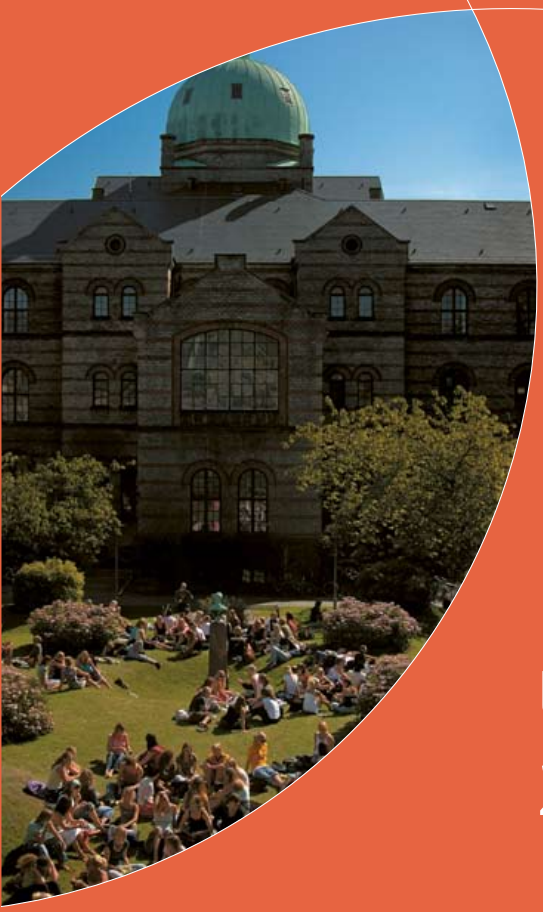
UNIVERSITY OF COPENHAGEN



University Life 2007

The University of Copenhagen's Programme of Excellence

In November 2007, the University of Copenhagen awarded approximately DKK 350 million to 20 outstanding research projects. The Programme of Excellence is a new initiative that allows researchers to apply for funding for ongoing or new research. Each project can apply for a maximum of DKK 5 million a year for five consecutive years.

The first 20 recipients of Programme of Excellence grants are:

- **Professor Ulrik Gether**: Biomolecular scaffolding of neutrontransmitter receptors and transporters (BioScaRT)
- **Professor Michael Sørensen**: Statistical methods for complex and high dimensional models
- **Professor Carsten Rahbek**: Center for Macroecology and Evolution - How to explain distribution of life on Earth
- **Professor Thomas Bjørnholm**: Single molecule nanoscience
- **Director Kristian Helin**: Epigenetics and cancer
- **Professor Jacob Weiner**: Evolutionary agroecology
- **Associate Professor Jette Sandholm Kastrup**: Ionotropic glutamate receptors as targets for structure-based drug research
- **Associate Professor Kim Ryholt**: Canon and identity formation in the earliest literate societies
- **Professor Carsten Elbro**: Development of speed in reading
- **Associate Professor Jens Elmegård Rasmussen**: The roots of Europe – language, culture and migrations
- **Associate Professor Lene B. Oddershede**: Dynamic genetics
- **Professor Eske Willerslev**: Copenhagen High Throughput Sequencing Facility
- **Professor Jesper Grodal**: Symmetry and deformation
- **Lecturer Martin Bizzarro**: Stardust to planets – unraveling the origins of the solar system
- **Professor Claus Bundesen**: Integrated visual attention research
- **Professor Christian Schultz**: Economic policy in the modern welfare state
- **Professor Ole Wæver**: CAST: Centre for Advanced Security Theory
- **Professor Lars Hviid**: Membrane topology and quarternary structure of key parasite proteins
- **Professor Henrik Clausen**: Copenhagen Center for Glycomics
- **Professor Troels Engberg-Pedersen:** Naturalism and Christian semantics

Year one at the new University of Copenhagen

The University of Copenhagen merges, it is steered through its first year by a transitional Board, and it develops a new strategy – *Destination 2012*. With 2007 behind us, the merger can be considered complete: The University of Copenhagen is now a united university with eight faculties.

The University of Copenhagen had a special transitional Board throughout 2007. The existing Board was expanded to include representatives from the Boards of the two merger partners, increasing to an exceptional amount of 17 members. Thanks to the remarkable discipline displayed by all members, the transitional Board was a success.

In spring 2007, the Board passed the *Destination 2012* strategy for the University. The Rectorate was both the driving force and the body responsible for the process, which led to productive discussions among Board members and between the Board and the Rectorate. The process also included a written hearing at the University and an open meeting for employees and students.

The transitional Board negotiated a new development contract with the Ministry of Science, Technology and Innovation in 2007. With the merger in mind, the Minister asked each of the merging universities to prepare a new development contract to apply from 2008 to 2010. The existing development contract will therefore expire on 31 December 2007, one year earlier than originally specified.

The University of Copenhagen is now pursuing its new strategy while striving to achieve the goals set in the development contract. However, the Board considered it necessary to draw attention to the strategic direction of development outlined in *Destination 2012*, and therefore asked the Rectorate to draft a proposal for an action plan during 2008. This proposal should identify a number of key indicators that may be used to measure the performance of strategic initiatives. The action plan is expected to be passed in early autumn 2008.

One of the preconditions of the merger was that new articles of association would be written. The Board chose to use the University's existing articles of association as a template and make the changes necessitated by the merger and the three amendments to the 2007 University Act. One of the issues discussed in this debate was the size and composition of the Board. It was decided that as of January 2008, the Board should return to its usual size of 11 members.

The six new external members of the Board were selected at a meeting in autumn 2007, and the election results for the five internal Board members were announced in December 2007.

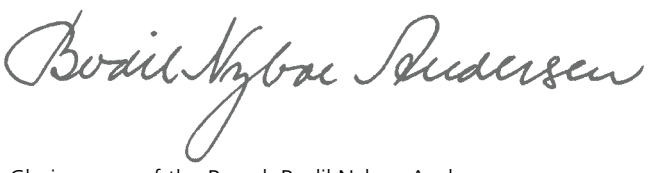
The Board approved the opening balance for the newly merged University in spring 2007 and passed its first consolidated budget in December 2007. The University's annual report, *University Life 2006* featured the political agreement on globalisation research funds, which the University had

PHOTO: HEINE PEDERSEN

looked forward to receiving in order to build a better platform for long-term planning and investment in research and education. However, a range of cutbacks has put a hold on increased funding for the University.

The University of Copenhagen's total annual budget is approximately DKK 6 billion, of which State Budget grants comprise DKK 4 billion. In the State Budget proposed in December 2007, the University's grant was raised by DKK 25 million from 2007 to 2008. A healthy sum, but only 0.4 percent of the total budget. With this in mind, it is important that the expectations of the University population and the general public are in line with the actual level of funding.

From 2008, the merger process will be considered complete, although a number of projects are still to be finalised. The time has come for us – and the outside world – to view the University of Copenhagen as one university with eight faculties rather than a merger of three existing universities. ■



Chairperson of the Board, Bodil Nyboe Andersen.

The Board 2007– key decisions

6 February 2007
Open meeting for the entire University on the submitted strategy.

21 March 2007
The Board approved the University's strategy, *Destination 2012*.

18 April 2007
The Board approved the annual reports from the University of Copenhagen, the Royal Danish Veterinary and Agricultural University (KVL), and the Danish University of Pharmaceutical Sciences (DFU).

25 September 2007
The Board approved the campus plan and opening balance for the newly merged University.
The Board also approved the University's development contract and gives the Rectorate and Chairperson of the Board the mandate to negotiate with the Ministry of Science, Technology and Innovation.

9 November 2007
The Board appointed external board members as of 1 January 2008.

18 December 2007
The Board passed the budget for 2008 and approved the University's articles of association as of 1 January 2008.

PHOTO: SØREN HARTVIG

Henrik Clausen's discovery of enzymes that can convert all blood types to blood type 0 is heralded as one of the top 10 scientific breakthroughs in 2007.

Professor Henrik Clausen is one of the masterminds behind the discovery of two enzymes that can quickly and easily transform blood types A and B into the precious blood type O. This breakthrough will save money, keep blood banks supplies topped up, and prevent fatal medical errors.

Blood alchemists

Every year, blood banks all over the world spend valuable resources on acquiring sufficient reserves of blood type O. Blood types A and B are easy to obtain, but blood type O is in short supply at most blood banks. The reason for this is fairly straightforward: Almost everyone can take blood type O, which is why this type is often used in critical situations when there simply isn't time for blood tests.

If blood type O was used for all blood transfusions, complications and mistakes could be avoided – and lives could be saved.

"Most people are afraid of catching HIV, hepatitis and other infectious diseases from blood transfusions. But actually the risks of complications arising from the wrong blood treatment are even greater," explains Professor Henrik Clausen, Faculty of Health Sciences.

Lifesaver

Emergencies are typically what cause the overuse and shortage of blood type O. If a mistake is going to be made with the wrong blood type, it's most likely to happen in emergency situations. For example, when a patient is rushed to hospital with a gunshot wound and must get to the operating theatre immediately. Doctors and nurses are fighting the clock to save the patient and, in a moment of haste, the wrong bag of blood is taken. In Denmark, this mistake costs one life a year; in the USA, more than ten lives a year are lost this way.

The problem is especially serious in large countries such as the USA with its many different population groups. One blood type often dominates in a specific group, but it's not necessarily the same groups of people that are giving and receiving blood.

The perfect enzyme

The shortage of blood type O prompted Henrik Clausen and his team of researchers to find a solution. A single sugar molecule determines the antigens for blood type A and B – people with blood type O don't have this molecule. As early as 1982, Jack Goldstein discovered that enzymes could remove this sugar molecule from the surface of blood cells.

The problem was, however, that the enzyme Goldstein used to convert blood type B was not that effective. It cost approximately DKK 4,000 for the one to two grams of enzyme needed for every transfusion bag, which made the method unfeasible in practice.

Henrik Clausen's research team started by defining the appearance of a perfect enzyme and then began screening

Number four worldwide

Wired, the American technology and innovation magazine, selects Henrik Clausen's discovery as number four on the list of top 10 scientific breakthroughs in 2007.

Copenhagen Center for Glycomics
Henrik Clausen is head of ICMM's Center for Glycomics, which was recently approved for one of the University's Programmes of Excellence. His research team is exploring the diverse biological functions of complex carbohydrates – from blood products such as universal blood to biomarkers for specific diseases.

2,500 bacteria for a match. They found two enzymes – one for each blood type (A and B). These enzymes were gentle on red blood corpuscles, they only reacted against A and B blood, and they could effectively convert both blood types into blood type O.

A thousand times more effective

The two enzymes are up to 1,000 times more effective than Goldstein's enzyme and can convert one bag of blood into blood type O at very low cost.

"The main advantage of our discovery is that it effectively removes the risks involved in performing blood transfusions. But the discovery can also save blood banks a lot of money. Now, they no longer need to spend so much on replenishing their supplies of blood type O; they can simply convert the A and B types they already have in store," says Henrik Clausen.

Blood banks also avoid wasting large amounts of blood. Until now, blood banks have had to discard a lot of A and B blood as it only keeps for 42-days.

The method, which is currently being tested in clinical trials in the USA and Norway, is expected to be introduced in blood banks in four to five years. ■

Highlights of 2007

Selected events at the University of Copenhagen.

1.1. The Danish University of Pharmaceutical Sciences, the Royal Veterinary and Agricultural University of Denmark and the University of Copenhagen merge, making the University the largest university in Scandinavia (measured by number of researchers). Two new faculties are formed: The Faculty of Pharmaceutical Sciences and the Faculty of Life Sciences.

1.1. Dr Anne Tybjærg Hansen, Consultant Physician (Department of Diagnostic Radiology) and three other European partners are awarded a Specific Targeted Research Project (STREP) grant of DKK 24 million from EU's Sixth Framework Programme for their project, *HDLomics. Functional genomics of inborn errors and therapeutic interventions in high density lipoprotein (HDL) metabolism.*

9.1. An international kick-off meeting is held for a research project on urban development. The University of Copenhagen receives EUR 7 million to lead the project, which has 31 partners from 15 countries. The project will help to balance environmental and development issues in European urban regions.

10.1. Danish pork must preserve its status of excellence, competing on quality rather than price. To ensure this, the Danish Meat Research Institute is taking part in one of the most comprehensive EU research projects on meat ever implemented. The project has a DKK 150 million budget and will be led from Denmark by Professor Anders H. Karlsson from the Department of Food Sciences (the Faculty of Life Sciences).

15.1. The Centre for Cultural Analysis launches a new supplementary training programme in interactive and digital media with funding from the Danish Ministry of Education. The target group is teachers of Danish at upper secondary level. Nicolai Knudsen, MA, is responsible for developing and implementing courses during 2007.

15.1. Assistant Professor Jógvan Isaksen (Department of Scandinavian Research) receives the Heiðursgáva Landsins 2006 Award at a function in The Nordic House, Tórshavn. A cherished author and publisher, Isaksen receives the award for his dedicated efforts within Faroese culture.

19.1. According to new research results published in the international journal, *Science*, we probably use our spinal cord as well as our brain to think. This surprising conclusion was reached by two researchers from the University of Copenhagen: Professor Jørn Hounsgaard and post.doc. Rune W. Berg.

Tasty chocolate and fairer trade

Better food for consumers and higher profits for the African producers. Those are the promising prospects for a project run by Danish researchers to strengthen expertise in Africa's food industry. One result is a new method that transforms Ghana's cocoa into world-class chocolate.

Fermenting cocoa beans in wooden boxes is a simple way of improving and refining the quality of chocolate. Professor Mogens Jakobsen and his research team from the Faculty of Life Sciences made this discovery while studying the cocoa bean and its fermentation process with their African partners from the Cocoa Research Institute of Ghana.

Traditionally, cocoa beans ferment while heaped in cone-formed piles on the ground and covered with leaves from the banana tree. This kind of fermentation gives an uneven supply of oxygen. But that's not the case with fermentation in wooden boxes. Here, oxygen is more evenly distributed, which produces a higher-quality product.

The method is good news for chocolate lovers in Denmark and other countries that import cocoa beans from Ghana. And it's also good news for the African farmers who can get more out of their raw materials and better prices for their products. The wooden boxes are currently being used at a research station that will spread the successful method to the Ghanaian cocoa farmers.

