

ADRIENE M. BELTZ
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POSITIONS

2025- **Research Professor at the Survey Research Center**, Institute for Social Research
 University of Michigan

2025- **Professor of Psychology**
 University of Michigan

2022-2025 **Associate Professor of Psychology**
 University of Michigan

2016-2022 **Assistant Professor of Psychology**
 University of Michigan

2017- **Michigan Institute for Data Science**, Faculty affiliate
 University of Michigan

EDUCATION AND TRAINING

2014-2016 **Post-doctoral scholar**
 Department of Human Development and Family Studies
 The Pennsylvania State University (PSU), University Park, PA

2014 **Ph.D., Psychology (developmental)**
Specialization in Cognitive and Affective Neuroscience
 The Pennsylvania State University (PSU), University Park, PA

2009 **M.S., Experimental Psychology**
 Saint Joseph's University (SJU), Philadelphia, PA

2008 **B.S., Psychology, *summa cum laude***
 Minor: Theology
 Honor's Program graduate
 Saint Joseph's University, Philadelphia, PA

HONORS

Honors and awards:

2025 **Member of the Society of Multivariate Experimental Psychology**
 Small elective society of quantitative methodologists, limited to 65 active members

2025 **Committee on Women in Psychology Leadership Award from the American Psychological Association**
 For being an emerging leader in scholarship, public interest, and service in psychology, having made a substantial contribution to women in psychology and showing promise of an extensive, influential career

2024 **Outstanding Early Career Alumni Award from the Pennsylvania State University Department of Psychology**

For success and influence as a leader, for significant career achievements, and for being an outstanding role model for current students

- 2021 **Anne Anastasi Distinguished Early Career Contributions Award from American Psychological Association Division 5**
Scholar who has made outstanding contributions to quantitative research methods
- 2021 **Wilbert McKeachie Award for Excellence in Lecture-Based Teaching**
University of Michigan Department of Psychology honor for teaching the graduate-level Advanced Research Methods and Statistics I and II course sequence
- 2020-2022 **Jacobs Foundation Early Career Research Fellowship**
Highly talented and innovative young scholars working on child and youth development
- 2019 **Association for Psychological Science Rising Star Award**
Outstanding psychological scientists in the earliest stages of their career whose innovative work has already advanced the field and signals great potential for continued contributions
- 2018 **Rachel Upjohn Clinical Scholars Award from the University of Michigan Comprehensive Depression Center**
- 2017 **Brenda A. Milner Award from American Psychological Association Division 6**
Excellent paper in behavioral neuroscience: *Oral contraceptives and cognition: A role for ethinyl estradiol*
- 2016 **The New Biobehavioral Science of Puberty International Working Group Early Career Scholar Award**
- 2016 **Society for Behavioral Neuroendocrinology New Investigator Award**
Symposium presentation and support for travel to SBN meeting, \$500
- 2014 **American Psychological Association Interdivisional Mentoring Award**
Support for travel to 2014 APA Convention, \$1,000
- 2014 **Graduate Exhibition Third Place Award, \$100**
- 2013 **Psychology Department Outstanding Graduate Student Publication, \$500**
- 2013 **College of the Liberal Arts Superior Teaching and Research Award**
Research project support for excellence in all aspects of graduate training, \$2,400
- 2009 **Geis Student Research on Women Conference Second Place Award, \$150**
- 2008 **Sigma Xi Research Award, \$200**
- 2008 **Psychology Department Outstanding Graduate Award**
- 2004-2008 **Dean's List**

Training fellowships:

- 2014 **College of the Liberal Arts Dissertation Support Grant**
Release time for one semester to complete dissertation
- 2011-2013 **Child Study Center Strumpf Scholars Fellowship**
Two years of summer support and research-related costs, \$9,000
- 2007 **Summer Scholars Program Fellowship, \$3,000**

Travel support:

- 2015 **Office of Postdoctoral Affairs Travel Award, \$200**
- 2014 **American Psychological Foundation 2014 Ungerleider/Zimbardo Travel Scholarship**
Support for travel to 2014 APA Convention, \$300
- 2012 **Society for Behavioral Neuroendocrinology Travel Award, \$750**
- 2011 & 2013 **Society for Research in Child Development Travel Awards**
2 awards, \$300 each
- 2010-2014 **Psychology Department and Child Study Center Travel Awards**
11 awards, ranging from \$500-\$750 each

RESEARCH FUNDING

Current:

Title: Personalized cognition in context: An ambulatory assessment study of executive function dynamics across adulthood and aging

Source: **James S. McDonnell Foundation Understanding Human Cognition Opportunity Award**

Award Amount: \$250,000

Award Period: 09/2020-08/2026

Role: PI

doi: 10.37717/2020-1145

Title: Investigating age-related neural dedifferentiation longitudinally and in Alzheimer's pathology

Source: **National Institute on Aging** (R01AG050523)

Award Amount: \$3,656,073

Award Period: 08/2021-07/2026

Role: Co-I (PI: Thad Polk)

Title: Behavioral and neurobiological predictors of widespread pain in early adolescence and sex-specific trajectories of pain during puberty

Source: **National Institute of Nursing Research** (R01NR020013)

Award Amount: \$2,776,492

Award Period: 04/12/2022-01/31/2027

Role: PI (MPI: Chelsea Kaplan)

Title: Efficiency of evidence accumulation (EEA) as a higher-order, computationally defined RDoC construct

Source: **National Institute of Mental Health** (R21MH130939)

Award Amount: \$429,000

Award Period: 04/15/2023-03/31/2026

Role: Co-I (PI: Alexander Weigard)

Title: Individual variation in the psychological correlates of hormonal intrauterine device use

Source: **University of Michigan Institute for Research on Women and Gender Faculty Seed Grant**

Award Amount: \$7,500

Award Period: 04/2024-03/2026

Role: PI

Mentor on training and career awards:

Title: Developmental psychology training grant

Source: **National Institute of Child Health and Human Development** (T32 HD007109)

PIs: Christopher Monk, Vonnie McLoyd, & Susan Gelman

Title: Multidisciplinary alcoholism research training program

Source: **National Institute on Alcohol Abuse and Alcoholism** (T32 AA007477)

PI: Frederic Blow

Title: Regulation of stress and depression by hormonal contraceptives

Source: **National Institute of Child Health and Human Development** (F31 HD114532)

Award Amount: \$85,298

Award Period: 08/01/2024-07/31/2026

Role: Co-I (consulting mentor)

Title: An idiographic approach to the neurobiological underpinnings of adolescent chronic pelvic pain

Source: **National Institutes of Health** (K99 HD116935)

Award Amount: \$1,040,280

Award Period: 09/01/2025-08/31/2027

Role: Mentor PI (Sponsor PI: Esmeralda Hidalgo-Lopez)

Pending:

Title: Phenotypic and genetic effects of endogenous testosterone on binge eating in women

Source: **National Institutes of Health** (R01)

Award Amount: \$124,988 (subaward)

Status: submitted

Role: Co-I (MPIs: Kelly Klump & Kristen Culbert)

Title: Advanced training in functional magnetic resonance imaging analysis and reproducibility

Source: **National Institutes of Health (R25)**

Award Amount: \$853,505

Status: resubmitted

Role: Program Faculty (PI: Andy Jahn) Pubertal timing in adolescence and adulthood: Relations among contemporaneous and retrospective measures

Title: Integrating between-session, real-time data into clinical care: A novel measurement-based care protocol for suicidal youth

Source: **National Institutes of Health (K08)**

Award Amount: \$960,610

Status: submitted

Role: Advisor (Sponsor PI: Ki Eun Shin)

Title: Tracking the development of the ERN and its changing association with anxiety risk across childhood

Source: **National Institutes of Health (R01)**

Award Amount: \$3,784,243

Status: resubmitted

Role: Consultant (MPIs: Kimberly Meekins & Rebecca Brooker)

Title: Longitudinal modeling of the neural substrates of developmental mismatch

Source: **National Institutes of Health (R01)**

Award Amount: \$2,092,313

Status: resubmitted

Role: Co-I (MPIs: Lora Cope & Jillian Hardee)

Completed:

Title: Sex-related resting state brain function and behavior links in cigarette smokers

Source: **American Psychological Foundation / Council of Graduate Departments of Psychology Graduate Research Scholarship**

Award Amount: \$1,000

Award Period: 09/2013-09/2014

Role: PI

Title: Computational social science and individualized medicine

Source: **University of Michigan Institute of Data Science Core Faculty Award**

Award Amount: \$50,000

Award Period: 06/2017-06/2019

Role: PI

Title: The person-specific structure of emotion and daily links to depressive symptomatology: Informing individualized treatment

Source: **University of Michigan Comprehensive Depression Center Rachel Upjohn Clinical Scholars Award**

Award Amount: \$50,000

Award Period: 01/2018-01/2020

Role: PI

Title: The daily diary oral contraceptive study

Source: **University of Michigan Center for the Education of Women: Riecker Undergraduate Research Fund**

Award Amount: \$1,500

Award Period: 06/2018-08/2018

Role: PI

Title: The person-specific structure of emotion and daily links to depressive symptomatology: Informing precision health by studying gender

Source: **UL1TR002240 (NIH/NCATS) via Michigan Institute for Clinical & Health Research Pilot Grant Program Award**

Award Amount: \$25,000
Role: PI

Award Period: 10/2018-09/2019

Title: Beyond 'mean girls' and the 'average Joe': Using person-specific models to quantify daily gendered phenomena important for learning

Source: **Jacobs Foundation Early Career Research Fellowship**

Award Amount: \$171,119

Award Period: 01/2020-12/2023

Role: PI

Title: Beyond 'mean girls' and the 'average Joe': Person-specific models quantify daily gendered phenomena important for teacher-reported learning

Source: **University of Michigan Institute for Research on Women and Gender Faculty Seed Grant**

Award Amount: \$8,418

Award Period: 04/2020-03/2022

Role: PI

Title: Disentangling the context of interactions between cognition and daily alcohol use with intensive longitudinal data modeling

Source: **University of Michigan Addiction Center Research Catalyst Innovation Award**

Award Amount: \$15,000

Award Period: 07/2021-06/2023

Role: Co-I (PI: Alexander Weigard)

Title: The impact of pubertal suppression on adolescent neural and mental health trajectories

Source: **National Institute of Mental Health (R01MH123746)**

Award Period: 08/2021-03/2025

Award Amount: \$115,822 (subaward)

Role: Co-I (MPIs: Diane Chen, Eric Nelson, & John Strang)

Title: Using astronomical simulation techniques to assess temporal network methods for studying individual differences in learning

Source: **Canadian Institute for Advanced Research & Jacobs Foundation**

Award Amount: \$35,000

Award Period: 09/2021-08/2023

Role: PI

Title: Psychological correlates of hormonal intrauterine device (IUD) use

Source: **University of Michigan ADVANCE SUCCEED Grant**

Award Amount: \$10,000

Award Period: 04/20/2022-04/20/2025

Role: PI

Title: COVID time? Stability and change in personalized anxiety networks

Source: **University of Michigan College of Literature, Science, and the Arts Summer Research Support Grant**

Award Amount: \$2,140

Award Period: 05/2022-08/2022

Role: PI

PUBLICATIONS (*Italics denote mentored trainee*; ^ denotes joint authorship position)

Pletzer, B., Hausinger, T., Thoms, N., Gierg, C., & **Beltz, A. M.** (accepted, pending minor revisions). Menstrual cycle variations in stress vulnerability and sociability relate to premenstrual mental health symptoms and libido. *npj Women's Health*.

