



University Life
2004

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A new framework for the future



PHOTO: HEINE PEDERSEN

The aims of the University are to educate, conduct research and exchange knowledge with the rest of society. And we have achieved fine results within these main areas in 2004 – from the awarding of 2,812 Bachelors and 2,517 Masters to the upgrading of the continuing and further education area, the establishment of new knowledge networks and the commercialisation of licensing agreements. All of this has only been possible thanks to our many committed and reliable employees and students.

Internationally, the University has also attracted attention. In 2004, the University of Copenhagen was ranked 19th on an internationally recognised list of Europe's 50 best universities and 63rd among the top 200 universities in the world. These are placements we would like to see the University maintain and preferably improve.

Such excellent results require continuous attention to and quality development of education and research areas, which is also reflected in the University of Copenhagen's Performance Contract for 2005 that was entered into with the Ministry of Science, Technology and Innovation just before Christmas. In December 2004, the Academic Council held its last meeting, and from 2005 the University of Copenhagen will be managed by a University Board comprising external and internal representatives. The transition to the new management requirements has affected the past year, where focus has been

on, among other things, developing a more transparent and coherent organisation – a process which continues in 2005.

Standards of Values

In autumn 2004, the Academic Council adopted standards of values for the University, which sum up the core values that form the basis for the community of employees and students at the University of Copenhagen. (See the Values on page 55).

Research-related innovation

The balance between broad research and in-depth research is important, and the cultivation of scientific innovation is high on the agenda of the policy-makers as well as our own. The size of the University of Copenhagen makes it possible to have a strategic focus while at the same time maintaining and developing a wide range of academic areas. Examples of this prioritisation are the University's four interfaculty Research Priority Areas: *Religion in the 21st Century*, *BioCampus* and *Body and Mind* – launched in 2003 – and *Europe in Transition* – launched in 2004.

At the same time, a Nano-Science Center, a Centre for International Health and Development (CISU) and several "research clusters" have been established at faculty level. The University of Copenhagen continues to be particularly active in the establishment of the BioCenter, which is to form the

framework for collaboration in spearhead research within biotechnology.

The University of Copenhagen is a member of three out of seven high-tech knowledge networks, including the biomedical network BioLogue, which seeks to build bridges between universities and companies. The Ministry has initially granted funding for two years. The University has also received grants from the Danish National Research Foundation for the establishment of six new basic research centres.

Quality development of education programmes

In order to offer education programmes of the highest quality, continuous and systematic quality development is needed. In 2004, the University, in cooperation with the Danish Evaluation Institute, conducted a comprehensive audit project.

The significant reforms carried out in Denmark's educational sector these years have made it even more important to focus on educational quality. Much of the work has been concentrated on fine-tuning programmes to suit the actual market need. The challenge in coming years will be to find the proper balance between education for the masses and education for the best. It is desirable and paramount that the programmes are adjusted to suite the actual needs. At the same time, we feel that university education programmes are and should continue to be characterised by being research-based, in-depth and far-sighted.

Knowledge-exchange and knowledge dissemination

By far the most important exchange of knowledge takes place via the education of graduate students who bring the newest knowledge with them to their new jobs after graduation. Another important part of this knowledge-exchange takes place in connection with collaborations between the University and the outside world. A third form is business-oriented knowledge and technology transfer.

In coming years, the challenge for the University will be to expand its interaction and knowledge-exchange with society and the business community, while continuing to uphold the autonomy and quality of the research. However, this does not preclude utility or business-oriented approaches: the University's Tech Trans Unit works with the protection and commercialisation of research results through licensing and setting up companies. In 2004, the Unit received notification of 17 promising inventions, and since 2000, three international patents have been obtained.

Internationalisation

For a modern University, globalisation means unlimited competition, creativity and life-long learning. We feel that the focus should be on increasing the general population's educational and knowledge level. This is the universities' contribution to the development of a knowledge economy and will ensure Denmark a spot in the globalisation race.

The University of Copenhagen must, therefore, be internationally-oriented. The University has always been popular with international students. In 2004 alone, we received approximately 25 per cent more students than in 2003, a total of 900. At the same time, 800 Danish students travelled abroad. We cannot and must not allow anything to prohibit our own young talents from going out into the world, but we need to prioritise in such a way that we can bring them home again as well as attract new talents from abroad. Naturally, this means we need to have something to offer.

The challenge will be, on the one hand, to handle the University's traditional, national focus and, on the other, to deal with the increasingly widespread and intense globalisation that makes constant demands on improving the internationalisation of our teaching and research environments.

Linda Nielsen, Rector

Jørgen Olsen, Pro-Rector



PHOTO: SØREN HARTVIG

Desmond Tutu's philanthropic message

One of the year's highlights for the University of Copenhagen was the talk by the former archbishop, Desmond Tutu, in the Ceremonial Hall to an audience of 650 on 10 September.

The little white-haired man mounts the rostrum in the Ceremonial Hall. The enthusiastic applause that seconds earlier had reverberated among the tapestries, carved wood panelling and 650 standing spectators is replaced by the sound of cameras flashing. Bishop Desmond Tutu takes it all in stride. Once on the rostrum, he immediately diverts attention from himself and his position:

"A priest preaches at length to his congregation and then thunders at the assembly: What more can I say? To which one

of the listeners quickly rejoins: Amen!"

For the next hour, the South African Nobel Peace Prize winner serves up stand-up comedy and philanthropy in equal measures as though it were the most natural thing in the world. Not that anyone in the hall needs converting as such, because religious or not, the entire audience seems to be on the same wavelength as Tutu. And his message is as self-evidently sympathetic as it is difficult to comply with: Forgiveness is the way forward.

“Everyone has the capacity to become a better person. Once a murderer, always a murderer – we don’t subscribe to that belief. For even the worst criminal is a child of God,” the bishop believes.

Applauding ourselves

But first he asks us to applaud ourselves in recognition of Danish support for the ANC during the fight against apartheid. And it would also sound rather feeble if Desmond Tutu were to clap alone. Satisfied with our second attempt, Bishop Tutu moves on to the day’s main topic: Truth as the way forward to reconciliation.

It is now ten years since the collapse of the apartheid regime, and the lecture topic is the subsequent work of the Truth and Reconciliation Commission. The henchmen of the apartheid government were granted amnesty in return for the whole truth about the atrocities they had committed. In this way, the guilty had a chance to confess their crimes and apologise, while the survivors gained peace of a sort.

“We must remember that this was perhaps the first time many of the guilty admitted to their own families that they had been members of a death patrol. Public denouncement was a high price to pay.”

Desmond Tutu insists on forgiveness, although it is never easy and always comes at a price, and even though not all Africans are convinced that it was right to offer amnesty in exchange for the truth.

“But revenge would only have unleashed a wave of violence. As Gandhi said: An eye for an eye makes the whole world blind.”

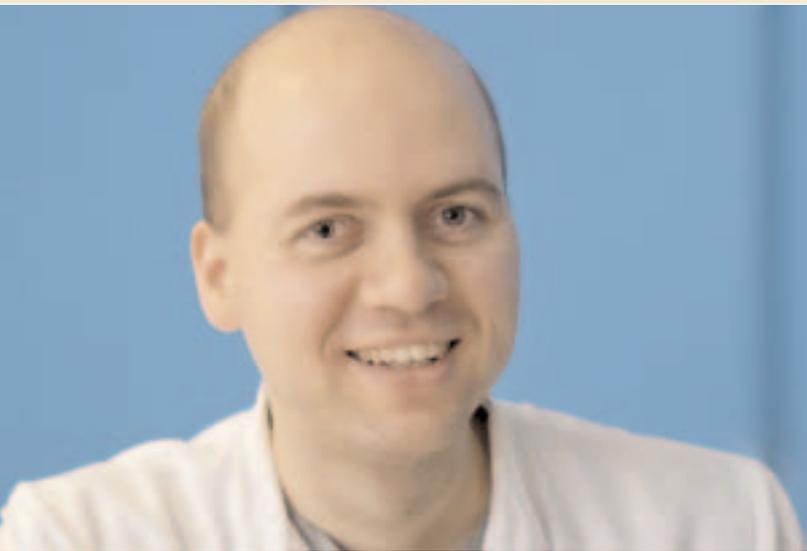
And the audience willingly let themselves be swept away by Tutu’s philanthropic message. A woman sways in time to the bishop’s arguments, stressing them with an occasional ‘huh-hum’ and a single ‘amen’. Maybe she lived in South Africa during the apartheid regime. Other people’s eyes glisten with tears.

After just over an hour, a few questions from the floor and standing ovations, the bishop leaves for a more secular activity in the vestibule: the signing of his latest book, *God has a Dream*. A long queue is quick to form. □

The year’s events 2004

Event highlights, quotes and notes from the year in review at the University of Copenhagen.

- 1.1. The Centre for Language Technology is incorporated into the Faculty of Humanities.
- 1.1. Søren Buus, Professor, Department of Medical Microbiology and Immunology, is appointed coordinator for the EU project, *Genomes to Vaccines*, which integrates cell biology and bioinformatics with a view to more rapid development of vaccines. The project is due to run until 2007 and is in receipt of a grant of DKK 15 million.
- 1.1. “When a religious marriage ceremony between Muslims in Denmark takes place in conformance with a standard marital contract, the Danish Government should require that the husband makes a declaration that the wife has the same right to divorce as he has.” Rubya Mehdi, Senior Researcher, Carsten Niebuhr Institute of Near Eastern Studies, in a feature in *Berlingske Tidende*.
- 1.1. “If you come from a home without newspapers or current affairs radio, taking a university degree can be difficult.” Jakob Lange, Head of Studies, in *Berlingske Tidende*.
- 2.1. “Denmark doesn’t need a science police, which in the long run would only benefit a handful of legal experts in the Ministry of Science, Technology and Innovation.” Professor Tim Knudsen, Department of Political Science, in a discussion article in *Politiken*.
- 6.1. Henrik Galbo, Professor, Department of Medical Physiology, receives DKK 900,000 from the *Lundbeck Foundation* for research into the HSL enzyme.
- 7.1. “If contenders in public debate are to understand each other better, they need to speak the same language. If they don’t, it is counterproductive to the debate.” Niels Kristian Højerslev, Associate Professor, the Niels Bohr Institute, in *Jyllands-Posten*.
- 12.1. “Danish children’s TV has become too entertaining and is devoted less than it was to the general education and instruction of children.” Christa Lykke Christensen, Media Researcher, Department of Media, Cognition and Communication, currently conducting a major research project into trends in Danish children’s TV, in *Kristeligt Dagblad*.
- 11.1. “Economic policy in Denmark is untenable when you consider factors such as public services and transfer payments along with the declining tax base as a result of the future population trend.” Peter Birch Sørensen, professor and newly appointed senior economic adviser, Institute of Economics, in his first interview as senior economic adviser in *Politiken Søndag*.



KASPER ALMHOLT



PHOTO: HEINE PEDERSEN

Counter-attacking the forces of cancer

Imagine a future where being diagnosed with breast cancer would be like being diagnosed with arthritis. It might be a distressing condition, and you may be on medication for the rest of your life, but it's not a terminal illness.

That future is not so remote judging by the results of a collaboration between the University of Copenhagen and the Finsen Laboratory at Copenhagen University Hospital – Rigshospitalet.

Researchers have proved that the presence of a single enzyme is one of the factors that cause breast cancer to metastasise, i.e. to spread. This enzyme, *uPA*, is produced by everyone. But if the enzyme is removed or inhibited, the result is reduced cancer metastasis.

“This finding is crucial, because it is the metastases that the patients die from. If tumour cells become detached and spread to other organs, the patient will often suffer a relapse and may die. However, the patient will often be cured if the breast cancer has not had time to spread at the time of surgery,” explains molecular biologist, Kasper Almholt, PhD from the Finsen Laboratory.

The enzyme has great influence on cancer cell metastasis because it controls the breakdown of proteins outside the cell. And that's important:

“To penetrate a blood vessel, the cancer cell first has to overcome a number of physical barriers surrounding that vessel, such as membranes, which are made up of proteins,” explains Almholt.