Seeing that the advantages of using the boxes for fermentation were outstanding, Mogens Jakobsen decided to share the discovery with the Danish chocolate producer, *Toms*, which buys all its cocoa beans in Ghana. At *Toms*, they know precisely what this new discovery means:

"Fermentation in wooden boxes produces a better quality, which will result in better chocolate in the long run. We believe that we can produce a chocolate that is just as good as the finest and most expensive chocolates in the world, which are produced from the expensive Caribbean cocoa beans," explains Jesper Møller, CEO of *Toms*. He hopes that by 2008 *Toms*' consumers will be sinking their teeth into the tasty new chocolate.

Education and accreditation

Cocoa beans and farmers are not the research team's primary focus in Africa; they are there to educate high-calibre international researchers. Since 1997, the team has trained eight PhD graduates, who have returned to their native countries to put their ideas into practice and improve food production.

Five new scholars are on their way. The African researchers are extremely qualified and figure as principal authors of 40 articles published in famous international journals.

The most recent PhD student is James Parkouda from Burkina Faso, who is investigating whether the fruit of the baobab tree is suitable for food production. Danish students also benefit from the collaboration between the Faculty of Life Sciences and the Ghanaian Cocoa Research Institute, as it provides them with the opportunity to spend a couple of months visiting their African partners.

Another important result of the Danish-African partnership is the new ISO 17025-accredited laboratory, Food Research Institute. The research team furnished this laboratory from top to bottom with the right equipment for conducting analyses and has given the staff quality assurance training in line with the ISO 17025 standard.

Today, the laboratory has about 100 employees offering analyses for the food industry on a national scale. Mogens Jakobsen is the initiator and driving force behind the accreditation, which was achieved in May 2007.

Better conditions for farmers

Personal commitment is the driver behind the researchers' efforts and results. Mogens Jakobsen is passionate about Africa, and he cannot reconcile himself to the injustices he sees:

"Africa is usually seen as a supplier of cheap raw materials that western producers buy, process and sell to consumers at huge profits. By studying African crops and building up an accredited laboratory, we can guarantee western buyers high-quality products while ensuring African farmers higher prices for their goods," explains Mogens Jakobsen, who has been improving conditions for African farmers for the past 10 to 15 years. ■

Toms might go to Ghana

The collaboration with the Danish chocolate manufacturer *Toms* has prompted the company to consider establishing its own chocolate solids production in Ghana. With funding from *Danida's* Public Private Partnership Programme, *Toms* has hired a Ghanaian PhD student to study the aromatic components of the cocoa bean.

Fermenting cocoa beans in wooden boxes helps Ghanaian farmers to produce a better product – good news for African farmers, chocolate manufacturers and Danish chocolate lovers.

PHOTO: CHARLOTTE BERGHOF

19.1. The University of Copenhagen launches a new international Programme of Excellence that supports outstanding research to the tune of DKK 65-75 million a year over the next five years. Each project can receive a maximum of DKK 5 million a year. Entry to the programme is based on the projects' scientific quality – assessed, among others, by international experts within the given field.

23.1. The Minister of Culture, Brian Mikkelsen, reveals the winning *History Book of the Year* for 2006. With over half the total votes, the award and DKK 25,000 go to Professor Hans Bonde (Department of Exercise and Sport Sciences) for his book on Danish sports' links with Germany before and during the occupation.

25.1. A total of 11 researchers at the University of Copenhagen receive the *Elite Researchers Award* together with millions of Danish kroner for research. Two of the 11 researchers, Professor Dan Zahavi (Department of Media, Cognition and Communication) and Professor Rasmus Nielsen, (Department of Biology) receive the Ministry of Science, Technology and Innovation's top *EliteForsk Award* worth DKK 1 million. The other nine researchers receive the *Young Researchers Award* from the Danish Councils for Independent Research.

25.1. Henning Bro, MA receives this year's *Workers' History Award* for his PhD thesis on Danish Building and Housing Policy 1850-1930. The PhD defence took place at the SAXO Institute (Faculty of Humanities) in 2006.

26.1. The University of Copenhagen's long-awaited alumni association gets the green light.

26.1. The Danish National Research Foundation's first professorship in Islamic studies goes to Jørgen S. Nielsen (photo) from the University of Birmingham, UK. As Professor at the Center for European Islamic Thinking at the Faculty of Theology, Jørgen S. Nielsen will continue his research on Islam in Europe. At the same occasion, the Foundation awards a professorship to John Robert Couchman, Head of the Department of Biomedical Science, Imperial College, London, UK. This professorship is held by the Faculty of Health Sciences.

PHOTO: HEINE PEDERSEN

The man who might find life on Mars

PHOTO: SØREN HARTVIG

Eske Willerslev finds old DNA under the permafrost and pieces together the history of life. He attracted more worldwide publicity than any other Danish researcher in 2007.

"It's been a good year. Two articles in *Science* and one in *PNAS*. And three separate media storms," says Professor Eske Willerslev adding:

"My definition of a media storm is when you have to take two mobile phones with you to the bathroom. For four days, media representatives from all over the world bombarded me with questions. *CNN*, *NBC*, *New York Times*. All of them. Fifty times a day, I would give the same explanation. After four days, I was pretty exhausted. But then it stopped."

We are at the Department of Biology, and Willerslev's office clearly suggests that design and interior decorating are not his main interests. Across the table, among piles of paper and empty cola cans, lies a colossal bone. "Mammoth," says Eske Willerslev with a nod.

In bones, under permafrost and in ancient layers of earth researchers find remnants of DNA from people, animals and plants from the past. New technology has created a vital breakthrough in our scope for understanding and documenting the history of the planet and life itself.

Willerslev and his 23-strong research team, Ancient DNA and Evolution, are working in a field at a time when major new discoveries are coming thick and fast. According to the Danish magazine, *Ingenioren*, Eske Willerslev had a greater international impact in 2007 than any other Danish scientist.

Finding new answers in old DNA

"In 2007, we published an article about the ice cap melting away during the most recent period of global warming, when temperatures on Greenland were five degrees higher than today. It was generally believed that the ice in southern Greenland completely melted away at that time. We showed that some of the ice remained. That created quite a stir in the media," explains Eske Willerslev.

Another flurry of media attention followed the article in which the research team documented the world's oldest DNA from a living organism. A bacterium, half a million years old, and from a living cell. They found the well-preserved bacterium DNA beneath the permafrost. "A discovery like that puts ageing into perspective," says Eske Willerslev.

"Right now we're awaiting peer review on two articles. One investigates what happened to the large mammals. Why did the mammoths, sabre-toothed cats and woolly rhinos disappear? Some people say it happened about 11,000 years ago. Some think they were hunted to extinction by man. Others claim their extinction was due to climate change. But no one has ever qualified the debate on the subject," Eske Willerslev explains.

Professor Eske Willerslev has found the oldest bacteria on the planet and is turning American history upside down. In 2007, he was the Danish scientist who attracted most international attention. He prefers researching "relatively big questions". Life on Mars might be next.

Previously, researchers had to rely on the bones and imprints available to determine facts about life on the planet thousands of years ago. Today, soil samples can be used to show whether mammoths lived in a specific region at a given time in history.

In the same way, we can trace the first humans as they made their way into the American continent. It's generally thought that America was unpopulated until 11,500 years ago, and that the first people to arrive here were Asiatic types, who, according to some researchers, came this way because they were hunting mammoths. However, Professor Willerslev's latest research, published in spring 2008, refutes this theory. His research team has analysed DNA from human faeces that proves to be 14,300 years old.

"We now know the DNA remains in the faeces from the first humans in that part of the world and may conclude that the ancestors of present-day Indians *were* in fact the first Americans," says Eske Willerslev.

Next stop Mars?

According to Eske Willerslev, the new discoveries and analysis methods open up research perspectives that extend beyond the history of life on Earth.

"When you can find bacteria on Earth that is more than half a million years old, what might you find on Mars? We'll have to go further back than half a million years to find a climate in which life as we know it was possible. On the other hand, the permafrost is colder on Mars than it is on Earth and that would keep the bacteria alive longer. It may be possible to find living bacteria or a trace of DNA-based life. Our research team is leading the way in the field of fossilised DNA, so we may well be asked to take the enquiry further," says Eske Willerslev. If so, he wouldn't say no.

"If you're the researcher who proves there's been DNA-based life on Mars at some point, then you'll have done your bit – for research and for mankind," he smiles. ■

30.1. The University of Copenhagen and the Danish biopharmaceutical company, *NeuroSearch* establish a five-year industrial professorship within heart research. This new kind of industrial professorship will involve joint employment by the University and a company. These positions are set up to create more synergy between basic and applied research. Denmark's first industrial professor will be Morten Grunnet, leader of the Department of Cardiophysiology at *NeuroSearch*.

5.2. Leader of the *Danish Social Democrats,* Helle Thorning-Schmidt speaks at a beginning-of-term meeting in the Ceremonial Hall. This marks a new semester kick-off tradition for students (SemesterKickOff) where current issues are discussed. Thorning-Schmidt's speech is followed by a debate on the University's study environment in which the University's Student Council and Pro-Rector Lykke Friis take part.

PHOTO: LIZETTE KABRÉ

7.2. Pioneering international research featured in *Science* and led by Professor Carsten Rahbek from the Department of Biology, questions the popular belief that the distribution of species on the planet is determined exclusively by the contemporary climate.

8.2. An international team of researchers cracks the genetic code of decomposed plant material. This discovery blazes a trail for solving murders, mapping climate conditions in the past and improving food safety. Professor Eske Willerslev from the Centre for DNA and Evolution takes part in the project.

14-24.2. The Department of Cross-Cultural and Regional Studies (ToRS), together with the Indonesian Embassy, the Thai Embassy and Copenhagen City Hall stage the exhibition, *Tsunami Afterwards: Reconstructing Lives.* The exhibition features a collection of works by students at the Department of East-Asian Studies.

14.2. Analysing DNA from prehistoric animals speeds up as Danish PhD student Jonas Binladen develops a method that allows researchers to quickly distinguish one sequence of DNA from another.

16.2. The Danish National Research Foundation pledge DKK 15.7 million to the Centre for Subjectivity Research for the period March 2007 to February 2012. The money will be used to finance the centre's new research programme, The Self: an integrative approach.

20.2. Emeritus Professor Peter Naur is the first Dane to receive ACM's *Turing Award*, computer science's version of *The Nobel Prize*. The University of Copenhagen hosts an honorary lecture to celebrate the occasion.

PHOTO: SØREN HARTVIG

Rector Ralf Hemmingsen and Pro-Rector Lykke Friis welcome 700 researchers from the newly merged University of Copenhagen, and the quest for interdisciplinary research platforms begins.

Only a few weeks after the university merger, the Rector and faculty Deans invited all researchers to what was probably the largest interdisciplinary team-working session the world has ever seen. The result: 12 unusual proposals for future research.

When 700 researchers brainstorm

2,000 yellow, green, pink and orange post-it notes. That's the first tangible result of 700 researchers' collective brainstorming session. These pieces of paper, which decorate the walls of the *Radisson SAS Falconer Hotel & Conference Centre*, feature words such as 'Geoinformatics', 'Risk perception' and 'Urban concentration'.

It's Wednesday 17 January 2007. The year is as new as the merger between the Danish University of Pharmaceutical Sciences, the Royal Danish Veterinary and Agricultural University and the University of Copenhagen. The Rectorate and the eight faculty Deans have invited all researchers at the newly merged University to a 'merger take-off seminar'. 700 researchers accepted their invitations and, for the first time in the history of the University, they will meet to generate ideas for joint research projects.

The day begins with speeches by Rector Ralf Hemmingsen and Helge Sander, Minister of Science and Technology and the official sponsor of Denmark's new university structure.

From post-it notes to research platforms

How will the scientific synergies from the merger be achieved? The question beckons from the walls covered in post-it notes. During the weeks and months following the take-off seminar, ideas are transformed into 12 research platforms – interdisciplinary research projects collectively conceived by researchers from eight different faculties. Now that the research projects are finalised, the University is ready to apply for grants from relevant funds.

The 12 research platforms

1. Living conditions, environment and health in developing countries
2. eResearch
3. Natural resources and the environment
4. Science, ethics and communication
5. The universe of the cell
6. Identities
7. Food, fitness and pharma for health and disease
8. Migration – movement of people and the development of societies
9. Future technologies
10. Globalisation challenges: spaces, powers and cultures
11. Welfare and democracy
12. The brain, mind and medicines

The folder, *Meeting the future* briefly presents the 12 interdisciplinary research platforms and can be downloaded at www.ku.dk/synergi/english/.

One of the enthusiastic participants at the take-off seminar was Dean Sven Frøkjær from the new Faculty of Pharmaceutical Sciences:

"The amount of effort and the dynamics invested in the process has meant that we, as a new faculty, have been introduced to the University's professional scope and strength – right from advanced humanities to hardcore natural sciences. This has happened in record time. If this integration process hadn't been facilitated so quickly and efficiently, it would have taken several years," he says. ■

PHOTO: SØREN HARTVIG

21.2. With DKK 20 million from the *Lundbeck* Foundation, the Biotech Research and Innovation Centre (BRIC) appoints Swedish-Iranian Professor Shohreh Issazadeh-Navikas new group leader. Her research into immune defence mechanisms and the central nervous system is expected to significantly enhance our understanding of inflammatory and neurodegenerative diseases and cancer.

23.2. The *McKinsey Award* of DKK 10,000 for the best draft report submitted in the economics programme during the autumn term, 2006 goes to Geoffrey S. Gaisford and Atef M. R. Qureshi, both economics students, for their draft *Crime and Punishment – The Effect of Sanctions Against People on Unemployment Benefits in Denmark*. Economics student Trine Tornøe Platz receives the *Champagne Award* for her report, *Kidney Exchange and the Roommate Problem.*

1.3. Tanzania's President, Jakaya Mrisho Kikwete gives a guest lecture in the Ceremonial Hall. In his lecture, the President argues that only through education will Africa build sufficient capacity to manage on its own. This can be achieved if affluent countries donate USD 500 million annually over a period of 10 years.

