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EDITOR'S NOTE

In the age of instant communication and connection, one would hope that scientific information would be more easily accessed and absorbed. However, the opposite seems to hold true. With many of us on the Berkeley campus still reeling from the 2016 election, it can be disheartening to see just how easy it is to spread misinformation and for our country's leaders to reject scientific theories and methods. Moving forward, scientists must not only fight with facts but with stories and pictures, with more ethos and pathos. It is clear that BSJ's mission is more critical than ever: to educate young scientists and engineers in written and graphical communication and lead those specializing in the humanities to apply their skills in elucidating scientific concepts. We are succeeding grandly in this mission. In Fall 2016, the BSJ team grew to over 45 Berkeley undergraduate students, one of our largest teams in recent years. This semester, we also redesigned the layout and graphics of the journal from scratch. We hope you enjoy this visually stunning issue!

The Berkeley Scientific Journal proudly presents its Fall issue: Chronos. Fleeting or enduring, time is central to scientific inquiry, and its speed is dependent on the scale it is considered at. This concept is captured by the evolutionary biology debate over gradualism vs. punctuated equilibrium. Do new species arise due to gradualism, the slow accumulation of small changes, or punctuated equilibrium, periods of stasis followed by rapid changes? Both gradualism and punctuated equilibrium proved relevant for explaining speciation; however gradual changes are only apparent on the scale of hundreds of thousands of years when a species transforms into a new species whereas punctuated equilibrium is visible in shorter time scales when species quickly diverge. The moral of the story is that time, a crucial measure, can be perceived as ephemeral or everlasting depending on the topic being studied. In this issue, you will see how the scales of time advance our scientific knowledge of the present, past, and future. From the ominously fast speed of the spread of the Zika virus to using bacteria to undo the damage of plastic waste over decades, the articles in this issue shed light on the importance of time in scientific exploration.

Harshika Chowdhary
Managing Editor

Alexander Powers
Editor-in-Chief