

How Going Green Can Fight Floods

Interview with Professor Liat Margolis
Landscape Architect, University of Toronto

What are green roofs?

My research focuses on green building technologies. We examine what will be the optimal construction of green roofs, relative to storm water management. So how do we mitigate flooding, for instance, in our urban environment during extreme weather events or any sort of weather event. We look at how plants could evapotranspire and lower ambient temperature and perhaps mitigate urban heat island effect. Thinking about how we can design our cities to be smarter, in that regard – to have our buildings, streetscapes, parks, function or play a role in environmental management and at the same time do everything they were always doing be it sort of public space, housing, esthetic beautiful places and so on. So thinking about them as multifunctional, mutually beneficial, hybrid systems, that's the kind of thing I'm interested in.

What is new in your research?

From a research point of view, we're onto a new research which is the integration of solar panels with green roof systems. So actually combining them on top of one another. In our lab, what we really care about is going beyond green. In other words, going beyond the lip service that the green movement is all about. Now the question is, how do we actually optimize these systems and make them perform in the most ideal way?