

## The Norwegian Academy of Science and Letters:

(originally published: ALLEA Biennial Yearbook 2006; updated: January 2009)

### History

The Norwegian Academy of Science and Letters celebrated its 150<sup>th</sup> anniversary in 2007. It was established as a non-governmental learned society in 1857 on the initiative from a group of professors at the Royal Frederik's University, today the University of Oslo. From being mainly a personal network of high ranked scholars, the Norwegian Academy of Science and Letters is taking on a new role in connection with the promotion of science in society.

The Norwegian Academy of Science and Letters has been given the responsibility for the Abel Prize in mathematics and the Kavli Prizes which were awarded for the first time in 2003 and 2008 respectively. The establishment of these important science prizes has increased the Academy's significance and visibility both nationally and internationally.

### The Academy's mission

The main purpose of the Academy is the advancement of science and scholarship in Norway. It provides a national forum of communication within and between the various learned disciplines, and it represents Norwegian science vis-à-vis foreign academies and international organisations. The Academy fulfils these functions by initiating and supporting research projects, by organising meetings and seminars on topics of current interest, by publishing scientific and scholarly works, and by participating in and nominating representatives to various national and international scientific bodies.

### Organisation

#### *Members*

The Academy has 240 ordinary (i.e. under age 70) Norwegian members and 150 ordinary foreign members. A seat becomes vacant when a member turns 70. Including members over 70 years of age, there are presently 862 members. The Academy is divided into two classes, one for mathematics and the natural sciences, and one for the humanities and social sciences. Within each class there are eight groups.

#### *Organization*

The board of the Academy has nine members; the President, Vice President and Secretary General as well as the Chairmen, Vice Chairmen, and Secretaries of the two classes. For each of the groups there is a group leader.

The board of the Norwegian Academy of Science and Letters in 2009 comprises President: Øyvind Østerud and Secretary General: Reidun Sirevåg, as well as Vice President: Nils Christian Stenseth, and Anne-Brit Kolstø, John Grue, Øystein Elgarøy, Jan Terje Faarlund, Eivind Smith and Gunhild O. Hagestad.

H.M. King Harald V is honorary president of the Academy.

### *Economy*

The Academy receives an annual grant from the Norwegian government and additional funding through co-operation agreements with Norwegian industry and by revenue from various endowments.

### *The Academy's house*

The Academy address has since 1911 been Drammensveien 78, located in one of the noblest residential areas in the western part of Oslo and near to the city centre. The mansion was built in 1886-87 by a wealthy tradesman and politician, Hans Rasmus Astrup (1831-1898) and designed by Herman Major Backer (1856-1932), one of the prominent architects in Norway. The house is built in a German influenced neo-renaissance style.

## **Activities**

The Norwegian Academy of Science and Letters does not own any institutes, but is taking active part in several research foundations through representation on their boards. This includes the **Centre for Advanced Study (CAS)** that is located in the Academy building where it hosts three parallel international research groups each year within the natural sciences, social sciences/law, and the humanities. The Centre for Advanced Study is mainly funded by the Norwegian government but also receives contributions from the Norwegian Academy and Science and Letters. For more information consult the webpage [www.cas.uio.no](http://www.cas.uio.no).

### *An exceptional partnership*

VISTA is a research programme established in 1985 by the Norwegian oil company Statoil, now StatoilHydro, and the Norwegian Academy of Science and Letters. The clearly stated purpose, which has been the guideline ever since, was to provide support and help develop sound Norwegian basic research in fields that are significant for the development of the oil and gas industry.

Scientists at Norwegian universities are invited, through VISTA, to apply for project sponsorship for their PhD programmes and post-doctoral students. VISTA's ambition is to fund approximately 25 projects each year. In addition the programme supports VISTA professorships.

In 2008 Statoil Hydro and the Norwegian Academy of Science and Letters signed an agreement to collaborate for a new five year period. It means that 75 million NOK will be allocated to petroleum related basic research over the next five years. For more information consult the webpage [www.vista.no](http://www.vista.no).

### *The Abel Prize in mathematics*

In 2002, the Norwegian Parliament established the Niels Henrik Abel Memorial Fund in order to award an international prize for outstanding scientific work in the field of mathematics. The prize shall contribute towards raising the status of mathematics in society and stimulating the interest of children and young people in mathematics. The Fund had an initial capital of NOK 200 million. The annual return of this capital is allocated to the Norwegian Academy of Science and Letters which is responsible for the award to the Abel laureate and for other uses of the funds. The prize amount is 6 million NOK. King Harald, the Academy's Honorary President, presents the Abel Prize to the laureates.

