

THE MAP MAN

Alan Krensky has been put in charge of a controversial new office responsible for charting the progress of the NIH Roadmap for Medical Research. **Meredith Wadman** catches up with him in his first few days on the job.

Hurrying in to an interview on his second official day as the de facto roadmap czar at the US National Institutes of Health (NIH), Alan Krensky is absently clutching a piece of paper; he's proud to hand it over for inspection. On it, the physician-scientist has charted a year's worth of trans-NIH 'rounds' — expert talks on cross-agency topics from network theory to pharmacogenomics to health economics. He has scheduled 11 lectures. The first is in two days.

Krensky, a respected paediatric immunologist who spent the past 23 years at Stanford University, has been recruited to institutionalize the Roadmap for Medical Research, a brainchild of NIH director Elias Zerhouni that was launched four years ago to decidedly mixed reviews. The map is intended to foster trans-NIH, large-scale and high-risk research. This year, it will spend \$483 million, roughly

1.7% of the \$29-billion NIH budget.

But Krensky's job — his official title is deputy director for the Office of Portfolio Analysis and Strategic Initiatives (OPASI) — doesn't stop at the map. Krensky will be assessing its effectiveness, trying to come up with ways, for instance, to evaluate whether the coveted Pioneer Awards for high-risk research are delivering the intended spoils. He will be scoping out new scientific opportunities and emerging public health risks, to recommend for future trans-NIH projects. And he and his staff will be completing an exhaustive, unprecedented cataloguing of the NIH's research portfolio aimed, in a tight budget era, at identifying both gaps and redundancies in all the science that the NIH funds.

"The roadmap needed a home and someone to be responsible for it. But OPASI is much bigger than that," says Krensky, whose broad grin

and tousled grey hair belie the earnest energy required of a man squeezing an interview between meetings with senior staff and directors of 27 institutes and centres.

Zerhouni sees Krensky and the new office as lending the roadmap permanence and continuity. "You need a permanent director," he says. "Somebody who will be there through NIH directors and ensure that things are done well, without any temptation of having this dictated from the top."

An outgoing Chicago native, Krensky graduated from the University of Pennsylvania Medical School, trained in Boston in nephrology and immunology and landed at Stanford in 1984, where, along with seeing patients, he shared a lab with his wife, Carol Clayberger, a Yale-educated cell biologist.

During his last six years at Stanford, Krensky was tapped to lead a \$526-million campaign to

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transform the Lucille Packard Children's Hospital. In 2001, Packard was a regional hospital struggling to chart a course after Stanford University Medical Center's failed merger with the University of California, San Francisco. Krensky recruited 47 new faculty, oversaw the growth of the hospital's endowment from \$20 million to \$200 million and earned the hospital thirteenth place last year in *US News and World Report's* national ranking of children's hospitals.

What he achieved at the hospital, says Harvey Cohen, until recently its chief of staff, "is nothing short of astounding." Cohen, along with hospital chief executive Christopher Dawes and Stanford dean of research Ann Arvin, consider Krensky a perfect fit for the NIH job. At the hospital, he developed disease-based centres glued together by cross-cutting functions from imaging to informatics. In the process, they say, he proved himself an outstanding strategist with a vision broad enough to take in the massive complexity of the NIH and deep enough to understand how to tackle the thorny problems involved in incubating trans-institute research.

Light leadership

Krensky is quick to note that OPASI — a \$3.3 million, 15-person office intended to ramp up to 70 people in coming months — doesn't exercise executive power over individual institutes or roadmap spending. As in the past, roadmap projects will continue to run a gamut of review by senior NIH staff, with Krensky's office one of many participants. He sees his role instead as coordinating, advising, greasing inter-institute wheels and providing information. "A lot of my job is cajoling," he laughs.

Krensky's experience at Stanford went a long way with the hiring committee at the NIH. Top administrators there are scrambling to get into synch with a new NIH-governing law enacted in January that, among other things, enshrines the roadmap as an NIH fixture, backed by a 'common fund' that can comprise up to 5% of the NIH budget in any given year. "We were very impressed with his package of experience and knowledge and vision," says Raynard Kington, the agency's principal deputy director, who until this month was doing Krensky's job in an acting capacity. "He understood that a big part of the responsibility of this office is to integrate sciences that cut across the agency. He got that in a very concrete way."

