



# GSR Journal

Georgetown Scientific Research Journal

## Letter From the Editor-in-Chief Emerita

The Ice Age, Stone Age, and Bronze Age all engender defining periods in history, each described by an overarching narrative. Most recently, we have found ourselves in the Information Age, characterized by rapidly developing technologies such as the internet, giving us access to information within the matter of seconds. At the beginning of 2020, however, we stumbled upon a pandemic that left people around the world baffled. We watched in admiration as scientists collaborated, innovating ways to understand and tackle the novel coronavirus. This turning point marks the beginning of the Biological Age.

The rapid development of the COVID-19 vaccines using mRNA technology demonstrates the contributions biology has made for everyone around the globe. These recent biological discoveries and technological innovations including vaccine technology, gene therapy, 3D brain mapping, and stem cell technology have been spearheaded by scientists across the world. Research has already started to test gene therapy to treat different cancers and sickle cell anemia, brain mapping is being used as a tool to understand Alzheimer's disease and schizophrenia, and stem cell technology is being adapted to generate organoids and perhaps replacement organs. In the future, mRNA vaccine technology might be used to treat other diseases such as diabetes. With rapid innovation, research and medicine has the continued potential to ameliorate the lives of a myriad of people.

Student scientists are the next generation of researchers ushering in the Biological Age. Throughout the pandemic, first, virtually and, more recently, in person, students at Georgetown University have continued to rise to the challenge to conduct research safely, demonstrating resilience and determination. Our issue is joined by articles ranging from direct impacts to students in the Georgetown University community—understanding mental health afflicting Resident Assistants—to impacts on a global scale—understanding CRISPR's applications in defense against pathogens. These articles are a testament to the extensive research conducted by students within the Georgetown University community. Join me in commending Georgetown University student researchers for driving discoveries in the research field as we enter this new biological age.

A handwritten signature in black ink that reads "Danya A. Adams". The signature is enclosed within a faint, circular watermark or background graphic.

Danya A. Adams  
Editor-in-Chief Emerita