### **Curriculum Vitae**

# Jessica Rast

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### **EDUCATION**

- Drexel University, Philadelphia, Pennsylvania. September 2018 September 2022
  - o Degree: Doctor of Philosophy, Epidemiology
  - o Advisor: Brian K. Lee
  - o Thesis: Maternal health and antiseizure medication use during pregnancy
- Drexel University, Philadelphia, Pennsylvania. September 2012 June 2014
  - o Degree: Master of Public Health, concentration in Epidemiology
- University of Denver, Denver, Colorado. September 2007 December 2010
  - Degree: Bachelor of Science in Biology

#### PROFESSIONAL AND RESEARCH EXPERIENCE

- A.J. Drexel Autism Institute, Drexel University, Philadelphia, PA. July 2014 current
  - o Current position: Assistant Research Professor. February 2024 current
  - Previous positions: Research Scientist (September 2022 February 2024); Research associate, data analyst

# **TEACHING EXPERIENCE**

- Drexel University, Philadelphia, Pennsylvania. September 2021 Current
  - o Position: Adjunct Faculty
  - o Course: Disability and Measurement
  - o Department: Dornsife School of Public Health
  - o Role: Instructor, graduate-level course
- University of Pennsylvania, Philadelphia, Pennsylvania. January 2021 May 2022
  - o *Position:* Lecturer
  - Course: Introduction to Biostatistics
  - o Department: Perelman School of Medicine, Center for Public Health Initiatives
  - o Role: Instructor of Stata, graduate-level course

### **GRANTS RECEIVED AS PRINCIPAL INVESTIGATOR**

- 1. National Institute of Mental Health R03MH132034. 8/15/23 8/14/25. Mental Health Hospitalizations and Follow-Up Care in Autistic Adults. Role: PI. Total amount: \$100,000
- 2. Health Resources and Services Administration R40MC37542-01-00 for Maternal and Child Health Field-Initiated Research Program. 7/1/20 6/30/21. The Role of the Medical Home in Accessing Mental Health Care in Children with Special Health Care Needs. Role: PI. Total amount: \$99,838