Höbler, F., Liu, Y., **Beltz, A. M.**, Becker, H. C., Angstadt, K. M., Guenther, F. H., & Chang, S.-E. (in press). The speech network in childhood stuttering: Differences in functional connectivity of the planning and motor loops. *Neurobiology of Language*. doi: 10.1162/nol.a.26

Beltz, A. M., Pham, H., Smith, T., *Hidalgo-Lopez, E.*, Becker, H., *Portengen, C. M.*, Hetizeg, M. M., Kaplan, C. M., & Berenbaum, S. A. (in press). On the (mis)use of puberty data in the ABCD

- Study: A systematic review, problem illustration, and path forward. *Journal of Child Psychology and Psychiatry*. doi: 10.1111/jcpp.70035. PMID: 40851543
- Kelly, D. P., Dzera, J., Demidenko, M. I., Weigard, A., Foster, K. T., & Beltz, A. M. (in press). Pubertal timing and daily alcohol use in adulthood: Insights into the experiences of late maturers. *Applied Developmental Science*. doi: 10.1080/10888691.2025.2468254. PMID: 40880667
- Michon, K. J., Zhou, Q., Osborne, J. B., Beltz, A. M., Jonides, J., Simmonite, M., & Polk, T. A. (2025). Brain activation during cognitive control tasks differs substantially between people but is reliable within individuals. *Imaging Neuroscience*, 3, article IMAG.a.995. doi: 10.1162/IMAG.a.995. PMID: 41230411
- Hagy, H., Hidalgo-Lopez, E., Portengen, C., Holman, A., Schrepf, A., Clauw, D. J., Harte, S. E., Beltz, A. M., Bohnert, A. M., & Kaplan, C. M. (2025). The emergence of sex differences in primary pain during adolescence: A conceptual developmentally-oriented biopsychosocial model and opportunities for further investigation. *BMC Pediatrics*, 25, article 899. doi: 10.1186/s12887-025-06283-3. PMID: 41188763
- Yan, R., Portengen, C. M., Chaku, N., & Beltz, A. M. (2025). Average links between daily gender expression and depressive symptoms do not describe individual adolescents. *Journal of Youth and Adolescence*, 54, 2196-2208. doi: 10.1007/s10964-025-02184-x. PMID: 40232542
- Portengen, C., Smith, T., Hidalgo-Lopez, E., Becker, H., Lenert, M. E., Schrepf, A., Harte, S. E., Kaplan, C. M., & Beltz, A. M. (2025). Early pubertal timing is a risk factor for adolescent dysmenorrhea. *npj Women's Health*, 3, article 50. doi: 10.1038/s44294-025-00097-5. PMID: 40861288
- Yan, R., Portengen, C., Yang, T. A., Reece, G., Dunnum, Z., Hidalgo-Lopez, E., & Beltz, A. M. (2025). Hormonal intrauterine device use is related to mental rotations but not verbal memory skills. *Hormones and Behavior*, 75, article 105804. doi: 10.1016/j.yhbeh.2025.105804. PMID: 40829029
- Beltz, A. M., Portengen, C., & Berenbaum, S. A. (2025). Using behavioural network mapping to investigate dyadic play in girls with congenital adrenal hyperplasia. *British Journal of Developmental Psychology*, 43, 456-469. doi: 10.1111/bjdp.12520. PMID: 39222059
- Beltz, A. M., Tronson, N. C., Singh, M., & Rezq, S. (2025). Sex still matters for the brain and mental health across the lifespan. *Biology of Sex Differences*, 16, article 32. doi: 10.1186/s13293-025-00710-x. PMID: 40361253
- Chaku, N., Berenbaum, S. A., Qian, Y., Corley, R. P., Wadsworth, S. J., Reynolds, C. A., & Beltz, A. M. (2025). Pubertal timing in adolescence and adulthood: Relations among contemporaneous and retrospective measures. *Developmental Psychology*, 61(5), 928-943. doi: 10.1037/dev0001784. PMID: 39250300. PMID: 40232542
- Hidalgo-Lopez, E., Smith, T., Angstadt, K. M., Becker, H. C., Schrepf, A., Clauw, D. J., Harte, S. E., Heitzeg, M. M., Mindell, J. A., Kaplan, C. M., & Beltz, A. M. (2025). Sex, neural networks, and behavioral symptoms among adolescents with multisite pain. *JAMA Network Open*, 8(4), article e255364. doi: 10.1001/jamanetworkopen.2025.5364. PMID: 40238096
- Pham, H. T., Berenbaum, S. A., DiLalla, L. F., Corley, R. P., Wadsworth, S. J., Reynolds, C., & Beltz, A. M. (2025). The long reach of puberty: Mechanisms underlying sex-dependent links between pubertal timing and adult internalizing symptoms. *Psychological Medicine*, 55, article e115. doi: 10.1017/S0033291725000820. PMID: 40223573
- Huang, S., MacLean, R. R., Beltz, A. M., McClernon, F. J., Kozink, R. V., & Wilson, S. J. (2025). Sex differences in dorsal striatal volume and interest in quitting smoking. *Drug and Alcohol Dependence*, 267, article 112543. doi: 10.1016/j.drugalcdep.2024.112543. PMID: 39764928

- Beltz, A. M., & Kelly, D. P.** (2024). Daily gender and cognition: A person-specific behavioral network analysis. *Multivariate Behavioral Research*, *59*(6), 1188-1197. doi: 10.1080/00273171.2023.2228751. PMID: 37590438
- Yan, R., Chaku, N., Lopez-Duran, N. L., Deldin, P. J., & **Beltz, A. M.** (2024). Gender matters for daily depression: Symptom fluctuations and links to self-expression. *Journal of Affective Disorders Reports*, *18*, article 100839. doi: 10.1016/j.jadr.2024.100839. PMID: 39640866
- Hardi, F. A., **Beltz, A. M.**, McLoyd, V., Brooks-Gunn, J., Huntley, E., Mitchell, C., Hyde, L. W., & Monk, C. S. (2024). Latent profiles of childhood adversity, adolescent mental health, neural network connectivity. *JAMA Network Open*, *7*(8), article e2430711. doi: 10.1001/jamanetworkopen.2024.30711. PMID: 39196556
- Bailey, D. H., Jung, A. J., **Beltz, A. M.**, Eronen, M. I., Gische, C., Hamaker, E. L., Kording, K. P., Lebel, C., Lindquist, M. A., Moeller, J., Razi, A., Rohrer, J. M., Zhang, B., & Murayama, K. (2024). Causal inference on human behavior. *Nature Human Behaviour*, *8*, 1448-1459. doi: 10.1038/s41562-024-01939-z. PMID: 39179747
- Zuppichini, M. D., Hamlin, A. M., Zhou, Q., Kim, E., Rajagopal, S., **Beltz, A. M.**, & Polk, T. A. (2024). GABA levels decline with age: A longitudinal study. *Imaging Neuroscience*, *2*, 1-15. doi: 10.1162/imag_a_00224
- Beltz, A. M.** (2024). Hormonal contraceptives and behavior: Updating the potent state of the nascent science. *Hormones and Behavior*, *164*, article 105574. doi: 10.1016/j.yhbeh.2024.105574. PMID: 38972245
- Rajagopal, S., **Beltz, A. M.**, Hampstead, B., & Polk, T. A. (2024). Estimating individual trajectories of structural and cognitive decline in mild cognitive impairment for early prediction of progression to dementia of the Alzheimer's type. *Scientific Reports*, *14*, article 12906. doi: 10.1038/s41598-024-63301-7. PMID: 38839800
- Pletzer, B., Bodenbach, H., Hoehn, M., Hajdari, L., Hausinger, T., Noachtar, I., & **Beltz, A. M.** (2024). Reproducible stability of verbal and spatial functions along the menstrual cycle. *Neuropsychopharmacology*, *49*, 933-941. doi: 10.1038/s41386-023-01789-9. PMID: 38267632
- Boele, S., Bülow, A., **Beltz, A. M.**, de Haan, A., Denissen, J. J. A., de Moor, M. H. M., & Keijsers, L. (2024). Like no other? A family-specific network approach to parenting adolescents. *Journal of Youth and Adolescence*, *53*, 982-997. doi: 10.1007/s10964-023-01912-5. PMID: 38055136
- Le, E., Chaku, N., Foster, K. T., Weigard, A. S., & **Beltz, A. M.** (2024). The link between daily affective complexity and anxiety is altered by oral contraceptive use. *International Journal of Psychophysiology*, *198*, article 112310; doi: 10.1016/j.ijpsycho.2024.112310. PMID: 38272264
- Chaku, N., Yan, R., Kelly, D. P., Zhang, Z., Lopez-Duran, N., Weigard, A. S., & **Beltz, A. M.** (2024). 100 days of adolescence: Elucidating externalizing behaviors through the daily assessment of inhibition. *Research on Child and Adolescent Psychopathology*, *52*, 93-110. doi: 10.1007/s10802-023-01071-y. PMID: 37405589
- Russman Block, S., Klump, K. L., Winters, A., **Beltz, A.**, Burt, S. A., & Moser, J. (2024). Ovarian hormones reduce the negative association between worry and cognitive control: A combined neural and behavioral investigation. *Psychoneuroendocrinology*, *161*, article 106947. doi: 10.1016/j.psyneuen.2023.106947. PMID: 38183865
- Becker, H. C., **Beltz, A. M.**, Himle, J. A., Ableson, J. L., Russman Block, S., Taylor, S. F., & Fitzgerald, K. D. (2024). Changes in brain network connections after exposure and response prevention therapy for obsessive-compulsive disorder in adolescents and adults. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, *9*(1), 70-79. doi: 10.1016/j.bpsc.2023.09.009. PMID: 37820789