PHOTO: SØREN HARTVIG

1.3. *SFK Technology* and the Faculty of Life Sciences have developed a 3D infrared spectroscopy method that quickly and precisely identifies the content and nutrients in food by measuring the composition and quality of fatty substances. As a result, consumers can look forward to improved quality and safety in the food industry.

5.3. Researchers from the Biotech Research and Innovation Centre (BRIC) have identified a new group of proteins that are essential for regulating stem cell differentiation. The discovery is published in *Cell*, one of the most prestigious scientific journals in the world.

6.3. Researchers from the Department of Food Sciences prove that it is possible to prepare a chicken by submerging it in a water-filled metal container and subjecting it to underwater pressure equivalent to a depth of 80 kilometres. This innovative new method results in healthier food, as the pressure treatment kills bacteria without affecting the taste or nutrient values of the food.

C for climate, congress and Copenhagen

Everyone is talking about the climate. The University of Copenhagen is doing more than talking. In 2007, a major investment was made within the area of climate research and education, and in 2009 the University will host the International Scientific Congress on Climate Change. The University also wants to minimise its own contribution to global warming.

An International Scientific Congress on Climate Change, an ambitious reduction target and a series of lectures on climate change. These are just some of the elements in the ambitious climate initiative that the University of Copenhagen presented in autumn 2007.

According to Pro-Rector Lykke Friis, universities have three important roles to play in future climate policies. Research and development can generate new knowledge on climate change, and, most importantly, develop new environmentally friendly technologies. Education can help educate future climate stakeholders – from political consumers to ministers and officials. And finally, the universities can make a direct contribution by minimising the emission of greenhouse gasses by setting their own ambitious reduction targets.

"The top universities in the world have helped generate our current knowledge on climate change. But universities must also play an active role in finding solutions. At least that's what our University will be striving to do in the years ahead," explains Lykke Friis.

A scientific congress on climate change

The focal point of the University's climate initiative is an International Scientific Congress on Climate Change, to be held in Denmark in March 2009. The main results of the congress will be compiled and handed to the UN Climate Summit (COP15) in Copenhagen in autumn 2009.

These results will include a "climate policy toolbox" that leaders of government can use when deciding how to reduce global warming in the future.

Since climate challenges are by definition global, the majority of the University's climate activities will be carried out in cooperation with the star alliance of universities. This alliance, which the University helped establish in 2006, is also know as IARU and consists of the University of Copenhagen, Australian National University, University of California/Berkeley, University of Cambridge, University of Oxford, Peking University, National University of Singapore, the University of Tokyo, Yale University and ETH-Zürich.

PHOTOS: HEINE PEDERSEN

Green campus

Clear reduction targets for the University's buildings and operations, described in day-to-day terms as 'Green campus', will also be defined as important parts of the University's climate initiative. This will also happen in an IARU context, as all ten universities in the alliance have committed to pass a collective climate plan. In spring 2008, the ten Rectors will agree which elements to include in the plan. Naturally, the universities will take advantage of the opportunity to learn from each other as well. The University of Copenhagen has already entered into close cooperation with Yale University, which has set targets for reducing its CO2 emissions by 43 per cent from 2005 to 2020.

"Before we can set realistic reduction targets for our own university, we need to map our current emissions. As with any diet, we must climb on the scales first to find out how bad things are – this also gives us a yardstick for measuring – and celebrating – small victories along the way," emphasises Lykke Friis, who has visited Yale herself to gain inspiration for the University's own sustainability activities.

As a part of the Green campus efforts, students can take part in the *Green Relay*, a competition to devise the most innovative energy-saving idea. Other features of the climate initiative include students working on sustainability during international summer schools, work experience training and new courses. ■

Keep up with the University's climate initiatives at www.climate.ku.dk.

Climate debate

Communication with students and the public is an important element of the University's climate initiative. From January 2008 and up to the UN Climate Summit to be held in Copenhagen in 2009, the University will be putting the climate up for debate. This will be done partly through a series of lectures by researchers, politicians and business people. Richard C. Levin, President of Yale University, will give the first lecture in the Ceremonial Hall on 21 January 2008.

Pro-Rector Lykke Friis and Margrethe Vestager, leader of the Danish Social-Liberal Party fire the starting shot for the energy-saver competition, Green Relay.

8. 3. Researchers worldwide welcome a new computer programme developed by researchers from the Technical University of Denmark (DTU) and the University of Copenhagen. The programme speeds up the development of medicine to combat genetic diseases by mapping genes and their complex interaction. The research results are published in the scientific journal, *Nature Biotechnology.*

17-18.3. The meeting of cultures is the theme for this year's Humanities Festival, which includes discussions of topics such as masculinity and gastronomy, hot names for babies and Borneo's last nomads. The festival is held at the University's South Campus.

PHOTO: RIE KJÆR POULSEN

19.3. Nadia Lyhne Larsen, recently graduated M.Sc. of Medicine from the University of Copenhagen, receives the *Danish Society for the History of Medical Science's* Student Prize of DKK 10,000 for her OSVAL-II project, *The existence of hysteria*.

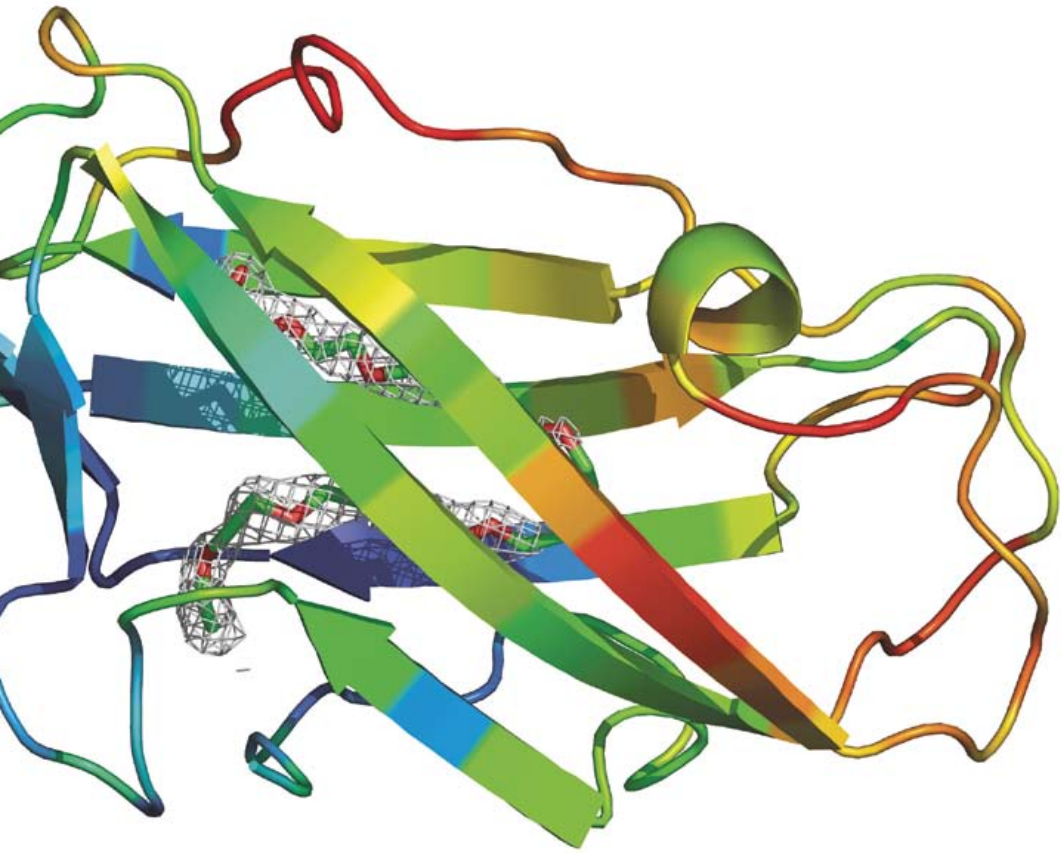
20.3. Mogens Herman Hansen, classical philology lecturer at the University of Copenhagen for 40 years, travels to Stockholm to receive the distinguished Gad Rausing Award. The prize of SKR 800,000 is awarded for his work, *Copenhagen Polis Centre* – an extensive basic research project that explores political culture in Antiquity, establishing that political thinking began in the city-states.

21.3. Professor Claus Felby from the Faculty of Life Sciences and Senior Engineer Jan Larsen from DONG Energy receive the *Bayer CropScience Innovation Award.*

21.3 Consultant Physician Steen Larsen, MD, Dr.Med. and PhD student Filip Krag Knop, both part of Professor Jens Juul Holst's team, have received EUR 100,000 for their project, *Incretin physiology and beta-cell function before and after remission of Type 2 Diabetes.* The funds are given by the European Foundation for the Study of Diabetes (EFSD) and Novartis' European Programme for Clinical Research in the Field of Pancreatic Islet Dysfunction.

22.3. As a public outreach initiative, the University of Copenhagen and many of the other 12 participants in the Øresund University consortium launch a portal to communicate experience-based research. The website features specific cases posted by the individual universities.

Life's second language



Proteins are the building blocks of life, and a new research centre at the University of Copenhagen will map how they function and interact in cells and tissues. This research can create new methods to develop medicine. *The Novo Nordisk Foundation* has donated DKK 600 million to this centre.

At its most basic level, human life is complicated biochemistry. Biology's great manual is passed down through the genes, but it's the proteins that are the building blocks of life and get the essential chemical signal processes going. Every cell in the body contains our DNA. Depending on the cell's location in the body, the DNA creates completely different proteins. On their way around the body, proteins change, move, divide and gather in a complex biochemical interaction. This is what life is all about – from a biological point of view, at least.

"We've only scratched the surface of protein variations and how their interaction creates biological activity. There's still a lot of exciting work in front of us," says Michael Sundström, Managing Director of the new *Novo Nordisk Foundation* Center for Protein Research (CPR). The donation of DKK 600 million from the *Novo Nordisk Foundation* in 2007 has made it possible to establish this Center at the University's Faculty of Health Sciences.

It appears that the human genome contains a maximum 25,000 protein-coded genes. They create up to a million different protein variations, each with their own critical function in the human organism. If the DNA code is life's first language, the task for the new CPR will be to decode life's second language: that of the proteins.

Six research departments

The CPR will identify the relevant proteins in disease mechanisms through a combination of computer modelling and laboratory studies, then investigate and confirm their functions in cell biology studies, and eventually understand part of their function.

The CPR will include a core facility for biotechnology and chemical biology, led by Michael Sundström. It will be responsible for training in large-scale production (high throughput) as well as for the description of human proteins.

Professor Matthias Mann will be in charge of the Proteomics Department. This section will apply new breakthroughs in mass spectrometry to identify and study thousands of proteins and their biochemical interactions. This extensive study, which is part of The Humane Proteome project, can lead to new biomarkers that indicate certain diseases – in the same way that a pregnancy test reacts to certain hormones in urine.

The Department for Systems Biology, lead by Professor Søren Brunak, will focus on proteins' role as transmitters, the link between disease, genes, proteins and chemistry. This department will also carry out textual analysis of electronic patient journals, biobanks and biomedicinal literature.

PHOTO: BENT BØRGESEN

Chairman of the Board at the Novo Nordisk Foundation, Ulf J. Johanson (right) together with the Minister of Science, Technology and Innovation Helge Sander, Rector Ralf Hemmingsen and Dean Ulla Wewer.

The CPR will include three other research departments, which will focus on basic disease understanding, among other things. Heads of departments will be appointed during 2008.

A very exciting time

The Faculty of Health Sciences is in the process of establishing the CPR in the Panum Building, and the first laboratories will open in the beginning of 2009. When the centre is running at full strength, it will be the workplace of more than 100 employees.

The CPR will cooperate with experts from all over the world and is already attracting top international researchers. Besides strengthening research at the Faculty of Health Sciences, the CPR will position the University of Copenhagen as one of the world's leading institutions in protein science.

Dean Ulla Wewer received the donation from the *Novo Nordisk Foundation* at a large celebration on 20 April 2007. She looks forward to a centre of excellence that investigates how proteins look, function and interact in cells and tissue, in the healthy as well as in the diseased body.

"With its brilliant scientists, the CPR will strengthen basic research and potentially establish ground-breaking methods for developing new medicine. We're entering a very exciting period," she says. ■

Read more about the Novo Nordisk Foundation Center for Protein Research at www.cpr.ku.dk

23.3. An international research team, including the Danish Professor Minik Rosing from the Geological Institute, discovers that the continents started forming as early as 3.8 billion years ago – 700 million years after the planet was formed. This ground-breaking discovery is featured in *Science*.

29.3. A consortium of the University of Copenhagen, two other universities and six Danish companies receives DKK 16 million from the Danish Council for Technology and Innovation to establish a new Center for Immunomics. Working with industry and universities, the new research centre will explore the potential for helping the immune system prevent and fight illness and will study the effects of various ingredients, medicines and diet supplements on diseases.

30.3. PhD student Paul Sharp from the Department of Economics presents his article, *On the Origins of the Atlantic Economy* at *the Economic History Society's* annual conference, held at the University of Exeter, UK. He also receives an award for best article written by a young researcher.

2.4. Mads K. Jepsen, Bjørn Petersen and Simon Spoorendonk from the Department of Computer Science win the *DORS Award* for the best dissertation in Denmark, 2004-2005 in the field of operational analysis and optimisation. The award winners have devised a system for calculating the shortest possible routes for vehicles driving from a central depot to customers.

5.4. The acclaimed international journal, *Nature* reveals the news that researchers from the University of Copenhagen – including physicists Lene Oddershede and Professor Henrik Clausen from the Niels Bohr Institute – have discovered a method for producing "universal blood".

10.4. Under the heading *Global health*, the University of Copenhagen hosts an open meeting entitled *Women and health in developing countries* with WHO's new Director General, Dr. Margaret Chan and Minister for Development Cooperation, Ulla Tørnæs as guest speakers. The meeting reflects the University's growing commitment to global health.

16.4. Many doctors are unsure what medicine to prescribe for patients suffering from depression, and only 60-70 per cent of the patients experience a beneficial effect from antidepressants, according to Professor and Consultant Physician, Lars Vedel Kessing. Assisted by a research team from the University of Copenhagen, Professor Kessing has compiled a comprehensive report on the source of the problem.

