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EDUCATION

- 2015 B.A with honors in Psychology, University of Missouri, Columbia, MO
- 2017 M.S. in Human Development and Family Studies, Purdue University, West Lafayette, IN
Thesis: *Informal Lessons of Executive Function in Preschoolers' Daily Lives: A Sibling Study*
Advisors: Drs. Shawn Whiteman and Kristine Marceau
- 2020 Ph.D. in Human Development and Family Studies, Purdue University, West Lafayette, IN
Thesis: *Contextual Influences of Prenatal and Postnatal Environments on Executive Function Risk for Adolescent Substance Use*
Advisor: Dr. Kristine Marceau

POSTGRADUATE TRAINING

- July 2020- June 2022 **Postdoctoral Research Associate.** Psychology Department, Michigan State University under Drs. Kelly Klump and Kristen Culbert. *A Twin Study of Androgen Effects on Binge Eating Risk during Puberty in Males.*

AWARDS AND HONORS

- 2015 Award for Excellence in Undergraduate Research & Creative Achievements, University of Missouri
- 2016 HHS Summer Research Grant, Purdue University
- 2017 Service Learning Grant: "Kids Cook!": A kid-focused healthy cooking demonstration. Sponsored by Dr. Blake Jones, \$900.00
- 2018 HDFS Outstanding Masters Student Award
- 2018 HHS Outstanding Masters Student Award, \$1,000
- 2019 Bilsland Dissertation Fellowship, \$20,000

PEER REVIEWED PUBLICATIONS

1. **Rolan, E. P.**, Schmitt, S. A., Purpura, D. J., & Nichols, D. L. (2018). Sibling presence, executive function, and the role of parenting. *Infant and Child Development*, *27*(4), e2091.
2. **Rolan, E. P.**, & Marceau, K. (2018). Individual and sibling characteristics: parental differential treatment and adolescent externalizing behaviors. *Journal of Youth and Adolescence*, *47*(12), 2535-2553.
3. Knopik, V. S., Marceau, K., Bidwell, L. C., & **Rolan, E. P.** (2019). Prenatal substance exposure and offspring development: Does DNA methylation play a role?. *Neurotoxicology and Teratology*, *71*, 50-63.
4. Hamwey, M. K., **Rolan, E. P.**, Jensen, A. C., & Whiteman, S. D. (2019). "Absence makes the heart grow fonder": A qualitative examination of sibling relationships during emerging adulthood. *Journal of Social and Personal Relationships*, *36*(8), 2487-2506.
5. Korucu, I., **Rolan, E. P.**, Napoli, A. R., Purpura, D. J., & Schmitt, S. A. (2019). Development of the home executive function environment (HEFE) scale: Assessing its relation to preschoolers' executive function. *Early Childhood Research Quarterly*, *47*, 9-19.
6. Marceau, K., **Rolan, E. P.**, Leve, L. D., Ganiban, J. M., Reiss, D., Shaw, D. S., ... & Neiderhiser, J. M. (2019). Parenting and prenatal risk as moderators of genetic influences on conduct problems during middle childhood. *Developmental Psychology*, *55*(6), 1164.
7. Duncan, R. J., **Rolan, E. P.**, Marceau, K., Lewis, K. M., Bavarian, N., DuBois, D. L., & Flay, B. (2019). Childhood protective factors and a prevention program reduce later problem behaviors. *Journal of Applied Developmental Psychology*, *65*, 101063.
8. Jensen, A. C., Apsley, H. B., **Rolan, E. P.**, Cassinat, J. R., & Whiteman, S. D. (2020). Parental differential treatment of siblings and adolescents' health-related behaviors: The moderating role of personality. *Journal of Youth and Adolescence*, *49*(1), 150-161.
9. Ekblad, M. O., Marceau, K., **Rolan, E. P.**, Palmer, R. H., Todorov, A., Heath, A. C., & Knopik, V. S. (2020). The effect of smoking during pregnancy on severity and directionality of externalizing and internalizing symptoms: A genetically informed approach. *International Journal of Environmental Research and Public Health*, *17*(21), 7921.
10. Robertson, O. C., **Rolan, E. P.**, Wang, W., Shirtcliff, E. A., & Marceau, K. (2020). Within person associations of hair cortisol concentration and maternal prenatal stress in the context of the hormonal milieu. *Psychoneuroendocrinology*, *119*, 104983.
11. Ekblad, M. O., **Rolan, E. P.**, Marceau, K., Palmer, R., Todorov, A., Heath, A. C., & Knopik, V. S. (2020). Disruptive behavior in siblings discordant for exposure to maternal smoking during pregnancy: A multi-rater approach. *Nicotine and Tobacco Research*, *22*(8), 1330-1338.
12. Purpura, D. J., King, Y. A., **Rolan, E. P.**, Hornburg, C. B., Schmitt, S. A., Hart, S. A., & Ganley, C. M. (2020). Examining the factor structure of the home mathematics environment to delineate its role in predicting preschool numeracy, mathematical language, and spatial skills. *Frontiers in Psychology*, *11*, 1925.
13. Ekblad, M. O., Marceau, K., **Rolan, E. P.**, Palmer, R. H., Todorov, A., Heath, A. C., & Knopik, V. S. (2020). The effect of smoking during pregnancy on severity and directionality of externalizing and internalizing symptoms: A genetically informed approach. *International Journal of Environmental Research and Public Health*, *17*(21), 7921.