And that's where this enzyme comes into the picture. Because *uPA* starts a reaction which leads to the breakdown of the membranes so the cancer cells can gain access to the bloodstream.

No side-effects

Researchers investigated the enzyme's effect on 80 mice. In mice lacking the enzyme, metastasis of the breast cancer was greatly reduced compared to that in normal mice. But what is equally important is that the mice without the enzyme functioned normally.

“This suggests that we can block the enzyme without any side-effects for the patients,” says Associate Professor Morten Johnsen, Institute of Molecular Biology and Physiology.

Johnsen has been studying the *uPA* enzyme since the early 1990s. He came up with the project, and persuaded Kasper Almholt to come onboard. With the discovery of the enzyme's role in the spread of cancer, researchers may have found a key to preventing it from doing so:

“We will be developing a *uPA* inhibitor to prevent cancer cells from spreading. This drug will act in an entirely different way to chemotherapy, which destroys cells,” explains Johnsen.

The drug has to be designed so that it only inhibits this single enzyme. Johnsen and Almholt explain that patients will



MORTEN JOHNSEN

then have to take the medication for as long as there is any risk of the cancer spreading. For some patients this will mean life-long treatment, so it is paramount that the treatment carries no side effects whatsoever. The reactions have been overwhelming since the two researchers published their results – from both the press and other cancer researchers. Torben Skovsgaard, Chief Hospital Physician from the Oncology Department, K.A.S. Herlev Hospital, welcomes the findings as a major advance for cancer research. □

Unique Bio Centre on the way

The Institute of Molecular Biology and Physiology and the Copenhagen University Hospital's Finsen Laboratory are two of the departments due to move into the unique Bio Centre in Universitetsparken, Copenhagen. Associate Professor Morten Johnsen from the Institute of Molecular Biology and Physiology is looking forward to closer collaboration with the other departments, which include the Biotech Research and Innovation Centre (BRIC) and the K.A.S. Bartholin Institute.

“Good research environments are a prerequisite for good research. It is important to be part of a larger team, where we can develop ideas together. It is a wonderful way to work,” he explains.

“We were conducting research before the design of the bio-centre had even been decided. The launch of our cancer project coincided with the first concrete proposal for the Bio Centre. So it would not be wrong to say that our cancer research is the first result of our in-house collaboration, which is very promising,” says the associate professor.

Helge Sander, the Minister for Science, Technology and Innovation, laid the foundation stone for the Bio Centre in November. The Centre is expected to be completed in early 2007. □

- 17.1.** Carsten Christophersen, Associate Professor, Department of Chemistry, as a visiting researcher in Peru, receives two honorary medals from, respectively, Universidad Nacional del Callao, for planning and guidance in studies of marine resources, and Universidad Nacional Agraria de la Selva, for planning and guidance in research into rain forest resources.
- 21.1.** The Academic Council appoints the six external members to serve on the forthcoming University Board: Bodil Nyboe Andersen, Claus Bræstrup, Boel Flodgren, Jørn Lund, Henrik Topsøe and Poul Erik Tøjner. See page 46.
- 26.1.** Chile's President Ricardo Lagos visits the Niels Bohr Institute to discuss the collaboration on observatories.
- 27.1.** At the conference entitled *Web-based Learning – Global Trends and the University of Copenhagen*, a report is published on the role of IT in future teaching at the University, with contributions from foreign guest speakers, business and industry representatives and other employers of university graduates.
- 5-7.2.** The University of Copenhagen attends the *Education without Borders* fair at the Forum exhibition venue. 2,428 visitors were registered at the University's stand, where student counsellors from the entire University were on hand to provide information and advice.



PHOTO: JENS FINK-JENSEN

- 14-15.2.** Iraq's Minister of Culture, Mufid Al-Jazairi, attends an international conference in Copenhagen concerning the future of Iraqi heritage, organised by the Carsten Niebuhr Institute of Near Eastern Studies and the United Exhibits Group.
- 19.2.** Professor Jens Kristiansen, Vice-Dean, Faculty of Law, receives the *Hermer's Grant* of DKK 75,000 for significant advances in the discipline of labour law – in respect of both research and teaching.
- 23.2.** Professor Finn Surlyk, Geological Institute, and Jon R. Ineson, Senior Researcher, Geological Survey of Denmark and Greenland, receive *Denmark's Geology Prize* of DKK 25,000.
- 23.2.** Professors Steffen Loft, Institute of Public Health, and Ulrik Gether, Department of Pharmacology, each receive DKK 50 million from the *Større Tværgående Foskergrupper* (Major Interdisciplinary Research Groups) research programme.
- 26.2.** The University of Copenhagen holds an open house event at which prospective students have the opportunity to learn about the various study programmes at close quarters and obtain answers to their many questions.

Brain researcher in top form

The brain is the uncharted continent of the human body, and brain researcher Milena Penkowa is one of its modern explorers. In 2004, she received an honorary grant for her research, which promises hope for people with severe brain disease.

Milena Penkowa was never ill as a child. Only if she accidentally swallowed a fishbone did she ever go the doctor. And on those rare occasions, she was the happiest little girl in the world. Nothing was more interesting than a visit to the doctor's office – where, if she were lucky, there might be hypodermics and stethoscopes, hefty textbooks and a microscope. And this was where she saw herself as a grown-up.

Milena Penkowa's vision came true. She is now 31 years old, a medical doctor, a PhD, and a post doc. senior lecturer at the Department of Medical Anatomy, as well as a grant-holding brain researcher. Most recently – in March 2004 – she was awarded a grant from the *Johan Quentin og Hustrus Hæderslegat* for her discovery that the protein metallothionein is an inhibiting factor in the progression of a number of severe diseases of the central nervous system, such as Alzheimer's and Parkinson's.

Epileptic mice

Back in the 1990s, however, researchers were more or less unanimous that metallothionein seemed to have little bearing on anything. A professor in Barcelona had in his possession a unique strain of mice, which lacked the gene that causes normal mice to produce metallothionein. And it seemed that these mice were none the worse off for it. But far away in the North of Europe, Milena Penkowa at the University of Copenhagen was far from convinced.

“Yes, these were healthy mice. But who was to say that they could get by without metallothionein, if they contracted a disease? And why would a protein molecule be present, almost unchanged throughout evolution – from amoeba to modern Man – if it were an irrelevance?”

Penkowa decided to get to the bottom of the matter. She travelled to Barcelona and started giving the mice brain diseases. They died one after another, afflicted by sclerosis, epilepsy and lesions. But if she injected them with large doses of metallothionein, they showed a marked improvement. In fact, they recovered.

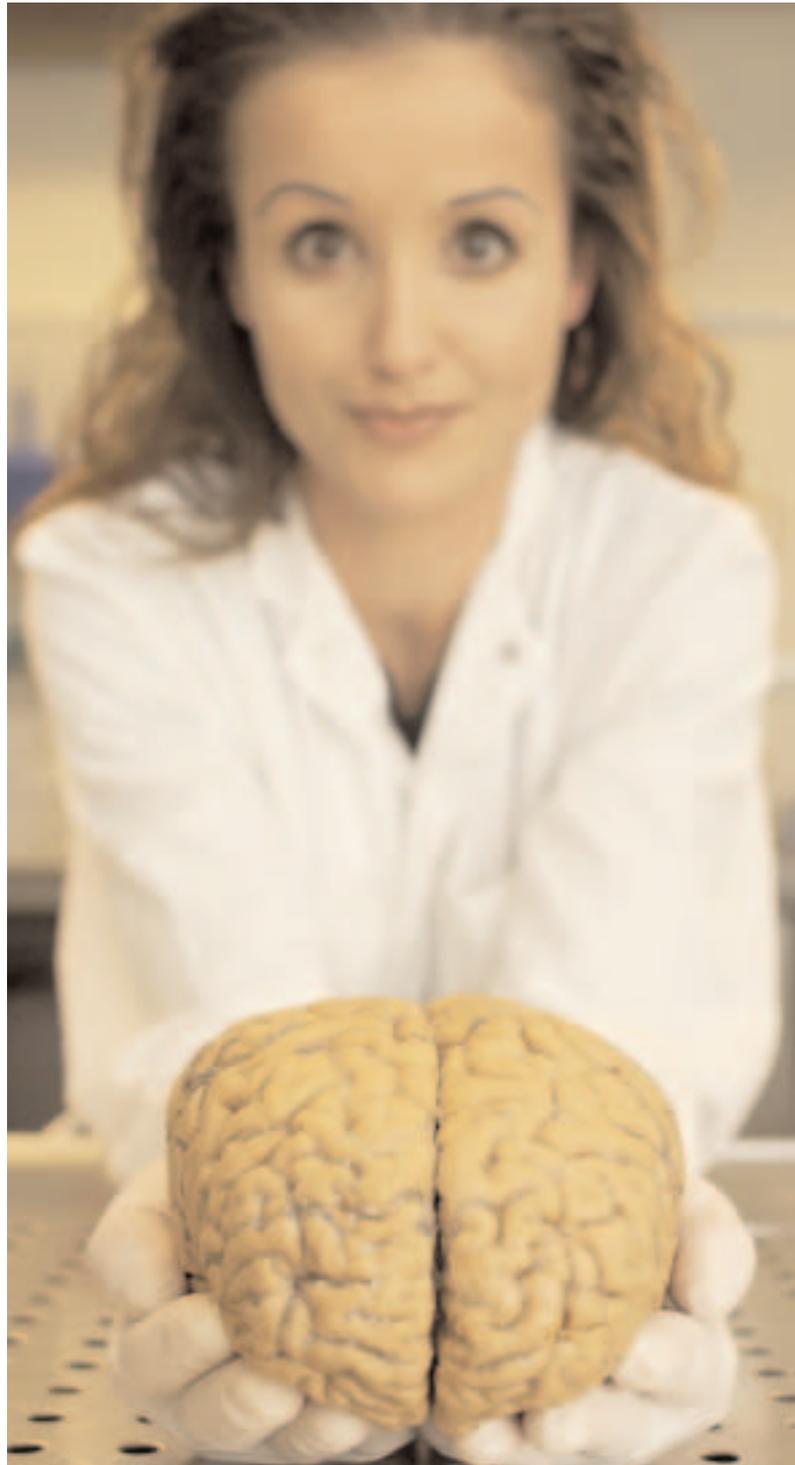


PHOTO: HEINE PEDERSEN

In 2001, Penkowa and her Spanish colleague patented a drug designed to transport that protein to the brain and arrest the programmed cell death. If all goes well, it should be possible to start treating the first patients in 8-9 years' time.

Brain fertiliser

No matter how driven Penkowa's high-flying career might seem, it was actually coincidence that brought her to metallothionein. In 1993, as a new student at a brain research laboratory, a senior colleague suggested that she use some solutions kept in the refrigerator. One of these could trace metallothionein, a substance about which little was known at the time. And that was how her future got on track.

"For me, being a researcher is more a way of life than a profession," says Penkowa, who describes her place of work, the Panum Institute, as "Denmark's greatest playground."

"It's like a hobby – fun and fascinating all in one. All the other organs of the body are described and understood, but the brain is still a mystery. That's also why I don't like wasting too much time on things that don't involve molecules, genes and brain disease. I'd rather play around with the microscope than watch TV in the evenings. And I can easily be planning papers and new experiments in my head while nodding or shaking my head at some social gathering."

Penkowa lives in the Copenhagen borough of Vesterbro with her husband, who is also a doctor. In their flat, she has set up a mini gym – as an integral component of her research life. Each morning, just before 5 am, she laces up her trainers and devotes an hour to fitness and strength training, before climbing into her MX5 Convertible and speeding off to her formalin-dripping brains. She knows that her pumping muscles release the IL6 hormone which causes the brain to produce metallothionein. And she knows that metallothionein has pretty much the same effect on body and brain cells as fertiliser has on houseplants. So the morning's workout may contribute to the solving of yet another mystery at the Department of Medical Anatomy. □

27.2. *The McKinsey Award*, worth DKK 10,000 for the best short essay submitted to the economics programme in autumn 2003, is awarded to Christian Farø, a student of economics, for his essay entitled *Aktiemarkedets reaktion på patenter* (The Stock Market Response to Patents).