18.4. Assistant Professor Jørn Boisen (Department of English, Germanics and Romanics) and Professor Gretty M. Mirdal (Department of Psychology) are presented with the Order of the Academic Palmes *(Ordre des Palmes Académiques)* at the French Embassy in Copenhagen. Dean at the Faculty of Science, Professor Nils O. Andersen also receives the Order of the Academic Palmes for

More self-study workstations, better Internet access and longer library opening hours. In 2007, the Rectorate's efforts to improve the University's study environment show results. Next on the agenda: day care and sports facilities at all campuses.

A landmark year for the study environment

2007 was the year the University of Copenhagen really put words into action when it comes to improving its study environment.

Making improvements to the study environment is no longer the responsibility of the individual faculties – the Rectorate takes a keen interest in this area as well. In 2007, the University Board set aside DKK 6.5 million of its strategy budget to finance a range of initiatives aimed at improving the University's study environment.

One of the goals was to establish 1,000 new workstations for self-study. All in all, the University created 1,139 new self-study workstations this year – each within range of a wireless Internet connection. Libraries' opening hours have also been extended, and an innovation pool to fund local study environment projects has been set up.

These were all focus areas high on the students' wish list, according to Thorkild Damsgaard Olsen, whom the Rectorate commissioned early this year to look into the University's study environment and libraries. Damsgaard Olsen has been a member of the Governing Board at the Faculty of Humanities for 25 years, and has spent the last 13 years as the Prodean.

The library at the Centre for African Studies before it was equipped with self-study workstations ...

More than nice facilities

Although a lot was achieved in 2007, the efforts to create a well-functioning, interdisciplinary study environment that everyone is happy with have only just begun. The University of Copenhagen aims to create an environment that promotes a diverse range of activities and strengthens student learning by providing self-study areas, meeting spaces and informal café milieus. The Board would still like to provide more activities to help all students socialise with one another across faculty and programme divides.

The Rectorate proposed a range of interdisciplinary activities in 2007. These included events such as Semester Kick Off meetings, ElectionMeeting prior to elections, and ElectionBar for Students, all of which packed the University banqueting hall. The ElectionBar included a virtual dimension that gave students the chance to contribute before, during and after the event.

But it takes more than attractive facilities and exciting social activities to create a good study environment. "We have to take all aspects of student life into account and consider which services the University can offer to make campus life run smoothly. We want all students to enjoy their experience here. For example, the latest campus proposal calls for on-campus day care facilities," explains Thorkil Damsgaard Olsen. He hopes that future campus plans will include proposals for more services along these lines.

PHOTOS: JAN FRIIS JENSEN

… and after.

Online booking and common standards

Besides day care facilities, the University hopes to establish 2,000 extra self-study workstations. The aim is to have one station per 4.5 students and to set up a system so that students can book their study stations and meeting places online.

In 2008, the University is to draw up and implement new standards for its study environment. This will include defining standards for furniture to meet requirements for ergonomic design, quality and sustainability. The Board has plans for more study environment improvements in the forthcoming year. However, the budget for such spending will not be granted before the Board has seen the results of last year's campus workshops and study environment assessments.

Thorkild's hobbyhorse

Thorkild Damsgaard Olsen knows exactly what he hopes the University will go for when it comes to improving the study environment.

His own personal hobbyhorse is to create an inclusive study environment where everyone can join in and nobody will feel left out due to handicap or ethnic background. His other hobbyhorse is sports facilities.

"We have so many students in each of the five campuses, and it's clear that we need sports facilities where students from all faculties can meet."

Thorkild Damsgaard Olsen recognises, though, that sports facilities require a lot of money and space. While he acknowledges that these requirements do not tie in very well with the University current situation, he hopes the Board will be able to come up with a creative solution. ■

his long-standing association with the French research environment and his dedicated efforts to promote exchange programmes for researchers and students from France and Denmark.

18.4. New research into lymphoma reveals that bacteria can cause cancer to become more aggressive. According to a study carried out by Danish researchers from, among others, the Department of Molecular Biology, patients with lymphoma of the skin may benefit from antibiotic treatments used to fight infections. The study is funded by the Danish Cancer Society and its results have been published in the latest edition of the eminent journal, *Blood*.

26.4 Assistant Professor Karsten Vrangbæk (Department of Political Science) and consultant Ian Røpke from the Danish management consultancy, *Rambøll Management* wins the Danish Regions' competition for best dissertation. Their study is entitled *Managing the Hospital Service of the Future*.

29.4. The University of Copenhagen joins in the international launch of the newest broadband technology for universities. This technology allows simultaneous transmission of data, sound and images at a previously unmatched quality and speed. The launch begins with a free concert arranged by *The Philadelphia Orchestra* and *MAGPI*.

30.4. The largest donation in recent history goes to research at the University of Copenhagen. The *Novo Nordisk Foundation* donates DKK 600 million for a new Protein Research Centre.

4.5. Professor Niels Peder Kristensen from the Natural History Museum of Denmark is appointed honorary member of *Gesellschaft für Biologische Systematik*. This is the first time the German-Austrian-Swiss scientific company has chosen an honorary member with no roots in a German-speaking country.

9.5. During the Swedish royal family's first official visit to Denmark in 32 years, the Swedish Crown Princess Victoria visits the Faculty of Life Sciences, together with H.R.H. Crown Prince Frederik.

11.5. Today, gender and ethnicity rather than social class determines Copenhageners' pronunciation. In fact, young people with foreign backgrounds are the prime movers behind language developments, according to a survey of 80 ninth graders from a school in Copenhagen. The person behind the survey, Marie Maegaard wrote her PhD thesis at the University of Copenhagen on variations of pronunciation and change.

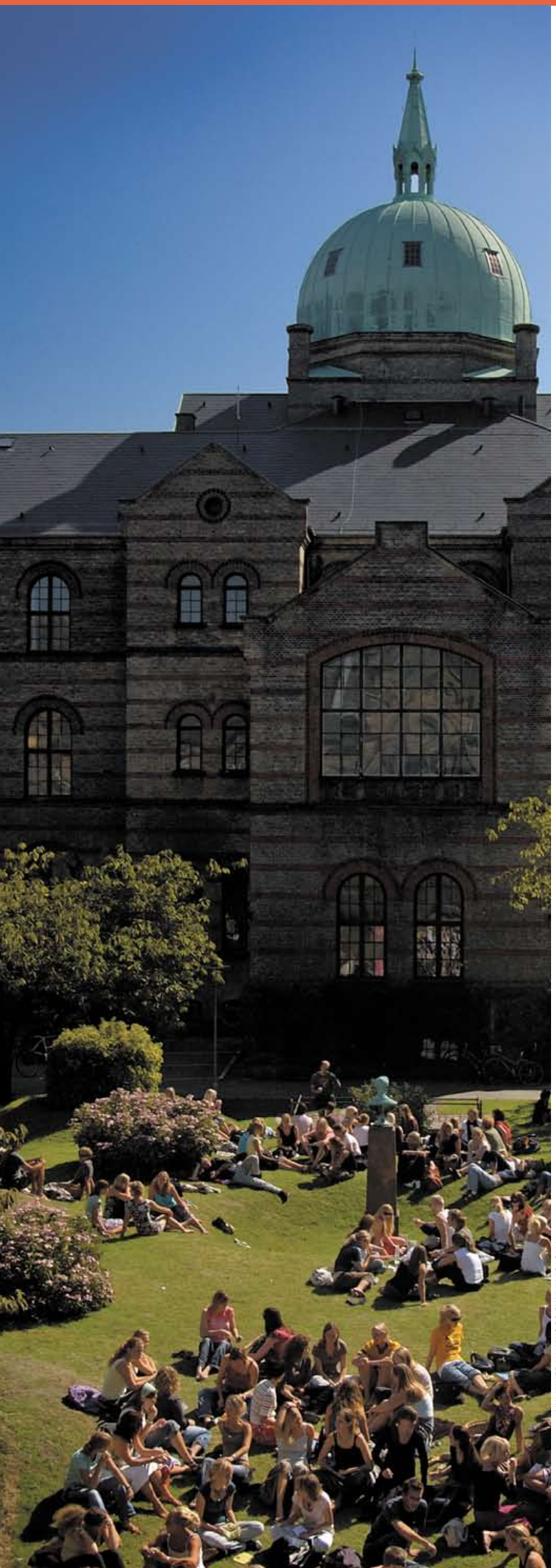


PHOTO: HANNE BECKWITH LEHMANN

Copenhagen's former municipal hospital has been transformed into a vibrant part of the city's cultural and academic environment.

New life in historic buildings

His Royal Highness Prince Joachim officially opened the Centre for Health and Society (CSS) on 1 October. This occasion marked the University of Copenhagen's take-over of the city's municipal hospital. These historic buildings from the 1800s have been transformed and are now part of a modern university – and a new, spacious auditorium has also been added.

Approximately 6,000 students and 900 fulltime employees work at CSS. They come from the Faculty of Health Sciences and the Faculty of Social Sciences, as well as the National Institute of Public Health and the Central Research Unit of General Practice.

With CSS, conditions for a completely new, knowledge-sharing environment have been created. The building now houses both health and social sciences research, and researchers with related academic interests are within reach of each other. ■

World-class cancer research

Basic research of international standard, better medicine and *Nobel* prizes. Much is expected from the new Biocenter – this was made abundantly clear in the speeches given at the Biocenter's opening. With its own research school, state-of-the-art equipment and a knowledge-sharing environment, the facilities are so good that the Biocenter will be able to attract young research talents and the world's leading cancer researchers.

The 30,000 m2 building houses 130 employees and 14 research groups from five research units:

- The Capital Region of Denmark's experimental research units, the Bartholin Institute and the Finsen Laboratory
- Biotech Research and Innovation Centre (BRIC)
- The Institute for Molecular Biology (the Faculty of Life Science)
- Parts of the Faculty of Health Sciences

Minister of Science, Technology and Innovation, Helge Sander participated in the opening of the Biocenter on 13 September. ■

PHOTO: HELLE BLÆSILD

The newly built Biocenter is located in the University Park, on the corner of Jagtvej and Tagensvej.

22.5. The University of Copenhagen hosts a major 'Entrepreneur Day' where business people and students meet to explore the potential for new enterprises and companies. In cooperation with the Confederation of Danish Industries (DI), the Faculty of Science has developed a range of initiatives for students, among them a mentor scheme that matches students with managing directors from private companies. Students are also offered courses on entrepreneurship, workshops and company dating events.

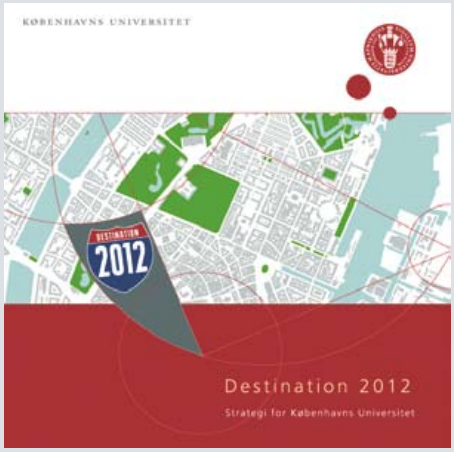
23.5. Assistant Professor Kasper Møller Hansen, (Department of Political Science) receives the prestigious *Rudolf Wildenmann's Best Paper Prize* for his contribution to the Joint Sessions of the European Consortium for Political Research held in Nicosia, Cyprus 2006.

30.5. PhD student Martin Aagesen, physicist at the Nano Science Centre publishes details of a new discovery: While writing his PhD, Martin stumbled on a new and untested material that transmits solar cell energy much faster and more effectively than conventional materials. Long-term, Martin Aagesen's invention will have both environmental and financial benefits.

31.5. Two students from the University of Copenhagen and their company, *CSP.NET* win the annual *Venture Cup* for a programme library that makes computer programming easier.

1.6. A newly developed method from the University of Copenhagen for studying embryonic diseases is launched across Europe and Asia.

1.6. The University of Copenhagen's *Destination 2012* strategy is published on the university's 528th birthday. The University of Copenhagen aims to make focused investments in outstanding basic research to ensure its position as a highly respected university internationally, and a leading academic institution in Europe.



DESIGN: KAREN KRARUP

6.6. Minister of Science, Technology and Innovation Helge Sander rewards the winners of an essay competition issued by the Danish University and Property Agency on the study environment of the future. Lise Nielsen, a student at the Department of Scandinavian Studies and Linguistics, wins first prize of DKK 25,000.

Art for ears

"Memento mori – remember you will die. Take a will from the box on the wall …" That's what you would have heard in your earphones at the art museum, ARKEN's summer exhibition. On iPods, visitors could hear the first results of a close partnership between ARKEN and students from the University of Copenhagen. The result was an exhibition that sought to break with tradition.

PHOTOS: THOMAS BUSK

A team of students from the Modern Culture and Cultural Communication course worked closely with ARKEN to prove that it's possible to listen to an exciting art exhibition.

Students from the Department of Art and Cultural Studies gave the summer exhibition at ARKEN, *Pictures of People* an untraditional soundtrack: a series of podcasts developed specially for the exhibition.

Unusual sound treatment and a range of props added an extra dimension to the artistic experience. Challenging the way art is perceived and experienced, the *ARKoustic* project provided students with a unique opportunity to put their knowledge into practice in a new and exciting media.

Future art exhibitions

The students' audio works were produced as part of a course in digital communication in the Modern Culture programme. The idea for a soundtrack to the summer exhibition came from ARKEN; the museum was very clear about their intention of letting a team of students experiment with audiovisual expression.

Christina Papsø Weber, the curator who came up with the idea of working with university students, explains:

"There's so much potential in audiovisual media which may enhance the museum experience. ARKEN's curators can easily cope with the more traditional exhibitions, but when it comes to untraditional approaches to art communication, we've really learnt a lot from the students."

Two former faculty students, Jutta Jessen Hansen and Nina Nørgaard Jensen, put the course together. Based on their joint dissertation on sound and experience-based communication, they were taken on to help the students:

"We've worked on creating an intense and controlled spatial experience using sound. In this way, the student's contributions become works of art in their own right. Some people might find this provocative, but it's been important for us to

establish an alternative to the traditional objective and fact-based approach to art communication," explains Jutta Jessen Hansen.