- Kaplan, C. M., Schrepf, A., Boehnke, K. F., He, Y., Smith, T., Williams, D. A., Bergmans, R., Voepel-Lewis, T., Hassett, A. L., Harris, R. E. Clauw, D. J., **Beltz, A. M.**, & Harte, S. E. (2023). Risk factors for the development of multisite pain in children. *The Clinical Journal of Pain*, 39(11), 588-594. doi: 10.1097/AJP.0000000000001148. PMCID: PMC10592500. PMID: 37440345
- Boele, S., Bülow, A., **Beltz, A. M.**, de Haan, A., Denissen, J. J. A., & Keijsers, L. (2023). The direction of effects between parenting and adolescent affective well-being in everyday life is family specific. *Scientific Reports*, 13, article 16106. doi: 10.1038/s41598-023-43294-5. PMCID: PMC10522680. PMID: 37752173
- Gloe, L. M., Russman Block, S., Klump, K. L., **Beltz, A. M.**, & Moser, J. S. (2023). Determining menstrual cycle phase: An empirical examination of methodologies and recommendations for improvement in behavioral and brain sciences. *Hormones and Behavior*, 155, article 105421. doi: 10.1016/j.yhbeh.2023.105421. PMCID: PMC10714354. PMID: 37666081
- Dora, J., Piccirillo, M., Foster, K. T., Arbeau, K., Armeli, S., Auriacombe, M., Bartholow, B., **Beltz, A. M.**, Blumenstock, S., Bold, K., Bonar, E., Braitman, A., Carpenter, R., Creswell, K., DeHart, T., Dvorak, R., Emery, N., Enkema, M., Fairbairn, C., Fairlie, A., Ferguson, S., Freire, T., Goodman, F., Gottfredson, N., Halvorson, M., Haroon, M., Howard, A., Hussong, A., Jackson, K., Jenzer, T., Kelly, D., Kuczynski, A., Kuerbis, A., Lee, C., Lewis, M., Linden-Carmichael, A., Littlefield, A., Lydon-Staley, D., Merrill, J., Miranda, R. Jr., Mohr, C., Read, J., Richardson, C., O'Connor, R., O'Malley, S., Papp, L., Piasecki, T., Sacco, P., Scaglione, N., Serre, F., Shadur, J., Sher, K., Shoda, Y., Simpson, T. L., Smith, M. R., Stevens, A., Stevenson, B., Tennen, H., Todd, M., Treloar Padovano, H. T., Trull, T., Waddell, J., Walukevich-Dienst, K., Witkiewitz, K., Wray, T., Wright, A. G. C., Wycoff, A., & King, K. M. (2023). The daily association between affect and alcohol use: A meta-analysis of individual participant data. *Psychological Bulletin*, 149(1-2), 1-24. doi: 10.1037/bul0000387. PMCID: PMC10409490. PMID: 37560174
- Hardi, F. A., Goetschius, L. G., McLoyd, V., Lopez-Duren, N. L., Mitchell, C., Hyde, L. W., **Beltz, A. M.**, & Monk, C. S. (2023). Adolescent functional network connectivity prospectively predicts adult anxiety symptoms related to perceived COVID-19 economic adversity. *Journal of Child Psychology and Psychiatry*, 64(6), 918-929. doi: 10.1111/jcpp.13749. PMCID: PMC9880614. PMID: 36579796
- Weigard, A., Lane, S., Gates, K., & **Beltz, A.** (2023). The influence of autoregressive relation strength and search strategy on directionality recovery in group iterative multiple model estimation. *Psychological Methods*, 28(2), 379-400. doi: 10.1037/met0000460. PMCID: PMC9897594. PMID: 34941327
- Sun, X., Marks, R. A., Eggleston, R. L., Zhang, K., Yu, C.-L., Nickerson, N., Caruso, V., Chou, T.-L., Hu, X.-S., Tardif, T., Booth, J. R., **Beltz, A. M.**, & Kovelman, I. (2023). Bilingual proficiency enhances neural network density: Sources of heterogeneity in children's functional connectivity during English word processing. *Neurobiology of Language*, 4(2), 198-220. doi: 10.1162/nol_a_00092. PMCID: PMC10205148. PMID: 37229508
- Luo, L., Fisher, Z. F., Arizmendi, C., Molenaar, P. C. M., **Beltz, A.**, & Gates, K. M. (2023). Estimating both directed and undirected contemporaneous relations in time series data using hybrid-group iterative multiple model estimation. *Psychological Methods*, 28(1), 189-206. doi: 10.1037/met0000485. PMCID: PMC12151540. PMID: 35420853
- Petersen, N., **Beltz, A. M.**, Casto, K. V., Taylor, C. M., Jacobs, E. G., Sundström-Poromaa, I., & Pletzer, B. (2023). Towards a more comprehensive neuroscience of hormonal contraceptives. *Nature Neuroscience*, 26, 529-531. doi: 10.1038/s41593-023-01273-z. PMCID: PMC11999101. PMID: 36879144
- Beltz, A. M.**, Demidenko, M. I., Wilson, S. J., & Berenbaum, S. A. (2023). Prenatal androgen influences on the brain: A review, critique, and illustration of research on congenital adrenal hyperplasia. *Journal of Neuroscience Research*, 101(5), 563-574. doi: 10.1002/jnr.24900. PMCID: PMC12124213. PMID: 34139025

- Constante, K., Demidenko, M. I., Huntley, E., Rivas-Drake, D., Keating, D., & **Beltz, A. M.** (2023). Personalized neural networks underlie individual differences in ethnic identity exploration and resolution. *Journal of Research on Adolescence*, 33(1), 24-42. doi: 10.1111/jora.12760. PMCID: PMC9673182. PMID: 35429195
- Dorn, L. D., & **Beltz, A. M.** (2023). Puberty: Foundations, findings, and the future. In L. J. Crockett, G. Carlo, & J. E. Schulenberg (Eds.), *APA handbook of adolescent and young adult development* (pp. 3-19). Washington, DC: American Psychological Association. doi: 10.1037/0000298-001
- Foster, K. T., & **Beltz, A. M.** (2022). Heterogeneity in affective complexity among men and women. *Emotion*, 22(8), 1815-1827. doi: 10.1037/emo0000956. PMCID: PMC8605038. PMID: 34014723
- Beltz, A. M.** (2022). Hormonal contraceptive influences on cognition and psychopathology: Past methods, current inferences, and future directions. *Frontiers in Neuroendocrinology*, 67, article 101037. doi: 10.1016/j.yfrne.2022.101037. PMID: 36154817
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- Chaku, N., Yan, R., Kaplan, C. M., Foster, K. T., & **Beltz, A. M.** (under review). Working memory and daily internalizing problems: Pubertal timing moderates adult relations.
- Dyer, W. G., **Beltz, A. M.**, & Wilson, S. (under review). Association between oral contraceptive use and cigarette use in women who smoke cigarettes.
- Goeckner, B. D.**, Savitz, J., Teague, T. K., Brett, B. L., **Beltz, A. M.**, & Meier, T. B. (under review). The role of oral contraceptive use in associations of concussion history with kynurenine pathway metabolites, inflammation, and psychological symptoms in female athletes.
- Hidalgo-Lopez, E.**, Portengen, C., Smith, T., Becker, H. C., Schrepf, A., Harte, S. E., **Beltz, A. M.**, & Kaplan, C. M. (under review). Cortical thickness, surface area, and multisite pain: Distinct patterns by sex in adolescence.
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- Kim, E., Simmonite, M., Zhou, V., Wyatt, K., Zuppichini, M., Reardon, N., **Beltz, A.**, Hampstead, B., Taylor, S. F., & Polk, T. A. (under review). Michigan Neural Distinctiveness (MiND) study II protocol: Investigating age-related neural dedifferentiation longitudinally and in Alzheimer's pathology.
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- Portengen, C. M.**, & **Beltz, A. M.** (under review). (In)stability in daily parental acceptance and especially conflict are associated with adolescent academic well-being.
- Portengen, C.**, **Hidalgo-Lopez, E.**, Yan, R., & **Beltz, A. M.** (first revision under review). Gender "in the wild": Toward a person-specific behavioral neuroendocrinology. *Biology of Sex Differences*.
- Schock, A.-K., Hausinger, T., **Beltz, A. M.**, & Pletzer, B. (under first revision). Today I am like a leader: Within-person variability in self-ascribed leadership emergence indicates gender bias. *Humanities and Social Sciences Communications*.

In preparation:

- Beltz, A. M.**, & Weigard, A. S. (invited paper in prep). Intensive longitudinal assessment of neurocognition. *Trends in Neurosciences*.

- Foster, K. T., Chaku, N., Roche, D. J. O., & **Beltz, A. M.** (in prep). Person-specific variation in the affective reinforcement of alcohol use.
- Hidalgo-Lopez, E., Portengen, C. M., Smith, T., Angstadt, K. M., Schrepf, A., Clauw, D. J., Harte, S. E., Heitzeg, M. M., Mindell, J. A., Beltz, A. M.[^], & Kaplan, C. M.[^]* (in prep). Developmental pathways to adolescent pain by sex: Brain networks, sensory sensitivity, and sleep.
- Lenert, M. E., Smith, T., Hidalgo-Lopez, E., Portengen, C. M., Harte, S. E., Beltz, A. M., Schrepf, A., & Kaplan, C. M.* (in prep). Risk factors for future dysmenorrhea are evident in female adolescents prior to menarche.
- MacSweeney, N., Dumoulin, T., Aksnes, E. R., Barth, C., Crestol, A., Heller, C., Toenders, Y. J., Pletzer, B., **Beltz, A. M.[^]**, & Tamnes, C. K.[^] (in prep). Adolescent hormonal contraceptive use, mental health, and brain development: A review of the literature and considerations for the field.
- Portengen, C. M., Chaku, N., Yan, R., Hidalgo-Lopez, H., Patrick, M. E., & Beltz, A. M.* (in prep). Risk taking: Sex differences and links with estrogenic activity in oral contraceptives.

