0653292 Louise Pagotto and John D. Rand, Kapi'olani Community College, **STEP-UP - Science Talent Expansion Program in Urban Polynesia**

Kapi'olani Community College's STEP-UP program goals are to increase the number of students in the College's STEM pipeline, the number of Associate in Science in Natural Science degree completers, and the number of students matriculating to two collaborating institutions, the University of Hawaii at Manoa (UHM) and UH Hilo (UHH); and to institutionalize and provide ongoing support for STEM students in the pipeline.

The STEP-UP award is in its first year of implementation. A comprehensive strategy that integrates and adapts research-based promising practices with successful campus-based innovations has been developed. A pre-college recruitment strategy into STEM is a computer building workshop. Fourteen talented junior students in 2 feeder high schools will assemble top-end computers from provided computer parts and keep the computers if they register in math and science classes in their senior year. The workshop at Kaiser High School is scheduled for March 17 – 21, 2008; the workshop at Roosevelt High School will be an after school activity during the month of April. A Summer Bridge preparation program for talented senior students is scheduled for July 14 to August 1, 2008. Three STEM students will receive research stipends for participating in existing research projects in the STEM Pathways. Peer mentors, a tutor and Peer-Led-Unit-Study (PLUS) leaders were hired to advise and provide supplemental instruction to STEM students in the pipeline. PLUS sessions are currently being held for Chemistry and Physics classes. Resistance from some faculty hindered offering sessions for Math classes. Instead, a tutor was hired to provide support for Math students and Math faculty willing to be involved in STEM efforts have been identified. Logistics for the computer building workshop for the first year was challenging as the program was offered to the schools after the academic year started. With lessons learned, subsequent years should proceed smoothly. Two campus-based innovations, the service-learning program and the e-portfolio system, will support the implementation and evaluation of these research-based promising practices.