1.3. High productivity workplaces are to prepare Denmark for further globalisation. This is the focal issue in a new think tank appointed by the Government. One of the members is Rector Linda Nielsen. The think tank is due to submit its report in spring 2005.

2.3. Philip Bolten Jagd and Peter Martin Larsen, both students of economics at the Institute of Economics, receive the *Mikael Kristiansen Prize* worth DKK 75,000. They will both be continuing their studies at the London School of Economics.

4.3. One in four 15-year-old Danish girls suffers from obesity, whereas the ratio in boys of the same age is one in seven, and only Portugal and the USA have more 15 year-old girls with obesity problems than Denmark. This is revealed by a study of the health and well-being of school children, conducted by Associate Professor Pernille Due and Professor Bjørn E. Holstein, Institute of Public Health, as part of an international project under the World Health Organisation.

8.3. Milena Penkowa, Associate Professor, Institute of Medical Anatomy, receives an honorary grant worth DKK 125,000 from *Grosserer Johan Quentin og Hustrus Legat* for her research into cerebral disease. See page 10.

9.3. "It is absurd that politicians have made the penal code more stringent to demonstrate that they are cracking down on crime. Longer sentences actually lead to increased crime in the long term due to conditions prevailing in the prisons, which put people in poorer social circumstances when they are released." Professor Vagn Greve, Dean, Faculty of Law, in an interview in *Nordjyske Stiftstidende*.

12.3. The Danes are Europe's happiest people. This is revealed by a survey conducted by Professor Peter Gundelach, Department of Sociology. See page 24.

15.3. For the first time since its arrival at the Botanic Garden in 1973, the *Aloe suzannae* – a relative of the better known *Aloe vera* plant – flowers. The inflorescence itself is almost four metres high, and bears approximately 1,000 flowers which open at night. The plant is greatly endangered in its native habitat – Southern Madagascar – where there are currently just five plants remaining. (

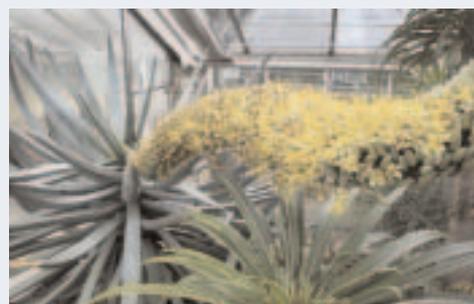


PHOTO: HEINE PEDERSEN

15.3. The Faculty of Law holds a large hearing at which staff discuss with students, employers of university graduates and part-time teachers proposals for the design of future law degree programmes.

A masked robber overextending his knee while walking – this observation prompted the scientists at the Laboratory of Biological Anthropology to start research into walking patterns. In spring, the Laboratory received a donation from bank employees.

Given away by his gait

“Sometimes we can tell who’s coming down the corridor just by the sound – we all know that. We each have a distinct way of walking, and this can also be used for identification,” explains Niels Lynnerup from the Laboratory of Biological Anthropology at the Department of Forensic Science.

This is exactly what happened to the masked offender who killed a man during a bank raid in Ålsgårde. During the trial, Niels Lynnerup showed that the killer’s walk was so distinctive that it was highly probable that the man on the bank’s videotapes and the police suspect were one and the same person.

In spring, Niels Lynnerup and his colleague Erik B. Simonsen from the Department of Medical Anatomy received DKK 500,000 from various sources, including the Danish union for bank employees, Finansforbundet. The money, which enables the study of human walking patterns, was used to appoint a senior researcher, who has since been joined by a PhD student.

The Grauballe Man

Back to the bank robbery in Ålsgårde, when police contacted the Laboratory of Biological Anthropology with a series of digital video recordings of the crime. They wanted the laboratory to help them produce a personal description of the killer. The bank had footage of the masked robber, taken from various angles. Unfortunately, traditional measurement and calculation methods failed to produce results.

“Then I remembered Jens Vedel, a specialist who had used photogrammetric measurement to reconstruct the Grauballe man. The technique uses lots of digital photographs which are entered into a computer programme to create a three-dimensional figure. We actually managed to produce a pretty precise model of the killer’s shoulder breadth, height and so on – with an estimated deviation of only six millimetres from the measurements of the convicted man. We also analysed the murderer’s walk and discovered it was quite unusual. Once the po-



VIDEO FOOTAGE FROM THE DEPARTMENT STORE WHERE SWEDEN'S FOREIGN MINISTER ANNA LINDH WAS MURDERED: ONE OF MIJAILO MIJAILOVIC'S SHOULDERS DROOPS SLIGHTLY. PHOTO: POLFOTO

lice had a group of suspects, we could compare their walks and appearance with the video tapes.”

Niels Lynnerup drew on the same technique in the investigation into the assassination of the Swedish Foreign Minister, Anna Lindh. Now convicted, the killer did not have a characteristic gait, however a slightly droopy shoulder supported the likelihood that the man captured on the department store tapes was identical with the suspect.

Silly walks

Successful analysis of walking patterns relies entirely on good digital recordings taken from several camera angles as well as high-powered computers to process the collected data. But couldn't bank robbers just start doing silly walks in front the security cameras?

“When video surveillance was first introduced, bank robbers could just wear ski masks. But in such a stressful situation, I think it would be hard to remember to walk in a consistently abnormal way. I am also convinced we would still be able to prove the probability of a suspect walking in a certain way – based purely on their build.”

The gait research project is a joint venture between the Departments of Forensic Science and Medical Anatomy, and the basement is used extensively for analysing walking patterns. Cameras “read” the walks of the test subjects. The findings suggest that the way the knee bends and stretches is a particularly revealing feature of a person's identity.

Assisted by the Faculty of Health Sciences, statisticians will now analyse whole series of data over a period of time. The idea is to find out how much our gaits differ and the degree to which we resemble others when we walk.

“This opens up a whole range of perspectives for a number of fields, including rehabilitation and disease diagnosis. For instance, I recently read that people on the verge of depression start walking slower and more heavily before they even realise what is happening to them. Our approach could help produce an early diagnosis,” he explains.

To date, lots of recordings of unsolved bank robberies, also from Norway, have landed on Niels Lynnerup's desk.

“As far as I can tell, we are the only Nordic experts in the field.” □

- 17.3.** Four Danish law students – Anne Kjær, Aini Tajuddin, Anders Aagaard and Jimmy Scavenius Lang – receive a silver award at the major international Moot Court Competition before the European Court of Justice in Luxembourg.
- 17.3.** “The introduction of new information technology results, in many instances, in increased public expenditure and reduced efficiency. The reason presumably being that information technology is so appealing that we forget altogether whether it is actually worthwhile.” Georg Strøm, Associate Professor, Department of Computer Science, in a feature in *Jyllands-Posten*.
- 19.3.** Jes Olesen and Olaf B. Paulson, Professors, Clinical Department of Neurology, Neurosurgery and Psychiatry, are awarded the *Mogens Fogs Ærespris* and each receive DKK 100,000 in recognition of their major contributions to Danish neurology.
- 19.3.** Sine Sunesen, Chair of the Danish Federation of Professional Associations, delivers the principal speech at the Ceremonial Speech Day for the Faculty of Law. In her address, she emphasises that a knowledge society is founded on more than scientific and technological innovation. It is also based on transparency, law and order, effective community services and an integrative approach.
- 24.3.** Rector Linda Nielsen is among the 22 VIPs from Danish business and industry, research and academia invited by Danish Prime Minister Anders Fogh Rasmussen to attend a three-hour meeting at the ministerial summer residence of Marienborg, where discussions concern the issue of the impact of globalisation on Danish jobs.
- 24.3.** Four law students from the University of Copenhagen win a silver medal in an international competition for the best pleading in a moot trial. The four, Anne Kjær, Aini Tajuddin, Anders Aagaard and Jimmy Scavenius Lang, narrowly lost to a team from the University of Stockholm in the competition at the European Court of Justice in Luxembourg.
- 26.3.** Lutheran and Roman Catholic theologians meet at the Faculty of Theology to discuss key issues dividing the two churches.



PHOTO: GEOLOGICAL MUSEUM

- 25.3.** A copy of the skeleton of a Mamenchisaurus – one of the largest-ever terrestrial animals – is erected in front of the Geological Museum until 22 July. From nose to tip of tail, the skeleton measures 22 metres, 11 of which are just the neck.
- 13.4.** Keld Zeruneith, Associate Professor, Department of Scandinavian Studies and Linguistics, receives the 2004 *Søren Gyldendal Prize*, worth DKK 150,000.

One bright spring day, geologist Jesper Milán made an amazing discovery on the beach at Hasle on the Danish island of Bornholm.



PHOTO: HEINE PEDERSEN

Denmark's first dinosaur prints

Once upon a time, two dinosaurs roamed Hasle beach on Bornholm. While the rest of Denmark lay under water and Bornholm was part of a coastal region extending from Scania to somewhere in Poland, the great beasts left their tracks in a muddy river basin.

About 170 million years later, a geologist from the University of Copenhagen found the prints on a beach by an old clay quarry. Or rather: Jesper Milán found prints of the prints, because over time, sand had washed over the mud, filled up the prints and fossilised into sandstone, compressed by mounting layers of clay and sand. And when the Bornholmers needed clay, they dug out the layers of clay, but discarded the sandstone or put it to other uses.

"Some of the sandstone blocks were dumped on the beach beside the quarry, but many were used to expand Rønne harbour. That's the way it goes," says Jesper Milán, now a PhD student.

An extra trip

Jesper Milán found the prints in May. He was an instructor

on a field course, and had decided to go for a walk along the beach during a break.

"I knew there was a chance of finding prints in the sandstone blocks, because prints of plant matter had already been

found. The light was perfect that day, and I soon spotted a footprint with the characteristic five toes. I got a real adrenalin rush. So I took a long walk down the beach before returning for a closer look – I was afraid it might be wishful thinking!" he admits.

Then Jesper Milán called his colleagues and girlfriend, also a palaeontologist. She was hard to impress, however, as she hails from Germany, the site of numerous finds of fossilised dinosaur prints.

Next, a haulier transported tons of sandstone blocks to the forecourt of the Geological Museum in Copenhagen, where Jesper Milán and his supervisor, Richard Bromley, now-retired associate professor of geology, started examining the finds. They realised instantly that one of the footprints, measuring 70 cm, belonged to a 20-metre sauropod, also known as a "long neck". The other one probably came from an armoured dinosaur.

In any event, the Geological Institute celebrated the finding of Denmark's first dinosaur footprints with beer and champagne.



Although two dinosaur teeth and a few fossilised bones have previously been found on Bornholm, Jesper Milán's find dated the animals with almost geographic precision: the mighty beasts trod the sand of Bornholm in the Jurassic era.

A boyhood dream

Jesper Milán's interest in prehistoric evidence is not new.

"My father is a biology teacher, and ever since I was a kid, I've been dragged out to look for fossils in Rønæs, where we lived. I've always been fascinated by prehistoric animal

life so you could call my interest in dinosaurs an old boyhood dream."

That dinosaurs are very special and fascinating is illustrated by the great interest the public and press have shown in Jesper Milán's finds.

"If you want to be famous, just work with dinosaurs. They're a very rewarding subject!" laughs Jesper Milán, who believes popular fascination with dinosaurs stems from the fact that they are totally unlike any modern animal.

"But we know from feathers found on fossilised skeletal remains that birds in fact evolved from carnivorous dinosaurs."

Jesper Milán has spent a lot of time raising awareness about dinosaurs and their remains through articles, interviews and talks because he enjoys passing on his knowledge.

Mind you, he may one day export his knowledge because, as one of only three formal dinosaur experts in Denmark, he foresees that he might well have to travel to Portugal to find a job. The southern European country is blessed with some of the world's longest and best-preserved series of dinosaur trails. There is no hope of finding anything similar in Denmark, because the right geological layers have not been uncovered over such large areas here.

