



# Science In Our Lives

## Toxicologists: The Nation's Unsung Heroes

(NAPSA)—The next time you take a medication, wash your car or work in your garden, you may want to tip your hat to the nation's toxicologists. These are the women and men who do research to assure that the chemicals and products we use are indeed safe and do not represent an unreasonable concern for harm. They are among the nation's truly unsung heroes.

Chemicals make up everything around you. Hardly a week goes by without hearing that a chemical may potentially threaten your health—pesticides in your food, pollutants in the air you breathe, chemicals in the water you drink, toxic dump sites near your home. Which chemicals are really dangerous? How much does it take to cause harm? What are the effects of a particular chemical?

Cancer? Nervous system damage? Birth defects? Toxicologists determine what the effects of a particular chemical might be, but more importantly, how much it takes to cause harm.

### What Toxicologists Do

Finding scientifically sound answers to these very important questions is what toxicologists do, using the most modern biological, molecular, genetic and analytical techniques available. Toxicology combines the elements of many scientific disciplines to help people understand the harmful effects of chemicals on living organisms. Toxicologists work to ensure that modern-day chemicals, drugs and other products can be introduced into commerce and safely used by consumers.

The responsibility of the toxicologist is to:



**Making sure the food you eat and the medicines you take are safe is just part of the job of the nation's toxicologists.**

- Design and carry out carefully controlled studies of specific chemicals of social and economic importance to determine the conditions under which they can be used safely (that is, exposures not expected to negatively impact human health).

- Develop new and better ways to determine the potential harmful effects of chemical and physical substances. An essential part of this is to learn more about the basic molecular, biochemical and cellular processes responsible for diseases caused by exposure to chemical or physical substances.

- Ensure that new drugs are safe to study in clinical trials.

- Assist in the establishment of rules and regulations aimed at protecting and preserving human health and the environment.

### Learn More

To learn more about toxicology and what toxicologists do, visit the Society of Toxicology Web site at [www.toxicology.org](http://www.toxicology.org) or call (703) 438-3115.