2015-2016 CHANCELLOR’S AWARDS FOR EXCELLENCE IN UNDERGRADUATE RESEARCH AND CREATIVE ACHIEVEMENT

Faculty recipients:

Professor Ludwig Bartels, Chemistry:

In the 16 years since his hiring at UCR Dr. Bartels has mentored close to a hundred undergraduate research students from three colleges and eight departments. Dr. Bartels has developed and supervises the NSF funded Research Experiences for Undergraduates (REU) site (called MacREU), which supports research experiences for an additional 15 students each summer (mostly from Southern California Community Colleges or California State Universities). Dr. Bartels is willing to accept students into his research group with less than stellar GPAs and those same students show notable improvement while they are being mentored by him. Dr. Bartels has also made student diversity a hallmark of his undergraduate research mentoring effort. 40% of the undergraduate students that Dr. Bartels has mentored since 2010 belong to underrepresented groups, the majority being Hispanic. A nominator writes, “As a first generation Hispanic, my parents had considered attending a university to be a grand achievement, and I often saw it as a ceiling to my education until Dr. Bartels told me that I was capable continuing”. Most of Dr. Bartels’ publications since joining UCR have undergraduate co-authors, including one who earned first-authorship on an article in Science, one of the most prestigious journals (now at 200 citations). It is noteworthy that five of the six peer-reviewed articles that Dr. Bartels published in 2015 had UCR undergraduate student co-authors. Dr. Bartels’ undergraduate mentees present their research at conferences, and earn awards locally and in national competition. A nominator writes “I was treated equivalent to a full time graduate student and I felt obligated, as well as empowered, to pull my weight and perform well”. Undergraduate researchers from Bartels’ group proceed to graduate programs in the sciences and engineering or to medical school, and some have founded their own companies. A nominator writes “Working in Dr. Bartels lab made me realize how much I enjoyed research and made me want to take my education to the next level”. In the past three years, four of Dr. Bartels undergraduate research mentees obtained NSF graduate research fellowships based on their work with him.
Professor Katherine Sweeny, Psychology:

Professor Sweeny has mentored well over 300 undergraduate students in the less than 8 years at UCR. The research assistants in her lab are highly diverse, with over 80% consisting of underrepresented minorities and, separately considered, over 75% women. Her involvement with her students is deep and very time consuming. She treats her most committed and capable undergraduate researchers much like graduate students, with many one-on-one meetings and hands-on training in asking good research questions, designing unambiguously interpretable studies, analyzing the data, interpreting results, and writing the studies up in publication format. A nominator writes “Dr. Sweeny had never recommended I simply mimic the formatting of successful publications, but instead taught me the structural framework of professional writing and worked closely with me to integrate it into my own work”. Another nominator writes, “her teaching style is unique and integrates both a ‘hands-on’ approach while also providing significant room to understand and learn the methodology of research through trial and exploration.” Dr. Sweeny has mentored seven Honors capstone projects and has been the secondary advisor for an additional 10 Honors capstone projects. She also supervised two senior theses, as well as was the mentor for three students in UCR’s Mentoring Summer Research Internship Program (MSRIP). Professor Sweeny also supervised three Undergraduates in the Community projects, and eight students employed as interns for psychology department course credit. Two of her students have presented papers at national or international scientific conferences, two have presented at the annual UCLA Psychology Undergraduate conference, and six have published in the UCR Undergraduate Research Journal. Additionally, two of her mentees are co-authors on papers that have been submitted for publication in major research journals. Two of her mentees have received Chancellor’s Research Fellowships and another received the Chancellor’s award for Excellence in Undergraduate Research. Many of her students have benefited markedly from Dr. Sweeny’s mentoring, and for several it has been life-changing. A nominator writes, “Dr. Sweeny has been an amazing mentor who has seen potential within me and her students, providing opportunities for us to find it within ourselves. Through her dedication and high standards of excellence, I believe she will continue to mentor, enrich, and inspire the students of today, cultivating the researchers, writers, and professionals of tomorrow.” Several of Dr. Sweeny’s undergraduate researchers proceed to graduate school, law school, or medical school.