Python Linux, FSL, Mrtrix REDCap, QUALTRICS

# Adobe (Photoshop, Premier Pro & Lightroom)

# **MEMBERSHIPS**

Society for Research on Adolescence Society for Research on Child Development Society for the Study of Human Development

LAST UPDATED OCTOBER 19, 2021