Although Jesper Milán has made interesting finds abroad, the footprints in Denmark are his most exciting achievement:

"The find appeals to my national pride." □

- 23.4. Rector Linda Nielsen awards the *Sonning Prize* to the graphic artist, Mona Hatoum, in the Ceremonial Hall. See page 40.
- 24.4. The Faculty of Humanities holds its annual Humanities Festival on topics such as the Celts, the Danish language and much more.



- 26.4. A Danish research team led by Professor Søren Buus, Department of Medical Microbiology and Immunology, wins USD 4 million in an international tendering competition from the U.S. National Institute of Health for research into the functions of the immune system. The object is to develop vaccines against, and techniques for curing, infectious diseases.
- 27.4. The *BioCampus* research priority area holds its public conference on *Ansvarlig Bioteknologi* (Responsible Biotechnology).
- 29.4. Two junior researchers, Eske Willerslev and Anders Johannes Hansen, Institute of Biology, receive the *Diploma Award* from the *Brødrene Hartmann Foundation*. "They are expected to make a valuable contribution to Danish society," is the motivation from the Foundation. The two researchers have set new standards for DNA studies.
- 1.5. The American *Juvenile Diabetes Research Foundation International* grants DKK 3 million to a diabetes research project led by Jens Høiriis Nielsen, Associate Professor, Department of Medical Biochemistry and Genetics, which will be investigating the protein known as TFF 3.
- 4.5. A research team led by Anja Jensen, Associate Research Professor, Department of Medical Microbiology and Immunology, discovers a protein linked to severe childhood malaria. The discovery could form the basis for the development of a global vaccine against malaria.
- 4.5. University studies can lead to many things. This is revealed by a portrait of six biology graduates from the University of Copenhagen. In 1992, the six first-year biology students formed a reading group. Now, twelve years later, they still meet up. All of them graduated in the years 1999 and 2000 but have ended up in very different places. One has worked as a marine biologist at the National Environmental Research Institute of Denmark, but is now seeking a PhD post. One has studied apes in Nairobi; one is working in clinical trials at the Nycomed pharmaceutical company; one has just taken part in the Eurovision Song Contest and is a currently seeking employment; one will be a PhD student at the Danish Institute for Fisheries Research in two months' time; and one is working on rules for transportation of hazardous goods at the Danish Emergency Management Agency, reports *Berlingske Tidende*.

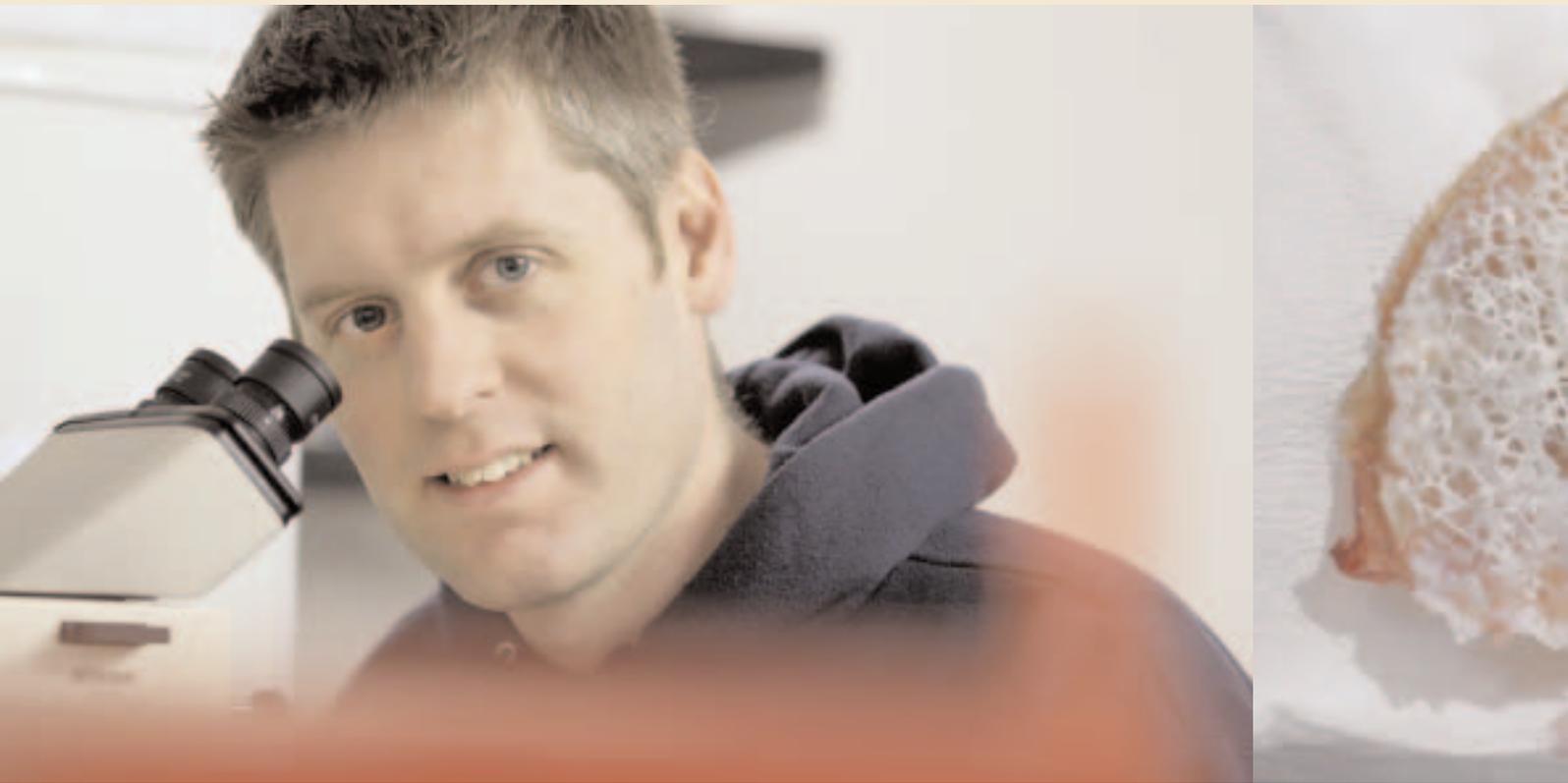


PHOTO: HEINE PEDERSEN

Nano close-up of human bone

Tue Hassenkam, assistant research professor at the Nano-Science Center, has got closer to human bone than anyone before him. So close in fact, that he can see the molecules. And the world of medicine is thrilled.

There on the slide, it resembles a tiny end of sewing thread. But this is actually a minute paring of human bone. Place it in an Atomic Force microscope, and a curious, brownish jumble appears on the computer monitor: grooved surfaces and long, thin tubes.

“This image shows five micrometres of the bone section – equivalent to one-twentieth the width of a human hair. When you enlarge it even more, you can see the individual molecules and how they are structured and bonded. This tells us something about the bone composition,” says Tue Hassenkam, assistant research professor at the Nano-Science Center, as he points at the screen.

The quality of the bone

It was during his year at the University of California that physicist Hassenkam got the idea from an American professor

to image a bone. The researcher held that doctors knew a lot about the quantity of human bone, but less about the quality of bone in relation to bone disease. Hassenkam duly launched into the project and finally arrived at a close-up.

“I was surprised to find that it hadn’t even been attempted before, since it’s relatively easy to produce, if you have that kind of microscope, that is. But perhaps it took a nano-researcher to come up with the idea,” says Hassenkam.

He enthuses about the way nano-research brings fields of existing expertise in biology, mathematics, physics and chemistry together – and about the microscope, which is a story in itself: It feels its way across the object using a tiny point on a lever arm which is dragged over the bone. The movements of the level arm register the bone’s peaks and valleys, which are then rendered as an image on the monitor.

International enthusiasm

Hassenkam’s close-up of human bone has met with international enthusiasm in the world of medicine because it offers new potentials for understanding what happens to the skeleton when afflicted by brittle bone disease – osteoporosis.

“Over the next three years we have to work out how to compare normal bone with bone affected by osteoporosis to



determine what differentiates their structures. And we'll be 'tweaking' the molecules a bit to see how the bonds work.

"Personally, I think it would be amazing if we could make a difference in this field. It may not mean that bone disease can be cured, but it might lead to better forms of treatment," says the assistant research professor. □

New nano-wave

The Danish Prime Minister and the Minister for Science, Technology and Innovation attended when the Nano-Science Center widened its remit. With new research laboratories and new expertise from the Faculty of Health Sciences, the Center intensified its focus on bio-nanotechnology, which holds many prospects, from more efficient washing powder to advances in the development of medicinal products.

Thomas Bjørnholm, head of the Nano-Science Center, cites as an example new progress on T cells. These are the immune system's biological minibuses, which can be used for transporting "nanoscopic kamikaze pilots" out to tumours.

"We've seen how cancer cells die like flies when we release these particle bombs. There's still a long way to go before we can help patients. But one thing is certain: we'd never have made it to where we are now without the interdisciplinary approach that characterises our Center: the particles are released via a very physical mechanism, are decorated using chemical techniques and conveyed by biological buses. Working in this field calls for close interdisciplinary collaboration and a good grasp of chemistry, physics and biology," says Bjørnholm. □

- 5.5.** "The Crown Prince's wedding on 14 May is a unique historic event in that not since 1743 has a crown prince been married in Copenhagen. At that time, it was the future Frederik V who got married." Claus Bjørn, Associate Professor and expert on the Danish Royal Family, Saxo Institute, in *metroXpress*.
- 5.-6.5.** The Centre for African Studies, in association with the Danish Institute for International Studies and the Danish Institute for Human Rights, holds the academic symposium *The Rwandan Genocide of 1994: Lessons Learned, Lessons Still to Learn* as a 10 year memorial for the genocide in Rwanda.
- 10.5.** Rector Linda Nielsen, Pro-Rector Jørgen Olsen and John E. Andersen, Head of the International Office, present the University of Copenhagen's wedding gift, *The Crown Princess Mary Scholarship*, to Crown Prince Frederik and his future Crown Princess, Mary Donaldson, at Amalienborg. See page 42.
- 10.5.** The Niels Bohr Institute and the Danish Meteorological Institute (DMI) sign a cooperation agreement on new focus on research and education in meteorology, air quality, climate, oceanography and space research. The Niels Bohr Institute contributes pure research in these fields, while DMI's research and development have a more operational orientation.
- 10.5.** "The new local government reform represents a further step in weakening local, representative democracy." Professor Tim Knudsen, Department of Political Science, in a feature in *Kristeligt Dagblad*.
- 10.-14.5.** The Department of Asian Studies at the Department of Cross-Cultural and Regional Studies in association with NIAS – Nordic Institute of Asian Studies – hosts an international conference on the 34 million Chinese residing outside of China. More than 90 international researchers from all over the world attend the conference, which emphasises how Chinese migration is contributing to changing both the global economy and the global labour market.
- 11.5.** It is important that school children are assigned to a single class at school, since this is what enables them to develop into socially aware, responsible and resilient adults. This is the conclusion of the survey entitled *Den vordende demokrat – en undersøgelse af skoleklasser som demokratisk lærested* (The budding democrat – a survey of school classes as democratic learning centres). The research team responsible for the survey is headed by Bo Jacobsen, Professor, Department of Sociology.
- 13.5.** The University flag on the main building at Frue Plads is approved by the Rector, after several trial versions have been hoisted. The flag is 3 metres in height and 4.5 metres in width and flies day and night, except when the Danish national flag is flown.



PHOTO: HEINE PEDERSEN

The detective who came in from the cold

Professor Dorthe Dahl-Jensen reveals the climate secrets of the past. The clue: a three-kilometre core of ice from Greenland.

Dorthe Dahl-Jensen, professor of glaciology, stops to buy a video tape on the way home from work, not to record the evening's TV programme about herself and the North Greenland Ice Core Project (NGRIP), but because her five-year-old daughter is to appear in a children's programme.

