

## Mr. Meshkati Goes To Washington

REFLECTIONS FROM A YEAR AS A JEFFERSON SCIENCE FELLOW

*This summer, industrial and nuclear safety expert Najmedin “Najm” Meshkati completed a year as a Jefferson Science Fellow. Run by the U.S. Department of State, that program called for Meshkati to serve as a Senior Science and Engineering Adviser for the Office of the Science and Technology Adviser to the Secretary of State. Established in partnership with the National Academies and the science, technology and engineering community in 2003, the Fellowship’s purpose is to create a platform by which science and engineering can inform foreign policy decisions. Meshkati, a professor of the Sonny Astani Department of Civil and Environmental Engineering and the Daniel J. Epstein Department of Industrial and Systems Engineering, offered this reflection on his experience.*

My efforts in Washington, D.C., revolved around the development of science and engineering diplomacy initiatives for partnership creation, capacity building and conflict resolution, especially as such initiatives are needed for interacting with countries in the Middle East.

My work encompassed integrated technical and policy-based, systems-oriented frameworks to improve the safety and reliability of large-scale technological systems in the civil aviation, nuclear power, and (upstream and downstream) oil industries. It was not only a journey to Capitol Hill but also a global adventure; I met with scholars, diplomats and policy-makers in Athens, Paris, Bahrain, Cairo, Alexandria, Tunis and Stockholm over the last seven months.

One of the most interesting experiences of my assignment? The opportunity to closely observe the making of a major thrust of the Obama administration’s foreign policy. Following President Obama’s historic address to the Muslims of the world in Cairo on June 4, 2009 which he dubbed “the New Beginning,” the administration embarked on a series of initiatives geared toward the realization of meaningful collaborations in science and technology for developing new sources of energy; green jobs; digitized records; clean water; and new crops.

Now called the “Global Engagement,” they comprise a major U.S. foreign policy initiative that could eventually rival the Marshall Plan. As that 1947 program helped *rebuild* the broken countries

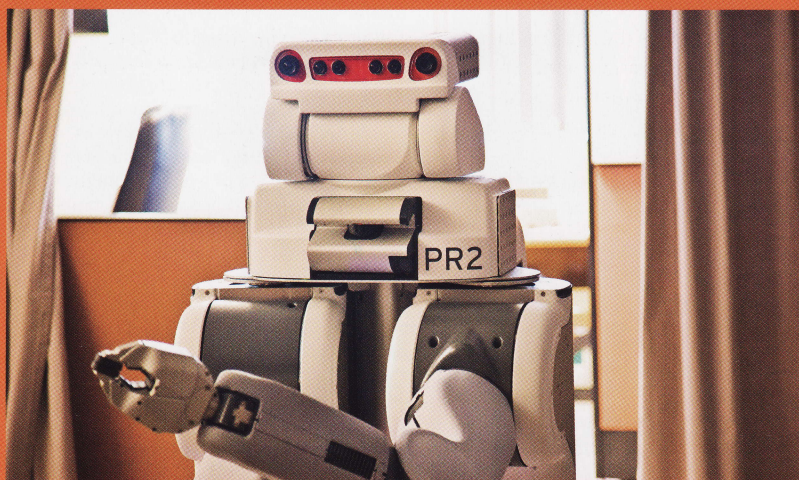


of Europe following World War II, the Global Engagement initiative could also substantially rebuild badly damaged relations between the U.S. and Muslim majority countries, if it is formulated correctly and executed prudently.

Something else that impressed me was the direct, key role that young, enthusiastic staffers play in the administration’s policy formulation. Although they may not “make” final policy, they are surely the brains behind its framing and institutionalization. Many of my talented former USC students, especially engineering students who chose interdisciplinary paths, are certainly at least as remarkable as these staffers, if not *more* so. I come back to campus with a renewed interest in encouraging my future students to try seek such influential positions within departments of the executive branch in Washington, D.C. They can make a difference.

Throughout the year, I felt doubly proud of my Trojan connections—USC affiliations as both an engineering alumnus (M.S.EMT ’78 and Ph.D.ISE ’83) and a faculty member. During an important meeting last April at the headquarters of the League of Arab States in Cairo, the high-ranking host thanked me for my technical and diplomatic contributions, and also noted that “he is coming from one of the best universities in the world, the University of Southern California.” //

*On the heels of his fellowship, Meshkati was selected to serve on a National Academy of Engineering/National Research Council panel investigating the BP Deepwater Horizon explosion and Gulf oil spill.*



## WILLOW GARAGE ROBOT COMES TO CAMPUS

The Viterbi School is one of 11 universities worldwide whose research proposals survived a rigorous screening by the robotics company Willow Garage. As a result, a Willow Garage PR2 (Personal Robot 2) has arrived at the Robotics Research Lab in Tutor Hall. The arrival kicks off a two-year program in which the Viterbi School will pursue research and development goals related to developing sophisticated mobile robots.