# **PUBLICATIONS**

- 1. Anderson, K. A., Roux, A. M., **Rast, J. E.**, Garfield, T., & Shea, L. (2024). Low-income households of children with autism and the economic safety net. Academic Pediatrics, 24(2), 258-266.
- 2. Ahlqvist, V. H., Dardani, C., Madley-Dowd, P., Forbes, H., **Rast, J.,** Zhong, C., ... & Rai, D. (2024). Psychiatric comorbidities in epilepsy: population co-occurrence, genetic correlations and causal effects. *General Psychiatry*, 37(1).
- 3. Anderson, K. A., Radey, M., **Rast, J. E.**, Roux, A. M., & Shea, L. (2024). The Economic Impacts of COVID-19 on Autistic Children and Their Families. Journal of Autism and Developmental Disorders, 1-12.
- 4. **Rast, J. E.**, Tao, S., Schott, W., Shea, L.L., Brodkin, E.S., Kerns, C.M., Leonard, C.E., Murray, M.J., and Lee, B.K. (2023). Psychotropic Medication Use in Children and Youth with Autism Enrolled in Medicaid. *Journal of Autism and Developmental Disorders*. 1-9.
- 5. Roux, A.M, Miller, K.K., Tao, S., **Rast, J.E.**, Ventimilgia, J., Shattuck, P.T., Shea, L.L (2023). Unrealized Cross-System Opportunities to Improve Employment and Employment-Related Services Among Autistic Individuals. *The Millbank Quarterly*.
- 6. Madley-Dowd, P. C., **Rast, J. E.**, Ahlqvist, V. H., Zhong, C. K., Martin, F., Davies, N. M., ... & Forbes, H. J. (2023). Trends and patterns of antiseizure medication prescribing during pregnancy between 1995 and 2018 in the United Kingdom: a cohort study. *BJOG: An International Journal of Obstetrics and Gynaecology*.
- 7. **Rast, J. E.**, Garfield, T., Ezeh, T. H., & Anderson, K. A. (2023). Mental health, race and ethnicity, and medical home in children with special health care needs. Children's Health Care, 1-15.
- 8. Anderson, K. A., Roux, A. M., **Rast, J. E.**, Garfield, T., & Shea, L. (2023). Low-income households of children with autism and the economic safety net. *Academic Pediatrics*.
- 9. **Rast, J. E.,** Roux, A. M., Connor, G., Ezeh, T. H., Shea, L., Turchi, R. M., & Shattuck, P. T. (2023). The Medical Home and Mental Health Services in Children and Youth with Special Health Care Needs. Maternal and Child Health Journal, 1-10.
- 10. Ahlqvist, V. H., Madley-Dowd, P., Ly, A., **Rast, J.**, Lundberg, M., Jónsson-Bachmann, E., ... & Lee, B. K. (2023). Bias amplification of unobserved confounding in pharmacoepidemiological studies using indication-based sampling: there is no free lunch in restricting the sample to those with a particular drug-indication. *Pharmacoepidemiology and Drug Safety*. 32(8): 886-897.
- 11. **Rast, J.E.,** Fernandes, S.J., Schott, W., Shea, L.L. (2023). Disparities by Race and Ethnicity in Inpatient Hospitalizations Among Autistic Adults. *Journal of Autism and Developmental Disorders*. https://doi.org/10.1007/s10803-023-05911-0.
- 12. Roux, A. M., Shea, L. L., Steinberg, H., **Rast, J. E.,** Anderson, K. A., Hotez, E., ... & Shattuck, P. T. (2023). Evidence from the Autism Transitions Research Project (2017–2022): Capstone review and services research recommendations. *Autism Research*. 16(3), 480-496.
- 13. Ezeh, T. H., Lee, B. K., & Rast, J. E. (2022). The Medical Home and Use of Mental and Non-mental Specialty Services Among Children with Autism Spectrum Disorder (ASD). *Journal of Autism and Developmental Disorders*, 1-11.
- 14. Anderson, K.A., Roux, A.M., Steinberg, H., Garfield, T., **Rast, J.E.**, Shattuck, P.T., and Shea, L.L. National Autism Indicators Report: The Intersection of Autism, Health, Poverty and Racial Inequity. Philadelphia: Policy and Analytics Center and Life Course Outcomes Research Program, A.J. Drexel Autism Institute, Drexel University, April 2022.
- 15. **Rast, J.E.,** Roux, A.M., Fernandes, S.J., D'Silva, V., & Shea, L.L. (2022). Hospital Inpatient Stays for Autistic Youth and Youth with Other Disabilities. *Pediatrics*, *149*(Supplement 4).