14. Marceau, K., **Rolan, E. P.**, Robertson, O. C., Wang, W., & Shirtcliff, E. A. (2021). Within-person changes of cortisol, dehydroepiandrosterone, testosterone, estradiol, and progesterone in hair across pregnancy, with comparison to a non-pregnant reference group. *Comprehensive Psychoneuroendocrinology*, 5, 100024.
15. Purpura, D. J., Schmitt, S. A., Napoli, A. R., Dobbs-Oates, L., King, Y. A., Hornburg, C. B., ... & **Rolan, E. P.** (2021). Engaging caregivers and children in picture books: A family-implemented mathematical language intervention. *Journal of Educational Psychology*, 113(7), 1338.
16. Vo, P. T., Fowler, N., **Rolan, E. P.**, Culbert, K. M., Racine, S. E., Burt, S. A., & Klump, K. L. (2021). The effects of puberty on associations between mood/personality factors and disordered eating symptoms in girls. *International Journal of Eating Disorders*, 54(9), 1619-1631.
17. Knopik, V. S., Micalizzi, L., Marceau, K., Loviska, A. M., Yu, L., Bien, A., **Rolan, E. P.**, ... & Heath, A. C. (2022). The roles of familial transmission and smoking during pregnancy on executive function skills: A sibling-comparison study. *Development and Psychopathology*, 1-13.
18. **Rolan, E. P.**, Robertson, O.C., Nonkovic, N., & Marceau, K. (2022). Reliability of prospective and retrospective maternal reports of prenatal experiences. *BMC Pregnancy and Childbirth*. doi: 10.1186/s12884-022-05286-7.
19. **Rolan, E. P.**, Mikhail, M. E., Culbert, K. M., Burt, A., Klump, K. L. (2023). Differences across symptom domains for the moderating effect of estradiol on genetic influences on disordered eating in girls. *Psychoneuroendocrinology*. doi:<https://doi.org/10.1016/j.psyneuen.2023.106384>

PUBLICATIONS IN SUBMISSION OR IN PRESS

1. Nonkovic, N., **Rolan, E. P.**, Knopik, V., McGeary, J. E. Marceau, K. (*under review*). Gross placental morphology and DNA methylation in low-risk pregnancies. *Placenta*.