RESEARCH PRODUCTS (*Italics denote mentored trainee; ^ denotes joint authorship position*)

- Portengen, C., Yang, T. A., Hidalgo-Lopez, E., Yan, R., & Beltz, A. M.* (2025). [Cover image for issue]. *Hormones and Behavior*, 75.
- Hidalgo-Lopez, E., Kaplan, C.[^], & Beltz, A. M.[^]* (2023, June 13). Regions of interest for functional connectivity correlates of widespread pain in children [Methods]. doi: 10.17605/OSF.IO/FDJQU
- Beltz, A. M., Weigard, A. S., & Chaku, N.** (2022, August 23). Intensive longitudinal assessment of inhibitory control for up to 100 occasions [Measurement instrument]. doi: 10.17605/OSF.IO/9YABR
- Lane, S., Gates, K. M., Fisher, Z., Arizmendi, C., & Molenaar, P. C. M. (2021, August 19). *gimme*: Group Iterative Multiple Model Estimation. An R package. (Version 0.6-1). [Computer software]. Chapel Hill, North Carolina. Available from <https://cran.r-project.org/web/packages/gimme/>. **Beltz, A. M.** [consultant to project]: subgrouping, multiple solutions, hemodynamic response function.
- Beltz, A., Foster, K. T., & Loviska, A.** (2020, July 7). eMOTE: An emoji-based emotion assessment [Measurement instrument]. doi: 10.17605/OSF.IO/ZM2B6
- Beltz, A. M., & Kelly, D. P.** (2020, July 2). Intensive longitudinal assessment of mental rotations for up to 75 occasions [Measurement instrument]. doi: 10.17605/OSF.IO/M6AE8
- Beltz, A. M., & Kelly, D. P.** (2020, July 2). Intensive longitudinal assessment of verbal recall for up to 75 occasions [Measurement instrument]. doi: 10.17605/OSF.IO/VHR7U
- Beltz, A. M., Moser, J. S., & Fallis, J. S.** (2020). [Cover image for Special issue: The Year in Cognitive Neuroscience]. *Annals of the New York Academy of Sciences*, 1464(1), i. doi: 10.1111/nyas.14351
- Beltz, A. M., Dotterer, H. L., & Goetschius, L. G.** (2019, May 9). *GIMME preprocessing: Initial release* (Version v1.0). Zenodo. doi: 10.5281/zenodo.2692522

PRESS COVERAGE

Expert opinion provided for: *Healthline* (2022), *Washington Post* (2023), *Mind & Matter* podcast (2023) *Contraceptive Technology Update* (2024), *Let's Talk About Women* podcast (2024), *Nature & Nurture* podcast (2024), *The Michigan Daily* (2024), *De Standaard* (2024), *Science Vs.* podcast (2024), *APA Monitor on Psychology* (2025), *New Scientist* (2025)

Becker, Beltz, Himle, Ableson, Russman Block, Taylor, & Fitzgerald (2023) covered by: *Medical Xpress, Mirage News*

Weigard, Loviska, and Beltz (2021) covered by: *The TODAY Show, Forbes, More Than a Feeling* podcast, *Daily Mail, International Business Times, The Hill, Deutsche Welle, Spektrum, Azione, WGN 720 News, and Michigan News*

Beltz, Loviska, and Weigard (2021) covered by: *BlogHer*

Nielson and Beltz (2021) covered by: *Contraceptive Technology Update*

Dotterer, Hyde, Shaw, Rodgers, Forbes, and Beltz (2020) covered by: *PsyPost*

Beltz, Loviska, and Kelly (2019) covered by: *Contraceptive Technology Update* and *PsyPost*

Berenbaum, Beltz, Bryk, and McHale (2018) covered by: *Science Daily*

Beltz, Hampson, and Berenbaum (2015) covered by: *Daily Mail*, *The Mirror*, *Contraceptive Technology Update*

Beltz, Swanson, and Berenbaum (2011) covered by: *LiveScience* and *Science Daily*

INVITED TALKS AND WORKSHOPS

Beltz, A. M. (2025, June). *The psychological correlates of hormonal contraceptives (HC) use, with adolescent reflections*. Invited presentation at The Neuroscience of Hormonal Contraceptives in Adolescence workshop, University of Oslo, Norway.

Beltz, A. M. (2025, March). *Hormonal contraceptives (HCs) and behavior: The potent state of the nascent science*. Invited Edwards Scholar community presentation at Reed College, Portland, OR.

Beltz, A. M. (2025, March). *A person-specific approach to behavioral neuroendocrinology*. Invited Edwards Scholar psychology presentation at Reed College, Portland, OR.

Beltz, A. M. (2024, November). *Revealing sex-related heterogeneity in functional neural networks*. Invited presentation for the Texas A&M Institute for Neuroscience, College Station, TX.

Beltz, A. M. (2024, September). *Hormonal contraceptives and behavior: The potent state of the nascent neuroscience*. Invited presentation for the Ann S. Bowers Women's Brain Health Initiative Seminar Series, virtual.

Beltz, A. M. (2024, July). *Integrating sex and gender in behavioral neuroendocrinology*. Invited presentation for the Canadian Organization for Gender and Sex Research, virtual.

Beltz, A. M. (2024, February). *GIMME: Group iterative multiple model estimation*. Invited workshop at the Department of Psychiatry and Psychotherapy, University of Tübingen, Germany.

Beltz, A. M. (2024, February). *Hormonal contraceptives and behavior: Developmental perspectives on a nascent science*. Invited presentation at the Women's Mental Health Across the Reproductive Years international research training group, University of Tübingen, Germany.

Beltz, A. M. (2023, June). *Hormonal contraceptives and behavior: The potent state of the nascent science*. Invited keynote at the Society for Behavioral Neuroendocrinology annual meeting, Tours, France.

Becker, J., **Beltz, A. M.**, Wright, E. C., & Rigney, N. A. (2023, June). *Incorporating sex as a biological variable in your research*. Invited workshop at the Society for Behavioral Neuroendocrinology annual meeting, Tours, France.

Beltz, A. M. (2023, March). *Round table discussion*. Invited panelist at Mind the Gap: Hormonal Contraceptives and Brain Health sponsored by the Women's Health Research Cluster, virtual.

Beltz, A. M. (2023, March). *From general inferences to specific effects: Evaluating research on hormonal contraceptives and cognition*. Invited presentation at Mind the Gap: Hormonal Contraceptives and Brain Health sponsored by the Women's Health Research Cluster, virtual.

Beltz, A. M. (2023, January). *Assessing the psychological correlates of hormonal contraceptive use in unique women: A workshop on study design*. Invited presentation at Mind the Gap:

Hormonal Contraceptives and Brain Health conference sponsored by the Women's Health Research Cluster, virtual.

- Beltz, A. M.** (2022, October). *The psychological correlates of hormonal contraceptive use: General trends and individual differences from puberty to menopause*. Invited presentation at the inter-institutional LIFE Course Academy, Berlin, Germany.
- Beltz, A. M.** (2022, May). *Intensive longitudinal methods for studying multidimensional developmental processes*. Discussant for symposium at the Association for Psychological Science annual convention, Chicago, IL.
- Beltz, A. M.** (2022, March). *Intensive longitudinal data analysis with group iterative multiple model estimation (GIMME)*. Invited presentation given at the Causal Inference from Longitudinal Data Workshop sponsored by the Jacobs Foundation and the Canadian Institute for Advanced Research, virtual.
- Beltz, A. M.** (2022, February). *From average differences to different from average: When gender matters for emotion and anxiety*. Invited presentation for the Ann Arbor District Library "Exploring the Mind" Community Talk, virtual.
- Beltz, A. M.** (2021, June). *Putting the i in gender: Person-specific analyses of psychopathology and cognition*. Invited presentation at the LEAD Graduate School & Research Network at the University of Tübingen, virtual.
- Beltz, A. M.** (2020, October). *Finding the "i" in ovary: Person-specific models of neuroendocrine-linked brain function and behavior*. Invited presentation at the Jacobs Laboratory at the University of California Santa Barbara, virtual.
- Beltz, A. M.** (2019, November). *Gender differences in the brain and behavior: The role of prenatal and pubertal sex hormones*. Invited presentation at the Mariani Foundation for Paediatric Neurology course on Developmental Cognitive/Behavioural Neuroscience and Gender Differences: Normality and Pathology, Milan, Italy.
- Beltz, A. M.** (2019, April). *Beyond the average Joe and mean girls: Intra-individual variation in gendered phenomena*. Invited presentation at the Michigan State University Social / Personality Forum, East Lansing, MI.
- Beltz, A. M.** (2018, October). *Beyond the average Joe and mean girls: Studying intra-individual variation in gendered phenomena*. Invited presentation at the Gender Development Research Conference, San Francisco, CA.
- Beltz, A. M.** (2018, August). *Oral contraceptives and cognition: A methodological perspective*. Invited presentation at the American Psychological Association annual convention, San Francisco, CA.
- Beltz, A.** (2018, April). *SRA Emerging Scholars Committee event: Analyzing intensive longitudinal data with group iterative multiple model estimation (GIMME)*. Invited workshop at the Society for Research on Adolescence biennial meeting, Minneapolis, MN.
- Beltz, A. M.** (2017, February). *Network analysis of clinical time series data*. Invited presentation at the Michigan State University Clinical Science Forum, East Lansing, MI.
- Gates, K. M., & **Beltz, A. M.** (2016, June). *An Introduction to fMRI connectivity mapping with GIMME*. Invited colloquium at the Multimodal Neuroimaging Training Program, Pittsburgh, PA.
- Beltz, A. M.**, & Gates, K. M. (2016, June). *Extensions of GIMME: How to handle subgroups, multiple solutions, correlated residuals, and non-stationarity*. Invited colloquium at the Multimodal Neuroimaging Training Program, Pittsburgh, PA.
- Gates, K. M., **Beltz, A. M.**, & Molenaar, P. C. M. (2016, March). *Connectivity mapping with GIMME in Matlab and R: A practical guide*. Invited workshop at the Georgia Institute of Technology, Atlanta, GA.

Molenaar, P. C. M., Gates, K. M., & **Beltz, A. M.** (2016, March). *fMRI connectivity mapping: The state of the science to assess individual differences in brain processes*. Invited colloquium at the Georgia Institute of Technology, Atlanta, GA.

PROFESSIONAL SERVICE

Scientific working group

2024- **Ann S. Bowers Women's Brain Health Initiative**, Chair of the Hormone-based Medications working group

Associate editor:

2020-2025 **Journal of Research on Adolescence**

2018- **Multivariate Behavioral Research**

Topic editor:

2021-2023 **Journal of Neuroscience Research**

Special issue editor:

2023-2025 **Hormones and Behavior**, "Nuance and novelty in the behavioral neuroendocrinology of hormonal contraceptives"

Statistical consulting editor:

2021- **The Journal of Child Psychology and Psychiatry**

2019-2025 **Child Development**

Editorial board member:

2024- **Biology of Sex Differences**

2023- **Journal of Neuroscience Research**

2018-2020 **Journal for Research on Adolescence**

2017- **Advances in Methods and Practices in Psychological Science**

2016- **Hormones and Behavior**

International conference organizer:

2018 **Society for Research in Child Development Special Topic Conference on the Use of Secondary and Open Source Data in Developmental Science (DEVSEC)**
Executive Organizing Committee Member

Federal grant reviewer:

2023 & 2024 **National Institutes of Health**, Understanding Chronic Conditions Understudied Among Women Special Emphasis Panel (SEP)

2022-2023 **National Science Foundation**, Developmental Sciences Advisory Panel member

2022 **National Institutes of Health**, Biobehavioral and Behavioral Sciences Study Section

2020 **The Dutch Research Council (NWO)**, external reviewer

2017 **National Science Foundation**, Social Psychology Program Research Proposal

2014-2015 **National Science Foundation**, Graduate Research Fellowships Program

International conference submission reviewer:

2018 **Society for Research on Adolescence** biennial meeting

2015 **Organization for Human Brain Mapping** annual meeting

2015-2020 **Society for Research in Child Development** biennial meeting

Leader in professional societies and organizations:

- 2025-2026 **Program committee member**, Organization for the Stud of Sex Differences
 2024-2025 **Awards committee member**, Organization for the Study of Sex Differences
 2008-2009 **Psi Chi president** at Saint Joseph's University chapter
 2007-2008 **Psi Chi treasurer** at Saint Joseph's University chapter