Echoing reality

For Caroline Enghoff, one of the students who worked on producing two of the series' eight audio works, it's been particularly challenging to work with sound as a means of communication.

"At university, we're expected to present all our work in text format. Communicating in sound follows completely different principles, so this project has forced us to cast off our analytical spectacles and think out of the box," says Caroline Enghoff.

Caroline was attracted by the hands-on working methods of this course. Thanks to the partnership with ARKEN, the course has reflected the way a professional curator actually works.

"To begin with, we went to ARKEN to pitch our ideas to the curator of the exhibition. It was the first time that I'd experienced having my ideas taken seriously as a student. Right from the beginning, ARKEN has treated the project as a professional consultation. We have also been responsible for getting the process up and running, which has involved budgeting, press conferences and the exhibition's opening," explains an enthusiastic Caroline.

At ARKEN, there're no doubts about the project's success. Christina Papsø Weber says that the students' podcasts provoked an invigorating discussion about how to take advantage of audiovisual media for future exhibitions.

The students' sound productions have received favourable reviews from critics, and ARKEN already has plans to work with a new team of students for their winter exhibition. ■

New course in IT and cognition

The Faculty of Humanities launched a new Masters course in IT and Cognition in autumn 2007. Key words in this programme are human cognition, computer modelling, user interfaces and the interplay between humanity and technology. IT is having an ever-increasing impact on everyday lives, company processes and products. In the various courses offered students will learn how to create IT products that can improve people's everyday lives.

9.-10.6. Six law students from the University of Copenhagen win a Nordic competition in Stockholm on human rights.

11.6. Highly affluent Danes are less susceptible to poor health and live considerably longer than the poorest members of the population – even though Denmark is a wealthy country where economic inequalities are among the least pronounced in the world. This is illustrated by figures and statistics collected by Professor Finn Diderichsen, MD, (Department of Public Health) over the past 20 years.

22.6. Tests carried out at the University of Copenhagen show that sustainable foods from green farming can easily be produced and sold as inexpensively as the conventional food Danes buy in supermarkets. Researchers farming 12 hectares of sustainable fields outside Copenhagen have managed to match the crop harvested from conventional farming. Professor Claus Felby from the Faculty of Life Science believes the results may have a major impact on bio-friendly fuel, green energy, sustainable food production and many other fields.

23.6. A comprehensive research project from the Department for Exercise and Sport Sciences shows that exercise from football is equal to or more effective than running. Peter Krustrup, Assistant Professor at the Department for Exercise and Sport Sciences and his colleagues Jens Jung Nielsen, Anne Marie Pedersen and Birgitte Krustrup are responsible for this research project.

28.6. The University of Copenhagen receives DKK 2 million from the National Agency for Enterprise and Housing to establish a new interdisciplinary hothouse for students. Here, students and employees can get help to realise their entrepreneurial dreams. The hothouse offers activities and support schemes, and it also sets up proper project companies with external project management and individual budgets.

1.7. Norwegian Professor of Environmental and Resource Economics, Eirik Schrøder Amundsen (University of Copenhagen) is appointed Denmark's first eco-economics adviser by Bendt Bendtsen, Minister of Trade and Industry. His work will mainly involve promoting the societal benefits of environmental investments.

2.7. Tom Fenchel, Professor of Marine Biology at the University of Copenhagen, joined the exclusive ranks of the *British Royal Society* thanks to his major contributions, which include revealing the importance of microorganisms in the chemistry of seawater and the atmosphere.

6.7. While drilling in the mud under Greenland's ice cap, Professor Eske Willerslev (Department of Biology) discovers residual DNA of butterflies, beetles and pine trees. His discovery, published in an article in the scientific journal, *Science* indicates that the climate in Greenland 450,000 years ago resembled that of southern Sweden.

PHOTO: HEINE PEDERSEN

When the Boardroom Academy trains future chief executives, there's more grey hair and business suits in the room than is usually the case at university.

Education for society's elite

They don't look like your average student, sitting there in their business suits. Most of them are between 35 and 40 years old, and their business cards reveal that they're either chief executives or deputy chief executives in large Danish businesses or organisations. But the Boardroom Academy was never intended for the masses. The price is one deciding factor: DKK 40,000 for four days. For that price, you get the privilege of being taught by some of the business community's most high-ranking and experienced board chairpersons, consultants and investors.

The Boardroom Academy is the result of collaboration between the Faculty of Law and the law firm, *Plesner*. The goal is to develop top management training similar to that offered at prestigious schools abroad, such as INSEAD in France and IMD in Switzerland.

This ambition is very attractive to the target group. This was immediately clear to Jan Schans Christensen, Professor of Corporate Law and the person responsible for the programme. The first two Boardroom Academy courses, held in May and November 2007, attracted around 65 participants, selected from triple the amount of applicants.

"A selection process takes place and that's only right," says the Professor. The right blend of people in high positions as

Boardroom Academy

Collaboration between the law firm, *Plesner* and the Faculty of Law at the University of Copenhagen has resulted in the Boardroom Academy, the University's first executive programme for current and future board members. An advisory board has been established in conjunction with the Boardroom Academy with a number of heavy weights from the business community. The members are:

- Stine Bosse, Group Managing Director at the Danish insurance company, *TrygVesta*
- Mads Øvlisen, Chairman of the Board at the Danish pharmaceutical company, *Novo Nordisk* among others
- Leif Beck Fallesen, Editor-in-Chief of the Danish business daily, *Dagbladet Børsen*
- Ole Andersen, Senior Partner in the Danish capital fund, *EQT*
- Mogens Munk-Rasmussen, Chairman of the Board at the Danish Broadcasting company, *DR*
- Fritz Schur, Director
- Henrik Stenbjerre, lawyer, *Kromann Reumert*

A number of them also teach at the Boardroom Academy. The next Boardroom Academy will be held on 12-15 November 2008.

When the Boardroom Academy prepares a new generation of board members, both the price and the teaching staff are out of the ordinary. The University of Copenhagen is following the path of the best chief executive schools such as INSEAD and IMD – and Danish CEOs are queuing to take part.

well as rising talents makes for the most interesting teaching. Many participants are economists or engineers, and nearly all of them have a university education. Common to them all is they've reached the higher echelons of business from which large companies recruit their board members. So they need the kind of information that very few can give them."

Sought after experience

"There're so many feel-good courses on the market," says Lotte Mollerup, Deputy Chief Executive for the Danish pension organisation, *PenSam*. "When the University of Copenhagen is on board, you know the professional level is in place, and it's obvious that the Boardroom Academy has managed to recruit teachers that are very sought after."

Lotte Mollerup is a lawyer, so it wasn't a general introduction to board legislation that drew her interest.

"I already had a basic understanding of this area. What was new to me was hearing how you assess the value of a company. When some of the business communities' high profile board chairpersons and consultants tell their version of real-world board work, you get access to knowledge that is hard to come by," she says.

As a trained business economist, Peter Høltermand, Country Manager for the Nordic bank *SEB's* Danish activities, enjoyed the introduction to the basics of board legislation. The presentation not only covered current laws, but also those in the pipeline from the EU and the government, as well as all those issues that aren't quite law, but ever so slowly become introduced – by Copenhagen Stock Exchange, for example – as common practice or requirements.

"You obviously listen up," says Peter Høltermand, "when one of the country's most experienced board members talks about what it's like to be the person holding the reins when a company melts down financially. What kind of effect does a situation like this have on you? It's so important you know the scale of responsibility before you join a board." ■

13.7. Physicist Morten Bo Madsen (the Niels Bohr Institute) is part of a team of researchers investigating the ice-covered North Pole on Mars. They feed the American Mars robot, *Phoenix Mars Lander* with information to ensure it manoeuvres safely over the uncharted Mars landscape. The chemical and meteorological material the robot collects will be analysed to map climate changes on Mars.

PHOTO: SCANPIX

30.7. The Faculty of Humanities and innovation company, *Zentropa WorkZ* bring together six companies and 36 elite students from all over Denmark for an intensive summer school on innovation. The goal is to generate new and surprising solutions to real-life challenges faced by the companies involved.

31.7.-5.8. The Department of Exercise and Sport Sciences hosts the first joint world congress for the International Society for the History of Physical Education and Sport (ISHPES) and the International Sociology of Sport Association (ISSA). Over 300 researchers from the world of sports and social sciences take part. Representatives of 40 countries attend the conference.

5.8. The devastation caused by the plague left Europe less genetically diverse than it was in the Iron Age. That is the conclusion reached by a team of researchers, among them Marcus Gilbert from the Niels Bohr Institute, who have compared the DNA from the Iron Age with DNA from today.

15.8. The University of Copenhagen is the eighth best university in Europe, according to an annual survey by Shanghai Jiao Tong University. This ranking is based on how many articles the university's researchers have published in scientific journals, and how often they are cited by other researchers. Since last year, the University of Copenhagen has climbed 10 places and now ranks 46 worldwide.

22.8. The Centre for Epigenetics at the University of Copenhagen is officially inaugurated. Epigenetics gives researchers vital insight into how the cells of all organisms develop and is therefore essential to our understanding of diseases such as cancer and Alzheimer's. The centre is led by Professor Kristian Helin, Biotech Research and Innovation Centre (BRIC).

31.8. International researchers and experienced peace negotiators meet at the Lessons of Peace Processes conference arranged by The Nordic Institute of Asian Studies, NIAS (an affiliate of the University of Copenhagen). The key speaker is former Finnish president Martti Ahtisaari, who has played a central role in a wide range of international peace talks.

PHOTO: RICHARD MARTIN

PHOTO: ANDERS PRIEMÉ

A garden of undersea pillars

Limestone pillars rising from the seabed of Ikka Fjord in southwest Greenland support an abundance of biological diversity. This unique ecosystem drew a team of scientists – including postgraduate students Marc Overgaard Hansen and Jes Gitz Holler – on an interdisciplinary summer expedition to the chill waters of the Arctic.

"This was certainly not a scuba diving holiday, but it was worth all the hard work. Sailing out, early in the morning under clear skies at low tide, seeing a garden of undersea pillars just below the surface. This is an amazing experience," explains Marc Overgaard Hansen.

He's 34 years old and writing his geography dissertation on the hydro-chemical cycle of ikaite pillars. Together with another postgraduate student, Jes Gitz Holler, he joined last summer's research expedition to the Ikka Fjord.

The two of them spent more than a week alone in the area preparing for the arrival of the rest of the research team. They set up the base camp, which was hard work even though the weather was excellent. During the expedition, Jes and Marc went about their tasks of collecting data and samples of animal life for their respective dissertations.

Loading up on inspiration

Greenland gave them plenty of inspiration and fuelled the writing of their dissertations:

"I wouldn't have missed the fieldwork experience for anything," says Marc. "Gathering all the data yourself gives you far more incentive and energy for lab work and the final writing process."

Jes is 26. He's writing his dissertation on the secondary metabolites from marine organisms in the Ikka Fjord. He has collected sea slugs, sea anemones and fungi, which need to be classified and studied in the lab for any active substances. Ikka Fjord might turn out to be a treasure chest of future medicines.

"It's important to feel personally committed to your dissertation topic if you don't want to get sick of it. This expedition was a great example of the commitment and enthusiasm fieldwork can inspire. All the other members of the research team were so enthusiastic about their work and great at answering the specific questions we had," explains Jes.

Ground-breaking knowledge

Marc and Jes were delighted to experience a working relationship based on mutual support and respect between researchers: "The data gathered by the expedition team was always available to each team member, and the trip proved to be an excellent way to build a good interdisciplinary network and knowledge base. Being able to use the water and temperature measurements made by other members of the team has been a huge help – otherwise it would have taken me much longer to get further with my dissertation," says Marc.

Left: Limestone pillars are part of Ikka Fjord's unique underwater world.
Right: Not all dissertations are written indoors: postgraduate Jes Gitz Holler begins the day's data collection.

But the two young scientists also gained inspiration from each other.

"Our first week alone was actually a great exercise in knowledge-sharing. When sailing across the fjord, Marc pointed out the undersea pillars to me. He explained how the landscape had been shaped over millions of years. What I study isn't visible to the naked eye, which makes it difficult to explain to people, but even so, Marc has learned that pharmaceutical research can also be carried out in aquatic environments," says Jes.

Both of them felt the expedition was an eye-opening experience, and that their projects leapt forward after working with the other scientists on the expedition:

"A lot of the research in and around the Ikka Fjord is cutting-edge, no matter what discipline you apply. Geography, geology, botany, zoology and microbiology all play a part. And it's in the crossover of these fields that new, ground-breaking knowledge emerges," says Marc. ■

Ikka Fjord – an ecological niche

In the peaceful waters of Ikka Fjord, hundreds of limestone pillars rise up to twenty metres above the seabed in an underwater garden that contains one of Earth's unique ecologies. Scientists have long been interested in Ikka Fjord's unique combination of coldness and an alkaline environment. The pillars are made up of the rare limestone mineral ikaite, which is formed when alkaline, soda-rich mineral water leak out of cracks in the bed of the fjord.

The mineral is only stable under low temperatures and will 'melt' if the temperature rises above six degrees Celsius. If predictions about climate change in the Arctic region come true, the rise in temperature could spell the end of Ikka Fjord's limestone pillars.

This summer's expedition was part of the Galathea-3 project, which included participants from the Faculty of Science, the Faculty of Life Sciences and the Faculty of Pharmaceutical Sciences. The Danish Polar Center published a book on the Ikka expedition in 2007.

31.8. The University of Copenhagen and two centres for higher education (CVUs) reinforce their existing teamwork to ensure that professional synergies between the universities and CVUs are fully exploited. Ralf Hemmingsen, Rector of the University of Copenhagen, Laust Joen Jakobsen, Head of CVU Greater Copenhagen and Chresten Kruchov, Head of CVU Copenhagen & North Zealand sign the cooperation agreement.