- 16. Roux, A.M., Rast, J.E., & Shea, L.L. (2022). Family Perceptions of Health Care Access for Autistic Young Adults Receiving Disability Services. *Pediatrics*, 149(Supplement 4).
- 17. Graham Holmes, L., Rast, J.E., Roux, A.M., & Rothman, E.F. (2022). Reproductive Health and Substance Use Education for Autistic Youth. *Pediatrics*, 149(Supplement 4).
- 18. **Rast, J.E.,** Garfield, T., Roux, A.M., Koffer Miller, K.H., Hund, L.M., Tao, S., Kerns, C.M., Rosenau, K.A., Hotez, E., Anderson, K.A., Shattuck, P.T., and Shea, L.L. National Autism Indicators Report: Mental Health. Philadelphia, PA: Life Course Outcomes Program, A.J. Drexel Autism Institute, Drexel University, August 2021.
- 19. **Rast, J.**, Newschaffer, C., Turchi, R., Plum, J.. Health Service and Functional Measures of Benefit of a Medical Home in Children with Autism. *Matern Child Health J* (2021). 25(7), 1156-1163. https://doi.org/10.1007/s10995-021-03150-2
- Anderson, K.A., Hemmeter, J., Wittenburg, D., Baller, J., Roux, A.M., Rast, J.E., & Shattuck, P.T. (2021). National and state trends in autistic adult supplemental security income awardees: 2005-2019. Journal of Autism and Developmental Disorders.
- 21. **Rast, J. E.**, Anderson, K. A., Roux, A. M., & Shattuck, P. T. (2021). Medication Use in Youth with Autism and Attention-Deficit/Hyperactivity Disorder. *Academic Pediatrics*. 21 (2), 272-279
- 22. **Rast, J. E.**, Roux, A. M., Anderson, K. A., Croen, L. A., Kuo, A. A., Shea, L. L., and Shattuck, P. T. National Autism Indicators Report: Health and autism. Philadelphia, PA: Life Course Outcomes Program, A.J. Drexel Autism Institute, Drexel University, November 2020.
- 23. Kerns, C. M., **Rast, J. E**., & Shattuck, P. T. (2020). Prevalence and Correlates of Caregiver-Reported Mental Health Conditions in Youth With Autism Spectrum Disorder in the United States. *The Journal of Clinical Psychiatry*, 82(1).
- 24. Roux, A. M., Rast, J. E., Garfield, T., Anderson, K. A., & Shattuck, P. T. (2020). Prevalence and Correlates of Work Experiences Among High School Students on the Autism Spectrum. *Intellectual and Developmental Disabilities*, 58(4), 273-287.
- 25. Anderson, K. A., Hemmeter, J., **Rast, J. E**., Roux, A. M., & Shattuck, P. T. (2020). Trends in Supplemental Security Income Payments to Adults With Autism. *Psychiatric Services*, 71(6), 602-607.
- 26. Shattuck, P. T., Garfield, T., Roux, A. M., **Rast, J. E.,** Anderson, K., Hassrick, E. M., & Kuo, A. (2020). Services for Adults With Autism Spectrum Disorder: a Systems Perspective. *Current Psychiatry Reports*, 22(3), 13.
- 27. Zablotsky, B., **Rast, J.**, Bramlett, M. D., & Shattuck, P. T. (2020). Health Care Transition Planning Among Youth with ASD and Other Mental, Behavioral, and Developmental Disorders. *Maternal and Child Health Journal*, 1-9.
- 28. **Rast, J. E.**, Roux, A. M., & Shattuck, P. T. (2019). Use of Vocational Rehabilitation Supports for Postsecondary Education Among Transition-Age Youth on the Autism Spectrum. Journal of autism and developmental disorders, 1-10.
- 29. Roux, AM, Rast, J.E, Nye-Lengerman, K, Purtle, J, Lello, A, & Shattuck, PT (2019). Identifying patterns of state vocational rehabilitation performance in serving transition-age youth on the autism spectrum. *Autism in Adulthood*, 1(2), 101-111.
- 30. Shattuck, Paul T., **Rast, Jessica E**., Roux, Anne M., Anderson, Kristy A., Benevides, Teal, Garfield, Tamara, McGhee Hassrick, Elizabeth, and Kuo, Alice. National Autism Indicators Report: High School Students on the Autism Spectrum. Philadelphia, PA: Life Course Outcomes Program, A.J. Drexel Autism Institute, Drexel University, 2018.

- 31. Roux, A. M., Anderson, K. A., **Rast, J. E.,** Nord, D., & Shattuck, P. T. (2018). Vocational rehabilitation experiences of transition-age youth with autism spectrum disorder across states: Prioritizing modifiable factors for research. Journal of Vocational Rehabilitation. Epub ahead of print. doi:10.3233/JVR-180976.
- 32. Roux, A. M., Rast, J. E., & Shattuck, P. T. (2018). State-level variation in Vocational Rehabilitation service use and related outcomes among transition-age youth on the autism spectrum. J Autism Dev Disord. doi: 10.1007/s10803-018-3793-5.
- 33. **Rast, J. E.,** Shattuck, P. T., Roux, A. M., Anderson, K. A., & Kuo, A. (2018). The medical home and health care transition for youth with autism. *Pediatrics*, *141*(Supplement 4), S328-S334.
- 34. Roux, A. M., Rast, J. E., Shattuck, P. T., & Anderson, K. A. (2017). National Autism Indicators Report: Developmental Disabilities
- 35. Roux, A. M., Rast, J. E., Shattuck, P. T., & Anderson, K. A. (2016). National Autism Indicators Report: Vocational Rehabilitation
- 36. Rava, J., Shattuck, P., **Rast, J.,** & Roux, A. (2016). The Prevalence and Correlates of Involvement in the Criminal Justice System Among Youth on the Autism Spectrum. *Journal of Autism and Developmental Disorders*, 1-7.
- 37. Roux, A. M., Shattuck, P. T., Rast, J.E., Rava, J. A., & Anderson, K. A. (2015). National Autism Indicators Report: Transition into Young Adulthood.
- 38. Roux, A. M., Shattuck, P. T., **Rast, J.E.**, Rava, J. A., Edwards, A. D., Wei, X., ... & Yu, J. W. (2015). Characteristics of two-year college students on the autism spectrum and their support services experiences. *Autism research and treatment*, 2015.
- 39. Rast, J.; Rast, J.E. (2014). Neighbor to family: supporting sibling groups in foster care. *Families in Society: The Journal of Contemporary Social Services*, 95(2)83-91. doi: 10.1606/1044-3894.2014.95.11

