



Seth D. Pollak

**Award for Distinguished Scientific Early Career
Contributions to Psychology**

Citation

“How does a child develop emotionally? How do biology and social environment interact in emotional development? Seth D. Pollak’s research answers these important questions about the mechanisms of emotional development through an innovative combination of methods from psychophysics, neuroscience, and behavioral endocrinology. Through his studies comparing children who have experienced neglect, stress, or abuse early in life with children who have developed typically, he has documented how early experience sculpts the brain to create the emotional lives of children. He has made significant contributions to developmental theory while helping psychologists understand the important changes wrought by child abuse and deprivation from a developmental psychopathology perspective.”

Biography

Seth D. Pollak was born in Silver Spring, Maryland, and had a thoroughly uneventful childhood in what he describes as “just outside of New York” but was actually New Jersey. His otherwise loving parents, Alan and Helen Pollak, unintentionally fostered his interest in psychology by subjecting Pollak to conversations about their careers manipulating human behavior through advertising. Because of these early experiences, the behavioral sciences always seemed like home.

Pollak credits his love of teaching to his family. As children, his younger sister Alison indulged him with hours of playing school, which really meant enduring her broth-

er’s lectures. Pollak appreciates the early teaching practice his sister fostered. His grandmother, Rose Pollak, a teacher of elocution and drama, made Pollak practice his bar mitzvah speech as if it were to be performed at Stratford-Upon-Avon. Pollak continues to treasure the enthusiasm, confidence, and tenacity that he learned from his grandmother. Although his Great Uncle Eli Sobel, a professor of Germanic literature at the University of California, Los Angeles, and his Great Aunt Margie Sobel did instill in him the value of precise (if not colorful) use of language, they would no doubt concede failure in Pollak’s use of orthography.

Pollak followed a circuitous route to the study of psychology. As an undergraduate at Franklin and Marshall College he engaged in random acts of registration, resulting in a series of semester-long majors in the history of art, government, English, history, geology, and philosophy before settling on anthropology. Pollak credits his college professors, especially anthropologist Nancy McDowell, for providing the ideal level of discomfiting criticism and support that challenged him to learn to work through his ideas. A part of Pollak’s undergraduate studies was completed at Oxford University, where he read in philosophy of mind and cultural anthropology. At Oxford, he was deeply influenced by his conversations with Professor Rodney Needham, a fellow of All Souls College, who encouraged Pollak to read and then reread Wittgenstein. Although he hoped to receive a better known accolade, Pollak’s college graduating class voted him “Most Likely to Serve on a Committee,” a harbinger, indeed, of his academic career to follow.

During his undergraduate studies, Pollak became interested in the concepts of rationality and relativism—while all cultural groups have categories for normal and abnormal behavior, they define these boundaries differently. Although he had been accepted into a doctoral program in cultural anthropology and despite never having taken an undergraduate psychology class, Pollak made an impetuous decision. He decided to study rationality at the level of the individual rather than the group, and he submitted a last-minute application to the interdisciplinary Human Development Program at Harvard University. Gil Noam introduced him to developmental approaches to psychology; he learned about cross-cultural approaches to psychopathology from Arthur Kleinman and about the philosophy of natural science from Hilary Putnam, who also introduced him to the original writings of Pollak’s psychology paladin, William James. To learn more about biological approaches to psychopathology, Pollak accepted a research assistant position in the laboratory of Robert McCarley at Harvard Medical School. There he was enthusiastically mentored by Steven Faux, Paul Nestor, and Martha Shenton, who exposed him to a variety of psychophysiological and brain-imaging techniques. Also beginning her career in the lab at that time was clinical neuroscientist Virginia Penhune, who became and continues to be a friend of remarkable intellect and compassion.

