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Dear Reader,

In this issue of Berkeley Scientific Journal, we explore how recent technological and biomedical developments have advanced our understanding of “synthetics” in science. We are constantly surrounded by synthetic science— manmade technological advancements that enable us to communicate faster, manipulate genes, and progress toward cleaner energy. UC Berkeley professors and other members of the academic community are currently researching cancer immunotherapy, genome editing, and solar energy among other topics. These accomplishments among many others have garnered global attention. Now is the perfect time to dedicate the current BSJ issue to “synthetics.”

This semester’s issue is filled with high quality research, features articles, and an interview with an award-winning Cal professor. For an understanding on how synthetic science works on a microscopic level, read our features articles about DNA as building blocks of nanotechnology [6], magnetoelectric materials [1], and “lab on a chip” [28]. Departing from micro-scale technology, explore interesting articles on “Manufactured Memories” [23], artificial heart devices [19], and “Bright Ideas in Solar Energy” [13]. Additionally, Berkeley Scientific had the opportunity to interview Jan Rabaey, a professor of Electrical Engineering and Computer Science about his research on neural prosthetics and their future applications [32]. I invite you to read the second issue of Berkeley Scientific Journal’s eighteenth volume, filled with fine articles and undergraduate research papers on the topic of synthetics. Go Bears!

Sincerely,  
Prashant Bhat  
Editor-in-Chief

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