COMMITTEE ON DISTINGUISHED TEACHING

NOMINATION FOR THE 2021-2022 DISTINGUISHED TEACHING AWARD

The Committee on Distinguished Teaching is pleased to nominate an outstanding and versatile educator as recipient of the 2021-2022 Distinguished Teaching Award:

Professor Bahram Mobasher

Professor Mobasher, an observational astronomer, joined the UCR Department of Physics and Astronomy in 2007. His research examines the formation and evolution of galaxies, star formation activities in galaxies and large galaxy surveys.

Alongside impactful research, Prof. Mobasher contributes to an impressively wide array of teaching activities at all levels. These include offering a popular service course (PHYS 037) and a lower division introduction to data science for scientists and engineers (PHYS 050), designing and teaching new courses for an on-line MS program (PHYS 243, 244 and 247), developing research opportunities for undergraduates, advising graduate students, winning educational grants from national and state agencies, and creating new educational programs for UCR, UCR extension and high schools.

"*The Origins*" (PHYS 037) seats about 500 students and receives high praise from the thousands of students in diverse majors who have completed it. The textbook that Prof. Mobasher wrote for the course has been translated into Chinese. UCOP has funded the production of an online version for other campuses.

Students find Prof. Mobasher eager to teach. Their narrative evaluations praise his eloquence, humor, and enthusiasm. They report how he encourages questions and remains outside the classroom to talk with them after his lecture. They see humility, balanced with expertise, and find that he knows when to assist and when to patiently let them strive alone. From him they learn study habits as well as astronomy and the management of huge data sets. They reveal that he is willing to support their career progress long after the course in which they first meet him, whether they become Physics and Astronomy majors or not.

Prof. Mobasher was PI on two NASA educational grants. The $4.2M grant titled "Fellowships and Internships for Extremely Large Data Sets" (FIELDS) was awarded by a NASA program to strengthen and develop research opportunities in minority serving institutions. His department estimates that in the last five years Prof. Mobasher's various FIELDS programs have supported 126 online MS students, 120 high-school students in the STEM Summer Academy, 96 undergraduate internships, 32 graduate fellowships, 26 undergraduate researchers and 6 postdoctoral scholars. The huge outreach program he set up reaches six thousand people a year, particularly K-12 students and their parents, first-generation college students, underrepresented communities, and students with disabilities.

The summer academy is now sustained by a NASA Aerospace Academy grant and matching funds from the Riverside Unified School District. Prof. Mobasher taught PHYS 037 and 050 for the academy. He and his wife received the RUSD's 2020 Presidential Prize for their service to education in the County.

FIELDS graduate fellows have completed PhDs in five different UCR departments in CNAS and Bourns College. The FIELDS program was a catalyst for two new research centers at UCR (Data Science and Astrobiology) and invested in the new Visualization Laboratory. In 2011, Prof. Mobasher received the Innovative Teaching Award for connecting the humanities and astronomy. Undergraduates, graduate students, and faculty across the UCR campus have benefitted from his teaching, mentoring, and funding initiatives, which also enrich the local high school environment and surely benefit our campus admissions. In summary, as one nominator writes, Prof. Mobasher "uses his experiences and resources at

UCR to empower and educate the broader UCR community." He has fully earned the Academic Senate's Distinguished Teaching Award.