Journal ad hoc reviewer:

- ongoing *Adaptive Human Behavior and Physiology, Addictive Behaviors, Advances in Methods and Practices in Psychological Science, Andrologia, Biology of Sex Differences, Cerebral Cortex, Child Development, Computers and Electrical Engineering, Current Opinion in Behavioral Sciences, Developmental Psychology, Endocrine, Frontiers in Human Neuroscience, Frontiers in Neuroendocrinology, Hormones and Behavior, Human Brain Mapping, International Journal of Psychophysiology, Journal of Adolescent Health, Journal of Child Psychology and Psychiatry, Journal of Neuroscience Research, Journal of Personality, Journal of Personality and Social Psychology: Personality Processes and Individual Difference, Journal of Psychosomatic Research, Journal of Research on Adolescence, Journal of the International Neuropsychological Society, Learning and Individual Differences, Multivariate Behavioral Research, NeuroImage, Proceedings of the National Academy of Sciences, Psychological Science, Psychoneuroendocrinology, Scientific Reports, Sex Roles, The American Journal of Psychiatry*

Internal leadership:

- 2024- **Department Executive Committee**, member
 2024- **Department tenure promotion committee**, chair
 2024- **Department LSA Collegiate Fellows (LCF) and Michigan Program for Advancing Cultural Transformation (MPACT) search committee**, member
 2024- **Department developmental science faculty search committee**, member
 2023-2024 **Department Lecturer III quantitative methodology search committee**, chair
 2020-2022 **Quantitative Methods in the Social Sciences**, steering committee member
 2019 & 2024 **Department Augmented Executive Committee**, member
 2019- **Eisenberg Family Depression Center**, LINC committee member
 2016- **Methods Hour**, founder and organizer at the University of Michigan

Internal invited talks and workshops:

- Beltz, A. M.**, Pham, H., Smith, T., *Hidalgo-Lopez, E., Becker, H., Portengen, C. M., Hetizeg, M. M., Kaplan, C. M., & Berenbaum, S. A.* (2025, October). On puberty and its measurement: The case of the ABCD Study. Presentation at the University of Michigan Methods Hour, Ann Arbor, MI.
- Beltz, A. M.** (2024, July). *On the study of sex as a biological variable*. Invited presentation at the University of Michigan Chronic Pain and Fatigue Research Center Short Course on Pain, Ann Arbor, MI.
- Beltz, A. M.** (2024, May). *GIMME: Group iterative multiple model estimation*. Invited workshop at the University of Michigan Chronic Pain and Fatigue Research Center, Ann Arbor, MI.
- Beltz, A. M.** (2023, October). *Hormonal contraceptives and behavior: Developmental perspectives on a nascent science*. Invited presentation at the University of Michigan developmental area brownbag, Ann Arbor, MI.
- Beltz, A. M.** (2023, August). *The psychology of hormonal contraceptives*. Invited Faculty Forum presentation at Camp Michigania by the Alumni Association of the University of Michigan, Boyne City, MI.

- Beltz, A. M.** (2023, August). *The long arm of puberty: Potential lasting impacts of adolescent experiences*. Invited Faculty Forum presentation at Camp Michigania by the Alumni Association of the University of Michigan, Boyne City, MI.
- Kaplan, C. M., & **Beltz, A. M.** (2022, October). *Behavioral and neurobiological predictors of widespread pain in early adolescence and sex-specific trajectories of pain during puberty*. Invited presentation at the University of Michigan Neuroimaging Initiative BOLD Ideas Forum, Ann Arbor, MI.
- Beltz, A. M.** (2022, August). *Basic statistics primer*. Invited presentation at the University of Michigan Training Course in fMRI, Ann Arbor, MI.
- Beltz, A. M.** (2022, July). *The psychology of hormonal contraceptives: Empowering women through personalization*. Invited Faculty Forum presentation at Camp Michigania by the Alumni Association of the University of Michigan, Boyne City, MI.
- Beltz, A. M.** (2022, July). *From average differences to different from average: When gender matters for emotion*. Invited Faculty Forum presentation at Camp Michigania by the Alumni Association of the University of Michigan, Boyne City, MI.
- Beltz, A. M.** (2021, August). *Basic statistics primer*. Invited presentation at the University of Michigan Training Course in fMRI, virtual.
- Beltz, A. M.** (2020, November). *Coffee chat with Dr. Adriene Beltz*. Invited presentation at the University of Michigan Quantitative Methods in the Social Sciences Speaker Series, virtual.
- Beltz, A. M.** (2020, March). *GIMME: Group iterative multiple model estimation*. Invited presentation in the University of Michigan Neuroimaging Initiative – Methods group, Ann Arbor, MI.
- Beltz, A. M.** (2018, November). *Person-specific temporal networks: Accuracy, dynamics, and emojis*. Invited presentation in the University of Michigan Institute for Data Science (MIDAS) Speaker Series, Ann Arbor, MI.
- Beltz, A. M.** (2018, November). *Oral contraceptives and cognition: A methodological perspective on heterogeneity*. Invited presentation at the University of Michigan Decision Consortium, Ann Arbor, MI.
- Beltz, A. M., Dotterer, H., Weigard, A., Duffy, K., & Cohen, J.** (2018, September). *Estimating time-varying networks with GIMME: A description and application*. Invited presentation at the University of Michigan fMRI Symposium, Ann Arbor, MI.
- Beltz, A. M.** (2018, May). *Studying gendered psychological processes with person-specific temporal networks*. Invited presentation at ICOS Big Data Summer Camp, Ann Arbor, MI.
- Beltz, A. M., & Dotterer, H. L.** (2017, November). *Leveraging a between-person grouping algorithm to estimate within-person brain dynamics*. Invited presentation at the University of Michigan cognition and cognitive neuroscience area brownbag, Ann Arbor, MI.
- Beltz, A. M., & Molenaar, P. C. M.** (2017, May). *GIMME*. Invited workshop by the inter-institutional LIFE Course Program, Ann Arbor, MI.
- Beltz, A. M.** (2017, February). *The development of i*. Invited presentation at the University of Michigan developmental area brownbag, Ann Arbor, MI.
- Beltz, A. M.** (2016, October). *Connectivity mapping with insights into development*. Invited presentation at the University of Michigan developmental area brownbag, Ann Arbor, MI.
- Beltz, A. M.** (2016, October). *Network analysis of clinical data*. Invited presentation at the University of Michigan clinical science area brownbag, Ann Arbor, MI.
- Beltz, A. M.** (2014, April). *Connectivity mapping with GIMME*. Invited workshop at the Pennsylvania State University Academic and Experimental Organization for Neuroscience Students, University Park, PA.
- Beltz, A. M.** (2012, February). *Gender differences in STEM careers*. Invited presentation at the Pennsylvania State University Graduate Women in Science during Women in Science, Technology, Engineering, and Mathematics Week, University Park, PA.

 PROFESSIONAL ASSOCIATIONS AND AFFILIATIONS

Affiliate

American Psychological Association
 Association for Psychological Science
 International Society for the Study of Behavioral Development
 New York Academy of Sciences
 Organization for Human Brain Mapping
 Organization for the Study of Sex Differences
 Society for Behavioral Neuroendocrinology
 Society for Research in Child Development
 Society for Research on Adolescence

Inductee

Alpha Epsilon Lambda, *National Interdisciplinary Graduate Honor Society*
 Phi Beta Kappa, *National Liberal Arts Honors Society*
 Psi Chi, *International Honor Society in Psychology*
 Sigma Xi, *National Interdisciplinary Scientific Research Society*

 TEACHING

2020 & 2021 **Data, Distributions, and Decisions: The Science of Statistics**
 Michigan Math and Science Scholars: High School Summer Program
 2019 **The Behavioral Neuroscience of Puberty**
 2017 & **Advanced Research Methods and Statistics I** (graduate)
 2020-2021
 2018 & **Advanced Research Methods and Statistics II** (graduate)
 2021-2022
 2017-2025 **Methods Hour** (graduate)
 2015 **Introductory Psychology**
 2013-2025 **Guest lecturer**
 Analyzing Multivariate Data (graduate)
 Big Data Boot Camp
 Biocontextual Developmental Training Grant Seminar (graduate)
 Biology Brain, and Behavior: The Developing Child
 Developmental Neuroscience of Human Behavior (graduate)
 Developmental Psychology
 Developmental Psychology Proseminar (graduate)
 fMRI Data Analysis (graduate)
 Gender and Development (graduate)
 LIFE Course
 Person-Specific Data Analysis (graduate)

 MENTORING (+ denotes post-doctoral scholar)

2025- **Annelise Madison**, Assistant Professor
 2024- **Alexander Wasserman**, Lecturer III

Primary mentor:

2024- **Christel Portengen**⁺
 2023- **Esmeralda Hidalgo-Lopez**⁺
 2021- **Ran (Rachel) Yan**

2020-2022 **Natasha Chaku**⁺
 2020-2022 **Matthew Nielson**⁺
 2018-2021 **Alexander Weigard**⁺
 2017-2022 **Dominic Kelly**

Secondary mentor:

2024- **Jacqueline Katz**
 2021- **Yue (Linda) Zhang**
 2017-2022 **Michael Demidenko**

Dissertation committees:

ongoing **Savannah Pearson** (Neuroscience), cognate
 ongoing **T. Ariel Yang**, member
 ongoing **Ran (Rachel) Yan**, chair
 ongoing **Bryna Goeckner** (Medical College of Wisconsin), external member
 2025 **Lindzey Hoover**, member
 2025 **Hannah Becker**, member
 2024 **Felicia Hardi**, member
 2022 **Michael Demidenko**, member
 2022 **Dominic Kelly**, chair
 2022 **Carissa Wengrovius** (Kinesiology), cognate
 2021 **Kevin Constante-Toala**, member
 2021 **Hailey Dotterer**, member
 2021 **Leigh Goetschius**, member
 2021 **Andrea Scheuringer** (University of Salzburg), discussant
 2020 **Alexa Ellis**, member
 2018 **Katherine Foster**, member

Senior and honor's theses:

2019-2020 **Elizabeth Le** (Neuroscience), honors thesis mentor
 2019-2020 **Zoe Solomon**, senior thesis mentor

Training grant mentor:

2025- **Jacqueline Katz**
 2023-2025 **Olivia Varney-Chang**
 2023-2025 **Hannah Becker**
 2022-2024 **Katherine Ross**
 2021-2023 **Felicia Hardi**
 2020-2022 **Natasha Chaku**⁺
 2020-2022 **Matthew Nielson**⁺
 2020-2022 **Averill Cantwell**
 2020-2022 **Jennifer Cleary**
 2019-2021 **Michael Demidenko**
 2018-2021 **Alexander Weigard**⁺
 2018-2020 **Leigh Goetschius**
 2017-2019 **Kevin Constante-Toala**
 2017-2019 **Petal Grower**
 2017-2018 **Melissa Peckins**⁺

