Living Amongst Toxicity

Stephanie Seneff
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CURRENT RESEARCH

Identifying relationships between toxic chemicals and disease

The CDC estimated that one in 68 12-year-old children in the US are on the autism spectrum today, and the prevalence is growing at an exponential rate. An extension of the line on a log scale predicts that one fourth of the children born in 2025 will be diagnosed with autism, and half the children seven years later. In fact, Dr. Stephanie Seneff, of MIT, predicts that the growth could be worse than exponential, and that, already by 2025, half the children born will be on the autism spectrum, if we stay the course. She attributes the increase in autism and other disorders, including heart disease, as well as various mental and physical disorders, to the toxic chemicals found in the foods we eat, the air we breathe, and the materials that surround us. Dr. Seneff and her team make use of computer science and natural language processing techniques to analyze online databases, online chat forums, and the research literature in biology and medicine in order to discover patterns over time, associations between prescriptions drugs and disease, and associations between environmental pollutants and disease. At the intersection of computer science and biology, Dr. Seneff's research not only identifies the relationships between toxic chemicals, such as aluminum and glyphosate, and disease, but also helps to develop online tools that can assist a researcher, patient, or clinician in the discovery process. While the perception is that such chemicals are harmless, her research has supported their detrimental effects.

Dr. Seneff's approach uniquely combines computer science skills with a solid background in biology. While her research lends itself to applications that are highly applicable to everyday encounters between...

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AFFILIATION

Massachusetts Institute of Technology

EDUCATION

- B.S., in Biology, 1968 , Massachusetts Institute of Technology
- M.S., in Electrical Engineering and Computer Science, 1980 , Massachusetts Institute of Technology
- Ph.D., in Electrical Engineering and Computer Science, 1985 , Massachusetts Institute of Technology

AWARDS

- 1966: Sophomore Chemistry Award for the sophomore at MIT most likely to succeed in the field of chemistry, awarded by the American Chemical Society
- 1967: Junior Scholastic Award from the American Alumnae Association for the female student at MIT with the strongest academic record
- 1997: Elected Fellow of the International Speech and Communication Association (ISCA)
- 2012: Integrity in Science Award from the Weston A. Price Foundation

RESEARCH AREAS

Life Science, Cardiovascular, Circulatory, Neurological / Cognitive

FUNDING REQUEST

Your contributions will support the continued research of Dr. Seneff as she investigates how toxic chemicals in the environment affect people. Donations will support the necessary $500K to fund personnel and technology. Additional funds will support a larger number of students and therefore increase pace of discovery. Your contributions will aid Dr. Seneff in reducing the risk of chemicals currently threatening our communities and leading to autism, physical and mental disabilities, and more.