



# Journal of the South Carolina Academy of Science

Vol. 21, no. 2  
On-Line Edition

Fall 2023

A peer-reviewed electronic publication of the South Carolina Academy of Science

## RESEARCH ARTICLES

### **An Analysis of the Sequence $X_{n+2} = i m X_{n+1} + X_n$**

Jensen Meade, David Duncan, Ogül Duncan, Prashant Sansgiry.....1

### **Identification of a Small Regulatory RNA UspS Associated with the Universal Stress Protein in *Lactobacillus* Species**

Zarah M. Fowler, Sasha S. Bronovitskiy, Finn K. Rose, Brian M. Lee.....7

### **Environmental Bacteriophage Presence in Drainage Ponds at Coastal Carolina University**

Hailey Oldfield, Alexei E. Chesnutwood, Gabriella A. Caldwell, Shiraz C. Cohen, and Paul E. Richardson ..... 18

### **Developing a Safe and Effective Papillomavirus Screen to be used on College Students at a South Carolina University**

Owen R. Smith, Nicole E. Frantz, Emily E. Bishop, Rahjai G. Thomas, and Paul E. Richardson .....26

### **Generalizing Random Fibonacci Sequences**

Alex Foster, Ogul Duncan, David Duncan, Prashant Sansgiry ..... 32

### **Electrochemical Detection of Glucose Using a Prussian Blue Modified Electrodes Combined with Glucose Encapsulated within a Xerogel**

Daniel Baker, Sarah Davis, and Drew Budner .....44