

Signing on

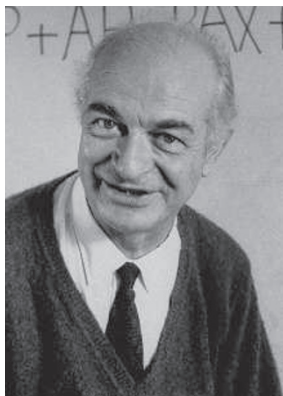
When you win a Nobel prize, you become much in demand. **Eric Sorensen** takes a look at how laureates decide which worthy causes to lend their name to.

Half a century has passed since chemist Linus Pauling spearheaded one of the biggest petitions ever in science. More than 11,000 scientists, including 36 of Pauling's fellow Nobel laureates, signed on to call for the "ultimate effective abolition of nuclear weapons". The petition led to the first international attempt to control nuclear weapons — the Partial Test Ban Treaty. And on the same day in 1963 that the treaty went into effect, the Norwegian Nobel Committee announced that Pauling would receive the peace prize to go with his 1954 Nobel Prize in Chemistry.

Scientific petitions graced by laureates have become common tools of activism — clamouring to free the unjustly imprisoned and cure a myriad of perceived ills, from drug laws to inadequate research funding to nuclear proliferation. Having a Nobel laureate's name on a petition almost guarantees it extra attention: in a newspaper story's first paragraph, if not its headline.

The past year alone has seen laureates' signatures on petitions to make publicly funded academic research available for free on the Internet; decriminalize homosexuality in India; raise the US minimum wage; decry the Bush administration's alleged politicization of science; and restrict the US president's authority to order nuclear strikes against nations without nuclear weapons. And last week in Jordan, about 35 laureates gathered at the third Petra conference to discuss major world issues; it concluded with the launch of a US\$10-million fund to bolster scientific projects in the Middle East.

As the high-powered scientific petition has grown, signature gathering has become its own industry. Leading the way is the watchdog group Union of Concerned Scientists in Cambridge, Massachusetts, whose 1992 World Scientists' Warning



Linus Pauling gained worldwide support for his petition to abolish nuclear weapons.



to Humanity on the environment was signed by about half of the living Nobel laureates in the sciences, for a total of roughly 1,700 researchers. Five years later, no fewer than 110 laureates signed the group's Call for Action on global warming.

Politicians also routinely summon laureates — or at least their signatures — to their pet causes. During the 1996 presidential race, Bill Clinton had seven Nobel laureates backing his budget plan; his Republican rival Bob Dole had four. In 2004, George W. Bush's campaign mustered only six Nobel laureates to deride the tax plan of Democratic nominee John Kerry, which had the backing of 10 Nobel economists.

And that illustrates a fundamental problem with the Nobels: tease out the inner workings of matter, and you become a Nobel laureate; sign a petition, and you become a number. Roald Hoffmann of Cornell University in Ithaca, New York, won the 1982 Nobel Prize in Chemistry. He says that laureates become a sort of commodity from the moment he or she is asked if their name can be used. "It's a kind of detachment of the person from the subject," he says. "Do they really want to know what I think? Or do they just want my name?"

As the number of Nobel-signed petitions has risen,

their value has decreased, says Peter Agre, who won the Nobel Prize in Chemistry in 2003 and is now vice chancellor for science and technology at Duke University School of Medicine, Durham, North Carolina. "The more you sign and respond to, the less valuable your service is," he says. Since winning the prize, Agre has signed petitions opposing the inclusion of intelligent design in science curricula and seeking leniency for an infectious-disease specialist charged with mishandling lethal biological agents. He also supported the candidacy of Kerry — along with 47 other laureates.

Great minds think alike

So how does a Nobel, newly inundated with fame and requests, sort through the competing, well-meaning demands for his or her time and name? For Agre, it means looking at who else is already involved; if he sees other respected names on a petition, such as Harold Varmus from the University of California School of Medicine in San Francisco and winner of the 1989 prize for medicine, then he's in.

Nicholaas Bloembergen, emeritus of Harvard University in Cambridge, an honorary professor at the University of Arizona and winner of the 1981 prize for physics, says that he is asked to sign petitions half a dozen times a year. He signs about once a year, acting as a physicist on scientific issues such as federal funding for research and as a well-read citizen on social issues such as overpopulation. He was, for instance, one of 41 laureates signing a protest against the Iraq

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war and one of 100 laureates to warn in 2001 that world security hangs on environmental and social reform.

Robert Solow, from the Massachusetts Institute of Technology in Cambridge and winner of the 1987 prize for economics, signs no more than half the times he is asked and he tries to stick to economics issues, recently advocating for a rise in the minimum wage.

