

Ladies and Gentlemen

In 2004 The Norwegian Academy of Science and Letters received a most extraordinary communication from across the Atlantic and the American continent. Fred Kavli, a Norwegian-American former industrialist invited us to take part in establishing three new science prizes of Nobel Prize quality, in the fields of astrophysics, nanoscience and neuroscience. Fred Kavli wanted the Norwegian Academy to take the responsibility for organizing this, he wanted the Norwegian government as a partner to the enterprise, but the bulk of the expenses should be covered by his philanthropic foundation, the Kavli Foundation.

After a moment of stunned disbelief, the Academy realized the enormous potential of three such prizes, and we entered into a fruitful three part cooperation with Kavli Foundation and the Norwegian government in establishing a solid institutional and scientific basis for these prizes.

This presentation marks the opening of the call for nominations to the Kavli Prizes, of one million dollar each. The nomination of candidates will closed 15<sup>th</sup> of December, the prize winners will be announced 4<sup>th</sup> of June, and the award ceremony will take place for the first time in Oslo in September 2008. . In connection with the prize awards The Norwegian Academy will arrange international symposia on select subjects related to the fields of the prize-winners.

I will shortly go on to tell you some more about the prizes and the award procedure, but first I think it is both proper and useful invite Fred Kavli to tell us more about his background and his visions.

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REMARKS by FRED KAVLI  
AT THE U.K. BA FESTIVAL OF SCIENCE  
SEPTEMBER 9, 2007 (draft)

Good afternoon.

Wow, this is practically like being back on old stomping grounds. I spent a summer in Manchester working at ICI (Imperial Chemical Industries) during my student days. That was back in 1954 – a long time ago. I grew up in Norway, and three days after I finished my graduation exercise at The Technical University in Trondheim, I boarded the S.S. Stavangerfjord for my journey to America – retracing the path of my father who came to America when he was 15 years old and lived in San Francisco for 13 years before he came back to settle down and have a family in Norway.

I came to Canada first – and after working for one year as an engineer in Montreal, I headed for California. In 1956, I flew to Vancouver and traveled down the coast to San Francisco, but I decided that San Francisco had too much fog and I continued on to Los Angeles – preferring eternal sun and summer to the dark and cold winters of Norway.

After two years in California, and just three years out of college and in a foreign country, I put a small ad in the Los Angeles Times newspaper stating “Engineer seeking financial backing to start own business”. I got several offers of backing and the ad turned out to be the beginning of my own company: Kavlico, where I developed and manufactured sensors for aerospace, automotive and industrial applications.

During my business career, I had long planned to start a Foundation to do something of value for humanity using the wealth I had accumulated, and when I sold my company in 2000, after 42 years in business, I started The Kavli Foundation.

The Kavli Foundation supports science through an international network of 15 institutes. In Europe at Cambridge University through The Kavli Institute for Cosmology and at Delft University through The Kavli Institute of Nanoscience and at The Norwegian University of Science and Technology in Trondheim, through The Kavli Institute for Systems Neuroscience; in China at Peking University, through The Kavli Institute for Astronomy and Astrophysics and at The Chinese Academy of Sciences through The Kavli Institute for Theoretical Physics and in the United States through institutes at the University of California Santa Barbara, Stanford University, the University of Chicago, Massachusetts Institute of Technology, California Institute of Technology, Cornell University, Yale University, Columbia University, University of California San Diego, and Harvard University.

The Kavli Foundation also supports science through the Kavli symposia, the Kavli Professors, and The Kavli Frontiers of Science put on by the U.S. National Academy of Science.

I came to support basic science because of curiosity and because I believe in its long-range benefit. Science helps us live healthier lives. Practically everything we touch in our daily lives have been improved or developed through basic research. The progress of our entire standard of living is tied closely to the fruits of science and research.

Most of the funding for science comes from government support. In order to motivate the public to give their support, and get the politicians to provide the funding, it is important that science gains visibility, that people understand what science is about and its benefits, and that we stimulate peoples’ curiosity.

Starting next year, three major international prizes will be awarded in Oslo in a partnership between the Norwegian Academy of Science, the Norwegian Ministry of Education and Research and The Kavli Foundation. The prizes will round out our world-branded comprehensive effort to promote science, to reward the best scientific work and to give it more visibility among the public. The President of the Norwegian Academy of Science and Letters, Professor Jan Fridthjof Bernt will tell us more about the prizes.

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The Kavli Prizes are established through a partnership agreement signed the 3<sup>rd</sup> of May 2005 by the Kavli Foundation, the Norwegian Government and the Norwegian Academy of Science and Letters. The prizes will be awarded on a bi-annual basis.

The recipients of the prizes will be selected by three distinguished panels of leading international scientists in each field, appointed by the Norwegian Academy on the basis of recommendations from The Royal Society (UK), The US National Academy of Science, The Max Planck Society, The French Academy of Sciences, and The Chinese Academy of Sciences. The Norwegian Academy appoints the chairs of the prize committees.

Some may think that it is a rather backward looking approach to the challenges of science on the 21<sup>st</sup> century to focus on awarding past achievements rather than supporting new research. The Kavli prizes are, however, far from being backward looking. They express a forward looking vision on developing and supporting sciences.

This is *firstly* reflected in the choice of topics for the prizes. They are dedicated to what is likely to be three of the most important and extremely, dynamic fields of modern science, exploring on one hand the outer universe, and on the other the inner universe of man and the material world that surround him.

*Secondly* the forward looking vision of the Kavli prizes is reflected in the format of the award proceedings. We shall indeed celebrate the prize winners with an award ceremony and a grand banquet, but this is only one part of the celebration.

Science does not happen in the head of the individual scientist. A scientific statement is an act of communication, and as a consequence of this it is a major goal for the Kavli Prize to enhance and create a new arena for scientific discourse on a high level.

Consequently the prize winners will have to sing for their supper. We shall arrange three major symposia in the fields of the prize-winners and invite the foremost experts in each field to share and debate their views and experiences from the frontlines of science.

*Thirdly* the Kavli Prizes also reflect the insight that a major challenge for science to day is to be a voice that is both heard and listened to in a national and global context.

Science has so much to offer in terms of improving the material and intellectual quality of human life. But it is a voice that is not always heard or taken seriously.

Two thousand scientists expressing concern about global warming are lucky if they get the same media coverage as one dissenter claiming that this is not a problem. And in some countries it appears to be no safer way to media attention

and even research funding than advocating the theory of “intelligent design” as an opposition to Darwinistic evolution theory.

At the same time lack of interests in and enthusiasm for research on the side of public and private funding organizations is a considerable problem in several fields. There simply is not enough knowledge of the quality and importance of basic research among the decision makers.

In this situation it is important that we make an effort to draw attention to high quality research and excellent scientists. We have to “sell” science to the general public,

An award of Kavli prize quality, one million dollars, granted on the basis of a recommendation from an expert committee of the most outstanding scientists in the field, is a strong statement and a good vehicle for creating interests in science. We also expect the symposia arranged in connection with the award ceremony to generate considerable public attention of the fields and issues in questions.

Finally, we hope that the awards and the activities connected to them may also serve as a means to recruit young talent to research in these fields. We may say that while the prize winners are our showcases and ambassadors for science, the most important addressee for the Kavli prize activities is the next generation of students and young scientists.

It is necessary to work to generate enthusiasm for research. Without enthusiasm true science cannot exist. The main goal of the Kavli prizes is to express, create and reward such enthusiasm.