



Kay (left) and Schultz aim to boost the number of basic discoveries at Scripps that make it to medicines.

BIOMEDICAL RESEARCH

Scripps hooks prominent pair to lead it to health

Steve Kay and Peter Schultz aim to focus basic science powerhouse on translational medicine

By Robert F. Service

Steve Kay and Peter Schultz are old deep-sea fishing buddies. Now, their skills will be tested as they navigate the choppy waters surrounding the Scripps Research Institute in San Diego, California, one of the world's largest basic biomedical research institutes. Last week, Scripps announced that Kay, formerly the dean of the college of arts and sciences at the University of Southern California (USC) in Los Angeles, will become the institute's president. Schultz, currently a Scripps chemist and director of the California Institute for Biomedical Research (Calibr) in San Diego, will become CEO.

The appointments portend a move that could strengthen Scripps's tight finances: extending the institute's historical strength in basic science into translational research, which aims to transform discoveries into novel treatments. "It's a very exciting move," says Peter Kim, formerly the head of the Merck Research Laboratories and now a biochemist at Stanford University in Palo Alto, California. He adds Scripps is "very fortunate" to have landed Schultz and Kay to share the top duties.

Although Kay will run day-to-day operations and Schultz will oversee Scripps's long-term strategic plan, both have long track records in translational research—and in raising money. In addition to run-

ning Calibr, Schultz previously led the Genomics Institute for the Novartis Research Foundation (GNF), and has been a founder of eight startups that used robotics and other high throughput technologies to advance biomedicine and materials science. Before joining USC, Kay also worked with Schultz at Scripps and GNF, and helped launch several biotech companies himself. Together the pair has raised well over \$1 billion in backing from pharma companies, foundations, and private donations in their recent positions.

The announcement likely ends a contentious chapter at Scripps, which has an annual budget of \$310 million, 2730 staffers, and campuses in San Diego and Jupiter, Florida. Just over a year ago, Scripps faculty led a revolt against the institute's former leadership amid a financial slump and discussions of a merger with USC (*Science*, 27 June 2014, p. 1435). But when Kay and Schultz met with Scripps faculty to lay out their vision last week, "The reaction was one of overwhelming enthusiasm from all of us," says Reza Ghadiri, a chemist at Scripps in San Diego.

The centerpiece of their approach will be a long-term push into translational research, Kay and Schultz say. Like most academic institutions, today Scripps sticks mainly to basic research, discovering the molecular underpinnings of health and disease. In contrast, pharmaceutical companies tend to fo-

cus their efforts at the other end of the drug development pipeline, moving potential drug compounds through human clinical trials into the market. In between is translational research, which aims to bridge the space between basic science and drug approval. It's come to be known as the "valley of death," because many promising findings never make it to market. To traverse the valley, translational researchers focus on refining promising early-stage compounds; they try to minimize their toxicity, for instance, and improve how long they circulate in the bloodstream and find their targets.

Today, a large chunk of translational research falls to biotech companies that license promising early-stage compounds and try to shepherd them into human clinical trials. But few biotech firms have the wide array of needed expertise, causing many compounds to fall by the wayside, says Patrick Griffin, who runs a translational research center at Scripps Florida. "If you can move a [would-be drug] along in a nonprofit, you can nurture it so it has a better opportunity to advance."

To make this easier for Scripps faculty to do in house, Kay and Schultz say they plan to form alliances with Calibr and other institutes. The collaborations should mean more compounds make it into human trials, they say. And that outcome could earn the institute new licensing royalties, they add. "If we are successful, not only are we making new medicines that can help people, we are potentially creating additional financial resources [for Scripps]," Schultz says.

The duo also plans to take more immediate action to shore up Scripps's finances, which have suffered from a decline in revenue from National Institutes of Health grants and other funding streams. The institute's finances are currently "stable," according to a July report by Fitch, a bond rating agency. But Scripps has operated in the red for years, and has covered deficits by drawing down its endowment, which shrunk from \$430 million in fiscal year 2012 to \$397 million in fiscal year 2014.

One move that could save \$12 million annually would be to unload nearly 37,000 square meters of leased lab space. "That would have a big impact pretty quick," Griffin says, although Scripps would have to raise more than \$100 million to build two new lab buildings of its own. But ultimately, he says, Scripps's stability will depend on how effective Schultz and Kay are in hooking together formerly disparate parts of the drug development pipeline, and how many keeper drugs the fishing buddies manage to snare in their net. ■