ORAL PRESENTATIONS (*Italics denote mentored trainee*)

Beltz, A. M., Pham, H., Smith, T., *Hidalgo-Lopez, E.*, Becker, H., Heitzeg, M., Kaplan, C. M., & Berenbaum, S. A. (2024, June). *On the use of puberty data in the ABCD Study: A systematic*

- review and empirical illustration*. Presentation at the International Society for the Study of Behavioral Development biennial meeting, Lisbon, Portugal.
- Kelly, D. P., Weigard, A. S., & **Beltz, A. M.** (2024, June). *Heterogeneity in the daily link between affect and cognition: Is intra-individual variability a trait?* Presentation at the Society for Ambulatory Assessment annual meeting, Ann Arbor, MI.
- Boele, S., Bülow, A., **Beltz, A. M.**, de Haan, A., Denissen, J. J. A., de Moor, M. H. M., & Keijsers, L. (2023, October). *Family-specific networks of daily adolescent affect and perceived parenting*. Presentation at the Emotions 2023 conference, Tilburg, The Netherlands.
- Beltz, A. M.**, Bürger, Z., Lacasse, J., & Tronson, N. (2023, June). *A conversation about hormonal contraceptives, behavior, and the brain*. Science and Society round table at the Society for Behavioral Neuroendocrinology annual meeting, Tours, France.
- Chaku, N., & **Beltz, A. M.** (2023, April). *Daily inhibitory control matters for adolescent behavior: A temporal network perspective*. Poster blitz presentation at the Society for Research on Adolescence annual meeting, San Diego, CA.
- Yan, R., Portengen, C., Chaku, N., Lopez-Duran, N., & **Beltz, A. M.** (2023, April). *Heterogeneity in daily relations between gender expression and depression: Findings from a 100-day study of adolescence*. Poster blitz presentation at the Society for Research on Adolescence annual meeting, San Diego, CA.
- Kelly, D. P., Chaku, N., & **Beltz, A. M.** (2023, March). *Cognition in the classroom: The potential of daily assessments for individual learners*. Presentation at the Modeling Individual Differences in Education meeting, Zurich, Switzerland.
- Beltz, A. M.**, Chaku, N., Yan, R., Kelly, D. P., Zhang, Z., Lopez-Duran, N., & Weigard, A. (2022, June). *Daily inhibition, risk-taking, and puberty: An adolescent behavioral network perspective*. Presentation at the International Society for the Study of Behavioral Development biennial meeting, Rhodes, Greece.
- Chaku, N., Yan, R., Kelly, D. P., Zhang, Z., Lopez-Duran, N., Weigard, A., & **Beltz, A. M.** (2022, May). *100 days of adolescence: Daily executive function provides novel insights into adolescent behavior*. Presentation at the Association for Psychological Science annual convention, Chicago, IL.
- Kelly, D. P., & **Beltz, A. M.** (2022, May). *Describing me today: The person-specificity of relations between cognition and personality over 75 days*. Flash talk at the Association for Psychological Science annual convention, Chicago, IL.
- Hardi, F., Goetschius, L. G., McLoyd, V. C., Lopez-Duran, N. L., Mitchell, C., Hyde, L. W., **Beltz, A.**, Monk, C. S. (2021, April). *Adolescent data-driven functional network connectivity prospectively predict adult anxiety symptoms related to COVID-19 economic adversity*. Presentation at the NIH Social, Behavioral, and Economic (SBE) Health Impacts of COVID-19 Initiative Grant Results Webinar, virtual.
- Hardi, F. A., Goetschius, L. G., McLoyd, V. C., Lopez-Duran, N., Mitchell, C., Hyde, L. W., **Beltz, A. M.**, Monk, C. S. (2021, December). *Adolescent data-driven neural networks prospectively predict adult anxiety symptoms related to COVID-19 economic adversity*. Presentation at the annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico.
- Chaku, N., Kaplan, C., Foster, K. T., & **Beltz, A. M.** (2021, March). *Working memory and daily internalizing symptoms: Pubertal timing moderates adult relations*. Presentation at the Society for Research on Adolescence biennial meeting, virtual.
- Goetschius, L. G., Hein, T. C., McLanahan, S. S., Brooks-Gunn, J., McLoyd, V. C., Dotterer, H. L., Lopez-Duran, N. L., Mitchell, C., Hyde, L. W., Monk, C. S., & **Beltz, A. M.** (2020, December). *Childhood violence exposure predicts adolescent neural network sparsity*. Presentation at the American College Neuropsychopharmacology Annual Meeting, virtual.
- Weigard, A., Loviska, A., & **Beltz, A.** (2020, October). *Ovarian hormones and daily emotional variability: Little evidence for differences between the endogenous menstrual cycle and exogenous oral contraceptive use*. Presentation at the Society for Psychophysiological Research annual meeting, virtual.

- Karthikeyan, G., **Beltz, A. M.**, & Brang, D. (2019, October). *Building generalizable cognitive models using ECoG: An improvised technique for group-level analysis*. Nanosymposium presentation at the Society for Neuroscience annual meeting, Chicago, IL.
- Simmonite, M., Khammash, D., **Beltz, A.**, & Polk, T. (2019, October). *Reliable, person-specific functional architecture derived from Human Connectome Project task data*. Nanosymposium presentation at the Society for Neuroscience annual meeting, Chicago, IL.
- Beltz, A. M.** (2018, October). *Comments and future directions on open fMRI data analysis*. Presentation at the Society for Research in Child Development Special Topic Conference on the Use of Secondary and Open Source Data in Developmental Science, Phoenix, AZ.
- Beltz, A. M.**, Loviska, A. M., Foster, K. T., & Kelly, D. P. (2018, May). *Behavioral networks in oral contraceptive users: Exploring ovarian hormone links to gendered cognition and personality qualities*. Presentation at the Association for Psychological Science annual meeting, San Francisco, CA.
- Beltz, A. M.**, & Dotterer, H. L. (2018, May). *Leveraging a between-person grouping algorithm to estimate within-person brain dynamics*. Presentation at the Modern Modeling Methods annual conference, Storrs, CT.
- Beltz, A.** (2018, April). *Pubertal timing is related to adolescent depressive symptoms via gendered mechanisms*. Presentation at the Society for Research on Adolescence biennial meeting, Minneapolis, MN.
- Morris, A., **Beltz, A.**, Guyer, A., Silk, J., Squeglia, L., & Tezler, E. (2018, April). *Integrating neuroimaging with developmental research to better understand risk and resilience processes in adolescence*. Roundtable at the Society for Research on Adolescence biennial meeting, Minneapolis, MN.
- Berenbaum, S. A., & **Beltz, A. M.** (2017, November). *From genes to behavior through sex hormones & socialization: The example of gender development*. Presentation at the TWINS Congress, Madrid, Spain.
- Beltz, A. M.**, Acharya, R., Graber, J. A., Nixon, S. J., & Lynne-Landsman, S. D. (2017, April). *Puberty influences reward-related neural connectivity: Girls with early versus typical maturation*. Paper presentation at the Society for Research in Child Development biennial meeting, Austin, TX.
- Wright, A. G. C., **Beltz, A. M.**, Gates, K. M., Molenaar, P. C. M., & Simms, L. J. (2016, October). *Examining the dynamic structure of daily internalizing and externalizing behavior at multiple levels of analysis*. Presentation at the Association for Behavioral and Cognitive Therapies annual convention, New York City, NY.
- Beltz, A. M.**, Hallquist, M. N., Calabro, F. J., Molenaar, P. C. M., Luna, B. (2016, September). *Intra-individual time-varying network connectivity provides insight into functional brain development*. Presentation at the Developmental Methods Conference, Whitefish, MT.
- Beltz, A. M.** (2016, August). *Prenatal androgen effects on behavioral and neural networks: Insights from females with congenital adrenal hyperplasia*. Presentation at the Society for Behavioral Neuroendocrinology annual meeting, Montréal, Quebec, Canada.
- Beltz, A. M.**, & Wright, A. G. C. (2016, May). *The potential of unified structural equation modeling (uSEM) for personalized medicine: Personality pathology as a model system*. Presentation at the International Society for Pharmacoeconomics and Outcomes Research, Washington, D.C.
- Wright, A. G. C., Gates, K. M., **Beltz, A. M.**, Molenaar, P. C. M., & Simms, L. J. (2015, June). *Using Group Iterative Multiple Model Estimation (GIMME) to study dynamic individual structures in ambulatory assessment data of psychiatric patients*. Presentation at the Society for Ambulatory Assessment meeting, University Park, PA.
- Morales, S., Shewark, E., **Beltz, A.**, Molenaar, P., & Buss, K. (2015, March). *The utility of unified structural equation modeling (uSEM) for the study of regulation and dysregulation of fear*. Presentation at the Society for Research in Child Development biennial meeting, Philadelphia, PA.
- Molenaar, P. C. M., & **Beltz, A. M.** (2013, October). *Dynamic factor analysis of nonstationary processes*. Presentation at the Society of Multivariate Experimental Psychology annual meeting, St. Petersburg, FL.

- Beltz, A. M.**, Lam, C. B., McHale, S., & Berenbaum, S. A. (2011, April). *Links between gendered socialization and sex hormones*. Presentation at the Society for Research in Child Development biennial meeting, Montréal, Quebec, Canada.
- Beltz, A. M.**, & Murray, C. S. (2009, April). *A comprehensive analysis of gender differences in attachment*. Presentation at the Geis Student Research on Women Conference, Newark, DE.