She shows the same modesty as she talks about herself, her job as project leader of the NGRIP, her entry in *Kraks Blå Bog* (the Danish Who's Who), and about being a role model for young women who opt for glaciology: the study of snow, ice and glaciers.

An icy secret

Dorthe Dahl-Jensen has headed the NGRIP since scientists started drilling out the more than three-kilometre core of ice in northern Greenland in 1995. Last summer, they brought up the last section of the core from the icy depths. Then they broke up camp and returned all the snow scooters, trucks and temporary buildings to Copenhagen.

"It's like being a detective. At first, the shiny ice core offers no clues at all, but once we've taken samples and analysed them, we can gradually decode its secrets and piece together the story of the climate in past times."

Every year, snow is deposited on the ice cap of Greenland. It compresses and freezes into layers of ice like the growth rings

of a tree. These layers of ice are the keepers of the climatic story of the past, which is precisely what Dahl-Jensen finds so fascinating.

If she is a detective, she is certainly investigating a very old case, for the ice at the base of the ice core is more than 115,000 years old, originating from the time when the last warm period, or interglacial, was ending and the last ice age about to start.

But despite the age of the evidence, Dahl-Jensen and her colleagues managed to solve the mystery:

They have analysed the ice core in sections of five centimetres and can now draw a temperature graph of the atmosphere spanning 125,000 years. The graph shows that the transition from interglacial to ice age took place over a very long period of time. 5,000 years in fact.

"So we can conclude that interglacials end slowly and peacefully. Equipped with this knowledge, we can safely say that we are not on the verge of the next ice age," Dahl-Jensen assures us.

She is a scientist with a capital 'S', but the NGRIP project also gave her the role of leader of a huge international research team:

"When we're in the field, being the leader is a bit like being a ship's captain. Everyday life gets more intense and conflicts seem more extreme than back home at the office. So it's important to have one person who makes the decisions," she explains.

She smiles broadly, and we believe her when she says that any problems are usually resolved peacefully.



A Danish summer

It is a long time since the ice scientist last enjoyed a Danish summer – for the past ten years, she has spent every June, July and August in Greenland. Her husband, fellow glaciologist and team member, Jørgen Peder Steffensen, has accompanied her. So have their four children aged between 5 and 19. The couple took it in turns to lead the team on the ice cap and look after the children in Kangerlussuaq.

“We took our students along as well. It was an important principle: the students come first. It fuels their enthusiasm for the subject,” explains Dahl-Jensen, who is proud of the students.

“I am particularly pleased so many women are studying glaciology. Half the students are women, which is unusual for the sciences.”

She admits that she was probably a role model for others at the start of her career.

“But today’s women students are just as much role models for future generations. They can see opportunities for them here, and that attracts more young women.”

New projects

The NGRIP project has come to an end after ten years. But Dahl-Jensen feels no regret:

“No, because we have achieved what we set out to do, and more.”

Dahl-Jensen and her colleagues from the Niels Bohr Institute have already started work on the next ice core projects. Right now they are planning a new drilling in Greenland so they can study ice from the former ice age – the ice age before the interglacial before the last ice age. □

- 14.5.** Staff at the University of Copenhagen who work at sites in the City Centre have the chance to follow the wedding of Crown Prince Frederik and his fiancée, Mary Donaldson, at close quarters from the windows of their offices. However, only those holding a valid ID card are able to get past the police barricades erected for the occasion. All teaching in the zone is suspended, so the students are obliged to follow the event from their TV sets at home.



PHOTO: PETE BURKE

- 14.-15.5.** The results of empirical and theoretical consciousness research are presented and discussed at the conference entitled *Consciousness: Empirical Findings and Philosophical Interpretations*, held in association with the *Danish Society for Philosophy and Psychology* and backed by the University’s Body and Mind research priority area.
- 24.5.** The Centre for African Studies and the Danish Institute for International Studies mark the 10th anniversary of the first democratic elections in South Africa with a conference on contemporary South African society and international relations.
- 25.5.** Geologists from the University of Copenhagen, in collaboration with researchers and students from the University of Aarhus and soldiers from the Skive Barracks, detonate bombs across the Jutland peninsula and from ships in the Bay of Aarhus and the North Sea in order to measure the resulting sound waves, thereby obtaining insights into prehistoric volcanic activity, and to discover new oil deposits.
- 25.5.** The Faculty of Theology produces a radio montage designed to raise awareness of the Faculty’s activities. A CD of the montage is sent out to the nation’s local radio stations with the aim of attracting more students.
- 26.5.** Professor Thomas Söderqvist, Institute of Public Health, receives the *2003 Generalkonsul Ernst Carlsens Ærespris* – an award worth DKK 60,000 – for his outstanding work in establishing Medical Museion and its research into medical history, collections and exhibitions.
- 27.5.** Professor Thomas Bredsdorff, Department of Scandinavian Studies and Linguistics, holds his farewell lecture on his retirement after 40 years at the University.
- 30.5.** Professor Kirsten Ketscher, Faculty of Law, receives *Vanførefondets Forskningspris* – a prize worth DKK 50,000 – for having laid down a series of basic principles in disability law.
- 30.5.** Since the early 1900s, the Archaeopteryx, a prehistoric bird, has enjoyed official status as the earliest known bird. Now scientists, such as the zoologist Per Christiansen, Zoological Museum, have established,

2004 was a turbulent year for Head of Department Ingolf Thuesen and the Carsten Niebuhr Section at the Department of Cross-Cultural and Regional Studies. It featured a UNESCO invitation, the planning of a world exhibition – and an assault on one of his staff.



Iraq: birthplace of Europe

Ingolf Thuesen is a quiet man, a 52-year-old assistant professor of archaeology whose interests include Sumerian ceramics and the early urbanisation of Western Asia. But a Google search on him returns 645 hits. His workplace, the Carsten Niebuhr Section, results in more than 1,000. Why so many? One reason is that Ingolf Thuesen is the Danish archaeologist with the greatest experience in excavations in Iraq, one of the world's hot spots. He visited Iraq four times in 2004 – once by invitation from UNESCO – to help plan how best to protect and preserve the Iraqi cultural heritage for posterity and to inspect damage to the Iraqi national museum, which fortunately was far less extensive than first reported.

“The situation is much worse in the provinces, where looting and military actions have taken a heavy toll on national historical sites such as ancient Samarra, the former centre of the Abbasidian Empire. It is a great loss for future generations, because when objects are destroyed or removed from their original location, we never get the opportunity to describe them or understand their significance,” explains Ingolf Thuesen.

The Gold of Nimrud

Since the UNESCO trip, Ingolf Thuesen has visited the Iraqi authorities three times to plan a unique travelling exhibition,

The Gold of Nimrud, which will hopefully also exhibit in Denmark. The more than 600 fabulous artefacts exquisitely fashioned in gold and weighing 40 kg, belonged to Queen Yaba, who lived in the Assyrian capital of Nimrud 1,500 years ago. Her untouched grave was opened by an Iraqi archaeologist right before the first Gulf War and its contents hidden under the national bank in Baghdad. It is only now, after 1,500 years of oblivion – 16 under lock and key – that the gold of Nimrud can be displayed publicly.

“We hope the exhibition will raise world awareness of Iraq's huge cultural and historical contribution to world history,” says Thuesen.

“The birthplace of European culture was not ancient Greece but more probably Iraq and South-east Asia. The earliest known civilisations and agricultural settlements, the first urban societies, central administrations, the art of writing and first empires all originated in the ancient kingdoms centred on the River Euphrates and River Tigris. The whole basis of the political and social systems we live by today evolved in Iraq between 5,000 and 7,000 years ago.”

From obscure to trendy

Thuesen has been passionately interested in Iraq ever since his brother invited him as a young man to visit Israel and Pales-



INGOLF THUESEN AND A 200,000-YEAR-OLD TOOL FROM JORDAN. PHOTO: HEINE PEDERSEN

tine. On his return to Denmark, he enrolled himself in an oriental archaeology programme, an obscure little course that attracted two new students a year. The University's Asian studies have since grown explosively, achieving new significance and status in society.

"Today, Arabic and Chinese studies are quite acceptable, because the large new export markets and growth potential are in the Middle East and Asia. The Middle East is important to us, not only because of the oil and our common cultural roots, but also because wars and demographic shifts have given Denmark a new population group with a Middle Eastern background. A need has arisen for people with academic expertise and personal experience in the countries and culture of the Middle East," he explains.

That is why the Carsten Niebuhr Section advises the business community on Middle Eastern issues and why the department was asked to organise a debate meeting in 2004 between new Danish imams and Bertel Haarder, former Minister for Refugees, Immigration and Integration Affairs.

However, Ingolf Thuesen earns most Google hits for his response to the assault on one of his staff in autumn 2004 who had recited verses from the Koran in class. Although the unfortunate incident has not yet been cleared up, Thuesen has spearheaded a multidisciplinary conference on freedom of speech and tolerance at the University.

"The right to freedom of speech, thought and research is the cornerstone of the University," affirms Thuesen. □

through studies of the 150 million year-old fossil, that Archaeopteryx was feathered. This has never been proved until now, but simply taken for granted.

- 1.6. The University of Copenhagen celebrates its 525th anniversary.
- 1.6. Eva Smith, Professor of Law, is appointed honorary professor at the Lund University, Sweden.
- 9.6. The first students of Conflict Resolution receive their Master degrees at the Faculty of Law.
- 2.6. The first-ever finds of fossilised prints of dinosaurs are made in Denmark, on the Island of Bornholm, and arrive at the Geological Museum. See page 14.
- 18.6. Steen Winther Blindum, MSc (Economics) and PhD student, Institute of Economics, receives the *Tuborg Foundation's business economics prize* worth DKK 150,000 for continuing education at Princeton University, USA.
- 18.6. The Department of Geography, jointly with the School of Architecture in Aarhus and the Royal Veterinary and Agricultural University, receives DKK 25 million from the *Realdania Foundation* for the establishment of *Center for Strategiske Bystudier – Realdania Forskning* (Centre for Strategic Urban Studies – Realdania Research). The research centre will be tasked with addressing urban development management and quality from an interdisciplinary perspective.
- 19.6. "The values of the forthcoming European Constitution comprise welfare, democracy, dignity and tolerance – values that are not to be found in the Danish Constitution. Hence, the Constitution represents an improvement in the rights of Danish citizens." Marlene Wind, Associate Professor, Department of Political Science, in *Politiken*.



PHOTO: POUL KRARUP

- 26.6. The Royal Couple visit the Arctic Station during their tour of Greenland, where they are received by Dean Henrik Jeppesen, Faculty of Science.
- 1.7. Throughout July, Helsingør Central Library presents an informative exhibition on Iraqi cultural heritage comprising photographs, posters and copies of cultural artefacts. The exhibition is coordinated by a group of students from the Carsten Niebuhr Institute of Near Eastern Studies.
- 1.7. The new *Biophysics Centre* at the University of Copenhagen opens with financial support from the *Villum Kann Rasmussen Foundation*. At the Centre, led by Professor Mogens Høgh Jensen of the Niels Bohr Institute, researchers from the University of Copenhagen, the University of Aalborg and the University of Southern Denmark will be conducting research into cell behaviour and communication.

Jensen on the way out

Although it is still the most common surname in Denmark, the number of Danes called Jensen has fallen by 30,000 in just 10 years.

Thus concluded Michael Lerche Nielsen, assistant professor in name research, after examining last autumn's statistics from the Danish Central Office of Civil Registration. This is the first time in 20 years that the Name Research Section of the Department of Scandinavian Research has had the chance to study in-depth all the names used by the Danish population, and the figures will ensure researchers plenty of work in coming years. But a preliminary analysis suggests that the traditional Danish surnames ending in '-sen' are not among the most popular.

"Although there is cause for concern about the future of Jensen, I don't think the name will die out. Instead, the name might well become 'hip' in future because it has become increasingly rare and because we are extremely aware of our cultural inheritance," Michael Lerche Nielsen forecasts.