The Abel Prize is awarded annually. The Norwegian Academy of Science and Letters appoints the Abel Committee that consists of five prominent mathematicians recommended by the International Mathematical Union and the European Mathematical Society. The Academy's board selects the Abel laureate on the basis of the recommendation from the committee.

The Abel Prize, which was first awarded in 2003 to Jean-Pierre Serre, has become a highly recognized international prize. Outstanding mathematicians from all over the world are involved in the award and also in the yearly symposium and selection procedure of candidates. In addition, programs for promoting mathematics at several levels in the Norwegian school system have been initiated.

#### *Abel Prize laureates 2003 – 2008*

The Abel Prize is an international prize for outstanding scientific work in the field of mathematics, including mathematical aspects of information technology, mathematical physics, probability theory, numerical analysis and computational science, statistics and applications of mathematics in other sciences.

- **2003:** Jean-Pierre Serre, Collège de France, Paris
- **2004:** Sir Michael Francis Atiyah, University of Edinburgh and Isadore M. Singer, Massachusetts Institute of Technology
- **2005:** Peter D. Lax, Courant Institute of Mathematical Sciences, New York University
- **2006:** Lennart Carleson, Royal Institute of Technology, Sweden
- **2007:** Srinivasa S. R. Varadhan, Courant Institute of Mathematical Sciences, New York
- **2008:** John Griggs Thompson, University of Florida and Jacques Tits, Collège de France

For more information about the Abel Prize: [www.abelprisen.no/en/](http://www.abelprisen.no/en/)

#### *The Kavli Prize – science prizes for the future*

In 2005 the Norwegian Academy of Science and Letters was given the responsibility for the administration of three other international prizes; the Kavli Prize in astrophysics, nanoscience and neuroscience. The Kavli Prize was initiated by the Norwegian-American businessman and philanthropist Fred Kavli, and established as a joint venture between The Kavli Foundation, the Norwegian Ministry of Education and Research and the Norwegian Academy of Science and Letters.

The agreement between the three parties emphasizes the responsibility for creating networks and procedures for promoting nanotechnology, neurosciences and astrophysics at the highest level. The Kavli Prize, which consists of \$ 1 million for each scientific field, a gold medal and a scroll, is awarded every two years.

#### *Nomination and selection of the Kavli Laureates*

The Norwegian Academy of Science and Letters appoints one prize committee for each of the three fields, astrophysics, nanoscience and neuroscience. The members of the committees are selected by the Academy after receiving recommendations from the following scientific organizations:

- The Chinese Academy of Sciences
- The French Academy of Sciences
- The Max Planck Society (Germany)
- The National Academy of Sciences (US)
- The Norwegian Academy of Science and Letters
- The Royal Society (UK)

The Board of the Academy selects the Kavli Laureates on the basis of recommendations from the committees.

The names of the first Kavli Prize winners were announced on the 28<sup>th</sup> of May 2008 by the President of the Norwegian Academy of Science and Letters, Ole Didrik Lærum. The announcement event at the Academy in Oslo was transmitted live to Columbia University, New York, as a part of the opening of the World Science Festival.

- **The Kavli Prize in Astrophysics** was awarded jointly to Maarten Schmidt, of the California Institute of Technology, US, and Donald Lynden-Bell, of Cambridge University, UK, both of whose work underpins our understanding of quasars.
- **The Kavli Prize in Nanoscience** was awarded jointly to Louis E. Brus, of Columbia University, US, and Sumio Iijima, of Meijo University in Japan, for their respective discoveries of colloidal semiconductor nanocrystals, also known as quantum dots, and carbon nanotubes.
- **Kavli Prize in Neuroscience** was awarded jointly to Pasko Rakic, of the Yale University School of Medicine, US, Thomas Jessell, of Columbia University, US, and Sten Grillner, of the Karolinska Institute in Sweden, who collectively have deciphered the basic mechanisms that govern the development and functioning of the networks of cells in the brain and spinal cord.

These seven pioneering scientists received their prizes from His Royal Highness Crown Prince Haakon at an award ceremony at Oslo Concert Hall on the 9<sup>th</sup> of September 2008.

The second Kavli Prize will be awarded next time in 2010. For more information: [www.kavliprize.no/](http://www.kavliprize.no/)

Facts about the Norwegian Academy of Science and Letters

### **International co-operation**

The Academy has international scientific co-operation agreements with sister academies in the Baltic States, Poland, Hungary, France and Great Britain. The Academy represents Norwegian research internationally in the “International Council for Science” (ICSU), including its many sub-organisations, and in the “Union Académique Internationalé” (UAI), the “European Science Foundation” (ESF) and “ALLEA” (All European Academies). Very recently, in 2008, the Norwegian Academy of Science and Letters became a member of International Social Science Council (ISSC).