1.9. A new gastronomy and health programme that applies scientific techniques from physics and chemistry is established to develop delicious natural foods. Together with chefs from the restaurant, NOMA in Copenhagen, the researchers will develop chocolate that, instead of empty calories, contains natural ingredients that stimulate the metabolism. The respected obesity researcher, Professor Arne Astrup, MD (Department of Human Nutrition) has initiated this new programme.

1.9. The Faculty of Humanities starts using its own seal. The seal for the Humanities is designed by the University's graphic designer, Pete Burke and shows a person and an open book, icons inspired by the seal of the old Faculty of Philosophy. The left page of the book bears the old Phoenician character, 'alef' which is the ancient version of the present 'a', representing the linguistic and cultural historical dimensions of the humanities. The right page of the book shows a lyre, which represents the creative and musical aspects.

7.9. The Department of Film and Media Studies stages a major conference on mobile media. Researchers from Denmark and abroad team up with representatives from the telecom industry to describe the future of mobile media as they see it.

11.9. Jakob Scharf gives his first official speech since taking over as Head of the Danish Security and Intelligence Service (PET). His speech in the Ceremonial Hall marks the beginning of term and is followed by a debate with students.

The world's first sustainable freshers' trip

A freshers' trip is typically not associated with eco-friendly behaviour. But the Union of Natural Resource students, together with the Union of Biology-Biotechnology students at the Faculty of Life Sciences, put a stop to that.

During the summer, the students were busy planning the world's first sustainable freshers' trip. The trip had to be up and running before the beginning of term, so 70 green students could head to Sweden on an intensive five-day excursion that would give them a taste of their new subject of study.

It was an educational, entertaining – and primitive – trip, where students slept outdoors, cooked food over an open fire and bathed in a nearby lake. The following green dogma rules where in force during the trip:

- The environmental impact of transportation must be kept to an absolute minimum
- The food should be locally produced and organic. Food wastage must be avoided
- The amount of waste must be minimised, and the remaining waste sorted
- Respect nature by protecting the water environment and remove all traces left behind

Adam Bank Lentz, Chairman of the Union of Natural Resource students, hopes that the freshers' trip is the first step towards encouraging a more sustainable mindset among students.

"As a student union, we support education on sustainability as well as sustainable education," he says enthusiastically.

Sustainability spreads

Prodean of education, Mogens Flensted-Jensen is pleased with the students' enthusiasm, pointing out that sustain-ability is a central part of the Faculty of Life Sciences' strategy to move towards a sustainable future, both within research and education:

"The concept of sustainability is evident today in campus life and in research and syllabus content. We hope, of course, that the idea will spread and develop even more," he says.

It seems that students throughout the University have already got together to move the University in a sustainable direction. A number of student unions formed *Green Network* under the Danish Society for Nature Conservation and Green Agenda. In the future, *Green Network* will play an active role in creating a more sustainable university.

"We're working hard to make the University of Copenhagen an international role model for sustainability – both on the educational and operational front," says spokesperson for *Green Network*, Casper Mølck. ■

An all-important goal for a fresher trip is to establish a good social environment. So why not do it the sustainable way?

In autumn 2007, 70 first year students from all over Denmark went on the world's first sustainable freshers' trip. They'd all recently joined the Natural Resources programme. Before burying themselves in books, the students had to catch a bus with a particle filter, eat organic food, sort rubbish – and pee in a line!

Guidelines for a sustainable freshers' trip

Food: Food and drink should be organic and locally produced. Organic meat means higher standards of animal welfare, so buy it. And don't waste food – eat up!

Transport: Rent a bus with a particle filter. To compensate for the CO2 emissions from transport, give support to a project with renewable energy, for example.

Hygiene: Use only products with approved eco-labels, such as the Nordic 'Swan label', and use them sparingly. Soap and shampoo must only be disposed of on areas with grass and as far away as possible from lakes and waterways.

Waste: Waste must be sorted and buried in the topsoil where decomposition is fastest. Dig a new ditch for food waste every day. All other waste must be delivered to the nearest recycling station.

Toilet: Urine decomposes and is absorbed three times more effectively on grass than on the forest floor. This means that over three days, 2,000 square metres of grass can be urinated on if the urine is evenly distributed. Stretch a cord over the grass to indicate the area where people should urinate. The cord must be moved frequently, so that after three days, the entire area will have been marked off. For toilets, dig two or more deep holes in the ground. Both the pee-line and the toilets must be at least 25 metres from the edge of any lake.

After the trip: Make sure you leave the site how you found it. Prepare a 'green account' to calculate the trip's environmental impact and make suggestions for improvements.

11.9. Financial adviser and Professor, Jeffrey Sachs, Head of the Earth Institute at Columbia University, USA visits the University of Copenhagen. Professor Sachs is also adviser to the UN Secretary General, Ban Ki-moon and has worked with economic development and on efforts to combat poverty for more than 20 years. In his guest lecture, Professor Sachs identifies and discusses achieving development goals for 2015.

13.9. Helge Sander, Minister of Science, Technology and Innovation opens the new Biocenter, a research, innovation and education centre that, with its almost 30,000 square metres, provides an ideal setting for a unique professional community.

PHOTO: JENS FINK-JENSEN

19.9. Garry Kasparov, Russian advocate of democracy and human rights, receives the first *Pundik Freedom Prize*. His celebratory lecture was organised and hosted by the Department of Cross-Cultural and Regional Studies.

PHOTO: RIE KJÆR POULSEN

19.-23.9. The University of Copenhagen began its research programme, *Religion in the 21st century* in 2003. The concluding conference attracts 250 researchers and guests – among them many acclaimed international researchers. The conference celebrates four years of intensive interdisciplinary research across seven faculties. Issues covered include the struggle between faith and knowledge, the role of religion in modern security policy and the religious beliefs of ethnic communities in Denmark.

25.9. A Danish research team is the first in the world to identify specific cells as the potential cause of breast cancer. According to Professor Ole William Petersen, Head of the Department of Cellular and Molecular Medicine, this new discovery may have vital implications for the treatment of breast cancer, and the study will reveal a clearer picture of the villains in cancer cells.

Beauty contest for employers

PHOTO: HEINE PEDERSEN

Employers from the public and private sectors made a dedicated effort to present themselves for future employees – and answer their many questions.

In November 2007, the University's alumni association, *Kubulus* invited companies and students to its first job fair, held in the University's Ceremonial Hall. Denmark's largest employers are making even more of an effort in the competition for young academic talents.

The woman in a light pink top and gabardine trousers straightens the pile of pens in front of her. On enormous posters behind her, people in their twenties give their reasons for choosing a career at IBM. The posters tell a global story. English words and exotic faces. A mid-American city girl with a sharp aristocratic nose hangs side-by-side with a black guy in a casual shirt. *Reason #34: Work at a place where you can design something that really counts. Your future.* The woman in the pink top glances with satisfaction at the pens. They're all straight. And she's all set.

At the neighbouring stand, a guy slouches across the table. A rust-coloured sweater, green Nike shoes with yellow stripes, a leather choker with what could be a Shaman's medicine pouch hanging around his neck. It's actually for his mobile phone. This stand has no pens, no brochures and no corporate posters. And why should it? A couple of film posters and a small photo of a few guys shouting – the celebrated filmmaker Lars von Trier and his producer Peter Aalbæk Jensen. That's all the famous Danish film company, *Zentropa* needs.

In the opposite corner, *Danske Bank* is also prepared, though a little differently. The woman on their poster flashes a smile that radiates across the room. "With us, you don't need sharp elbows, just a sharp mind," the headline promises, attracting talent to the stand with an offer of a mentoring scheme, trainee positions and mints in bank-blue packaging.

And here they all are, companies and organisations stand by stand in the Ceremonial Hall. Waiting. *Siemens* is ready with promises of a global future, symbolised by aerial photos of skyscraper cities. The Minister of the Environment is ready with an invitation to join the fight against global warming.

Novo Nordisk wants to help stamp out diabetes. The Confederation of Danish Industries (DI) is prepared to discuss worldwide networks and a good career start. *Dan Church Aid* has a clear message about making a difference in the world.

CEO: Follow your heart

They'll have to wait a little longer. The students are still seated on rows of chairs in the centre of the hall. *Kubulus*, the University's new alumni association, is presenting its first job fair. The association has invited Anette Wad, CEO of *Aschehoug* publishing house, to share her experience of how difficult career choices can be.

One person asks how important your first job is. Is it okay to make your choice based on what you really like, or should your first choice be more strategic?

"Choosing what you like *is* a strategic choice," says Annette Wad. She has been through her fair share of professional U-turns and blind alleys since getting her first director's job at the age of 29. "But really, when it comes to your career, there is no such thing as blind alleys because all experience is useful at some point," she explains.

Someone else is concerned about grades. He's been to job fairs before, and it's the same every time: The eyes of corporate representatives glaze over when grades are not quite at the level that they've been asked to recruit. Can't Anette Wad explain to the people on the stands that the best candidate is not necessarily the one with the best grades? Anette agrees and promises to do so.

Employers make an effort

The talent contest has attracted many companies. *Carlsberg* is there, so are the Danish Consumer Council, *Microsoft*, the Ministry of Foreign Affairs, Copenhagen City Council and many more. They are all far more on their toes than they were a few years ago. Even universities are doing all they can to create the best platform for the first meeting between employers and aspiring candidates.

Plenty of bridges are being built between academia and the world of business. The job fair, the new alumni association, new mentor schemes where former students help newcomers. Among the many new initiatives, students also find structured dissertation proposals, where the proposed topic addresses real-life problems faced by companies.

Finally, the students are let loose. Most seem to know where they want to go, and there's enough to do for the woman in pink, the man with the Shaman pouch, and the bank looking for the sharp-minded. ■

27.9. H.R.H. Crown Princess Mary visits the University of Copenhagen's South Campus to present The Crown Princess Mary Scholarship to students from Australia. The ceremony was part of an international conference on Australia.

PHOTO: ANNE TRAP-LIND

27.9. The Melfo project, which develops mobile e-learning for people who have dyslexia or reading difficulties, holds its concluding conference. The project culminates in a hand-held computer that can read text aloud.

1.10. H.R.H. Prince Joachim opens the University of Copenhagen's Centre for Health and Society (CSS). The Centre has moved into what was once Copenhagen's municipal hospital. CSS comprises parts of the Faculty of Health Sciences, the Faculty of Social Sciences, the National Institute of Public Health, the Institute of Preventive Medicine, and The Central Research Unit of General Practice.

PHOTO: JENS FINK-JENSEN

2.10. PhD student Signe Riemer-Sørensen and other astrophysicists from the Niels Bohr Institute have found the clue to one the greatest mysteries of the universe. Using telescopes to observe galaxies orbiting Earth, they have discovered that the dark matter of the universe may consist of new and unknown particles that they call 'axions'. The astrophysicists from the University of Copenhagen make the cover of the renowned *Physical Review Letters* journal.

Experts in curiosity

"The anthropologist approaches the world with an open mind. This approach can teach our staff to tune into new frequencies. For example, anthropologists hone in on what users of our ostomy products actually do, rather than what they say they do. The insight and knowledge gained through such an approach make our staff realise the innovative potential our customers actually have," says *Coloplast's* Peter Kragh, Director, Global Marketing, Ostomy Care.

New knowledge of customers paves the way for further development and improvement of existing products, or for the creation of entirely new ones. Peter Kragh is clearly surprised how valuable the collaboration with anthropologists has been for *Coloplast.* The Danish medico company is known to be a customer-oriented company that uses focus groups all over the world in their product development process.

Eye-opening training

In September 2007, *Coloplast* celebrated its 50th anniversary. As a prelude to the celebration, 6,000 *Coloplast* employees from headquarters and subsidiaries all over the world spent a day meeting the company's customers.

Ostomy is a particularly sensitive and intimate subject, Peter Kragh explains, which made it all the more important for the Ostomy Care unit to prepare its staff as well as possible for these meetings. Employees were offered special training in meeting end users of ostomy care products. That's how *Coloplast's* partnership with *Anthropological Analysis* began.

"The training was a real eye-opener – even for employees who are in daily contact with ostomy appliance users. More and more people have been asking for this kind of training. Employees have realised how much they can learn by meeting and talking to end users", says Peter Kragh.

Everyday life as a source of new ideas

As part of their anthropological training, Ostomy Care employees were introduced to a series of guiding principles and tools from anthropology, such as interview techniques and observation methods:

"We trained the employees to look for the question that they hadn't thought of beforehand, the one that arose naturally out of the conversation. They also learned to be more aware of how ostomy users plan their day. Perhaps users have developed a routine that makes it easier for them to cope with eveningwear, swimming or travelling. Important routines and information that you'd never consider just sitting behind a desk", says Tine Tjørnhøj-Thomsen, Associate Professor at the Department of Anthropology.

The customised training model was created through close cooperation between *Anthropological Analysis* and *Coloplast's* Ostomy Care unit. Later, training will also be given to staff in *Coloplast's* Urologi & Continence Care unit. In all, the anthropologists have trained 140 of *Coloplast's* headquarter staff, provided expert advice and taken on several consultant functions. ■

Anthropologists are known for their research on exotic cultures and lifestyles. But their methods are a goldmine for businesses wanting to better understand the needs of those who use their products. That was *Coloplast's* experience when anthropologists gave 140 employees new approaches to listening and observing.

PHOTO: LIZETTE KABRÉ

PHOTOS: JESPER WESTLEY

Innovative anthropologists

User-driven innovation is popular at the moment, which means that anthropologists are in high demand in the business world. Kirsten Lauritsen, a consultant at *Anthropological Analysis* says that working at *Coloplast* has inspired other companies to seek anthropological expertise from the Department of Anthropology.

"We spent time getting to know the company, learning their language and understanding how value is created in their universe. We've used this knowledge to develop concepts for training programmes and consultant services that apply anthropological knowledge to the world of business," says Kirsten Lauritsen.

Anthropological Analysis was founded in 2005 as a revenue-generating unit within the Department of Anthropology.

Associate Professor Tine Tjørnhøj-Thomsen is among the anthropologists who use the tools of her trade to train and challenge Coloplast's staff.

11.10. The Medical Museion at the Department of Public Health opens its *Oldetopia* exhibition on age and aging in honour of the Medical Museion's 100th jubilee.