PUBLICATIONS IN PREPARATION

1. **Rolan, E. P.**, Whiteman, S., Marceau, K. M., McHale, S. (*in prep*). The role of congruent sibling pubertal maturation in similarities of risky behavior.
2. **Rolan, E. P.**, & Marceau, K., Knopik, V. S., Schmitt, S. A., & Whiteman, S. (*in prep*). The influence of executive function and smoking during pregnancy on disruptive behavior.
3. **Rolan, E. P.**, & Marceau, K., Knopik, V. S., Schmitt, S. A., & Whiteman, S. (*in prep*). Contextual influence of smoking during pregnancy exposure on the executive function-disruptive behavior association.
4. **Rolan, E. P.**, & Marceau, K., Knopik, V. S., Schmitt, S. A., & Whiteman, S. (*in prep*). Transitions from disruptive behavior to substance use and the role of executive function and sibling relationships.

PRESENTATIONS

*Undergraduate Student/Mentee

1. **Rolan, E. P.**, Lindell, A. K., & Campione-Barr, N. (2015, May). *Sibling conflict in the transition to emerging adulthood*. Poster presented at the annual meeting of the Midwestern Psychological Associations. Chicago, IL.

2. **Rolan, E. P.**, & Nichols, D. L. (2016, September). *The role of siblings and media exposure on preschoolers' executive function*. Symposium conducted at the meeting of Screen Time: A Symposium on Media for Children and Youth. Chicago, IL.
3. **Rolan, E. P.**, & Whiteman, S. D. (2016, November). *Parental differential treatment, temperament and youth's delinquency: A moderation model*. Poster presented at the annual meeting of the National Council of Family Relations. Minneapolis, MN
4. Lindell, A.K., **Rolan, E.P.**, Killoren, S. & Campione-Barr, N. (2017, April). *Developmental implications of sibling conflict during the transition to adulthood*. Paper presented at the biennial meeting of the Society for Research in Child Development. Austin, TX.
5. **Rolan, E. P.**, Schmitt, S., Purpura, D., & Nichols, D. (2017, November). *More than just a playmate: Siblings and executive function*. Paper presented at the National Council of Family Relation. Minneapolis, MN.
6. Purpura, D. J., Schmitt, S.A., Dobbs-Oates, J., Napoli, A. R., Anaya, L., **Rolan, E. P.**, & King, Y. (2017, October). *Assessment of preschool numeracy and mathematical language: Cross-language (dis)agreement*. Presented at Erikson Institute's Promising Math conference. Chicago, Illinois.
7. **Rolan, E. P.**, & Marceau, K. (2018, April). Individual and sibling characteristics: Parental differential treatment and adolescent externalizing behaviors. In C. Rogers (Chair), *Sibling relationships as a protective factor against the development of adolescent risk-taking: A multi-disciplinary perspective*. Paper presented in a paper symposium at the biennial meeting of the Society for Research on Adolescence. Minneapolis, MN.
8. Clem*, O., **Rolan, E. P.**, & Marceau, K. (2018, April). *Parental differential treatment and adolescent adjustment in the context of parent-child relationships*. Poster presented at the Purdue Undergraduate Research and Poster Symposium, West Lafayette, IN.
9. Korucu, I., **Rolan, E. P.**, Napoli, A. R., Schmitt, S. A., & Purpura, D. J. (2018, May). *Home Executive Function Environment and its relation to preschoolers' executive function*. Poster presented at the 30th Annual Convention of Association for Psychological Science, San Francisco, CA.
10. Galles*, L., **Rolan, E. P.**, & Marceau, K. (2018, November). *Role of parent-adolescent autonomy perception in predicting adolescent adjustment*. Poster presented at the Purdue Fall Undergraduate Research Expo's poster symposium, West Lafayette, IN.
11. Ekblad, M., **Rolan, E. P.**, Knopik, V. (2019, February). *Disruptive behavior in siblings discordant to maternal smoking during pregnancy; The MOMATCH study*. Poster presented at the SRNT Annual Meeting. San Francisco, CA.
12. **Rolan, E. P.**, Whiteman, S., Marceau, K. M. (2019, February). *The role of congruent sibling pubertal maturation in similarities of risky behavior*. Poster presented at Purdue's Health and Disease: Science, Technology, Culture and Policy Research Poster Session. West Lafayette, IN.
13. **Rolan, E. P.**, Whiteman, S., Marceau, K. M., McHale, S. (2019, March). The role of congruent sibling pubertal maturation in similarities of risky behavior. In D. Meter (Chair), *The impact of siblings on problem behavior among adolescents*. Paper presented in a symposium at the biennial meeting of the Society for Research on Child Development. Baltimore, MD.