Pollak's training in cultural anthropology left him well poised to work within the emerging zeitgeist of experience-dependent plasticity that was taking hold in the biobehavioral sciences. Intrigued by the creative theoretical writings of Dante Cicchetti, he moved to upstate New York to continue his studies of developmental approaches to psychopathology. Pollak received a joint doctoral degree in brain and cognitive sciences (with a focus on development) and clinical psychology in 1997 from the University of Rochester. Pollak sincerely values the mentoring he received (and continues to receive) from his advisors, Rafael Klorman and Dante Cicchetti, who indulgently fostered his then-unusual attempt to integrate the study of the brain bases of behavior with an understanding of the effects of abuse in early childhood. Dick Aslin and Elissa Newport, other important mentors for him during graduate school, have remained close friends, role models, and invaluable advisors throughout his career. Pollak's current research program would not be possible without the excellent training in clinical work with maltreated children that he received from Sheree Toth and Jody Todd Manly at Rochester's Mount Hope Family Center. Pollak's years in graduate school were also enriched by a loving, highly engaged, and socially disinhibited group of classmates that included Julia Kim-Cohen, Jim Magnuson, Inge-Marie Eigsti, Michael Spivey, Marie Coppola, Ann Senghas, and Toby Mintz. One of Pollak's graduate school classmates, Jenny Saffran, has had a huge impact on his personal and intellectual life: First, Pollak and Saffran are now married. Second, in trying to woo Saffran, Pollak enrolled in whatever graduate courses she was taking. This has left him particularly conversant in the cognitive and perceptual sciences for someone studying emotional development. In fact, a graduate seminar at Rochester called Learning, Development, and Biology, taught by Elissa Newport, Dick Aslin, Tom Bever, Robbie Jacobs, Ernie Nordeen, and Kathy Nordeen, played a critical role in shaping Pollak's thinking about the emergence of emotional behaviors.

After a clinical internship at the University of Toronto, Pollak became an assistant professor in the Department of Psychology at the University of Wisconsin at Madison. When they began searching for jobs as an academic couple, Pollak told Saffran that there was no need to worry because he was totally flexible about geography—he was willing to consider living in any part of Manhattan or the San Francisco Bay Area. It was a surprise to all involved when Pollak, a quintessential East Coast vegetarian, returned from a steak-house recruiting dinner in Madison and announced his intention to move to the Midwest. Pollak's Wisconsin colleagues challenged him and stimulated his research with a constructive ruthlessness that still makes him wince. Friends who have been extremely generous with their time and thoughtfulness include Lyn Abramson, Martha Alibali, Avshalom Caspi, Loren and Jean Chapman, Jim Dannemiller, Richie Davidson, Hill Goldsmith,

Diane Gooding, Keith Kluender, Maryellen MacDonald, Temi Moffitt, Colleen Moore, Joe Newman, Mark Seidenberg, Chuck Snowdon, and Fred Wightman (to name a few). Pollak has also benefited from terrific collaborations with current and former Wisconsinites, including Chris Coe, Julia Evans, Lori Holt, Chuck Kalish, Doris Kistler, Mary Schneider, Pawan Sinha, Carolyn Zahn-Waxler, and Toni Ziegler. His life in Madison would be far more chaotic if not for the tireless secretarial efforts of Carol Allen and Cris Virgin in the University of Wisconsin Department of Psychology. Pollak's research is greatly facilitated by the scientific community and resources provided by the Waisman Center for Human Development, where he has been a beneficiary of a core grant from the National Institute of Child Health and Human Development, and the support of Marsha Seltzer and Len Abbeduto. Little in his lab would get done without the keen oversight and talents of Anna Putzer Bechner, Barb Roeber, Mary Schlaak, Elvira Zobel, and Johnna Dorshorst.

Pollak's research addresses developmental questions concerning the ontogenesis of emotion and the effects of early emotional experience on the organization of brain-behavior relationships. His approach to addressing this problem has been to focus on populations of children who have experienced social environments that are highly atypical for our species. The rationale of his approach is that the features that make children's environments atypical serve as approximations of how environmental variations affect brain-behavioral development. Pollak's methodological promiscuity and construal of his work in terms of experience-based plasticity has allowed him to connect on a theoretical level with investigators across a variety of sub-disciplines. Generally, his research suggests new ways that learning may play a more powerful role in early emotional development than many theorists previously believed. These lines of research offer a direct, and innovative, way to test the hypothesis that the uniqueness of human emotion resides in the general nature of human learning mechanisms.

Pollak was the first untenured faculty member to receive his department's award for excellence in teaching, and the following year, he received the University of Wisconsin's Chancellor's Distinguished Teaching Award. He has had the opportunity to serve as undergraduate, graduate, or postdoctoral advisor for a number of incredibly talented students who have been a source of pride and insight. Among these are Alison Wismer Fries, Jessica Shackman, Christa Tober, Elizabeth Shirtcliff, Jamie Hanson, Nicole Strang, and Anne van Grondelle. Pollak credits part of his success to the support of senior colleagues who took an interest in him very early in his career, including Ron Dahl, Linda Camras, and Chuck Nelson. An impromptu conversation with Megan Gunnar at a sushi bar in Vancouver prevented him from leaving the field during his early assistant professor years, and Pollak especially values her

continued support, friendship, and scientific good taste. Pollak is a member of the National Institutes of Health Psychosocial Development, Risk and Prevention study section and acknowledges Vicki Levin and members of this study section for intellectually rich discussions about disparate areas of developmental psychopathology. Pollak also deeply appreciates the support and interest in his work that Cheryl Boyce at the National Institute of Mental Health has provided since he was a fledgling researcher. He is sincerely indebted to the U.S. taxpayers, who have continuously supported his research on children at risk for psychopathology through the National Institutes of Health.

