From the Student Editorial Board

Welcome to the fifth volume of the UCR Undergraduate Research Journal! We, the members of the Student Editorial Board, have been working diligently to produce a journal that showcases the vast and diverse scope of undergraduate research at UCR. The entire editorial process — from initially reviewing entries, to working closely with student authors, to receiving revised final drafts — provided us with a rigorous, yet truly rewarding opportunity to experience the meticulous nature of academic publication. While balancing a wealth of other academic, extracurricular, and personal commitments, the students published in this journal exhibited their ability to conduct impressive research with outstanding professionalism. We found these articles to be exceptional and concluded that they should be presented to you in this publication. It is with great honor and gratitude that we invite you to explore a collection of articles that represents the multidisciplinary, scholarly and creative talents of the undergraduates at UCR.