

New National Academy Head Is No Stranger to Spotlight

Ralph Cicerone came to Washington, D.C., this month to lead the National Academy of Sciences—and walked smack into a hot climate debate

Last week, Ralph J. Cicerone showed the U.S. Senate what he might be like as the new president of the National Academy of Sciences (NAS): a politically savvy administrator who intends to make the voices of scientists heard in Washington, D.C., and beyond.

On consecutive days, the 62-year-old atmospheric scientist testified before separate panels examining the science of climate change. To the first panel, he explained firmly why the National Academies had waded into a fight brewing between an influential House committee chair and scientists whose research has linked rising temperatures with human causes by volunteering to look into the questions that Representative Joe Barton (R-TX) had raised about Michael Mann's work (*Science*, 22 July, p. 545). In the second, he addressed a legislator's concerns about the economic costs of capping greenhouse gas emissions by ticking off seven ways in which efficient energy use would help average Americans.

Colleagues say his performance, scarcely 2 weeks into his 6-year term as NAS president, was typical of someone who knows how to talk to politicians, peers, and the public. "He's very good at putting all the pieces together from different disciplines to provide a simple answer for societal questions," says atmospheric chemist Guy P. Brasseur of the Max Planck Institute for Meteorology in Hamburg, Germany.

Policy-oriented answers to complex problems are the academies' stock in trade. More than 200 times a year, it delivers measured judgments on issues from teaching evolution to energy policy. In 2001, while still chancellor of the University of California (UC), Irvine, Cicerone himself chaired a White House-requested academies' review of climate science that said human activities could result in higher temperatures, drought, and increased rainfall while noting uncertainties. "We were all on the hot seat," says botanist Peter Raven, who led the academy committee that nominated Cicerone to succeed Bruce Alberts. "But he really came through, with rigor and accuracy."

Although Cicerone called his back-to-back Senate appearances "probably more than I'd like to do," a busy, high-profile schedule is hardly a novelty for him. He maintained a productive research lab at Irvine during his 7-year stint at the helm, avoiding serious cuts

to programs and personnel despite a tough budget environment. Raven says that Cicerone's public relations and fundraising skills helped him nab the NAS job.

Cicerone began his career as an electrical engineer studying atmospheric plasmas. At the



Hot seat. New NAS President Ralph Cicerone prepares to testify at a Senate hearing on climate change.

University of Michigan, Ann Arbor, in 1973, he and Richard Stolarski showed that free chlorine atoms could decompose ozone catalytically, earning the pair a citation when UC Irvine colleague Sherwood Rowland won the Nobel Prize in 1995. His interests steadily broadened, from methane's role in greenhouse warming to climate change, and he reported his findings in regular testimony on Capitol Hill.

Cicerone spoke last week with *Science* about his new job. Here are excerpts from that conversation. —**ELI KINTISCH**

On his goals for NAS:

"In my lifetime, I think I've seen a pretty pronounced slippage of the public's enthusiasm for and understanding for science. And I'm going to try to get a number of academy members together and some of our staff to look at our past efforts on communicating and see what we can do better. ...

"I'm [also] really worried about the U.S. science and technology base. ... We have a couple of groups working right now to assemble some measures of how we track our progress and our relative standing around the world. ... We'll be working this one with the National Academy of Engineering and with scientific and engineering society leaders, too."

On the timeliness of reports:

"That's always been a criticism, but I think things have sped up a little bit. ... There have been some fast ones lately, like what to do with the Hubble [Space Telescope]. ... You couldn't take on the number of studies we're doing now if all of them were, let's say, 2-month turnaround. And I think by nature, many of the questions we're asked to look at are longer term, anyway."

On the number of women members:

"Last year's [entering class] was the all-time record, with 19 out of 72. ... We're doing better, but there are still a lot of ways in which

women are not being involved enough, like in our choice of award winners and officers of the academy. We've got a long way to go."

On his career progression:

"I think there's a real difference between leadership and management and administration. ... [In 1994] we had a fantastic dean of physical sciences who had to step aside for personal reasons, and they asked me to take over the job. I was out of town when the faculty met. ... [But] I've always enjoyed trying to do several things at once. Then when the opportunity came to be chancellor of the campus, ... someone said to me, 'You've complained a lot at the way other people do these jobs. Maybe it's time for you to try it.'"

On a funding gap between the life and physical sciences:

"In the physical sciences, I think there are many discoveries out there waiting to happen, largely because of our new capabilities in measurement. ... I think it was necessary to increase the portfolio for biological and health sciences, and I'm really glad we've done it. But the physical sciences have fallen too far behind."