The trends in Danish names come as no surprise to researchers:

"Some of our predictions are proving correct. For example, more women than men are taking their spouse's name, and 'posh' names are a popular choice for married couples looking for a shared name. At the same time, many parents are giving their children hyphenated names, a trend which is bound to

cause problems later: What does a Jensen-Wulff mother do when naming a child whose father is a Søndergård-Møller?" the assistant professor muses.

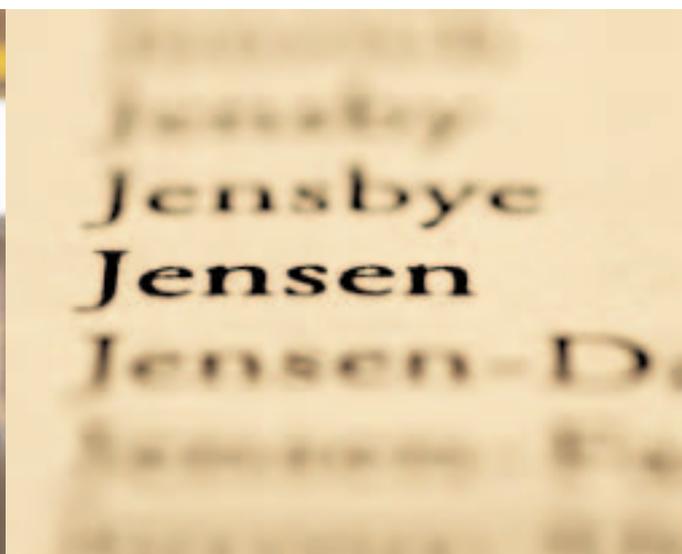
Potential topic for debate

The survey arose from the work of the Government's Committee on the Act on Personal Names, on which Michael Lerche Nielsen sits. The committee has proposed a new act on personal names that would offer new options. For example, unmarried partners would be able to take each other's surnames; middle names could be used as surnames; and women would be able to call themselves 'Jensdatter' after their father Jens, a common practice among people from Iceland, Russia and the Arab countries.

The committee would also like surnames carried by more than 1,000 people to be free for use by anyone. For instance, this would make it easier for immigrants applying for jobs in Denmark, because they often cannot even get as far as the first job interview due to their exotic-sounding surnames. In such cases, Jensen would be an option. Today, Jensen is a name borne by 300,000 Danes. □



PHOTO: HEINE PEDERSEN



Media and Military (too) closely related?

The first analysis of Danish media coverage of the invasion of Iraq in 2003 reveals that impartial military experts were not in great demand.

The analysis showed that the media largely used military staff as sources, particularly the two electronic media in the survey – the Danish Broadcasting Corporation and TV 2 – who invited military experts to their studios.

“The media’s extensive and unquestioning use of military staff, who can only be considered parties to the war, is problematic. They could have brought in people with military expertise who were not directly involved,” is the opinion of Professor Stig Hjarvard from the Department of Media, Cognition and Communication. Together with Assistant Professor Nete Nørgaard Kristensen, from the same department, and Associate Professor Mark Ørsten from Roskilde University, he wrote the report as part of the Modinet research project.

Losses marginalised

The media coverage reflected another close tie between coalition military and the media. The number of dead and wounded played a marginal role in the coverage, and the report attributes this marginalisation to the “reliance on military sources”.

“One of the arguments for waging the war was that it would be of a limited nature with little loss of life. So it is interesting that the journalists were not particularly keen to investigate whether this was in fact true,” Nete Nørgaard Kristensen points out.

The newspapers covered by the survey were the Danish dailies *Information*, *Jyllands-Posten* and *Politiken* – and their opinions on the war were reflected not only in their editorials but also in their letters to the editor and front page coverage. However, the media studied did devote roughly equal amounts of column space and air time to both the Danish Government and the opposition parties. □

- 5.-11.7.** The courtyard of the Academic Council comes alive to the sounds of Jazz as performers such as the *Mikkel Nordsø Band* from Denmark, *Aché* from Cuba and *Giovanni Falzone* from Italy take in this venue during the *Copenhagen Jazz Festival 2004*.
- 12.7.** Two law students, Susanne Rydal Drost and Michael Stensgaard of the University of Copenhagen, win the prestigious *International Negotiation Competition of Law Students 2004* in Paris.
- 19.7.** Karsten Pærregaard, Associate Professor, Department of Anthropology, receives an honorary doctorate from Universidad Nacional del Centro del Per’.
- 26.7.** *Copenhagen University Network on Science and Religion* receives USD 15,000 from the *Metanexus Institute* for activities in the field of religion and science.
- 1.8.** The University of Copenhagen, jointly with the student advisory centre, *ivu*C-København*, is appointed to supervise a new regional guidance centre as a new, radical reform of student and professional advisory services from basic secondary education to university level.
- 1.8.** Professor Elisabeth Bock, Department of Molecular Pathology, receives a grant of DKK 72 million from the European Union to head up an international project to conduct research into how the brain stores memory. The hope is that the research will advance the development of drugs for the treatment of conditions such as clinical depression, Parkinson s, Alzheimer s and cerebral haemorrhage.
- 2.-5.8.** The Department of Geography hosts *The Tidalites International Conferences on Tidal Sedimentology*, held every fourth year.



PHOTO: NASA / THE HUBBLE HERITAGE TEAM

- 7.8.** The dust particles in the atmosphere around Mars are magnetic, reveals an article in *Science* by Preben Bertelsen, Assistant Professor, Center for Planetary Research. The discovery is to a great extent attributable to specially constructed magnets developed by researchers at the Niels Bohr Institute, which have been mounted on the two rover vehicles currently collecting samples from the Martian surface.
- 10.8.** Maria Louise Wrang, Assistant Research Professor, Department of Molecular Pathology, receives DKK 1 million from the *Lundbeck Foundation* for research into cerebral haemorrhage and thrombosis in collaboration with researchers from the Lund University, Sweden. The ultimate aim is to arrive at techniques for preventing and treating strokes.

The Danes are happy

At least we feel happier and more satisfied than the rest of Europe's population, going by the results of a large-scale survey. But there may also be a hint of self-satisfaction too, says one of the forces behind the survey, Professor Peter Gundelach from the Department of Sociology.

Living in a stable relationship, having influence over our work, and our lives sorted out are some of the factors that peak on the Europeans' happiness scale. But other factors also come into play when we declare ourselves more or less satisfied with our lives. And, in Europe, the Danes are in the lead when it comes to feeling that things are going well. But why would that be?

Religion seemingly offers no explanation, since we have a pretty relaxed attitude to religious faith. On the other hand, we have great confidence in democracy and public institutions, which does a lot for our sense of satisfaction.

But according to Professor Peter Gundelach of the Department of Sociology, more than anything else perhaps, the Danes' sense of satisfaction and happiness derives from a combination of our high standard of living and our social ties.

"In Denmark there are many strong ties – and indeed these close relationships with friends and family are very important. But association activities and voluntary work also matter. Because what we get out of membership of associations is trust and a form of reciprocity: you give something and get something in return. And as regards voluntary work in associations, the Danes rank no. 1 in the sports and cultural domains," says Gundelach, adding:

"But another guess could be that the Danes are satisfied simply because they live in a productive society with a high standard of living."

Aversion to bribery

The Danes are proud of their welfare state, which is perhaps why we exhibit Europe's strongest aversion to bribery, cheating the social benefits system and deceit for personal gain. At the same time, we are more open-minded than the average



PHOTO: SCANPIX / HEINE PEDERSEN

European as regards aspects of our private lives – though not as much as we like to think. For instance, we are less tolerant than the Swedes or the Dutch when it comes to homosexuality, divorce and abortion.

We are also strongly patriotic, which may also be why a

concept such as “the multicultural society” does not carry particularly positive connotations for Danes. Professor Gundelach holds therefore that the reverse of the coin in the Danes’ life satisfaction may be a certain self-satisfaction – that we are pre-occupied with ourselves. However, there is no consistent trend.

“Danish attitudes to immigrants are complex. Many people are very much against allowing immigrants into the country and initially believe that foreigners arriving in Denmark should be just like Danes. But once they have arrived and become our next-door neighbours, we don’t believe that there should be any discrimination. This suggests an element of tribalism in the population,” claims Professor Gundelach.

Complaining

This tribalism may have the effect of putting a distance between ourselves and the world around us, and the same goes for our many privileges.

“Our tendency for complaining should perhaps be viewed against the background of the high standards we enjoy, but which we are reluctant to share,” says Professor Gundelach.

And while we are apparently satisfied with our lives in the welfare state, we are also quite apathetic about whether economic differences are evened out and whether provision is made to ensure that the basic needs of all citizens are covered.

“But it’s hard to say whether that’s because we take the benefits of the welfare state so much for granted that the ideal of redistribution is not uppermost in the Danish mentality. Or whether it is because we actually believe that equitability, i.e. the idea that everyone should have equal access to the same benefits – has gone too far,” says Gundelach, who heads up the Danish input on the project.

The European survey has been running for 17 years and has resulted in two books about changes in the Danes’ values. The latest conclusions, based on figures from 1999, are presented in the publication *Danskernes særpræg* (The Danes’ Uniqueness). More than 30,000 interviews with randomly selected citizens in Europe form the basis for the conclusions. □

15.8. A ranking conducted by the Institute of Higher Education, Shanghai Jiao Tong University, China, places the University of Copenhagen as 59th on the list of the world’s best universities, compared to last year’s ranking of 65th. In Europe, the University of Copenhagen is 14th on the list, compared to last year’s ranking of 16th.

16.8. Rector Linda Nielsen is re-elected as chairwoman of the Danish Rectors’ Conference.

16.8. 31 students commence the new Master Programme in Health Anthropology at the Department of Anthropology. The programme attracts nurses, doctors, midwives, occupational therapists and physiotherapists.

20-21.8. The *Equality and Pluralism Network* at the Department of Media, Cognition and Communication hosts a major international conference attended by a number of the most respected philosophers and economists working on equality as a value.

26.8. Three Danish astronomers, including Johan Peter Uldal, Associate Professor from the Niels Bohr Institute, conduct observations that could provide important new insights into the formation of galaxies. The results suggest that galaxies are formed only after the creation of a black hole.



PHOTO: ERIK GLEIE / POLIFOTO

27.8. Former student protestor, the psychologist Finn Einar Madsen dies aged 61. Madsen became a household name following his exploit at the Annual Commemoration at the University of Copenhagen on 21 November 1968, when he commandeered the lectern in the Ceremonial Hall from Rector Mogens Fog. This saw the beginning of the student revolts of that year in Denmark.

1.9. A total of 680 new law students assemble for a group sing-along for first-years at the Faculty of Law. The sing is led by Lillian Rasmussen, a specialist in team-building through musical activities.



DESIGN: PETE BURKE

1.9. The Faculty of Health Sciences and its departments adopt a new logo. The logo features a new seal containing the familiar medical symbol of Aesculapius’s staff and serpent, which stems from Greek mythology. At the same time, the Faculty changes its signature colour from pink to dark blue. Now three of the six faculties have got their own logo.



PHOTO: HEINE PEDERSEN

No-one speaks up for marriage

Wedded bliss across national borders is getting caught up in legalities, because marital law has become subordinate to immigration law. This is the conclusion of Professor Hanne Petersen, who has just taken part in a major EU research project.

We hear about them everyday: married couples who cannot be together because one of them is not an EU citizen; because they are not old enough or because they in some way or another fail to meet the legal requirements.

Professor Hanne Petersen, Doctor of Laws (LLD) at the Faculty of Law, has a long-standing interest in how wedded bliss fits in with the intricacies of legislation. Together with two other legal experts from the University of Copenhagen, she took part in a large-scale, three-year EU research project to study the migration of Bulgarian and Hungarian women to the Netherlands and Italy. At the time, neither Hungary nor Bulgaria were EU member states.

The Bulgarians and Hungarians interviewed were all well-educated, resourceful women who crossed national borders – or attempted to do so – because of a marriage or a relationship.

