

Preconception Child Follow-up Study Published Papers

April 2026

1. Morgan, J. E., Lee, S. S., Mahrer, N. E., Guardino, C. M., Poggi Davis, E., Shalowitz, M. U., Ramey, S. L., & Dunkel Schetter, C. (2020). Prenatal maternal C-reactive protein prospectively predicts child executive functioning at ages 4-6 years. *Developmental Psychobiology*, 62(2), 1111-1123.
<https://doi.org/10.1002/dev.21982>
 2. Mahrer, N.E., Ramos, I., Guardino, C., Davis, E. P., Ramey, S. L., Shalowitz, M., & Dunkel Schetter, C. (2020). Pregnancy anxiety in expectant mothers predicts offspring negative affect: The moderating role of acculturation. *Early Human Development*. PMID: 31775096 PMCID: [PMC7054146](https://pubmed.ncbi.nlm.nih.gov/PMC7054146/) DOI: [10.1016/j.earlhumdev.2019.104932](https://doi.org/10.1016/j.earlhumdev.2019.104932)
[Based on poster presented at Association for Psychological Science, San Francisco, CA May, 2018]
 3. Alen, N. V., Hostinar, C. E., Mahrer, N. E., Martin, S. R., Guardino, C., Shalowitz, M. U., Ramey, S. L., & Dunkel Schetter, C. (2020). Prenatal maternal stress and child hair cortisol four years later: Evidence from a low-income sample. *Psychoneuroendocrinology*, 117. Article 104707.
<https://doi.org/10.1016/j.psyneuen.2020.104707>
[Based on poster presented at the Society for Research in Child Development Biennial Meeting, Baltimore, MD March, 2019]
 4. Carroll, J. E., Mahrer, N. E., Shalowitz, M., Ramey, S., & Dunkel Schetter, C. (2020). Prenatal maternal stress prospectively relates to shorter child buccal cell telomere length. *Psychoneuroendocrinology*, 121, Article 104841. <https://doi.org/10.1016/j.psyneuen.2020.104841>
 5. Mahrer, N. E., Guardino, C., Hobel, C. & Dunkel Schetter, C. (2021). Maternal stress before conception is associated with shorter gestation. *Annals of Behavioral Medicine*, 20, 1-11.
<https://doi.org/10.1093/abm/kaaa047>
- Note: CCHN subsequent pregnancies/not children; Not funded on Preconception R01**
6. Swales, D. A., Davis, E. P., Mahrer, N. E., Guardino, C., Shalowitz, M. U., Ramey, S. L., & Dunkel Schetter, C. (2022) Preconception maternal post-traumatic stress and child negative affectivity: Prospectively evaluating the intergenerational impact of trauma. *Development and Psychopathology*, 1-11.
 7. Rinne, G.R., Davis, E.P., Mahrer, N.E., Guardino, C.M., Charalel, J.M., Shalowitz, M.U., Ramey, S.L. & Dunkel Schetter, C. (2022). Maternal depressive symptom trajectories from preconception through postpartum: Associations with offspring developmental outcomes in early childhood. *Journal of Affective Disorders* PMID: 35461817 PMCID: [PMC10024939](https://pubmed.ncbi.nlm.nih.gov/PMC10024939/) DOI: [10.1016/j.jad.2022.04.116](https://doi.org/10.1016/j.jad.2022.04.116)
 8. Guardino, C. M., **Rahal D., Rinne, G. R.,** Mahrer, N. E., Davis E. P., Shalowitz, E., Ramey, S. L., & Dunkel Schetter, C. (2022). Maternal stress and mental health before pregnancy and offspring diurnal cortisol in early childhood. *Developmental Psychobiology*, 64(7), Article e22314. <https://doi.org/10.1002/dev.22314> PMID: 36282760 PMCID: PMC10111814
[Presentation at the American Psychosomatic Society, Vancouver, BC March, 2019]
 9. Carroll, J.E., Price, J.E., Brown, J., Bamishigbin, O., Shalowitz, M.U., Ramey, S. L. & Dunkel Schetter, C. (2022). Lifetime discrimination prospectively predicts cellular aging in low-income mothers. *Social Science and Medicine*, 311, 115356. PMCID: PMC10024938 NIHMSID: NIHMS1878388 PMID: 36122526 <https://doi.org/10.1016/j.socscimed.2022.115356>

10. Rinne, G. R., Carroll, J. E., Guardino, C. M., Shalowitz, M. U., Ramey, S. L., & Dunkel Schetter, C. (2023). Parental preconception posttraumatic stress symptoms and maternal prenatal inflammation prospectively predict shorter telomere length in children. *Psychosomatic Medicine*, 86(5), 410-421. <https://doi.org/10.1097/PSY.0000000000001241> PMID: 37594236 PMCID: PMC10879462
11. Rinne, G. R., Barclay, M., Somers, J.A., Mahrer, N.E., Shalowitz, M.U., Ramey, S.L., Dunkel Schetter, C., & Lee, S.S. (2024). Developmental cascades from maternal preconception stress to child behavior problems: Testing multi-level preconception, prenatal, and postnatal influences. *Developmental Psychology*. <https://doi.org/10.1037/dev0001728> (Publicly available 2025) PMID: 38546574 PMCID: PMC11373736 NIHMSID: NIHMS2012144
12. Rinne, G. R., Podosin, M., Mahrer, N. E., Shalowitz, M. U., Ramey, S. L., & Dunkel Schetter, C. (2024). Prospective associations of prenatal stress with child behavior: Moderation by the early childhood caregiving environment. *Development and Psychopathology*, 1–12. <https://doi.org/10.1017/s0954579424000920> PMID: 38738363
13. Mahrer, N. E., Rinne, G. R., Guardino, C. M., Swales, D. A., Shalowitz, M., Ramey, S. L., & Dunkel Schetter, C. (2025). Parenting behavior and early childhood mental health: Testing cortisol awakening response as a moderator of child internalizing and externalizing. *OBM Integrative and Complimentary Medicine*, 10, 011. <https://doi.org/10.21926/obm.icm.2501011> PMID: 40321845 PMCID: PMC12046604
[Based on presentation at the Society for Research in Child Development Biennial Meeting, Baltimore, MD (March, 2019).]
14. Cha, L., Rinne, G. R., Carroll, J. E., Shalowitz, M. U., Ramey, S. L., Dunkel Schetter, C., & Sumner, J. A. (2025). A lifespan approach to biological aging: Early adversity, past-year trauma, and telomere length in women. *Psychoneuroendocrinology*, 182, 107645. <https://doi.org/10.1016/j.psyneuen.2025.107645>

Presentations (not published)

Price, J.E., Carroll, J., Guardino, C.M., Ramey, S.L., Shalowitz, M.U. & Dunkel Schetter, C., Postpartum social support and subsequent buccal telomere length in mothers. Presentation at the American Psychosomatic Society Meeting, Sevilla, Spain. (March, 2017)