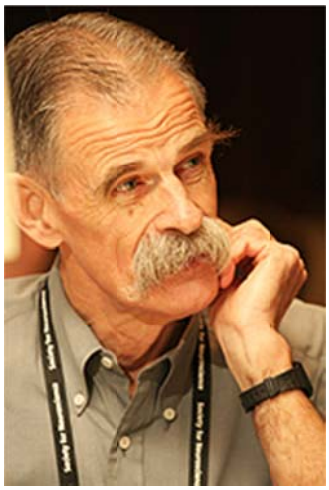
Communicating with the public makes you a better scientist:

TKF: ***Can you look at your career and see how this skill has benefited your work?***
SPITZER: Yes and in fundamental ways. **For instance, when I talk publicly, I appreciate the need to step back and present the big picture, and in so doing put details into a larger context that is much more accessible – and much more memorable – for an audience. This has stimulated me to think about larger questions over the years and has influenced the directions of my research.** This happens simply by virtue of stepping back from the immediacy of the details of a particular experimental paradigm, or a focused, tightly drawn question, then restating it in a context that the public finds understandable and interesting.
I have also found it opens my mind to cross-disciplinary possibilities. When I step back and look at the bigger picture, I quickly see potential links developing to fields that initially looked peripheral but wind up appearing contiguous. That leads to discussion of mutual opportunities and things that we can do together, which can be hugely productive. This is particularly true since I am fortunate to be embedded in an environment where my neighbors work in different fields. **This encourages new points of view, new ways at looking at problems, and new collaborations. Then different technologies come together to solve a problem, using methods that wouldn't have occurred to me otherwise.**

http://www.kavlifoundation.org/science-spotlights/ucsd-communications-nicholas-spitzer

CONVERSATION ABOUT COMMUNICATING SCIENCE WITH KAVLI INSTITUTE DIRECTOR NICHOLAS SPITZER



NICHOLAS SPITZER IS CO-DIRECTOR *of the Kavli Institute for Brain and Mind at the University of California, San Diego (KIBM) and an eminent neuroscientist, focusing on the ways neurons take on specialized functions to enable signaling in the brain. He is also someone who has made a priority of educating the public about his field, whether conducting interviews for UC-TV or serving as the inaugural Editor-in-Chief of BrainFacts.org – the major new website established this year by the Society for Neuroscience dedicated to providing accurate, public-friendly information about the brain.*

In the interview below, Spitzer discusses why engaging the public about neuroscience has been personally gratifying, and how it has benefitted and influenced his own work. He also discusses why, in a world increasingly dependent on the knowledge and principles of science, it is more important than ever for scientists to step out of the lab and discuss their work.

THE KAVLI FOUNDATION: ***It's been said we live in age when it's particularly important for the public to understand the role of science in their lives. Do you agree?***

NICHOLAS SPITZER: I do indeed. To a greater and greater extent, our futures are strongly influenced by and sometimes regulated by discoveries in science. We all need to have an understanding of these discoveries unless we want to be led along blindly like sheep. In addition, the involvement of science in our daily lives is much greater now than it has been in the past, and is growing at an extraordinary rate – faster now than at any point in history. Scientists have a responsibility to communicate to the public what they learn, to close the gap between what the public knows and what it should know about science.

That said, I think the broad public does have a great enthusiasm for neuroscience. The brain is cool. Unfortunately, there is also a great deal of misunderstanding about how it works. We address some of this on Brainfacts.org where our featured content includes debunking of "neuro-myths" such as "You only use 10% of your brain." We actually use 100% of our brains. So there is some misinformation out there. I suspect that cosmology, nanoscience and many other branches of science have the same problem, but in neuroscience being misinformed can also directly and adversely affect one's health.

TKF: ***You see scientists themselves as critical for bridging this communications gap.***

SPITZER: Yes, and we should welcome this. We need to help make this a better world. But set aside the social value, as well as the impact it can have in inspiring future scientists; if the public understands science a little better and sees the benefits, it can influence governmental and other funding decisions. As we march toward the fiscal cliff, much heralded in the news, I'm hearing many people on the UCSD campus raise concerns about this. If the public understands science and the benefits that have accrued from science they will be more inclined to support its funding. This is a real consideration for scientists who need funding to keep a lab open or launch an astronomical satellite into space.

Beyond that, if you love a field, why keep it to yourself? For me, neuroscience is the greatest invention since sliced bread. It's an extraordinary thing. I tell my family about it, my relatives, my friends, my neighbors. I'm a great enthusiast for this field and what we've learned, are on the verge of learning, and will learn. It's all tremendously exciting.

TKF: ***Can you look at your career and see how this skill has benefited your work?***

SPITZER: Yes and in fundamental ways. For instance, when I talk publicly, I appreciate the need to step back and present the big picture, and in so doing put details into a larger context that is much more accessible – and much more memorable – for an audience. This has stimulated me to think about larger questions over the years and has influenced the directions of my research. This happens simply by virtue of stepping back from the immediacy of the details of a particular experimental paradigm, or a focused, tightly drawn question, then restating it in a context that the public finds understandable and interesting.

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