Laureates speak at 50-year NINDS meeting

Despite winning the Nobel Prize in 1997 for his work, Stanley Prusiner is still stinging from years of fighting the scientific community's initial scepticism about his research into the cause of transmissible spongiform encephalopathies.

During a presentation at a two-day symposium at the United States National Institutes of Health (NIH) last month, held to mark the 50th anniversary of the creation of the National Institute of Neurological Disorders and Stroke (NINDS), Prusiner showed a slide depicting his critics as sharks sitting around a conference table.

Amid the tight security that has become routine at federal buildings since September 11, the NIH convened leaders in neuroscience research to discuss how the field has progressed in the past half-century and the prospects of future neurological therapies.

Prusiner's group has embarked on clinical research into treatments for new variant Creutzfeldt-Jacob disease (nvCJD), and during a panel discussion among Nobel laureates Paul Greengard and Torsten Wiesel (Rockefeller University) and Eric Kandel (Columbia University), Prusiner said that there is now a sufficient body of knowledge in so many fields of neuroscience that researchers can start to examine therapies in a rational way.

Based on initial data showing that the antimalarial drug quinacrine could clear the pathogenic form of the prion protein from cells, Prusiner's team has begun Phase III clinical trials of the drug to treat nvCJD patients. Although a temporary improvement of symptoms was seen in a 20-year-old woman, her condition continued to worsen over time.

Kandel's work into the basic processes of learning and memory—for which he won a Nobel Prize last year—is also leading the way to potential medicines. He has founded a New Jersey-based biotechnology company, Memory Pharmaceuticals, which identified its first drug candidates to prevent memory loss this year.

Despite the focus on therapies, the Nobelists stressed the importance of continued funding for basic research. Wiesel said that it is important to fund mathematicians, chemists, physics, along with biologists, because "technical developments have allowed major advances [in biology]".

Prusiner agreed, pointing out that

one limitation in his own research is the lack of sophisticated instruments to determine how proteins fold—advances that can only come through basic research.

On the subject of funding, the Nobelists attributed much of their own success and the significant progress of neuroscience research to generous fund-

ing by NIH. "NIH is a model of how science should be supported," said Wiesel. Kandel who trained at NIH in the late 1950s described NIH as "scientific Nirvana."

The praise comes at a time when the US Congress is considering the 2002 budget for the biomedical agency. As *Nature Medicine* went to press, the Senate Appropriations Committee had approved a \$3.4 billion raise for NIH, bringing the budget to \$23.7 billion for FY2002—an amount that would keep the NIH budget on track to double between FY1999 and 2003. The Senate figure was substantially higher than the \$2.5 billion increase proposed by President Bush and approved by the House.

Laura Bonetta, Bethesda

Courtesy of Arthur W. Toga, Laboratory of Neuro Imaging, UCLA

Wellcome combines population and disease teams

Britain's Wellcome Trust has long had an interest in two separate but closely related fields: the dynamics of population growth, particularly in developing countries, and the control and treatment of 'Westernized' diseases, such as diabetes and heart disease, which increasingly affect the industrialized world through changes in lifestyle and behavior.

Now the trust is to combine its support of research in these two areas into a new £65 million (US\$90 million) Health Consequences of Population Change (HCPC) research program. This will bring together Wellcome's Population Studies Programme, which was launched in 1995 partly in response to the lack of research in the field identified after the UN Population Conference in Cairo the previous year, with its separate Noncommunicable Disease initiative.

Positioned at "the interface between biomedical and social sciences," the

group aims to foster research training fellowships and project grants, and provide "a reliable evidence base to enable governments and health organizations to make the best use of scarce healthcare resources."

Officials at Wellcome point out that on the global scale, sweeping demographic and socio-economic changes are having a profound effect on patterns of disease, with significant implications for healthcare delivery. "The greatest impact of these changes will be in the developing world, where resources are scarce and public health infrastructure least develop," they point out.

A significant proportion of the funds for the program will be spent supporting work at centers of excellence that have already been established under the previous population studies effort in Southeast Asia, South Africa, Singapore and Lebanon. In addition, there are

plans to create a new center in Latin America, funding applications for which will be sought next year.

•HCPC will focus on five key 'drivers' of population change:

•Estimated population growth of 2.8 billion people in the developing world over the next 50 years and the extra pressure this will place on healthcare systems

•A dramatic increase over the next 25 years both in the proportion of young people and the size of the population over 65 years of age

•The impact of large-scale refugee movements on disease

•The similar impact of mass movement of individuals from the countryside to cities

•Widespread changes in lifestyle and behavior that are altering the illnesses experienced in developing countries.

David Dickson, London