

Q&A with Maja Mataric

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What is the single biggest trend in university research?

Without a doubt, it is interdisciplinary research. Today's most interesting and challenging research problems transcend any single discipline. USC is committed to fostering interdisciplinary research, and the Viterbi faculty have been campus leaders. We have a track record of collaborative research with almost every other school at USC, especially the Keck School of Medicine, the College of Letters, Arts and Sciences, the Annenberg School for Communication, and the School of Cinematic Arts. We are increasingly hiring faculty who have appointments in more than one school and who actively create interdisciplinary collaborative bridges.

How is the funding picture for university research changing?

The climate of the federal funding for research is not pleasant right now. Many of the major federal agencies have experienced funding reductions, including the National Institutes of Health (NIH), the Department of Homeland Security (DHS), the U.S. Geological Survey, the Environmental Protection Agency, and the Department of Defense (DoD). On the other hand, some agencies have received increases, including the National Institute of Standards and Technology, the National Science Foundation (NSF) and NASA Development and DoD weapons. The Department of Energy has less to spend on energy and a little more on basic science and in the areas of ethanol and biofuels. Overall, federal funding for basic research is down. But funding for more applied research has either held steady or is up in some specific domains.

Is the competition for big national research centers getting more or less competitive?

The competition for major national centers funded by the NSF, DHS, NIH and DoD is steadily increasing. While the number of applications from universities is growing, the number of center programs is not, so the probability

for winning is getting smaller. The bar for success keeps going up. The Viterbi School has been superbly successful in winning new centers and renewing all of its current centers. This track record is particularly impressive given the steady increase in competitiveness of such awards.

Could you describe some of the challenges of corporate funding?

Corporations naturally have shorter horizons than federal funding agencies do. To remain competitive, corporations need to see results from research quite quickly, and they have to be able to translate those results to products. This has implications on both the nature of the research, which needs to be shorter term and more applied, and on issues of intellectual property, which must be carefully balanced. That can be a difficult problem, but it is solvable.

What is the Viterbi School and USC doing to help young academics win NSF or NIH Career Awards?

Because young investigators starting on a productive funding path is critical for their research success, the Viterbi School provides mentoring, training and funding information forums for junior faculty. We aim to keep all of our faculty, and especially our young investigators, actively informed, trained and encouraged to productively pursue external funding that will enable and sustain their research endeavors. We do this through one-on-one mentoring, small discussion groups, all-faculty open forums with invited expert speakers, direct connections with the USC Washington Office for Research Advancement, and regular email and Web updates about funding opportunities. We also have a new initiative to help all faculty members win national awards. //

