



Gretchen K. Bielmyer-Fraser, Ph.D. is an associate professor in the chemistry department at Jacksonville University and authors sections on water quality trends for nutrients, dissolved oxygen (DO) and biochemical oxygen demand (BOD) in the basin, as well as contaminants in the basin and tributaries in the *2022 State of the St. Johns River Report*.

Dr. Bielmyer-Fraser's primary research interests are in the field of environmental toxicology with a focus on aquatic systems. Specifically, her research investigates how organisms respond to contaminant (particularly metals) exposure and examines the complex interactions between metals and other chemical components in aquatic systems. Characterizing how these variables interact to influence toxicity at the organism (survival, growth, reproduction), physiological (ion transport, acid-base balance), and biochemical (enzyme activity) levels are central components of Dr. Bielmyer-Fraser's current and future planned research.

Dr. Bielmyer-Fraser has been working in the field of environmental toxicology for almost 20 years. In that time, she has published three book chapters, 10 technical reports, and 33 journal articles in peer-reviewed journals.

In addition, Dr. Bielmyer-Fraser and has given 58 research presentations at external conferences and serves as a reviewer for over 10 different journals, averaging one review per month. Dr. Bielmyer-Fraser has supervised over 50 undergraduate students and seven graduate students from both Chemistry and Biology departments.