POSTER PRESENTATIONS (*Italics denote mentored trainee*)

- Zhang, Y., Hardi F., Kanaan, N. M., Michaud, S., Tillem, S., Mitchell, C., Huntley, E., Hyde, L. W., **Beltz, A. M.**, Monk, C. S. (2025, September). *Investigating individual differences in adolescent functional connectivity: A comparison between task and resting functional MRI*. Poster presentation at the Flux Congress 2025, Dublin, Ireland.
- Katz, J. M., Yan, R., **Beltz, A. M.**[^], & Gearhardt, A. N.[^] (2025, July). *Associations between reproductive hormonal milieus and binge eating: The role of sex and hormonal contraceptive use*. Poster presentation at the Society for the Study of Ingestive Behavior annual meeting, Oxford, United Kingdom.
- Hidalgo-Lopez, E., Smith, T., Portengen, C., Becker, H., **Beltz, A.**[^], & Kaplan, C.[^] (2025, June). *Sex and puberty-related brain structure differences in youth with and without multisite pain*. Poster presentation at the Organization for the Study of Sex Differences annual meeting, Albuquerque, NM.
- Portengen, C., Smith, T., Hidalgo-Lopez, E., Becker, H., Lenert, M., Schrepf, A., Harte, S., Kaplan, C.[^], & **Beltz, A.**[^] (2025, June). *Early pubertal timing is a risk factor for adolescent dysmenorrhea*. Poster presentation at the Organization for the Study of Sex Differences annual meeting, Albuquerque, NM.
- Yan, R., Portengen, C., Yang, T. A., Reece, G., Dunnum, Z., Hidalgo-Lopez, E., & **Beltz, A. M.** (2025, June). *Hormonal intrauterine device use is related to mental rotations but not verbal memory*. Poster presentation at the Organization for the Study of Sex Differences annual meeting, Albuquerque, NM.
- Hidalgo-Lopez, E., **Beltz, A. M.**, Lenert M. E., Harte S. E., Schrepf, A., & Kaplan, C. M. (2025, April). *Individualized neural networks differ based on depressive symptoms in women with urologic chronic pelvic pain syndrome*. Poster presentation at the United States Association for the Study of Pain annual meeting, Chicago, IL.
- Becker, H., Hardi, F., Bilek, E., Phan, K. L., **Beltz, A. M.**, Monk, C. S., & Fitzgerald, K. D. (2024, December). *Effects of treatment on the relation of amygdala connectivity and anxiety in pediatric anxiety disorders: A randomized fMRI clinical trial*. Poster presentation at the American College of Neuropsychopharmacology annual meeting, Phoenix, AZ.
- Chang, S-E., Liu, Y., Höbler, F., Becker, H., Angstadt, M., & **Beltz, A.** (2024, October). *Subgroup-level functional connectivity of the M1 inter-effector areas differentiating stuttering and non-stuttering children*. Poster presentation at the Society for the Neurobiology of Language Conference, Brisbane, Australia.
- Yan, R., Yang, T. A., Hidalgo-Lopez, E., Reece, G., & **Beltz, A. M.** (2024, June). *Hormonal intrauterine device use and three-dimensional mental rotation skills in women*. Poster presentation at the Society for Behavioral Neuroendocrinology annual meeting, Columbus, OH.
- Portengen, C. M., & **Beltz, A. M.** (2024, June). *Daily variability in parental acceptance and conflict is associated with adolescent academic well-being*. Poster presentation at the International Society for the Study of Behavioral Development biennial meeting, Lisbon, Portugal.
- Chang, S.-E., Liu, Y., Höbler, F., Becker, H., Caruso, V., Angstadt, M., & **Beltz, A. M.** (2024, June). *Distinct subgroup-level functional connectivity in stuttering and non-stuttering children*. Poster presentation at the Organization for Human Brain Mapping annual meeting, Seoul, South Korea.
- Hidalgo-Lopez, E., Smith, T., Becker, H., Mindell, J. A., Angstadt, K. M., Schrepf, A., Williams, D. A., Clauw, D., Harte, S. E., Kaplan, C., & **Beltz, A.** (2024, May). *Sex differences in resting state*

neural networks underlying adolescent multisite pain. Poster presentation at the Organization for the Study of Sex Differences annual meeting, Bergen, Norway.

- Becker, H., Smith, T., Hidalgo-Lopez, E., Fitzgerald, K., Kaplan, C., & Beltz, A. (2024, April). *Early pubertal timing increases risk of conversion from anxiety to depression in adolescent girls.* Poster presentation at Anxiety & Depression Association of America annual conference, Boston, MA.
- Marks, R., Sun, X., Caballero, J., Bouhali, F., Kepinska, O., Beltz, A., Hoeft, F., & Kovelman, I. (2024, April). *Individual differences in the emerging reading network: A CS-GIMME investigation of functional connectivity in beginning readers.* Poster presentation at the Cognitive Neuroscience Society annual meeting, Toronto, Ontario, Canada.
- Hidalgo-Lopez, E., Smith, T., Becker, H., Angstadt, M., Schrepf, A., Williams, D. A., Clauw, D., Harte, S. E., Kaplan C., & Beltz, A. (2024, April). *Resting state connectivity networks underpinning multisite pain in adolescent girls and boys.* Poster presentation at the United States Association for the Study of Pain annual meeting, Seattle, WA.
- Smith, T., Hidalgo-Lopez, E., Becker, H., Schrepf, A., Williams, D. A., Clauw, D., Harte, S. E., Mindell, J. A., Beltz, A., & Kaplan C. (2024, April). *Sex differences in pain-related CNS-mediated symptom clusters in children with multisite pain.* Poster presentation at the United States Association for the Study of Pain annual meeting, Seattle, WA.
- Zhang, Y., Hardi, F., McLoyd, V. C., Lopez-Duran, N., Mitchell, C., Hyde, L. W., Beltz, A. M., & Monk, C. S. (2023, September). *Examination of adolescent person-specific neural networks implicated in reward processing and internalizing symptoms.* Poster presentation at the Flux Congress, Santa Rosa, CA.
- Hardi, F. A., Beltz, A. M., Tillem, S., McLoyd, V., Mitchell, C., Hyde, L. W., & Monk, C. S. (2023, September). *Person-oriented approaches identify distinct longitudinal associations of childhood adversity with adolescent functional brain networks and mental health.* Poster presentation at the Flux Congress 2023, Santa Rosa, CA.
- Zhang, Y., Hardi, F., McLoyd, V.C., Lopez-Duran, N., Mitchell, C., Hyde, L.W., Beltz, A.M., & Monk, C.S. (2023, May). *Associations between person-specific reward processing neural networks and internalizing symptoms in adolescents.* Poster presentation at the Association for Psychological Science annual convention, Washington, D.C.
- Beltz, A., Smith, T., Becker, H., Schrepf, A., Boehnke, K., Williams, D., Clauw, D., Harte, S., & Kaplan, C. (2023, May). *Sex differences in the adolescent development of multisite pain.* Poster presentation at the Organization for the Study of Sex Differences, Calgary, Alberta, Canada.
- Reece, G., Chaku, N., & Beltz, A. M. (2023, April). *An investigation of real-world risk-related decision-making across adolescence.* Poster presentation at the Society for Research on Adolescence annual meeting, San Diego, CA.
- Rajagopal, S., Beltz, A. M., Hampstead, B., & Polk, T. (2023, March). *Estimating individual trajectories of structural and cognitive decline in mild cognitive impairment.* Poster presentation at the Cognitive Neuroscience Society annual meeting, San Francisco, CA.
- Chaku, N., Qian, Y., Corley, R. P., Berenbaum, S. A., & Beltz, A. M. (2022, June). *Reliability and validity of retrospectively reported pubertal timing: Evidence from adolescence to adulthood.* Poster presentation at the International Society for the Study of Behavioral Development biennial meeting, Rhodes, Greece.
- Yan, R., Chaku, N., Lopez-Duran, N., Deldin, P., & Beltz, A. M. (2022, June). *Gender differences in 100-day depressive symptomatology in early and middle adulthood.* Poster presentation at the International Society for the Study of Behavioral Development biennial meeting, Rhodes, Greece.
- Kelly, D. P., & Beltz, A. M. (2022, May). *Describing me today: The person-specificity of relations between cognition and personality over 75 days.* Poster presentation at the Association for Psychological Science annual convention, Chicago, IL.
- Wengrovius, C., Zick, S., Beltz, A. M., Wentz, E. E., Ulrich, D. A., & Robinson, L. E. (2022, May). *Relationships between parent-reported physical activity and facets of interoceptive awareness in*

- children. Poster presentation at the International Congress on Integrative Medicine and Health, Phoenix, AZ.
- Becker, H., **Beltz, A.**, Taylor, S., & Fitzgerald, K. D. (2022, April). *Changes in strength of brain network connections after cognitive behavioral therapy treatment for OCD in youth*. Poster presentation at the Society for Biological Psychiatry, New Orleans, LA.
- Kelly, D. P., Chaku, N., & **Beltz, A. M.** (2022, March). *Development through the eyes of emoji: Investigating associations of emoji use with personality and emotion*. Poster presentation at the Society for Research on Adolescence biennial meeting, New Orleans, LA.
- Yan, R., Zhang, Z., Chaku, N., & **Beltz, A. M.** (2022, March). *A role for mothers in the link between COVID-19 stress and adolescent mental health*. Poster presentation at the Society for Research on Adolescence biennial meeting, New Orleans, LA.
- Chaku, N., Kaplan, C., Foster, K.T., & **Beltz, A. M.** (2021, November). *Pubertal timing and gender moderate adult relations between working memory and daily internalizing behaviors*. Poster presentation at the International Society for Developmental Psychobiology meeting, Chicago, IL.
- Kelly, D., Dzera, J., Demidenko, M., Weigard, A., Foster, K., & **Beltz, A.** (2021, April). *Pubertal timing and daily adult alcohol consumption: Examining mediating effects of alcohol beliefs by gender*. Poster presentation at the Society for Research in Child Development biennial meeting, virtual.
- Russman Block, S., Klump, K. L., Winters, A., **Beltz, A.**, Burt, S. A., & Moser, J. (2021, March). *Estradiol is protective against the negative impact of worry on cognitive control*. Poster presentation at the Anxiety and Depression Association of America Conference, virtual.
- Kaplan, C., Schrepf, A., Mawla, I., Ichesco, E., Boehnke, K., Rutherford, S., **Beltz, A.**, Tsodikov, A., Williams, D., Hassett, A., Clauw, D., Harte, S., Harris, R. (2020, June). *Neurobiological evidence of pain vulnerability in children*. Poster presentation at the Organization for Human Brain Mapping annual meeting, virtual.
- Dzera, J., Kelly, D., Weigard, A., Demidenko, M. I., Stone, S., Foster, K. T., & **Beltz, A.M.** (2020, May). *Persisting effects of pubertal timing on alcohol expectancies and use in adulthood*. Poster presentation at the Association for Psychological Science annual meeting, virtual.
- Le, E., Weigard, A., & **Beltz, A. M.** (2020, May). *Daily affective complexity depends on emotional disposition and exogenous hormones*. Poster presentation at the Association for Psychological Science annual meeting, virtual.
- Solomon, Z., Kelly, D., & **Beltz, A. M.** (2020, May). *Gender and personality links to social media use: A partial replication and extension*. Poster presentation at the Association for Psychological Science annual meeting, virtual.
- Dotterer, H. L., Hyde, L. W., Shaw, D. S., Forbes, E. E., & **Beltz, A. M.** (2020, February). *Psychopathic traits are related to distinct patterns of neural connectivity at rest using a personalized directed connectivity approach in a diverse, low-income community sample*. Poster presentation at the annual meeting of the International Neuropsychological Society, Denver, CO.
- Reitz, E. L., Palmer, L. E., **Beltz, A. M.**, Bryk, K. L., Bailey, J. M., & Berenbaum, S. A. (2020, February). *Variation in female sexual orientation: Biological and social correlates in Congenital Adrenal Hyperplasia*. Poster presentation at the Society for Personality and Social Psychology annual meeting, New Orleans, LA.
- Goetschius, L.G., Hein, T. C., McLananahan, S. S., Brooks-Gunn, J., McLoyd, V. C., Dotterer, H. L., Mitchell, C., Lopez-Duran, N. L., Hyde, L. W., Monk, C. S., & **Beltz, A. M.** (2019, September). *Childhood violence exposure and resting-state connectivity: Person-specific networks capture heterogeneity and some consistency*. Poster presentation at the FLUX Congress, New York, NY.
- Weigard, A., **Beltz, A.**, & Heitzeg, M. M. (2019, June). *Timing of puberty and family history of alcoholism are independent predictors of late adolescent alcohol and marijuana use in males*. Poster presentation at the Research Society on Alcoholism annual meeting, Minneapolis, MN.
- Dotterer, H. L., Hyde, L. W., Shaw, D. S., Forbes, E. E., & **Beltz, A. M.** (2019, May). *Psychopathic traits are related to distinct patterns of neural connectivity at rest using a personalized directed*