And by the end of 2008, Krensky's job will grow. In the recent law, Congress created a new NIH division — the Division of Program Coordination, Planning and Strategic Initiatives (DPCPSI) — that is similar to, but not the same as, Krensky's current shop. A sort of OPASI-plus, DPCPSI (which Krensky will direct) will

incorporate offices including OPASI, the Office of AIDS Research and the Office for Research on Women's Health, with a combined annual budget of \$150 million. Although the new law explicitly states that these offices will keep their current powers, it has caused some to complain about reporting to Krensky rather than directly to Zerhouni.

Krensky will also oversee an exhaustively detailed accounting of the agency's science spending that will for the first time allow members of the public — and Congress — at the click of a mouse to examine every NIH project being funded in a given disease area, with dollar amounts and other details attached. This 'portfolio analysis' tool, intended to go public in February 2009, is using sophisticated computer software that will capture elusive disease connections not immediately obvious in research grants, along with a new, pan-NIH set of disease definitions laboriously crafted with input from hundreds of scientists.

"The idea is to identify gaps in funding but also redundancies," Krensky says. "It has the potential to find out that various people are funding similar things." Such talk can be unsettling to institute heads.

"People are worried that the historic independence of individual institutes' leadership could be undermined by having this kind of central analytic and oversight capacity within the NIH director's office," says David Korn, the senior vice-president for biomedical and health sciences research at the Association of American Medical Colleges.

But Korn says that worry is misplaced. A former dean of medicine at Stanford who knew and admired Krensky when he was on the faculty there, Korn contends that Zerhouni "is on exactly the right track" in appointing Krensky to take a more sophisticated and rigorous approach to analysing the research portfolio of the massive agency. In a time of fiscal duress on Capitol Hill, he says, the NIH needs just such numbers to assure the public its money is being spent as wisely and effectively as possible.

Others, including scientists who have spent their lives in the trenches of investigator-initiated research, see Zerhouni, Krensky and the entire enterprise of the new office as well-meaning but misguided. "The function of a

federal agency that funds science is to respond to the innovative, novel and exciting ideas generated by individual scientists," says Gerald Weissmann, a longtime NIH grantee who is the director of the Biotechnology Study Center at the New York University School of Medicine. "Considering the enormous lassitude of large organizations, I tend to doubt that we will get more bang for the buck from big science."

Indeed, senior agency administrators have been perennially tempted to direct science, rather than letting it come to them, says Murray Goldstein, a former director of the National Institute of Neurological Disorders and Stroke who spent 40 years at the NIH. There are many first-class grant applications from individual scientists that are not being funded, he says. "What's the priority?"

Krensky is unapologetic. "Having the kinds of infrastructure that OPASI will develop doesn't take away from individual investigators — it buoys them," he says, "by giving them tools

that modern science requires." What's more, he argues, "It's only 1.7% of the budget. Investigator-initiated awards are still the mainstay." As if to remind himself of this, Krensky intends to keep his hand in at the bench, working in the lab his wife will be running at the National Cancer Institute. There, he's hoping to find applications in tuberculosis for the cyto-lytic molecule granulysin.

But for the moment, he has to dash to a meeting of institute directors. There, he and NIH chiefs will be deciding the fate of \$60 million in unspent 2007 roadmap funds. A top aim is to jumpstart the new epigenetics and microbiome initiatives from the latest phase of

the roadmap, which is rolling out this autumn.

Mark Lively, a biochemist at Wake Forest University in Winston Salem, North Carolina, says he hopes Krensky's priorities stay in the right place. Recalling a recent Krensky speech to the Federation of American Societies for Experimental Biology, he says he has a "good feeling" about Krensky: "He spoke to us all like a scientist and not yet like a government bureaucracy leader. I hope he can maintain his optimism and not find the government rules and regulations too stifling for his ideas." ■

Meredith Wadman writes for *Nature* from Washington DC.



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