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Finding Life Where You'd Least Expect It

An interview with University of Toronto researchers:

Barbara Sherwood Lollar, Geochemist

Ann Sullivan Ojeda, Postdoctoral Fellow

Barbara Sherwood Lollar

Up until the time I finished high school, we were still largely thinking about life on this planet as being entirely dependent on the sun's energy. But around the time of the late 1970s, we began to understand that there are other forms of life, as well. And in particular, microbiology that draws its energy for life not from photosynthesis, but in fact from chemosynthesis, from the energy of chemistry and water-rock reaction. That even the continents, and even deep in the crystalline rock that forms the core of the continents around the world, there's still energy that can sustain microbial life. We're looking at the way in which naturally-occurring microorganisms are living in the waters deep within this planet.

Ann Sullivan Ojeda

I study contaminants in water. A lot of processes put contaminants in the water. But what's great about our environment, a lot of the microbes that are already in the soils can eat these contaminants and by the time they get to the water, they are not harmful at all. We're interested in identifying those microbes because we want to promote them so that they can transform toxic organic compounds into non-toxic compounds.

TODAY'S RESEARCH. TOMORROW'S REALITY.