But they did not always succeed. One example was a Bulgarian woman who was married to a Dutchman with a British mother. The couple had children, who held Dutch nationality. But for financial reasons, and perhaps also because of the husband's British mother, the family was not allowed to move from Bulgaria to the Netherlands. Hence it was not marital law, but rather immigration law that determined their fate.

“In a globalised world, it would seem that women such as the ones we studied are getting caught up in a new way. In legal terms, the ideal of marriage for love is under attack. Then there is the fact that some women have been able to improve their standard of living through marriage and have used this as a means of achieving financial security. But the determining factor now is national interests. As such, marital law is becoming an appendix to immigration law,” explains Petersen.

“This begs the question of who is left to take up the good fight for marriage as an institution? In this day and age, no one carries the torch for marriage, and marriage no longer frames the nuclear family. A decision to get married is increasingly a matter of personal preference. Which is why it is becoming more important for the State to protect itself against immigration via marriage and family unification than to protect the right of the individual to marry.”

Hanne Petersen compares our time with the Shakespearean ethos – when it was the patriarch who decided whom his



daughters were to marry and “a suitable match” was not just a quaint old phrase.

“At that time, marriage was governed by social class, whereas today it’s nationality. And if you happen to be an EU national, you are one of the privileged,” says Petersen.

“There’s nothing new in financial or national interests prevailing. And maybe it has to be that way. But in former times, a foreign spouse had a legal privilege to obtain citizenship. Today that privilege is controlled by market forces.”

Affinity with Europe

Yet in a way, the Bulgarian and Hungarian women interviewed were still privileged. In many respects, they were like other European women in terms of their level of education, occupations, family relations and religious creed. But they felt more European than did their Italian and Dutch counterparts who were interviewed for the study.

“Western European women have a stronger affinity with their own nation than with that of the European Union. This suggests that we tend to feel an affinity for the authority that offers us the best options. At the same time, the study showed that the Hungarian and Bulgarian women were sometimes disparaging about other immigrant groups – perhaps because they saw this as a way of emphasising their own affinity with their new country,” concludes Petersen. □

- 2.9.** The University of Copenhagen hosts its annual matriculation celebration, at which 2,000 first-years turn up to hear the Rector’s welcoming address, meet her in person and then go on to party in the courtyard of the Academic Council with live music and refreshments.



- 2.9.** The University of Copenhagen introduces a series of custom-designed University merchandising – initially comprising T-shirts, sweatshirts, umbrellas, key straps and reflective safety bands. See www.ku.dk/webshop.
- 3.9.** Minik Rosing, Professor, Geological Museum, and Klaus Mosegaard, Associate Professor, Niels Bohr Institute, are awarded the *2004 Faculty of Science Communication Prize*, worth DKK 25,000 each, for their research communication.
- 3.9.** The first class commences its Master Programme in Integrated Planning at the Department of Geography.
- 3.9.** The new programme in Molecular Biomedicine begins with its first class of 50 students. The teaching takes place at both the Faculty of Science and the Faculty of Health Sciences, and 5 out of 6 of the students are female.
- 7.9.** The Faculty of Science’s Youth Laboratory at the H.C. Ørsted Institute receives a visit from Minister for Education Ulla Tørnæs, who is invited to observe how research-based physics and chemistry are communicated to Danish upper secondary school students. The Youth Laboratory is a collaboration between the Department of Chemistry, the Niels Bohr Institute and the Faculty of Science Secretariat, and since its inauguration in 2001 has been visited by 4,000 students.
- 8.9.** In Malmö, junior anthropologist, Cecilie Robow, Department of Anthropology, receives *Einar Hansens Forskningsfonds Legat for Humanistisk Forskning 2004*, a grant for having brought anthropology home from more exotic hunting grounds by studying religiousness as it prevails in everyday Danish society.
- 8.9.** For the third year, the University hosts International Market Day in the Ceremonial Hall, at which visitors have the chance to meet representatives of foreign universities, embassies, organisations and cultural institutions.
- 8.9.** Ulrik Gether, Professor, Department of Pharmacology, receives DKK 3.3 million from the *Lundbeck Foundation* for research into neurotransmitters, which play a key role in mental disorders, including depression and drug dependency. The aim is to develop effective preparations for the treatment of these disorders.

Physical Faith

Church rituals affect us in a different way than sermons because they appeal to our senses. This is something we should aim to safeguard, and priests need to be better at communicating, according to Assistant Professor Bent Flemming Nielsen of Systematic Theology.

A priest sprinkles a handful of water from the font onto the baby's head and speaks the words: "I baptise thee in the name of the Father, and of the Son, and of the Holy Spirit". The child has now joined the large majority of baptised Danes. For although Danes do not flock to church on Sundays, the Church and its rituals play a distinctly important role at key moments in our lives: baptism, confirmation, marriage and funeral. According to Assistant Professor, Head of Department and Doctor of Theology Bent Flemming Nielsen, one of the reasons is the way we experience the rituals.

"As theologians, we have always concentrated on the Church and the Scriptures, while the rituals have taken second place. But the physical dimension – the sensory aspect and doing things together as a group – is far more important than I thought at first," explains Nielsen, whose book *Genopførelser – ritual, kommunikation og kirke* (Repeat Performances – Ritual, Communication and Church) came out this spring.

The anthropological approach

In the book, he explains ritual significance from an anthropological angle.

"Taking part in a ritual means being part of something that is established and not left open to coincidence or interpretation. From anthropology, we know that acting according to a set pattern is mentally liberating for the participants in the ritual. It is rather a paradox that something so ritualised can afford great freedom. However, this freedom enables us to reach deeper layers of ourselves. The experience is not necessarily religious. The participants may experience the ritual as comforting or heartening without associating it with specific religious convictions," explains Nielsen, who has worked as a priest for ten years.

But doesn't the Danish church run the risk of having rituals devoid of any Christian message? That form will become more important than content?

"That's a reasonable question. But rituals affect us on more than one level. For instance, at the fundamental human level, they can help us to embrace our insecurity. The rituals interact with the Christian scriptures, which prepare the way for a religious – but not necessarily exclusively religious – experience. And as long as the Church is aware of this, I do not see it as a problem."



PHOTO: HEINE PEDERSEN



Communication – a sore point

However, the Church has a potential problem with communication. And Nielsen is convinced priests can improve their communication skills.

“It would not be going too far to say that priests need to be more conscious communicators. Communication is a sore point for the Church from a theoretical point of view as well. In my role as priest, I have at times experienced the difficulty of one-way communication. But introducing dialogue as part of the church service is not the answer – that has been tried, without success. As I see it, priests have to learn to make abstract issues more concrete, to use their imagination and to bring in the sensory aspect,” explains Nielsen.

“There’s a great difference between saying ‘It is the harvest festival today’ and starting with ‘The apple tree in my garden at home is full of ripe fruit. This morning, I picked an apple ...’ That captures people’s attention in quite a different way.”

Conservative

Nielsen realises some theologians will accuse him of being too conservative because his analyses imply that rituals should be retained, and thus also the Church service in its present form.

“But the Church is all about recognition and security. We can simplify the rituals slightly, but the Church is not meant to be a showplace. In the 1970s, there was quite a bit of experimentation in church services, but that did not make people rush to church. There’s a child inside each of us that wants to hear the same bedtime stories and songs every night. Rituals are repeat performances with the emphasis on ‘repeat’. That is why we shouldn’t tamper too much with the external form,” the theologian says.

“And if Danes do not use churches enough, we need to make them aware of the qualities the Church can offer in these stressful times,” the assistant professor concludes. □



PHOTO: SØREN HARTVIG

10.9. Nobel Prize winner and Archbishop Emeritus Desmond Tutu delivers religious and philosophical stand-up entertainment to a crowded Ceremonial Hall. See page 6.

14.9. *Novo Nordisk Foundation* donates DKK 10.5 million to the Medical Museum's three-year research project, *Danish Biomedicine, 1955-2005: Integrating medical museology and the historiography of recent biomedicine*.

15.9. Rector Linda Nielsen signs the official standards of values for the University of Copenhagen, whose core values are *truth-seeking, responsibility, freedom and commitment*. See page 55.



PHOTO: HEINE PEDERSEN

15.9. The Nano-Science Center is extended with integration of expertise from the Faculty of Health Sciences. In future the focus will be on the field known as bio-nanotechnology, in which activities will be devoted to everything from new methods of treatment for widespread diseases, to the development of more effective detergents. Prime Minister Anders Fogh Rasmussen and Minister for Science, Technology and Innovation Helge Sander attend the event.

22.9. The Department of International Health at the Institute of Public Health receives the famous *Erasmus Mundus Scholarship*. Together with seven other universities in the European Troped network, funds will be granted for a total of 40 scholarships to be disbursed over a four-year period. The scholarships will be awarded to students from developing countries and, in particular, to students from China, Taiwan, India and Thailand.

24.9. The Zoological Museum opens its *Bionics* exhibition devoted to the impact and influence of nature on human lives. See page 45.

24.9. Supreme Court Judge Thomas Rørdam delivers the principal speech at the law graduates' ceremonial speech day, and states that: "The challenge in acting as counsel is to act as your client's sole assessor. To hold human destinies in your hands."

The University of Copenhagen is participating in a pioneering development project on new plants from South Africa.

Potted mistletoe

After years of working with ornamental plants, horticulturalist Bo Ivar Jørgensen, PhD, and gardener Jørgen Damgaard, both with the Botanical Garden, have developed a patented technique for getting mistletoe to grow on houseplants. For the first time ever, it is now viable to mass produce houseplants with mistletoe.

“In principle, the patent covers all parasitic plants that propagate like mistletoe. Naturally, the age-old natural technique for sticking mistletoe seeds onto home-grown apple trees has little to do with the patent. So everyone is still free to use that technique,” explains Jørgensen.

So far, the technique is best suited to the South African mistletoe *Viscum crasula*, and as a result, an actual production line has now been started up in South Africa. *Viscum crasula* is very similar to Danish mistletoe (*Viscum alba*), but has smaller leaves, is more densely branching and the berries are orange – not white. In fact, there are more than 150 species of mistletoe (*Viscum*) and numerous other families and genera of parasitic plants, which in many ways resemble mistletoe. So there is plenty of potential.

The University of Copenhagen is backing the project with the new production technology and training of employees at the export nursery currently being set up in South Africa. The nursery, which will be producing and exporting the local plants, is a so-called “black empowerment” project, in which the nursery staff jointly own 51 per cent of the enterprise.

“This is sustainable production and trade combined with new technology – a commercially run development project based on practical research, and that’s unusual,” says Jørgensen.

The aim is to export exclusive plants as semi-finished goods to the Asian and European markets. The Botanical Garden shop actually started selling the first South African house plants to come out of the new project in autumn 2004 – though not with mistletoe yet. □



PHOTO: BO IVAR JØRGENSEN

Mobile youth

Researchers are collaborating with IT and media firms on new mobile services for young people.

For the first time ever in Denmark, the academic research community, content providers and telecommunications operators have joined forces to systematically produce new services and new content for mobile phones. Through workshops, the partnership exchanges research findings, ideas and hands-on experience. The outcome is knowledge-sharing for the benefit of the collaborators and high quality for the users.

Mobile Content Lab is the name of this trailblazing partnership started at the end of 2004 as an alliance between the University of Copenhagen, the Danish Broadcasting Corporation (DR), the telecommunications operator TDC, the IT University of Copenhagen and Danmarks Designskole. The objective is to develop new content services for 15-24 year-olds, most of whom own a mobile phone. DR initiated the partnership, since the Danish public service giant is keen to develop services to attract and retain this youth audience.

It is vital for us to forge close links with Danish companies and media institutions in order to promote exchanges between researchers, students and practitioners, says project manager and media analyst Gitte Stald, from the Film and Media Studies Section under the Department of Media, Cognition and Communication.

Stald predicts that the partnership may lead to content services like “communities” for groups of under-25s with common interests and backgrounds as well as more and better opportunities for exploring their creativity by producing music, graphics and images – all of which in an extended interaction with other media, especially the Internet. And demand is not likely to decrease as mobile phones become ever more advanced with broadband connections, MP3 players, TV tuners, video recorders, GPS and plenty of capacity for advanced software.

