IN MEMORIAM

Naomi Breslau

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Naomi Breslau, Ph.D.

I have been asked to write a few words about Professor Naomi Breslau, an emeritus member of ACNP.

During the 1990s, whenever I wanted to learn something new about German expressionism art, I went to see Naomi Breslau. Later, when I wanted to learn something new about Chuck Close and his photorealism tradition in American 20th century art, I went to see Naomi. Whenever I wanted to learn something new about US–Israel relations, I went to see Naomi. Whenever I wanted to learn something new about post-traumatic stress disorder, I went to see Naomi. Eventually, when I wanted to learn something new about the genetic epidemiology of nicotine and tobacco dependence, I went to see Naomi.

These examples represent a few snippets of what we were able to learn during interactions with Naomi, whose experience and scholarship and learning were as broad as broad is broad. Elsewhere, there is an online obituary that says more about her life and experience and her family: <https://www.nytimes.com/2018/11/14/obituaries/naomi-breslau-dead.html>. In addition, there is an “in memoriam” statement from members of her home Department of Epidemiology and Biostatistics at Michigan State University: <http://www.epi.msu.edu/news/nbreslau/>.

These online documents convey too little about Naomi as a skeptic. To illustrate, I think they show too little of her skepticism about the qualifying events for PTSD, and might not convey her intellectual commitment to important ideas that are crucial in neuropsychopharmacology.

With respect to PTSD-qualifying events, she was skeptical about over-inclusion. She investigated, but she was not at all prepared to assert that PTSD might follow after each and every upsetting experience. She voiced serious concern about the idea that PTSD might be triggered simply by reading a newspaper or watching television coverage of events, such as the 9/11 terrorism event, or by other distant but upsetting experiences of that “vicarious” type.

Of more central importance in neuropsychopharmacology were her challenges to conventional thinking about the specification of thresholds for drug-agent exposures, all of which resonate with her skepticism about thresholds for PTSD-qualifying events. For example, after a single exposure to a nicotine-containing product, one should never expect to see a nicotine dependence syndrome. A single occasion of a single dose should not produce nicotine dependence as a syndrome, but we cannot ignore these one-time users. Biased estimates can result if we fail to assess nicotine dependence in the earliest stages of the nicotine exposure process, as often is the case when cost efficiency has prompted investigators to skip the assessment of nicotine dependence among users with only 1–99 occasions of smoking tobacco cigarettes, and to restrict nicotine dependence assessments only when there has been a cumulative count of 100 + occasions of such use.

Naomi also was concerned about shallow thinking when the science challenge is to draw cause–effect inferences. To illustrate, a shallow thinker will argue that it is not sensible to estimate the probability of nicotine dependence occurring among individuals who have smoked one or more tobacco cigarettes, unless cigarette smoking frequency is accounted for. Naomi appreciated the feedback loops that must be considered in this context, such that the prodrome of nicotine dependence includes a process that might drive up the frequency of smoking after the first cigarette. But she argued in favor of a first look at unconditional probabilities before frequency is controlled, with stratification as a second step. Standard acyclic statistical methods (e.g., regression control of covariates) can produce misleading results in the form of a ‘collider bias.’

In these few ‘in memoriam’ words, I am trying to convey the breadth and depth of Naomi Breslau’s contributions with some simple illustrations. I hope that I have succeeded in a fashion that will encourage ACNP members and other *Neuropsychopharmacology* readers to look into her work.

“She is missed” does not begin to convey the loss of our dear friend and colleague.

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