

## **Space Engineering Institute Students Represent the College of Engineering at the Houston Hispanic Forum Career and Education Day with Attendance of 17,000 !!**

The Space Engineering Institute (SEI) participated at the 25<sup>th</sup> Annual Career and Education Day (CED) sponsored by the Houston Hispanic Forum at the George Brown Convention Center on Saturday, February 7th, 2009. The annual event is designed to educate students in grades six through twelve and their parents on career choices, college preparation, and financial aid. Fourteen SEI students traveled to Houston to give four one-hour long presentations on "The World of Engineering". Each presentation had three components; an overview of all engineering majors, overview of one SEI team project, and a panel discussion. An SEI graduate team mentor, Ms. Julianna Camacho (graduate student in the Civil Engineering Department) moderated each session, while the SEI undergraduate students presented their work. The three SEI team projects presented were: Advanced Antenna, Water Reclamation, and Shape Memory Alloy Based Actuator. In the panel discussion, graduate and undergraduate students joined engineers from Shell Corporation to answer questions from the audience about career choices in engineering. Shell Corporation donated door prizes that included two iPods and two rolling backpacks bags. In addition to the four panel sessions, the SEI students represented the TAMU College of Engineering with an exhibition booth. Students handed out brochures and talked to students and parents about engineering and Texas A&M University.

Donna Littleton, executive director for the event, said: "WOW! What a successful event this year. Estimated attendance was between 17 and 18,000. Every year gets harder and harder to express to each of you our appreciation. There has never been a question that the breakout sessions are a very important part of CED and if it were not for all of you volunteering your time and effort, CED would not be what it is today. All I can say is thank you. The proverb "It takes a whole village to raise a child" has never been more appropriate. ALL OF YOU are certainly part of that village".

The Space Engineering Institute is a program that engages undergraduate engineering students beginning in the freshman year in interdisciplinary and multi-level team projects that run multiple semesters. Each team is composed of 6-8 undergraduates, a graduate student mentor who acts as their project manager, a faculty mentor and a NASA or industry sponsor. The program has been focused on NASA and space exploration projects, and due to its recognized success, has since expanded to other areas like nuclear engineering. The program main focus is to enhance the academic education of our undergraduates with valuable engineering experiences through sponsored projects. SEI teams present their technical work at regional and national events and, for the first time, hope to present at the International Conference Of Nuclear Engineering in Belgium in the summer of 2009.

SEI would like to thank the Engineering Student Services and Academic Programs (ESSAP) Office at Texas A&M University for sponsoring this event. For more information on the TEES Space Engineering Institute, please visit our website at <http://sei.tamu.edu> or email Magda Lagoudas, director of SEI, at [m-lagoudas@tamu.edu](mailto:m-lagoudas@tamu.edu). For more information about the HHF or Career and Education Day, visit their website at <http://www.hispanicforum.org>.



Figure 1. SEI Students from the Water Reclamation Team [David Moore (CVEN freshman), Sandhya Ramesh (BMEN freshman), Elizabeth Joachim (BMEN junior) and Julianna Camacho (CVEN, graduate mentor)] and SMA Actuator Team [Jonathan McClellan (AERO sophomore), Timothy Guenther (AERO senior) and Iris Hill (INEN freshman)]. Dr. R. Autenrieth (CVEN) and Dr. J. Boyd (AERO) are the faculty mentors for each team. Dr. K. Pickering and Mr. Gary Nickel are the NASA mentors.



Figure 2. SEI members from the Advanced Antenna Team (Frank Drummond (AERO, graduate mentor), Stephen Davis (AERO sophomore), Rachel Anderson (EE senior), David Umana (EE freshman), Cameron Peters (AERO freshman), Joel Barrera (EE senior). Dr. G. Huff (EE) is the faculty team mentor. Dr. Pat Fink is the NASA mentor.