14. Gao*, S., **Rolan, E. P.**, Nair, N., & Marceau, K. (2019, April). *Peer deviance, adolescent substance use, and the moderating role of parental monitoring*. Poster presented at the Purdue Undergraduate Research Conference, West Lafayette, IN.
15. Stradford*, K., **Rolan, E. P.**, & Marceau, K. (2019, April). *Gross placenta morphology and infant health*. Poster presented at the Purdue Undergraduate Research Conference, West Lafayette, IN.
16. Kumar*, M., **Rolan, E. P.**, Nair, N., & Marceau, K. (2019, April). *Effects of socioeconomic status and prenatal maternal anxiety on infant sleep behaviors*. Poster presented at the Purdue Undergraduate Research Conference, West Lafayette, IN.
17. Elliott*, A., **Rolan, E. P.**, & Marceau, K. (2019, November, and 2020, March). *The interacting effect of youth and parent substance use on parent-child relationship quality*. Poster presented at the Purdue Fall Undergraduate Research Expo's poster symposium, West Lafayette, IN and accepted at the biennial meeting for the Society for Research on Adolescence, San Diego, CA.
18. **Rolan, E. P.**, Marceau, K. M., Micalizzi, L., Knopik, V. (2019, June). *Contextual Influences of Prenatal Environments on Executive Function Risk for Adolescent Substance Use*. Poster submitted to the Behavior Genetics Association Meeting. Stockholm, Sweden.
19. **Rolan, E. P.**, & Marceau, K. (2021, March). Transitions from externalizing behavior to substance use and the role of executive function and sibling relationships. Poster to be presented at the biennial meeting of the Society for Research on Adolescence. Virtual.
20. Shope, M. M., Culbert, K. M., **Rolan, E. P.**, Anaya, C., Burt, S. A., & Klump, K. L. (June 2021). Clarifying earlier pubertal timing effects on binge eating symptoms in adolescent girls. Paper accepted for presentation at the virtual International Conference on Eating Disorders (ICED).

RESEARCH EXPERIENCE

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|------------------------|---|
| 2013-2015 | Research Assistant , <i>Family Relationships and Adolescent Development</i>
Psychology, the University of Missouri—Columbia
Supervisors: Drs. Nicole Campione-Barr and Sarah Killoren |
| 2014-2015 | Project Coordinator , <i>The Sisters Study</i>
Psychology, the University of Missouri—Columbia
Supervisors: Drs. Nicole Campione-Barr and Sarah Killoren |
| Fall 2015 | Graduate Research Assistant , <i>Family Journeys Project, Military Families Research Institute</i>
Human Development and Family Studies, Purdue University
Supervisor: Dr. Shelley MacDermid-Wadsworth |
| Fall 2015- Spring 2016 | Graduate Research Assistant , <i>Sibling Relationships in Young Adulthood</i>
Human Development and Family Studies, Purdue University
Supervisor: Dr. Shawn D. Whiteman |

- Summer 2016- Fall 2017 **Graduate Research Assistant, *Children's Media Lab***
Human Development and Family Studies, Purdue University
Supervisor: Dr. Deborah Nichols
- August 2016- Spring 2018 **Graduate Research Assistant, *Math Language Intervention***
Human Development and Family Studies, Purdue University
Supervisor: Dr. David Purpura
- Spring 2017- Summer 2020 **Graduate Research Assistant, *Biobehavioral Development Lab***
Human Development and Family Studies, Purdue University
Supervisor: Dr. Kristine Marceau