### **PRESENTATIONS**

- Poster Presentation: Rast, JE, Bromberg, J, Shea, LL, Chesnokova, AE. Birth Morbidity and Readmissions in Autistic People and People with Intellectual and Developmental Disabilities. Presented at the Society for Maternal and Fetal Medicine Conference; February 2024; Washington, DC.
- 2. AIR-P Presents: The National Autism Indicators Report on COVID-19 and Health. September 19, 2023. Presented through AUCD Webinars.
- 3. Research Symposium Keynote: Pregnancy And Obstetric Care In People With Intellectual And Developmental Disabilities. University of California LEND and MCH Research Symposium. June 9, 2023.
- 4. Conference Panel Chair: Obstetric Care and Pregnancy Experiences Among Autistic People. Presented at INSAR; May 2023; Stockholm, Sweden.
- 5. Conference Presentation: Health During Pregnancy and Delivery in Autistic People in Sweden. Presented at INSAR; May 2023; Stockholm, Sweden.
- 6. Poster Presentation: Rast, JE, Tao, S., Schott, W., Shea, L.L., Lee, B.K. Psychotropic Medication Use in Autistic Children Enrolled in Medicaid. Presented at INSAR; May 2022; Hybrid Virtual Conference.
- 7. Webinar: Rast, JE, Shattuck, PT. "Engaging Research Innovations & Challenges (EnRICH): How to Develop a Successful Research Career." Health Resources and Services Administration (HRSA),

