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Editor's Note



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Varun Upadhyay
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The cosmic universe is an enigma. Our world itself is already filled with an unlimited amount of incredibly complex questions, whose answers lay waiting to be discovered by the next generation of curious minds. Whether it be elucidating the inner mechanisms of the tiniest piece of molecular machinery or unraveling the intricacies of cosmic phenomena within the huge expanse of space, it is our scientific curiosity that forms the foundation for every field, at all magnitudes of focus. Every discovery made brings a greater level of understanding for the laws which not only govern the world around us, but also allow for evolutionary progression by the creation of innovative technologies. Given the impressive rate at which these advancements are constantly being made, we at the Berkeley Scientific Journal feel it is our journalistic duty to help facilitate the dissemination of the tremendous magnitude of scientific information, and aid in the mechanistic understanding of the impact these novel findings may hold.

At the Berkeley Scientific Journal, our writers seek to shed light on some of the scientific discoveries which govern the world and the universe beyond. In this latest issue, we encouraged our writers to focus their curiosity on realizing the magnitude of impact their chosen topic implies. From delving into breakthroughs in the microscopic world of nanotechnology and breast cancer surgery (by Writer Sania Moghe), to unveiling the large-scale impacts of deep-sea mineral mining on global climate change (by Writer Isabelle Cherry), our writers sought to illuminate the mystique present within a diverse range of scientific fields. While our Features Department writers were busy with their scientific expeditions, our Interviews Department worked to investigate current advancements in emerging areas of scientific research — in one interview with Dr. David Moses, BSJ Interviewers aimed to uncover the promising potential of AI in neuroprosthetics, specifically with respect towards speech-decoding and neural speech recognition. Looking inward, we also wanted to increase our own magnitude of impact on the bridging between novel, complex scientific discoveries and community understanding of these findings. In addition to revamping our website, this semester, we launched our inaugural mid-semester magazine, the Hypothesis, to showcase the impressive work of our Research and Blogs Department. Here, our writers focus on examining the more fantastical elements of scientific discovery — in this first edition, some of the exciting investigations delve into uncovering the relationship between sea creatures and potential improvements to fetal surgical techniques (by Writer Shikha Kathrani), as well as how human culture is inexplicably tied to understanding human emotions (by Writer Linda Thamizharasan).

The word “magnitude” originates from the Latin word “magnitūdō,” meaning “greatness in size.” At the Berkeley Scientific Journal, we believe that in the world of science, it is important to realize that every scientific discovery, of every magnitude, holds the important responsibilities of guiding our evolutionary pathway, shaping our collective understanding of the natural world, fostering innovation, and inspiring wonder within the next generation of scientific adventurers. As you peruse through this latest issue from the Berkeley Scientific Journal, we encourage you to examine the interwoven nature of each presented topic within your daily life — try to notice the magnitude, both grand and subtle, of the intricate impacts these new technologies and findings may have, as well as the ramifications they may propose. Let your scientific curiosity guide you in asking any potential questions these promising advancements may prompt, and we hope reading through our Journal inspires you to one day embark on your own journey of scientific exploration and discovery.

For Fall 2023, we proudly present the latest edition of the Berkeley Scientific Journal: Magnitude.