Pollak thanks his son Eli (age 4) for discouraging any notions that grand theories of development can practically guide parenting and his daughter Nell (age 2) for highlighting the salience of individual differences between children.

Pollak would like to dedicate this award to the memory of his mother, Helen, who died two years ago. She would have reproduced and disseminated innumerable copies of this essay with pride.

Selected Bibliography

Camras, L. A., Perlman, S. B., Wismer Fries, A., & Pollak, S. D. (2006). Post-institutionalized Chinese and Eastern European children: Heterogeneity in the development of emotion understanding. *International Journal of Behavioral Development, 30*, 193–199.

Pollak, S. D. (2003). Experience-dependent affective learning and risk for psychopathology in children. *Annals of the New York Academy of Sciences, 1008*, 102–111.

Pollak, S. D. (2005). Early adversity and the mechanisms of plasticity: Integrating affective neuroscience with developmental approaches to psychopathology. *Development and Psychopathology, 17*, 735–752.

Pollak, S. D., Cicchetti, D., Hornung, K., & Reed, A. (2000). Recognizing emotion in faces: Developmental effects of child abuse and neglect. *Developmental Psychology, 36*, 679–688.

Pollak, S. D., Cicchetti, D., & Klorman, R. (1998). Stress, memory, and emotion: Developmental considerations from the study of child maltreatment. *Development and Psychopathology, 10*, 811–828.

Pollak, S. D., Cicchetti, D., Klorman, R., & Brumaghim, J. (1997). Cognitive brain event-related potentials and emotion processing in maltreated children. *Child Development, 68*, 773–787.

Pollak, S. D., & Wismer Fries, A. B. (2001). Perceptual asymmetries reflect developmental changes in the neuro-

psychological mechanisms of emotion perception. *Emotion, 1*, 84–98.

Pollak, S. D., Holt, L. L., & Wismer Fries, A. B. (2004). Hemispheric asymmetries in children's perception of nonlinguistic human affective sounds. *Developmental Science, 7*, 10–18.

Pollak, S. D., & Kistler, D. (2002). Early experience alters the development of categorical representations for facial expressions of emotion. *Proceedings of the National Academy of Sciences, USA, 99*, 9072–9076.

Pollak, S. D., Klorman, R., Thatcher, J. E., & Cicchetti, D. (2001). P3b reflects maltreated children's reactions to facial displays of emotion. *Psychophysiology, 38*, 267–274.

Pollak, S. D., & Sinha, P. (2002). Effects of early experience on children's recognition of facial displays of emotion. *Developmental Psychology, 38*, 784–791.

Pollak, S. D., & Tolley-Schell, S. A. (2003). Selective attention to facial emotion in physically abused children. *Journal of Abnormal Psychology, 112*, 323–338.

Pollak, S. D., & Tolley-Schell, S. A. (2004). Attention, emotion and the development of psychopathology. In M. Posner (Ed.), *Cognitive neuroscience of attention* (pp. 357–368). New York: Guilford Press.

Pollak, S. D., Vardi, S., Bechner, A., & Curtin, J. (2005). Physically abused children's regulation of attention in response to hostility. *Child Development, 76*, 968–977.

Shackman, J. E., & Pollak, S. D. (2005). Experiential influences on multimodal perception of emotion. *Child Development, 76*, 1116–1126.

Wismer Fries, A. B., & Pollak, S. D. (2004). Emotion understanding in post-institutionalized Eastern European children. *Development and Psychopathology, 16*, 355–369.

Wismer Fries, A. B., & Pollak, S. D. (in press). Human emotions and the developing brain. In D. Coch, G. Dawson, & K. Fischer (Eds.), *Human behavior and the developing brain*. New York: Guilford Press.

Wismer Fries, A. B., Zigler, T., Kurian, J., Jacoris, S., & Pollak, S. D. (2005). Early experience in humans is associated with changes in neuro-peptides critical for regulating social behaviour. *Proceedings of the National Academy of Sciences, USA, 102*, 17237–17240.