- Maternal and Child Health Bureau (MCHB), Office of Epidemiology and Research (OER), Division of Research (DoR). March 24, 2022.
- 8. Conference Presentation: Rast, JE, Roux, AM, Shea, LL, Shattuck. PT. The Medical Home, Mental Health Care, and Unmet Service Needs in Children and Youth with Special Health Care Needs. Presented at APHA; November 2021; Denver, CO.
- 9. Invited presentation: Benevides, T., Rast, J., Shea, L., Shore, S. Priorities and Potential for Autism and Mental Health Research. Presented to the NIMH/OARC Interagency Autism Coordinating Full Committee (IACC); October 14, 2021.
- 10. Webinar: Rast, JE. "Making data talk: connecting people with data to inform decisions, programs, and policy." University of California Los Angeles, Los Angeles, California. Fielding School of Public Health. October 2021.
- 11. Poster Presentation: Rast, JE, Ezeh, TH, Shea, LL, Turchi, RM, Shattuck, PT. The Medical Home and Mental Health Care in Children with Special Health Care needs. Presented at SER; June 2021; Virtual Conference.
- 12. Conference Presentation: Rast, JE, Roux, AM, Fernandes, S.J., D'Silva, V., Shea, L.L. National Inpatient Hospitalizations in Autistic Youth in the U.S. Presented at INSAR; May 2021; Virtual Conference.
- 13. Conference Presentation: Rast, JE, Graham Holmes, L., Roux, A.M., Rothman, E.F.. School-Based Substance Use Education: Inclusion of Youth on the Autism Spectrum in a Representative U.S. Sample. Presented at INSAR; May 2021; Virtual Conference.
- 14. Symposium Webinar: "Health and Health Care in Autistic Children and Adults." First Place Leadership Institute Symposium Webinar. April 7, 2021.
- 15. Webinar: "Health and Health Care in Autistic Children and Adults." Organization for Autism Research Webinar Series. April 1, 2021.
- 16. Webinar: AIR-P Presents: The National Autism Indicators Report on Health and Health Care. January 21, 2021. Presented through AUCD Webinars.
- 17. Poster Presentation: Rast, JE, Roux, AM, Anderson, KA, Shattuck, PT. Psychotropic Medication Prescriptions in Children with ASD. Presented at INSAR; May 2020; Seattle, WA. Virtual Conference.
- 18. Poster Presentation: Rast, JE, Roux, AM, Anderson, KA, Shattuck, PT. Racial Disparities in the Use of Mental Health Services and Psychotropic Medication Among Children with ASD. Presented at APHA; November 3, 2019; Philadelphia, PA.
- 19. Poster Presentation: Rast, JE, Shattuck, PT. The National Autism Data Center at Drexel University: Population-level Data to Inform Policy. Presented at: AUCD Autism CARES Meeting; July 18, 2019; Washington, DC.
- Poster Presentation: Rast, JE, Roux, AM, Anderson, KA, Shattuck, PT. Prevalence and Correlates
  of Medication Use in Youth with Autism and ADHD. Poster presented at: INSAR; May 1, 2019;
  Montreal, Canada.
- 21. Poster presentation: Rast, JE, Roux, AM, Shattuck, PT. Prevalence and Correlates of Employment and Postsecondary Education in Transition-Age Youth with Autism in Vocational Rehabilitation. Poster presented at: IMFAR; May 10, 2018; Rotterdam, Netherlands.
- 22. Poster presentation: Rast, JE, Roux, AM, Anderson, KA, Shattuck, PT. Community and facility-based employment of adults on the Autism spectrum. Poster presented at: IMFAR; May 11, 2017; San Francisco, CA.
- 23. Poster presentation: Rast, JE, Shattuck, PT, Anderson, KA. Vocational Rehabilitation Service Use Among Youth and Young Adults with Autism: Comparing Students and Non-Students. Poster presented at: IMFAR; May 13, 2016; Baltimore, MD.

- 24. Poster presentation: Rast, JE, Shattuck, PT, Anderson, KA. Parental expectations in postsecondary education attendance in young adults with autism. Poster presented at: the Society for the Study of Emerging Adulthood Conference; October 15, 2015; Miami, FL..
- 25. Poster presentation: J. Rast, C. J. Newschaffer, R. Turchi, J. Plumb and P. T. Shattuck, Medical home use in transition age youth on the autism spectrum: medical home as a factor in better health care transition outcomes. Poster presented at: IMFAR; May 16, 2015; Salt Lake City, UT.

### PROFESSIONAL ACTIVITIES AND AWARDS

- 1. Listed as a "40 under 40" rising autism researcher in 2022 by Spectrum <a href="https://spectrumnews-web-assets.s3.amazonaws.com/wp-content/uploads/2022/12/15165514/Chronicle-of-a-field-retold-autism-science-in-profile.pdf">https://spectrumnews-web-assets.s3.amazonaws.com/wp-content/uploads/2022/12/15165514/Chronicle-of-a-field-retold-autism-science-in-profile.pdf</a>
- 2. Honorary Appointment at the University of Bristol. March 2021-current
- 3. The study Use of Vocational Rehabilitation Supports for Postsecondary Education Among Transition-Age Youth on the Autism Spectrum (Rast *et al.*, 2019) was listed in the top 20 most impactful autism studies of 2019 by the Interagency Autism Coordinating Committee
- 4. Working group member for the 2016-2017 Interagency Autism Coordinating Committee Strategic Plan for Autism Spectrum Disorder
- 5. The study National Autism Indicators Report: Transition into Young Adulthood (Roux *et al.*, 2015) was listed in the top 20 most impactful autism studies of 2015 by the Interagency Autism Coordinating Committee