

YOUTH HEALTH: YOUNG RESEARCHER EXPLORES “BIGGER PICTURE”



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When Hannah Schreier came to Canada from Munich, Germany, on a one-year high school exchange, she had little idea she'd still be on this continent 15 years later, a recognized researcher in health psychology with her own lab at just 30 years old.

Schreier came to Winnipeg in 2001 on a Grade 11 exchange program, staying on for Grade 12. Then, excited by the prospect of living abroad “a bit longer” and exploring other parts of Canada, she decided to study psychology at McGill University – where she earned the Bertha Lapitsky Award, a Dow-Hickson Scholarship, and the James McGill Award. She then chose the University of British Columbia (UBC) for graduate studies in health psychology, continuing to garner a number of scholarships and awards.

In her research, Schreier likes to take a “bigger picture approach.” Pursuing her Master’s and PhD under Dr. Edith Chen (then Canada Research Chair in Health and Society at UBC, now at Northwestern University), Schreier explored how experiences in childhood and adolescence come to influence later-life health.

“I tried to understand how the social environment gets embedded and comes to influence physiological health outcomes, especially with respect to the influence of, for example, socioeconomic status, and how that shapes longer-term health,” she explains (see *Poor youth, poor health: Unravelling the causes* on page 3 of this issue).

She finds adolescents particularly fascinating. “There are so many changes that individuals go through during adolescence; in some ways I think they’re understudied,” she reflects. “There’s a lot of focus on the very early years, which is very important because of the opportunities for early intervention, but I think there’s a second round of opportunities during adolescence that doesn’t get as much focus as it should.”

In one study while at UBC, Schreier looked at the effects of volunteering on cardiovascular health. She and her colleagues recruited over

100 Grade 10 students, randomly assigning half to volunteer with elementary school children in after-school programs. After four months, students who had volunteered showed more beneficial health outcomes, including lower levels of cholesterol and inflammation. “It was pretty convincing evidence, suggesting that beyond teaching social skills, volunteering might have direct physiological benefits.”

Other publications resulting from her work at UBC examined socioeconomic status in childhood as a predictor of cardiovascular risk in offspring; relationships between family routines and biological profiles among youth with asthma; and how air pollution and stress might interact to affect asthma.

In 2012, Schreier moved from Vancouver to New York to do postdoctoral research in the department of pediatrics at the Icahn School of Medicine at Mount Sinai, supervised by Dr. Rosalind Wright. Her paper on the interaction of mercury and stress during pregnancy was published in *Environmental Health* in March 2015. In August 2015, she began work as an assistant professor in the Department of Biobehavioral Health at the Pennsylvania State University, where she has her own lab and is affiliated with the Network on Child Protection and Well-Being.

Schreier believes that people working in public health, psychology, environmental health, sociology and other fields are increasingly realizing the value – and the need – for interdisciplinary collaboration. “Each one of these groups brings a unique focus that others might not be aware of but which can potentially explain very important aspects of those associations that we’re interested in.” 🐾

BY EVE KRAKOW