



“(T)here is far more you in your health than just what is inherited from mom and dad. Your daily actions actually have a much greater impact, not only on your health but the health of your children and even your grandchildren.”

—Louis Guillette Jr., Ph.D.
MUSC researcher

On the surface, crocodiles in the renowned Kruger National Park and the oil spill along America’s Gulf Coast may not seem to have much in common — unless you’re MUSC researcher Louis J. Guillette Jr., Ph.D.

The reproductive endocrinologist and developmental geneticist is involved in studies in both regions to figure how chemicals and contaminants interact with the environment in ways that impact human health. His research is confirming just how dramatic and far reaching these impacts can be.

That’s a subject Guillette, director of the Marine Biomedicine & Environmental Sciences Center, explores in a reflective piece published in *Science* magazine titled “Life in a Contaminated World,” (www.sciencemag.org/content/337/6102/1614.summary)

The article commemorates the 50th anniversary of Rachel

Carson’s book, “*Silent Spring*,” that challenged thinking that up until the early 1960s saw pesticide use as simply a benefit to agriculture and public health with few detrimental consequences. Guillette observes in the article that the book was the start of a debate that continues to this day on the relative benefits and risks of not just pesticides but of all synthetic chemicals.

His goal: To get researchers, doctors and the public asking the right questions.

“It’s time. A revolution is taking place. The new realization is that your health is a combination of what you inherited from mom and dad, but also the environment you saw from the day you were conceived. It’s no longer diseasecentric in that you have a mutation and it’s a predisposition for disease,” he says, adding that a person’s diet and lifestyle, level of stress and exposure to chemicals that act as endocrine disruptors all could be factors leading to such conditions as diabetes, obesity, cancer or infertility.

“It’s not just your genes. The idea is there is far more you in