TEACHING EXPERIENCE

- Fall 2017- Spring 2018 **Guest Lecturer, Human Development and Family Studies, Purdue University, In-Person Format**
- 210 Introduction to Human Development*
Topic: Family Relationships with a focus on Siblings
- 313 Adolescent Development*
Topic: Externalizing and Internalizing Behaviors,
- 627 Multilevel Modeling in Developmental and Family Research*
Topic: Power Analyses
- Fall 2015- Spring 2018 **Teaching Assistant, Human Development and Family Studies, Purdue University, In-Person Format**
- 627 Multilevel Modeling in Developmental and Family Research*
332 Stress and Coping in Contemporary Families
311 Child Development
313 Adolescent Development
- Summer 2019 **Instructor, Human Development and Family Studies, Purdue University, Online Asynchronous Format**
- 280 Diversity in Individual and Family Life*
- Fall 2022-Spring 2023 **Instructor, Department of Psychology, Michigan State University, In-Person, Online Synchronous, Online Asynchronous and Hybrid Formats**
- 236 Personality Psychology*
244 Child Development
280 Abnormal Psychology
424 Child and Family Psychopathology
444 Adolescent Development

GRANTS

F31 DA047065-01A1 Rolan (PI)
NIDA

Not Funded
Score 32, 26th percentile

Role: PI

Contextual influences of prenatal and postnatal environments on executive function risk for adolescent substance use.

The goal of this project is to examine (1) whether smoking during pregnancy exacerbates the association between EF and SU during adolescence and (2) to examine developmental trajectories of EF on the transition from externalizing problems to adolescent SU, and the moderating role of sibling relationship quality using family-based designs and advanced longitudinal methodology. I will work with Drs. Kristine Marceau, Valerie Knopik, and Shawn Whiteman to train in early risk for substance use, genetically-informed designs, sibling relationships, advanced statistics, and research ethics.

PROFESSIONAL SERVICES AND ENGAGEMENT

2017	Co-Reviewer (with Dr. Kristine Marceau) for SRA proposal submissions
2017	Reviewer for NCFR proposal submissions
2019 – 2019	Graduate Student Representative; Graduate Committee, HDFS, Purdue University
2018 – 2020	Emerging Scholar Representative to SRA's Publications Committee
2019 – 2020	Outreach Committee, HDFS, Purdue University
2020 – 2021	DEI Committee, Klump Lab, Department of Psychology, Michigan State University
2017- Present	Ad-Hoc Manuscript Reviewer: <i>Addictive Behaviors, Clinical Psychological Science, Current Psychology, PLOS One, Journal of Nervous and Mental Disease, The Journal of Early Adolescence, Early Human Development; Drug and Alcohol Dependence</i>

PROFESSIONAL AFFILIATIONS

2015 – Present	National Council on Family Relations, Member
2015 – Present	NCFR Family Policy Section, Member
2015 – Present	NCFR Families and Health Section, Member
2016 – Present	Society for Research in Child Development, Member
2017 – Present	Society for Research in Adolescence, Member
2019 – Present	Behavior Genetics Association, Member

REFERENCES

Dr. Kristine Marceau, Associate Professor of Human Development and Family Studies, Purdue University, kristinemarceau@purdue.edu

Dr. Sara Schmitt, Bricker/Squires Faculty Chair in Early Intervention, Associate Professor of Special Education and Clinical Science, and Research Scientist, Prevention Sciences Institute, sschmitt@uoregon.edu

Dr. Kelly Klump, MSU Foundation Endowed Professor, Michigan State University, klump@msu.edu

Dr. Kristen Culbert, Research Specialist, Michigan State University, culbertk@msu.edu