DESIGN: FRK. MADSEN

12.10. Professor Thor Theander, Professor Lars Hviid, post.doc. Ali Salanti and post.doc. Morten Nielsen, all from the Centre for Medical Parasitology (Department of Health Sciences/The University Hospital of Denmark) receive a DKK 10.5 million grant from the Bill & Melinda Gates Foundation to further develop a malaria vaccine.

12.10. The winner of the Nobel Peace Prize is announced and the prize is shared by USA's former vice president Al Gore and the UN's Climate Panel, which includes three professors from the University of Copenhagen: John R. Porter from the Faculty of Life Sciences, and Ole John Nielsen and Morten Pejrup from the Faculty of Science.

12.10. Copenhagen Culture Night takes off and the University of Copenhagen throws open its doors to the public. Anyone with an inquisitive streak can experience various activities and talks for children and adults at the University's four campuses.

PHOTO: ANNE TRAP-LIND

Engineers and business economists don't have the monopoly on entrepreneurship. Opera singer Nete Nørgaard-Nielsen was one of the first students to join the humanities hothouse, *Katalyst* – one among many initiatives taken by the University to support new entrepreneurs.

PHOTO: BENJAMIN KÜRSTEIN

A new kind of entrepreneur

On 1 February 2007, *Katalyst* opened its doors to humanities students with promising entrepreneur projects in experience economy and global communication. The *Katalyst* hothouse offers workstations and various coaching services to help entrepreneurs through the all-important start-up phase.

An offshoot of the Faculty of Humanities, *Katalyst* is part of the University's increasing efforts to promote innovation and entrepreneurship in the university environment. Students can apply to join *Katalyst*, which is located at the University's South Campus as part of the entrepreneur environment, *5th UnIT* that houses a number of small high-tech companies.

Students with entrepreneur ambitions want more than attractive office space, meeting facilities and networking in high-energy environments. *Katalyst* involves sparring and coaching with mentors, and the opportunity to take part in courses and seminars on innovation and entrepreneurship.

In 2007, 26 students and ten start-up ideas were approved for *Katalyst* places. The business ideas clearly showed that the experience economy has created scope for a new type of entrepreneur. Previously, entrepreneurs typically came from technical or business economics programmes. Now, a background in humanities is increasingly becoming a natural platform from which to start a business.

In 2007, *Katalyst* housed a number of wide-ranging projects:

- *Kollaboration* is a consulting company that draws on philosophy in their work with corporate social investments
- *Garagepublishing* deals with alternative and sustainable publishing for musicians and authors
- *Ministry of Music* uses opera as the starting point for team-building and leadership development

The entrepreneur's song

Nete Nørgaard-Nielsen, founder of *Ministry of Music*, is a privately educated opera singer who has also studied music science and entrepreneurship. When teaching employees in large corporations, Nete starts by giving them an artistic experience, she then moves on to give them specific tools for sales, change management, motivation, authority – or whatever it is they need.

University of Copenhagen student, Nete Nørgaard-Nielsen is the founder of Ministry of Music, a consultancy company that uses opera as a tool for teambuilding and leadership development.

Nete Nørgaard-Nielsen uses music as a language to encourage managers and employees to listen. She takes them through a number of exercises that improve their skills. And even though she only spends a couple of hours with a company, it has taken several years to develop her coaching or workshop programmes.

She has written the workshop opera and added elements from singing lessons, musical science and various psychological disciplines. She also sings at sales meetings to show people what they are buying. When she visits companies, a pianist accompanies her and when teaching large groups, Nete's assistant corporate consultant is also there as her co-teacher.

It's evident that there's a market for Nete's kind of business. But Nete Nørgaard-Nielsen learned a long time ago that you last a lot longer in the consulting business if you keep quiet about customers and prices.

"Let's just say that it's going really well," she suggests. The *Ministry of Music* website shows that bookings stretch months ahead.

Today she also acts as a guest teacher on the University's start-up courses. As well as Nete Nørgaard-Nielsen, *Ministry of Music's* current staff includes a part-time administrative employee, three affiliated pianists, and an assistant consultant. Taking on more staff is already on the agenda.

Ministry of Music was among the first student projects to be approved as a part of the *Katalyst* hothouse. After its first year, the business is already out of its start-up cradle. ■

Read more at: www.katalyst.hum.ku.dk (Danish only)

Katapult

Concurrent with *Katalyst*, another hothouse was set up at the end of 2007, primarily for students at the Faculty of Pharmaceutical Sciences, the Faculty of Life Sciences, the Faculty of Health Sciences and the Faculty of Science.

The Minister for Economic and Business Affairs, Bendt Bendtsen opened this new hothouse, *Katapult* on 28 November 2007. Like *Katalyst, Katapult* is funded by the National Agency for Enterprise and Construction.

23.10. The University of Copenhagen inaugurates Denmark's new water resource research centre, HOBE. With its new hydrological observatory and experience lab, the centre will map the reserves of groundwater beneath Danish soil.

27.10. A study by the Department of Human Nutrition, (University of Copenhagen) and the National Food Institute (DTU) proves that many children receive more than the EU-recommended dose of vitamin A. According to Kim Fleischer Michaelsen, Professor of Children's Nutrition (University of Copenhagen), children do not need a vitamin supplement provided their diet is varied.

31.10. The number of people suffering from asthma has tripled over three decades. New Danish research reveals that bacteria may be responsible for this boom in asthmatic conditions over the last 30 years. Hans Bisgaard, Professor of Paediatrics at the University of Copenhagen and Head of the Danish Paediatric Asthma Centre announces the sensational link established between bacteria from what is normally associated with pneumonia and the development of asthma.

31.10. A seminar kicks off the planned extension of the University's South Campus, KUA 2. The seminar is attended by the design team responsible for KUA 2, *Arkitema* and many of the employees at the Faculty of Humanities, which is located at the South Campus. When the next two building phases are completed in 2013, the South Campus will cover approximately 110,000 square metres.

5.11. The Danish National Research Foundation's Centre for Textile Research (CTR), the Faculty of Humanities and six other partners receive EU funding for a project entitled *Clothing and Identities – New Perspectives on Textiles in the Roman Empire (DressID).*

5.11. The University of Copenhagen's Ceremonial Hall houses a job fair featuring a range of the largest private, public and voluntary organisations cooperating to give students specific insight into the business community and potential careers. The event is organised by *Kubulus,* the University's new alumni association.

PHOTO: HEINE PEDERSEN

PHOTO: KATHERINA LUDVIGSEN

Sponsoring students and developing partnerships

Champagne, flowers, and wide smiles were in place on 28 June 2007, when Anh Dao Phan Thi from Vietnam was honoured as the first candidate from the Faculty of Life Sciences to have her studies financed by the University of Copenhagen, *Danida* and private sector partnership.

After two years of studying at the Department of Food Sciences, where she completed her final dissertation, Anh Dao Phan Thi could return to Vietnam with a suitcase full of new knowledge and expertise, thanks to *Arla Foods*, the Danish Agricultural Council, and others. These two organisations both have activities in Vietnam and chose to fund Anh Dao Phan Thi's stay through the PPP-scheme.

The abbreviation stands for Public-Private Partnerships. The basic idea is that private companies, the Faculty of Life Sciences and *Danida* co-sponsor the cost of education and living expenses for students from developing countries. This helps to strengthen the education sector and the scientific competencies in some of the developing countries where Danish companies do business.

An attractive proposition

In 2005, *Danida* introduced the new scheme in five focus areas. One of them was capacity strengthening in the agricultural sector, and to do this, *Danida* made an agreement with the Faculty of Life Sciences.

The agreement states that Danida supports activities within education, training and supplementary education, co-financed by private companies. In principle, *Danida* doubles all private sponsorship. So if a company pays DKK 250,000, this automatically generates an equal amount from *Danida*. In other words, DKK 500,000 will be granted to a student for studies in the student's homeland or at the Faculty of Life Sciences at the University of Copenhagen. There are no requirements for the size of the sponsorship.

The sponsorship is given to citizens from developing countries and covers not only education cost but also travel and living expenses. The *Danida* Fellowship Centre is responsible for all practical aspects of the foreign students' stay at the Uni-

A proud Anh Dao Phan Thi has just received her exam certificate. Danida, the Scandinavian dairy producer, Arla Foods and the Danish Agricultural Council have helped sponsor her studies.

The University of Copenhagen has further strengthened its collaboration with the private sector. With the Danish International Development Agency, *Danida* as its partner, the University and private companies are now offering to sponsor study periods for students from developing countries.

versity – from housing, to insurance, flight tickets and other practicalities.

Great interest in the PPP-scheme

The scheme gives Danish companies doing business in developing countries favourable conditions for upgrading their own employees' skills and strengthening educational and research sectors in partnership countries.

The PPP-scheme also opens up the opportunity for a general sum sponsorship with no specific purpose. In this case, the Faculty of Life Sciences selects a suitable candidate for a place on a course. That was how Anh Dao Phan Thi's stay in Denmark came about.

The business community is very interested in the PPP-scheme and new agreements are continuously being made with private companies joining the scheme. ■

8.-10.11. Around fifty researchers from more than 15 countries meet at the University of Copenhagen to discuss literature, films and plays written by migrants. Migrant literature highlights themes such as national and personal identity in the era of globalisation.

9.11. The Ceremonial Hall is the venue for a meeting in the run-up to the Danish general election. A number of top politicians debate issues of interest to first-time voters and young students and answer questions posted by students on the www.virtuel.ku.dk website.

12.11. Patients taking long-term HIV medication may find their immune defence system gradually normalised. This is the encouraging conclusion from the latest research in the field. Professor Jens Lundgren (Faculty of Health Sciences) has contributed to these findings.

15.11. The University of Copenhagen hosts its annual commemoration and the festivities begin in the Ceremonial Hall. Fifteen new honorary doctorates are awarded for work carried out at the University either as guest lecturers or through collaborative research:

- Pastor Emeritus, Jens Birch Lyster, Denmark
- Professor, Mohamed Salih, The Hague, Holland
- Professor Gustav Konrad von Schulthess, Universitätsspital Zürich, Switzerland
- Professor, John W. Lynch, McGill University, Canada
- Professor Kirsten Sandvig, the Norwegian Radium Hospital, Oslo, Norway
- Professor Paolo Matthiae, Università degli Studi di Roma, Italy
- Professor Orvar Löfgren, Lund University, Sweden
- Nicoletta Calzolari Zamorani, Istituto Linguistica Computazionale del CNR, Italy.
- Professor, H. Jeff Kimble, California Institute of Technology, USA
- Professor Michael Clark, University of Tasmania, Australia
- Professor Patricia Vertinsky, University of British Columbia, Canada
- Professor Karin Birte Svensson, DTU, Denmark
- Professor, Katrin Hinrichs, Texas A&M University, USA
- Senior Researcher, Magni Martens, Matforsk AS, Norway
- Professor, Graham A.R. Johnston, University of Sydney, Australia

PHOTO: JENS FINK-JENSEN

Research-based football

FOTO: HEINE PEDERSEN

Research at the Department of Exercise and Sport Sciences has revolutionised training methods in international top football. But research results will also benefit referees, overweight joggers and inquisitive spectators.

For Peter Krustrup (left) and Jens Bangsbo, football is a serious subject of research, and their results are being put into practice – in this case for fun with colleague Hans Bonde (right).

On a chair behind a door in the University Park buildings sits a man with tubes sticking out of his right leg. A nurse, a Spanish professor, Professor Jens Bangsbo and Associate Professor Peter Krustrup watch him carefully, observing every move of his lower leg. We know that muscles get tired, but no researchers have ever managed to explain why.

The mechanism behind tiredness is well worth knowing, whether you want to advise international top football clubs or help the large number of people who want to get fit but give up when they get tired.

Jens Bangsbo and Peter Krustrup's research has already changed physical training in football in a number of cases. All over the world, clubs now train differently as a direct consequence of research carried out at the University of Copenhagen. For a while, Jens Bangsbo worked with the world-famous Italian football club, *Juventus* as external consultant and later assistant coach.

A new way of training

Back in the mid-nineties, researchers wondered about the way football clubs and referees trained – with long-distance running through the winter to get into basic shape. Bangsbo and Krustrup's research showed that interval training strengthened not only the slow but also the fast muscle fibres, so that you can win short sprints and be ready to run fast soon after, as football requires.

Today, the researchers' thoughts have evolved into a school of thinking. In Italy, 70 regional training centres have been opened which all follow the Danish researchers' training systems and test methods. The same is happening in China, Qatar, Brazil, Mexico, Canada and Australia. Leading Scandinavian clubs, such as Norwegian *Rosenborg*, send their training programmes to the Danish researchers for evaluation, and Peter Krustrup is a consultant for the Danish national women's team.

That's how their research spread – and not just to players. Referees have also changed their way of training, first in Denmark and now in Europe, where the Union of European Football Associations (UEFA) has appointed Peter Krustrup as their adviser.

A global football cure?

The general public can also benefit from the sport science researchers' discoveries. In 2007, Peter Krustrup and his col-

leagues from the Integrated Physiology research group were the first to study how untrained men improve their physique, depending on whether they play football or run. More weight is lost, muscles grow and fitness indicators are highest for football players – maybe because football by its very nature includes short sprints. The study has attracted general interest and the international football union, FIFA is now funding further research in this area.

There are already half a billion football players on the planet, and an obesity epidemic is threatening. If football turns out to be the best cure, the sport itself and the status of the research could reach new heights.

The Department of Exercise and Sport Sciences can even supply the sport's more passive spectators with relevant knowledge. For some years, Professor Hans Bonde has followed the cultural and political importance of sport and football. He has written a book on Danish sports' links with Germany before and during the occupation. The book was awarded *History book of the year* in 2006. ■

Communicating worldwide

"Go on, bend it like Beckham" was the headline of a major article in the *L.A. Times* in August. The article was about Peter Krustrup's research unit, which had just documented that people who play football become more physically fit than people who spend just as much time running.

A few days previously, the University's central communication department had publicised Peter Krustrup's findings in an English press release and a website feature. Suddenly, it was travelling around the world: 45 American TV stations featured the news, which ended up on hundreds of blogs and websites worldwide.

This story is an example of the University's increased efforts to communicate its research abroad. Already, these efforts have resulted in more international publicity. A search on the *LexisNexis* media database shows that the University has more than tripled its publicity in just one year.

