

# UC Berkeley

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## C O N T A C T /kōn' tākt' /

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Dear Reader,

This issue of the Berkeley Scientific Journal is dedicated to the “extremes,” the aspects of science that push the boundaries of what we once considered possible. Our foray into the extreme is in part a recognition of the most eye-catching science of today, that which enralls and excites us to the highest degree. But in addition, extreme science refers to the frontiers of scientific study and to the scientists who are boldly pursuing previously unexamined ideas and fields. The science and professors highlighted in our journal are those who are changing the way we view and interact with the world around us, and in doing so are setting the course of scientific study for years to come. The choice of “extreme” is not only a nod to the most fascinating scientific discoveries of today, but also the future of science as a whole.

Our latest issue combines features articles written by our staff, interviews with Cal professors, and top-quality research performed by undergraduate Cal students. On the extremes as they relate to human life, we have an article on longevity [1], cryogenics [6], microbes in the human body [11], an analysis of fear [16], and a piece on sleep deprivation [21]. Moving away from ourselves lies a look at abandoned planets [4], plasma fusion [8], and gamma rays [14]. For our interviews we met with Dr. Kirn, who is at the frontier of finding novel approaches of battling cancer [25], and Professor Quataert, who speaks with us on the formation of black holes [32]. We also spoke to Professor Siddiqi, who studies measurement at the quantum scale [38], and Professor Dudley, whose studies range from the extremes of animal flight to alcohol abuse [44]. All of this is rounded out by two excellent papers which highlight original research spearheaded by Cal undergraduates themselves. I encourage you to dive into our exploration of the “extremes” of science, and I hope you enjoy the excellent content our staff has prepared for you.

Go Bears!  
Ali Palla  
Editor-in-Chief

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