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For immediate release

New book addresses the impact of prenatal stress on subsequent child development

Research examines how prenatal maternal stress affects the unborn child, and offers clues for recognizing it and building resilience

Montreal (April 26, 2021) – The complex impact of prenatal stress, the mechanisms by which it is transmitted from mother to child, and how it can impact a child's development and future well-being are the subjects of the new book *Prenatal Stress and Child Development*, edited by Drs. Ashley Wazana, Eszter Székely, and Tim F. Oberlander.

"The book offers an overview of the various ways in which prenatal stress affects cognitive, affective, behavioral, and neurobiological development in children, while pinpointing core processes of adaptation, resilience, and interventions that may reduce negative behaviors and promote optimal outcomes in children," said Dr. Wazana, a clinician-researcher with the Lady Davis Institute at the Jewish General Hospital, where he serves as co-director of the Psychiatric Day Hospital for Early Childhood Disorders. "Our objective in assembling this collection of current research and thinking on the subject aims to inform clinical strategies and future research targeting prenatal stress and its cyclical impact on subsequent generations."

Published by Springer, the volume looks at multiple mechanisms of prenatal stress, including prenatal programming, epigenetics, inflammatory processes, and the brain-gut microbiome. It reports findings on prenatal stressors affecting pregnancy, such as preconception stress, prenatal maternal depression, anxiety, and pregnancy-specific anxieties.

Key areas of coverage include:

- The developmental effects of prenatal maternal stress on children.
- Intergenerational transmission of parental early life stress.
- The effect of prenatal stress on parenting.
- Gestational stress and resilience.
- Prenatal stress and children's sleeping behavior.

- Prenatal, perinatal, and population-based interventions to prevent psychopathology.

Prenatal Stress and Child Development is an essential resource for researchers, professors, and graduate students as well as clinicians, therapists, and related professionals in infancy and early childhood development, maternal and child health, developmental psychology, pediatrics, social work, child and adolescent psychiatry, developmental neuroscience, and related behavioral and social sciences and medical disciplines.

"The quality and breadth of the science described in this compilation begs a broad audience," Dr. Michael J. Meaney, James McGill Professor of Medicine in the Department of Psychiatry at McGill University, wrote in his forward to the volume. "I would make the plea that in addition to anyone with an interest in child development, this book should be essential reading for researchers pursuing pre-clinical, basic science models of neurodevelopment and brain health. . . . This book provides what in my mind is the most advanced compilation of existing knowledge and state-of-the-art science in the field of prenatal psychiatry/psychology (and perhaps in the entire field of prenatal medicine)."

Dr. Wazana, an Associate Professor of Psychiatry at McGill University, has expertise in identifying how the early environment, and specifically parent-child interactions, modifies the developmental risk characterized by prenatal adversity and genetic susceptibility to predict childhood psychopathology. He leads DREAM BIG, an international consortium that examines complex models of prediction of psychopathology from prenatal origins.

Eszter Székely is a senior postdoctoral research scholar at the Lady Davis Institute and McGill University's Department of Psychiatry. Her expertise lies in psychiatric genomics, neuroimaging and developmental psychopathology. In her current research, she seeks to better understand the sex-specific effects of prenatal adversity on child mental health.

Tim F. Oberlander is the inaugural R. Howard Webster Professor in Brain Imaging and Child Development in the Department of Pediatrics at the University of British Columbia, a clinician with the Child Development and Rehabilitation Program and attending physician with the BCCH Complex Pain Service. As a physician-scientist his work bridges developmental neurosciences and community child health. Dr. Oberlander's research seeks to understand how prenatal exposure to maternal mood disorders and exposure to antidepressants affects early development.

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