Stairway to heaven

Solow says that: “The big difficulty is usually that you’re asked to put your signature to some statement that someone else has written.” If the statement is not in line with his thinking, he figures he has no business signing it; if he agrees with it in broad terms but not in specifics, he then asks if his disagreement with the author is minor enough. And he breaks little sweat over “general statements about peace and things like that. It’s not my specialty but I read it over and figure when I get to the pearly gates, St Peter won’t turn me away for favouring peace”.

Aaron Ciechanover of the Ruth and Bruce Rappaport Faculty of Medicine in Haifa, Israel, and winner of the Nobel Prize in Chemistry in 2004, faces a lot of local demands for his attention. He is often asked and signs a few petitions — for instance, a petition calling on Israeli prime minister Ehud Olmert to open contacts with Syria and Hamas, or a call

to the government in Sudan to stop the murder in Darfur. “I do not think that as a Nobel laureate my opinion is better or carries any extra weight than that of anybody else,” he says. “Yet I am guided by my principles and conscience and am voicing my opinion on issues I think are important. At the end, it may add up.”

Yet for all their celebrity, Nobelists seem to be decidedly weak instruments of social change. Leslie Gelb, Pulitzer prizewinning reporter for the *New York Times* and president emeritus of the Council on Foreign Relations, a non-partisan think tank based in New York City, says that he has seen petitions come and go over the past four decades. “I have not seen evidence that petitions change [the minds of] decision-makers,” he says. Gelb has routinely asked people in power if they had seen petitions in full-page advertisements, and nine times out of ten, he was told they had missed it.

And perhaps that’s not always a bad thing. “The big difference in life before and after you win a Nobel prize is there’s nothing you can say that’s so stupid that some magazine or newspaper won’t print it,” notes Solow. Others question the importance of some of these issues.

“There is no petition so stupid that it cannot get at least a handful of signatures from Nobel laureates,” economist George Stigler told a group of students at the University of Chicago in Illinois in 1970 — 12 years before he himself won the Nobel prize.

Even the best-intentioned petition can fail to measure up to its signatories’ hopes. For instance, the 1992 ‘warning to humanity’ encompassed a wide range of environmental issues, including ozone depletion, water pollution, declining fisheries, degraded soils, destroyed rainforests, species extinctions, overpopulation and poverty. Its release coincided with United Nations debate over actions outlined at the Earth Summit in Rio de Janeiro, Brazil, earlier that year. Yet few

newspapers gave it more than a brief mention. “It is a very powerful and beautifully written document and it was just totally ignored,” says Canadian biologist and broadcaster David Suzuki. “To me that is

a stunning indictment of the kind of society we have that scientists are marginalized by the media,” he says. Gelb, for his part, thinks that the laureates watered down their message by asking for too many things at once.

Still, laureates interviewed for this story would like to think that their support counts for something. The Nobel is a brand that many argue confers prestige and honour on petitions and their sponsors. “People like to put movie



Peter Agre’s work on water channels won him the 2003 Nobel Prize in Chemistry.

stars’ and sports figures’ names on petitions,” says Philip Anderson of Princeton University in New Jersey, who won the 1977 Nobel Prize in Physics. “Is there any reason a sports figure would know more about famine or any other issue?”

To many, the consequences of remaining silent are too great to ignore. “The majority of Nobel prizewinners are willing to use the ‘power of shame’ to inform the public about developments that should not be accepted,” says German physicist Klaus von

Klitzing, director of the Max Planck Institute for Solid State Research in Stuttgart, and winner of the Nobel Prize in Physics in 1985.

History repeats

Dudley Herschbach of Harvard University and winner of the 1986 prize for chemistry, sees his activism as part of a long American tradition that stretches back to Benjamin Franklin, the eighteenth-century statesman and scientist. As an active laureate, Herschbach sits on the board of the Council for a Livable World in Washington DC. This political-action group was created by physicist Leó Szilárd, the person who first imagined a nuclear chain reaction and the leader of the Manhattan Project petition that failed to keep President Harry Truman from using the atomic bomb on Japanese civilians. Herschbach, for his part, worries about the 1,000 tonnes or so of weapons-grade enriched uranium that exists in the former Soviet Union, and the very real possibility that the uranium will fall into the hands of terrorists. “Things like that,” Herschbach says, “you have to do what you can to get some attention.”

But even he is well aware of a laureate’s limits. Herschbach holds many of his field’s highest honours, yet accepts that many people were more interested when he appeared on an episode of the television show ‘The Simpsons’.

And perhaps it is just a symptom of democracy that a laureate may hold no more sway than any one else. “Each man counts for one,” says economist James Buchanan, “and that is that.” He should know. He won a Nobel prize. ■

Eric Sorensen is a science writer in Seattle, Washington. See Editorial, page 354.

“You have to do what you can to get some attention.”
— Dudley Herschbach



Nobel prizewinners William Lipscomb (left), Robert Wilson (middle) and Dudley Herschbach make light of their status.

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