Number of articles about University of Copenhagen in leading international newspapers/journals

Professor Eske Willerslev holds the principal speech, and the university's *Teacher of the Year* award goes to Professor Peter Kurrild-Klitgaard, Department of Political Science.

FOTO: JENS FINK-JENSEN

16.11. A new discovery by students at the University of Copenhagen is featured in *The Lancet.* Pernelle Kruse Kristensen, who studies clinical nutrition at the Faculty of Life Sciences, has discovered that *Rimonabant* slimming pills, which are also sold in Denmark, significantly increase the risk of serious depression and suicide. This is a previously unknown side effect of this drug.

16.11. Denmark's most prestigious literary prize for the best textbook goes to Professor Ditlev Tamm (Faculty of Law) for the draft of his textbook, *Global Legislative Culture.* Two special prizes are also awarded: Emeritus Professor Bertel Heurlin (Department of Political Science) receives a prize for his book, *War and Peace in the 21st Century.* PhD scholarship students Bella Marckmann and Niels-Henrik Møller Hansen (Department of Sociology) are awarded prizes for their book, *Questionnaire in reality,* written and edited with Esther Nørregaard-Nielsen.

26.11. Lecturer Michael Andersen wins *The Invisible Hand* teaching award for outstanding teaching. The award is based on the evaluations and views of the students and the Study Committee, and is awarded by both the Association for Social Economics and the Department of Economics.

27.11. Physicists and astronomers from the Niels Bohr Institute and the Department of Chemistry invest in Denmark's biggest and fastest supercomputer. This computer has 400 CPUs, almost 3,600 gigabytes of RAM and 250,000 gigabytes of hard disk capacity.

28.11. Rector Ralf Hemmingsen opens *Katapult*, the University of Copenhagen's new student hothouse offering students courses in entrepreneurship as well as mentoring, competitions, match-making events, workshops and lectures on entrepreneurship.

3.12. *The Green Relay* competition hits the road, helping the University of Copenhagen to achieve its aim of having one of greenest campus areas in Europe.

PHOTO: JOAKIM GROTH

An enlightening night

It looked as if a space ship had landed in the middle of Copenhagen. On Friday 12 October, the Palm House at the Botanic Garden was lit up and Copenhageners could stroll along illuminated pathways, which cut through the darkness of the garden.

In the Palm House's mysterious cellars and at the neighbouring Botanical Museum, enthusiastic guides welcomed visitors with new knowledge on orchids, mushrooms, succulents and many other varieties.

It was the first time the Botanic Garden participated in Copenhagen Culture Night, but it won't be the last. The garden attracted no less than 15,486 visitors, making it the second-largest Culture Night attraction.

The University's three other campuses had plenty to offer inquisitive souls of all ages. The GMO-approved laboratories at the Faculty of Life Sciences invited members of the public to genetically engineer a plant. At the Niels Bohr Institute, you could see the equipment used to drill through three kilometres of ice on Greenland and the Antarctic. And the Faculty of Humanities opened its doors to an evening of horror and thrills by, among other things, refreshing visitors' knowledge of the ancient art of burning witches. ■

The Palm House lured more than 15,000 guests to the Botanic Garden during Copenhagen Culture Night.

3.12. The main auditorium at the Centre for Social Sciences is the venue for *SymfUni's* winter concert. *SymfUni* is a symphony orchestra exclusively for students from the University of Copenhagen. It was founded in 2006 and its members come from fourteen different disciplines, five faculties and five different countries.

DESIGN: ADRIELLE BUUS

5.12 A Nigerian tea may cure Type 2 Diabetes. Researchers from the Faculty of Pharmaceutical Sciences have successfully tested Nigerian tea on mice.

7.12. The Faculty of Pharmaceutical Sciences holds its PHARMA Day. At this occasion, the University of Copenhagen gains its first honorary resident. Jan Leschly, MSc/BSc (pharmacology) is named honorary alumni. To celebrate, Leschly gives a lecture entitled *The Emerging Partnership between Pharma/Biotech and Universities and its impact on R&D Productivity.*

PHOTO: JESPER MUNCK

Live exhibit: Researchers

The questions put to the researchers from the Galathea-3 expedition are not easy. *'Do you believe in God?' 'Who are your role models?'* and others along those lines. The Zoological Museum does not confine itself to exhibiting discoveries and results; it also exposes its visitors to researchers' doubts and enthusiasm.

The special exhibition, *Galathea* brings the audience into close contact with the researchers from the Galathea-3 expedition. In the Ocean hall, several researchers are ready from morning to evening to answer a number of quite personal questions.

They're surrounded by objects from their research projects on the Galathea expedition: An enormous greenish fish stares with empty eyes into space from its spirit-filled aquarium prison.

Beside it stands a veritable 'wormarium': a huge glass containing hundreds of sea snakes. In another display case, yellow, orange, red and green birds from the Solomon Island's rain forest compete to be the most colourful. Another aquarium contains strange crawling mini-tanks: Live creatures that are distant relatives of spiders and scorpions, which have retained the same shape for several hundred million years.

One of the researchers smiles invitingly, another shakes his head slightly. They're part of an interactive project that allows the audience to ask some of the questions researchers are rarely asked. It all happens via screens:

When did you know you wanted to be a researcher? Do women and men research differently? And what did you dream of being when you were 10? Are you a nerd? Several of the researchers laugh at this last question. Most of them deny it, but a couple consider the question for a moment and reply that they probably are. You get the idea that being a nerd might not be quite so bad.

Everything we don't know

Not even the questions about the researcher's projects are traditional. No one mentions the results. Research is often a long process and most of the Galathea-3 results will not be on hand for some time yet. Instead, the researchers talk a lot about what they don't know. That's the real driving force for every researcher: discovering and understanding new phenomena.

Their enthusiasm is evident. And the fact that there's still so much left to explore and understand appeals to many of the high school students who visit the exhibition. A special programme for high school students has given them the opportunity to meet a Galathea researcher. This allowed them to ask

PHOTO: JENS ASTRUP

The National History Museum of Denmark

The National History Museum of Denmark was founded on 1 January 2004 following the merger of four departments: the Botanic Garden, Botanical Museum and Library, the Geological Museum and the Zoological Museum. The museum is now a department at the University of Copenhagen and consists of three units: the Botanic Garden and Museum, the Geological Museum and the Zoological Museum.

even more questions – an experience that might stimulate a budding research ambition.

Unique objects from Galathea expeditions 1 and 2

Not everything at the exhibition is new and modern. Two beautiful old display cases immediately catch your eye as you walk into the Ocean hall. One contains the skeleton of an enormous animal with a round, curved shell –an armadillo or glyptodont.

Another display case contains rows of exotic birds, each on its own perch. Yellowing labels in meticulous handwriting reveal that the animals were collected and described by the Danish researcher, P. W. Lund, who lived in Lagoa Santa in Brazil from the mid-1830s until his death in 1880. One of the objectives of the first Galathea expedition, which sailed from 1845-1847, was to bring home P. W. Lund's collections to the Danish state, as he had requested. The collections are usually carefully stored in the museum archives, but the *Galathea* exhibition gave the museum a welcome opportunity to exhibit some of the wonderful finds.

One of the more modest objects at the exhibition is a small glass with a shy grey shell at the bottom. Despite its outer appearance, it's nothing short of a world sensation. The little grey shell came up with one of the deep-sea samples collected by the Galathea-2 in 1952 and made global headlines. The creature turned out to be a live specimen of a group of animals that were thought to have died out about 400 million years ago. ■

Strange creatures less than half a milimetre long inhabit a miniature world between sandcorns at the bottom of the sea. These organisms, known as meiofauna, were given visual form in the Galathea exhibition as beautiful 3D laser-engraved figures of glass.

13.12. *The Venture Cup* entrepreneurship competition awards each winner of the regional phase with DKK 50,000. Among them, PhD student Peter Holst, (University of Copenhagen) and his team of fellow students are rewarded for the vaccine *Invac,* which strengthens the immune system in the struggle against cancer and vira.

14.12. The Minister of Science, Technology and Innovation grants DKK 15 million to strengthen research on the Danish language. The CLARIN project (Centre for Danish Language Resources and Technology Infrastructure for the Humanities), is to compile collections of old and modern Danish, spoken language, dictionaries, video clips and many other facets of the Danish language. Some of the strongest research environments in Danish Humanities research have joined forces to create a unique linguistics research infrastructure for the project. The Centre for Language Technology hosts the CLARIN project.

21.12. The University of Copenhagen and the Royal Library establish KUBIS, a cutting-edge library and information service for researchers, students and other employees at the University.

PHOTO: KARSTEN BUNDGAARD, THE ROYAL LIBRARY

Organisation as of 1 February 2008

University Board

Rectorate and University Director

Central Administration

Management Team (Deans, Rectorate and University Director)

Faculty of Life Sciences

- Department of Food and Resource Economics
- Department of Basic Animal and Veterinary Sciences
- Department of Food Sciences
- Department of Natural Sciences
- Department of Human Nutrition
- Department of Agricultural Sciences
- Department of Small Animal Clinical Sciences
- Department of Plant Biology
- Department of Large Animal Sciences
- Department of Veterinary Pathobiology
- Department of Ecology
- Forrest and landscape

Faculty of Pharmaceutical Sciences

- Department of Pharmaceutics and Analytical Chemistry
- Department of Pharmacology and Pharmacotherapy
- Department of Medicinal Chemistry

Faculty of Humanities

- Department of English, Germanics and Romanics
- Department of Arts and Cultural Studies
- Department of Cross-Cultural and Regional Studies
- Department of Media, Cognition and Communication
- Department of Scandinavian Studies and Linguistics
- Department of Scandinavian Research
- Saxo-Institute

Faculty of Law

The faculty is organised as a unitary faculty without departments but with sections and centres directly administered by the faculty.

Faculty of Science

- Department of Biology
- Department of Computer Science
- Department of Geography and Geology
- Department of Exercise and Sport Sciences
- Department for Mathematical Sciences
- Department of Science Education
- Department of Chemistry
- Niels Bohr Institute
- Natural History Museum of Denmark

Faculty of Social Sciences

- Centre for Applied Computer Science
- Department of Anthropology
- Department of Psychology
- Department of Political Science
- Nordic Institute of Asian Studies (NIAS)
- Department of Sociology
- Department of Economics

Faculty of Health Sciences

Pre-clinical departments:

- Department of Biomedical Sciences
- Department of Cellular and Molecular Medicine
- Department of Public Health
- Department of International Health, Immunology and Microbiology
- Department of Neuroscience and Pharmacology
- Department of Odontology
- Department of Forensic Medicine

Clinical departments:

- Department of Diagnostic Sciences
- Department of Gynaecology, Obstetrics and Paediatrics
- Department of Surgery and Internal Medicine
- Department of Neurology, Psychiatry and Sensory Sciences
- Department of Orthopaedics and Internal Medicine

Other units:

- Department of Experimental Medicine
- Centre for Protein Research

Faculty of Theology

The faculty is organised as a unitary faculty without departments but with sections and centres directly administered by the faculty.

PHOTO: CHRISTOFFER REGILD

University museums and gardens

- The Arboretum
- Horticultural Gardens
- Medical Museion
- The Pometum
- Natural History Museum of Denmark
  - Botanic Garden & Museum
  - Geological Museum
  - Zoological Museum
- Museum of Veterinary History
- The Øresund Aquarium

Outside of faculties

- School of Oral Health Care

As of January 2008, the Department of Biology and the Department of Molecular Biology merged under the name Department of Biology.

The University of Copenhagen encompasses a large number of changing research centres. For information about these, check the individual faculties' homepages or go to www.ku.dk/english/departments

Key figures

	2003	2004	2005	2006	2007
Student intake as of 1 October	4,843	4,889	4,946	4,865	5,844
Number of first-priority applicants	8,357	8,124	8,248	8,467	9,783
Number of students	32,649	32,413	32,656	33,359	37,796
Number of 60 ECTS credits*	16,493	16,478	16,987	17,345	20,219
Number of bachelors	2,753	2,958	2,904	3,101	3,364
Number of graduates	2,560	2,604	2,963	3,089	3,664
Number of tuition-paying students (full-time equivalent)	1,178	1,073	1,280	836	940
Completed degrees (master, diploma)	153	245	154	188	224
Outgoing exchange students	803	767	722	818	993
Incoming exchange students	756	924	1,024	1,121	1,400

* 60 ECTS credits represent the workload of a full academic year of study.

More students

The University of Copenhagen grew in 2007. The number of faculties, programmes, bachelors and graduates increased, and the total student population reached nearly 38,000, which is an increase of 13 per cent.

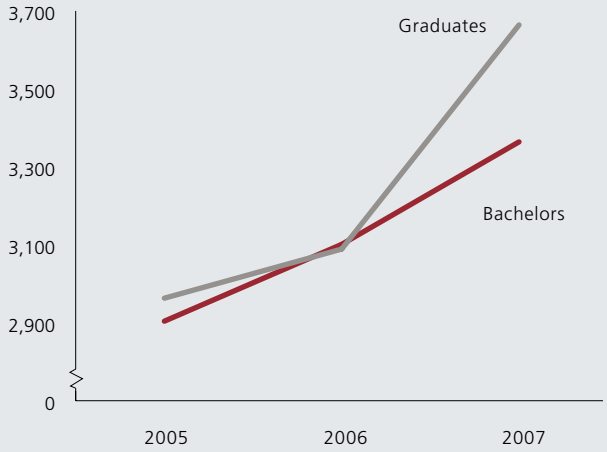
The large increase is primarily due to the University's merger with the Royal Veterinary and Agricultural University (KVL) and the Danish University of Pharmaceutical Sciences, both of which make up new faculties at the University of Copenhagen.

The student intake also increased in 2007, with a total of 5,844 new students beginning academic studies, which is 20 per cent more than the year before.

The merger also raised the levels of completed degree courses, both at BA and MA level. A total of 3,364 bachelors and 3,664 graduates completed their studies in 2007, which is an increase of 8 and 18 per cent, respectively compared to 2006. ■

The Annual Report 2007 *lists all key figures from the University's annual accounts – including university finances.*

Completed BA and MA degrees



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