



Trail of Bread Crumbs: Discovering the molecular mechanisms of nanotoxicity in fish

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The use of engineered nanomaterials (ENMs) has rapidly increased over recent decades. We can now typically find ENMs in cosmetics (e.g. sunscreens), diagnostic tools (e.g. biosensors), and therapeutics (e.g. drug delivery conjugates). Their increased use also signifies a greater probability that they will incidentally find their way into the environment, coming into contact with any species native to that environment.

Studies into nanotoxicology have surged in recent years. But when dealing with new ENMs and new organisms to which they might be exposed, where does one even begin exploring a new nanotoxin's potential mechanisms? Does one begin at the level of live physiology? Does one begin by sampling potential sites of exposure (i.e. oral, respiratory, dermal)? Or does one begin with major metabolic organs and traditional markers of toxicity? And from there, where does one then proceed?

Friday, March 28, 3-4 pm

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