- connectivity approach in a diverse, low-income community sample*. Poster presentation at the biennial meeting of the Society for the Scientific Study of Psychopathy, Las Vegas, NV.
- Kelly, D., & **Beltz, A.** (2019, March). *Spatial ability and self-perceived masculinity are positively related in women but not in men*. Poster presentation at the Society for Research in Child Development biennial meeting, Baltimore, MD.
- Kelly, D., Loviska, A., & **Beltz, A.** (2019, March). *Validation of a 75-day intensive longitudinal measure of immediate and delayed paired verbal recall*. Poster presentation at the International Convention of Psychological Science annual meeting, Paris, France.
- Grower, P., Ward, L. M., & **Beltz, A.** (2018, October). *Downstream consequences of pubertal timing for women's body beliefs*. Poster presentation at the Gender Development Research Conference, San Francisco, CA.
- Loviska, A. M., & **Beltz, A. M.** (2018, October). *Daily fluctuations in gender identity and adjustment: Implications for person-oriented research*. Poster presentation at the Gender Development Research Conference, San Francisco, CA.
- Arredondo, M., Hu, X.S., Satterfield, T., Kovelman, I., & **Beltz, A.** (2018, October). *It's a GIMME": Data-driven connectivity mapping identifies monolingual vs. bilingual brain activity*. Poster presentation at the fNIRS 2018 biennial meeting, Tokyo, Japan.
- Foster, K. T., Hicks, B. M., & **Beltz, A. M.** (2018, September). *Precision medicine using functional dynamics clinical profiling: The case of internalizing and alcohol use problems*. Poster presentation at the Society for Research in Psychopathology, Indianapolis, IN.
- Foster, K. T., & **Beltz, A. M.** (2018, June). *Accounting for heterogeneity in alcohol use problems: Three person-oriented techniques*. Poster presentation at the Research Society on Alcoholism, San Diego, CA.
- Kelly, D., Loviska, A., **Beltz, A.** (2018, May). *Validation of a daily diary measure of three-dimensional mental rotations ability*. Poster presentation at the Association for Psychological Science annual meeting, San Francisco, CA.
- Loviska, A., Colton, Z., Kelly, D., **Beltz, A.** (2018, May). *No evidence for personality differences between oral contraceptive users and naturally cycling women: Implications for research on sex hormones*. Poster presentation at the Association for Psychological Science annual meeting, San Francisco, CA.
- Foster, K. T., Hicks, B. M., & **Beltz, A. M.** (2017, September). *Person-specific variation in the structure of affect and implications for affective disorders*. Poster presentation at the Society for Research in Psychopathology Conference, Denver, CO.
- Reitz, E. L., Groh, T. L., **Beltz, A. M.**, Bryk, K. L., McHale, S. M., & Berenbaum, S. A. (2017, April). *Gendered peer preferences in girls with prenatal androgen exposure: Effects of gender identity, activities, and temperament*. Poster presentation at the Society for Research in Child Development biennial meeting, Austin, TX.
- Zelle, S. L., **Beltz, A. M.**, Bryk, K. L. K., Wilson, S. J., & Berenbaum, S. A. (2016, November). *Prenatal androgen effects on neural processing of reward*. Poster presentation at the Society for Neuroscience annual meeting, San Diego, CA.
- Beltz, A. M.**, Gates, K. M., & Molenaar, P. C. M. (2016, June). *Selection of a hemodynamic response function influences task effects in connectivity maps*. Poster presented at the Organization for Human Brain Mapping annual meeting, Geneva, Switzerland.
- Bouwman, M. E. J., **Beltz, A. M.**, Bos, E. H., Oldehinkel, A. J., de Jonge, P., & Molenaar, P. C. M. (2016, March). *Dynamic interplay between melatonin, affect, and fatigue*. Poster presentation at the American Psychosomatic Society annual meeting, Denver, CO.
- Beltz, A. M.**, & Molenaar, P. C. M. (2015, June). *A posteriori validation of temporal lags used in directed functional connectivity maps*. Poster presentation at the Organization for Human Brain Mapping annual meeting, Honolulu, HI.

- Beltz, A. M., & Molenaar, P. C. M.** (2015, June). *Mapping intra-individual time-varying connectivity with group iterative multiple model estimation*. Poster presentation at the Organization for Human Brain Mapping annual meeting, Honolulu, HI.
- Beltz, A. M., Molenaar, P. C. M., & Berenbaum, S. A.** (2015, March). *Dynamic dyads: Behavioral maps reveal the time-varying nature of children's play*. Poster presentation at the Society for Research in Child Development biennial meeting, Philadelphia, PA.
- Beltz, A. M., Bryk, K., McHale, S., & Berenbaum, S. A.** (2014, October). *Effects on STEM-related occupational interests of prenatal hormones and gendered socialization*. Poster presentation at the Gender Development Research Conference, San Francisco, CA.
- Beltz, A. M., & Berenbaum, S. A.** (2014, August). *Behavioral mapping technique reveals prenatal androgen effects on dyadic play*. Poster presentation at the American Psychological Association annual convention, Washington, D.C.
- Corley, R. P., **Beltz, A. M.**, Wadsworth, S. J., & Berenbaum, S. A. (2014, June). *Augmenting pubertal Developmental Scale indicators with height in two genetically-informative longitudinal studies*. Poster presentation at the Behavior Genetics Association annual meeting, Charlottesville, VA.
- Beltz, A. M., Berenbaum, S. A., & Wilson, S. J.** (2014, June). *Sex-related resting state brain function in cigarette smokers and links to behavior*. Poster presentation at the Organization for Human Brain Mapping annual meeting, Hamburg, Germany.
- Beltz, A. M., & Molenaar, P. C. M.** (2014, June). *Dealing with equivalent solutions in effective connectivity analysis*. Poster presentation at the Organization for Human Brain Mapping annual meeting, Hamburg, Germany.
- Molenaar, P. C. M., & **Beltz, A. M.** (2014, June). *Individual differences in time-varying neural connectivity and smoking behavior*. Poster presentation at the Organization for Human Brain Mapping annual meeting, Hamburg, Germany.
- Wilson, S. J., **Beltz, A. M.**, Henry, S. L., Geier, C. F., Gilmore, R. O., Turrisi, R. J., & Berenbaum, S. A. (2013, June). *Neurocognitive processing in relation to alcohol use across the early years of college*. Poster presentation at the Research Society on Alcoholism annual meeting, Orlando, FL.
- Beltz, A. M., Beckerman, E., Bryk, K. L., McHale, S. M., & Berenbaum, S. A.** (2013, April). *Prenatal androgen levels moderate links between gender identity and adjustment*. Poster presentation at the Society for Research in Child Development biennial meeting, Seattle, WA.
- Beltz, A. M., & Berenbaum, S. A.** (2013, April). *Prenatal androgen influences on childhood dyadic play: Insights from behavioral network mapping*. Poster presentation at the Society for Research in Child Development biennial meeting, Seattle, WA.
- Beltz, A. M., Corley, R. P., Bricker, J. B., & Berenbaum, S. A.** (2013, April). *Modeling pubertal development and examining links to behavior problems*. Poster presentation at the Society for Research in Child Development biennial meeting, Seattle, WA.
- Beltz, A. M., & Berenbaum, S. A.** (2012, June). *Examining the organizational effects of pubertal timing on cognition and adjustment in young adults*. Poster presentation at the Society for Behavioral Neuroendocrinology annual meeting, Madison, WI.
- Beltz, A. M., Bryk, K. L., & Berenbaum, S. A.** (2012, June). *Dose-dependent prenatal androgen influences on gender development in girls with congenital adrenal hyperplasia*. Poster presentation at the Society for Behavioral Neuroendocrinology annual meeting, Madison, WI.
- Beltz, A. M., Berenbaum, S. A., & McHale, S. M.** (2012, April). *Links among friendship, gendered activities, and adjustment: Evidence from adolescent girls with congenital adrenal hyperplasia*. Poster presentation at the Gender Development Research Conference, San Francisco, CA.
- Beltz, A. M., Beekman, C., Molenaar, P. C. M., & Buss, K. A.** (2012, February). *It's about time: Revealing the dynamic interplay among children's exuberance characteristics in unstructured group play*. Poster presentation at the Society for Research in Child Development Themed Meeting: Developmental Methodology, Tampa, FL.

- Beltz, A.**, Engels, A., Wilson, S., Gates, K., Molenaar, P., Pulido, C., Abar, C., Read, A., Fesi, J., Lemieux, S., Tapert, S. Turrisi, R., Berenbaum, S., & Gilmore, R. (2011, June). *fMRI connectivity mapping in first year students reveals neural networks engaged by alcohol cues*. Poster presentation at the Organization for Human Brain Mapping annual meeting, Quebec City, Quebec, Canada.
- Beltz, A. M.**, McArdle, J. J., & Berenbaum, S. A. (2011, April). *Hormonal influences on developmental change in gendered activities*. Poster presentation at the Society for Research in Child Development biennial meeting, Montréal, Quebec, Canada.
- Beltz, A. M.**, Bryk, K. L., Quigley, C. A., & Berenbaum, S. A. (2010, July). *Examining Y chromosome effects on human sex-typed behavior*. Poster presentation at the Society for Behavioral Neuroendocrinology annual meeting, Toronto, Ontario, Canada.
- Beltz, A. M.**, Berenbaum, S. A., Bryk, K. L., & Swanson, J.L. (2010, April). *Androgen effects on gendered occupational interests*. Poster presentation at the Gender Development Research Conference, San Francisco, CA.
- Beltz, A. M.**, Bryk, K. L., Bailey, J. M., & Berenbaum, S. A. (2010, March). *Prenatal androgen effects on female sexual orientation and links with gendered activity interests and gender identity*. Poster presentation at the Society for Research on Adolescence biennial meeting, Philadelphia, PA.
- Beltz, A. M.**, & Murray, C. S. (2009, April). *A comprehensive analysis of gender differences in attachment in the college years*. Poster presentation at the Saint Joseph's University Chapter Sigma Xi Research Symposium, Philadelphia, PA.
- Beltz, A. M.**, & Carpenter, D. W. (2007, November). *The psychology of religious conversions*. Poster presentation at Saint Joseph's University Summer Scholars Celebration, Philadelphia, PA.