The *Mobile Content Lab* project will run for an initial two-year period and is linked to *Crossroads Copenhagen*, whose goal is to create an international powerhouse for research and development in culture, media and IT in the new Ørestad area in Copenhagen. A number of researchers from both the academic institutions and private partners will be permanently attached to the project for the entire period. □

- 28.9.** Minister of Justice Lene Espersen addresses a public meeting on the subject of current legal policy for law students. In her speech she makes reference to physical abuse between spouses and the protection of domestic pets, and ends by concluding that if she were to set her judicial remit aside, she would have to concede that legislation at times proceeds too quickly.
- 29.9.** The Department of Geography signs a cooperation agreement with Shahid Chamran University in Ahwaz in Iran with a view to setting up a Master programme in Geoinformatics.
- 1.10.** Two researchers from the Canadian Museum of Nature name a newly discovered mineral *Johnsenite* in honour of Ole Johnsen, Associate Professor, the Geological Museum. Johnsen has worked intensively on rare minerals and has himself discovered and named new minerals found in rocks from Greenland and Canada.
- 1.10.** Professor Carl Christian Tscherning, the Niels Bohr Institute, signs a unique research contract with the European Space Agency (ESA) worth EUR 8 million. The money will be spent on scientific processing of data from a new satellite to be launched in 2006 to map the Earth's gravitational fields for use in potential predictions of climate change, earthquakes and volcanic eruptions.
- 5.10.** A teacher from the Carsten Niebuhr Institute of Near Eastern Studies is assaulted and beaten in broad daylight by five unknown assailants. The reason being, ostensibly, that during a class he read from the Koran without himself being a Muslim. Management, in a letter to the student body, strongly condemns the assault, and the students start a petition in support of the right to provide academic teaching on any religion. See page 20.



PHOTO: JENS FINK-JENSEN

- 5.-7.10.** The University of Copenhagen participates in Scandinavia's largest biotechnology fair, *BioTech Forum*, at the Bella Center exhibition venue. The fair brings together researchers, corporate executives and other delegates to exchange experiences and find new collaboration partners. At the stand, visitors met some of the University's leading researchers in biotechnology, and students from the nano-programme.

Solvejg Hansen, now a third-year sports science student, was given a unique opportunity in 2004 to join a research expedition in Greenland.



PHOTO: SOLVEJG HANSEN

Marked for life – in a positive way

“Sometimes we had to heat up the sausages under our jackets before we could eat them.” Solvejg Hansen laughs, looking pretty cheerful.

The 23-year-old sports science student braved extreme conditions in North-East Greenland on a six-week research expedition with the Copenhagen Muscle Research Centre and closely followed by the Danish Broadcasting Corporation.

The participants were sent out on a strenuous skiing trip, lugging all their baggage and serving as guinea pigs in a number of studies which will ultimately tell us something about type 2 diabetes, diet and exercise. 500 Danes signed up for the trip, and Solvejg Hansen was one of the lucky 16 to be chosen. She has previously taken part in a study on doping agents, and was encouraged to apply.

“I had this list of pros and cons. I’d have to suspend my studies for a while, I’d only been skiing twice before and I’d heard that the muscle biopsies hurt. But I thought the project sounded really interesting, and I was keen to put myself through it and see the country and the Greenlandic hunters,” recounts Solvejg.

As thick as a ballpoint pen

The muscle biopsies, where you jab tubes as thick as a ballpoint pen into the muscles and remove a small sample; disagreements within the group; and the trip up a glacier – a climb of 1,100 metres in two days – turned out to be the trip’s greatest challenges.

“Against that, the scenery was the ultimate experience. It was just so amazing – quite stomach-wrenching. You could see so far into the distance because there was nothing to block your view.

The Greenland adventure actually started with a swollen eye, which kept Solvejg indoors for five days while the others were getting in ski practice at -43° C. And when Solvejg, not one for the cold, finally got outside, she couldn’t feel her own fingers for the whole of the first day. But she gradually acclimatised.

A split group

And then it was just a matter of getting on with the project, which was divided up into legs and daily 8 to 10-hour skiing trips. Before long, Solvejg and the others in her group realised

that they weren't very good at coming to agreement. They discussed the ins and outs of their breaks to the point where the group ended up splitting in two.

"For a while it got to me that the group wasn't getting on that well. But as time went on, I learned to accept that you can't always get things to work. After all, we were very different people, and there were many individualists in the group," says Solvejg.

On the other hand, everyone was really good at encouraging one another – for example when mounting the glacier, with the sled pulling in the wrong direction and their blisters chafing in their boots.

"It was very, very tough. Mentally, especially, because we couldn't see the summit. At that point I had to take a few deep breaths and tell myself: OK, Solvejg, get your act together. But the view from the top of the glacier was amazing."

And then there were the muscle biopsies.

"The worst thing about them was that you could never prepare yourself for how much it was going to hurt. Sometimes I could hardly feel it, other times I was crying my eyes out, the pain was so intense. But they were worst when I got back from Greenland. I just didn't want to be messed about with anymore; the adventure was over."

Solvejg bares her shoulders, where the scar tissue traces fine patterns, which will eventually fade, but never quite disappear. All the same, she wouldn't have it any different, and would happily repeat the trip. She brought two things, in particular, home with her: a few good friends among people she would otherwise never have got talking to and an idea that she would like to get into research.

"I think it's really healthy to get other people's views on things. And the research was really interesting since we got insight into all the experiments. So I've had my fill of being a guinea pig. I'd like to be at the other side now," says Solvejg, who now has a job with the Copenhagen Muscle Research Centre. □

The Danish Broadcasting Corporation is planning a programme on the research expedition.



PHOTO: MICHAEL ØSTERGAARD

8.10. True to tradition, the University of Copenhagen takes part in the Copenhagen Cultural Night programme of events, offering visitors access to the old astronomical observatory at Rosenborg Bastion, tours of the University quadrangle, art appreciation at the Panum Institute, lectures on EU and NATO at the Faculty of Law and various events at the Zoological Museum, the Geological Museum and the Niels Bohr Institute. See page 42.

10.10. "Over the last decade we have moved at an alarming pace away from a constitutional state towards a police state. The rights of citizens in that period have been radically undermined by the politicians." Professor and Dean, Vagn Greve, Faculty of Law, to *Jyllands-Posten*.

11.-
14.10. The University holds its first open day event in the Ceremonial Hall at Frue Plads. More than 450 upper secondary school students and their parents turn up for a combination of student counselling and tours of the historic premises.



PHOTO: JAKOB LAUTRUP

18.10. Queen Margrethe attends the opening of artist Per Kirkeby's decoration of one of the stairway rotundas at the Geological Museum. See page 44.

19.10. Lisbet Christoffersen, Research Coordinator, Faculty of Theology, receives SEK 75,000 in *Interreg funds* for, in collaboration with Lund University, Sweden, developing an interdisciplinary course on religious law.

21.10. *Centre for Housing and Welfare – Realdania Research* is a new research centre under the Department of Sociology. Funding of DKK 25 million over the next five years will place focus on the correlations between housing, human living and the economy, and will extend existing knowledge of the correlation between housing and welfare.

26.10. Space doctor Peter Norsk, Department of Medical Physiology, is awarded the *Kaj Bunch-Jensen and Allis Bunch-Jensen's Grant* of DKK 125,000 for his research achievements in circulatory disease. Based on trials in space, Peter Norsk's research team has contributed to improving the health of heart patients.



PHOTO: HEINE PEDERSEN

Medical bridge builders

24 year-old Sheraz Butt is a medical student and co-founder of the SEHAT association, which seeks to build bridges between ethnic minorities and the Danish health service. The students in the association believe that targeted health campaigns and better communication are the way forward.

Everyone has the right to sound and objective health information – whether they speak Danish, Somali, Turkish, Persian, Arabic or Urdu. This is the message from SEHAT, an association of 20 students from three programmes under the Faculty of Health Sciences.

“I would like to help make the encounter between patients and health professionals in the Danish health service as painless as possible,” says 24-year-old Sheraz Butt, Secretary General of SEHAT and a 4th year medical student.

Like his friends in the association, he sees it as his duty to take action on an issue that has been overlooked for years: the lack of preventive health measures among minority groups.

“Much can be done to improve attitudes to health among ethnic minorities – and the same goes for authorities and health professionals. I belong to both groups and consider participation in an association such as ours a natural course of action,” he explains.

World of difference

SEHAT has made great headway in raising awareness of a neglected patient group in Danish society. Or, rather, patient groups. Because there’s a world of difference in how a Turk, a Pakistani and a Dane regard physical ailments, health and treatment.

“Everyone is different, but we often forget this when we provide health information. I’ve personally had to translate for a relative what the doctor or others were trying to tell the patient. Many of the subtleties get lost, and not just because of the language barriers,” says Butt.

One common barrier is the often divergent health perceptions between patient and doctor. An elderly Pakistani may find it difficult to understand that a doctor can send him home without an injection or pills. Others don’t feel respected, perhaps ridiculed even.

“The problem is often poor communication. Far too much

information goes over the heads of both the doctor and patient because they each have a different attitude and hence also different expectations.”

Health in 10 languages

SEHAT, which means “health” in 10 different languages, is neither a political nor a religious association. But it is highly multicultural. The members have roots in countries as different as Turkey, Iraq, Syria, Pakistan and Denmark. And they are keen to recruit even more minorities.

“That way, our outreach can be even broader. For our strength is precisely that we have a foot in both camps. We know where most of the misunderstandings arise because we’ve encountered them ourselves,” explains Butt, who has Pakistani roots.

Studies show that ethnic minorities are more prone to certain diseases than ethnic Danes. For example, one in four Pakistanis in Denmark is diagnosed with type 2 diabetes, while this only occurs in one in 50 Danes.

“Many of the diseases we see are lifestyle-related and can be prevented relatively easily. The problem is that national anti-smoking or physical exercise campaigns don’t take account of people’s cultural norms,” claims Butt.

Butt and the other members write articles, hold talks and use various other means to bridge the gap between patients and health professionals. Last year they had great success with a debate on “Patients with religious faith”, in which an imam, a minister and a rabbi discussed ethical dilemmas such as organ transplants, blood transfusions and post mortems. The event drew an audience of more than 100.

Politicians, too, are beginning to take an interest in the issue. The Danish Veterinary and Food Administration recently acknowledged that targeted public information about diet, exercise and health is in short supply. And a bill to create a special centre for ethnic minorities and health is currently being debated in the Danish Parliament. □

- 27.10.** The University of Copenhagen introduces a cross-institutional cooperation with the Esbjerg Museum of Art and the Royal Danish Academy of Fine Arts on the special potential of art and its role and function in society.
- 27.10.** Staff, students and guests of the Department of Archaeology and Ethnology celebrate the 50th anniversary of the creation of the first professorship of Cultural History at the University of Copenhagen in 1954. To celebrate the anniversary, the Ethnology researchers convene the *Cultural history in cultural research* seminar.
- 28.10.** Bente Klarlund Pedersen, Professor, Clinical Institute of Internal Medicine, receives DKK 25 million from the *Danish National Research Foundation* to set up a research centre to study how muscles affect fatty tissue and the brain.
- 29.10.** Four students – Johannes Bahlsted and Martin Marchman Andersen from the Department of Philosophy, Education and Rhetoric and Aske Hougaard and Martin Primdahl from the Department of Political Science – win Denmark’s first national competition in Corporate Social Responsibility. The students from the University of Copenhagen won against entrants from four other Danish universities and business schools.
- 30.10.** A team of two students from the Department of Philosophy and two from the Department of Political Science beat teams from the Copenhagen and Aarhus Business Schools, the University of Roskilde and the University of Aarhus in a competition on how best to mediate the relationship between economics and ethics.
- 2.11.** Curator Vibeke Haarup receives a silver medal for meritorious service from Rector Linda Nielsen for 40 years of service at the Geological Museum.
- 3.11.** The Head of the University of Copenhagen’s Nano-Science Center, Thomas Bjørnholm, receives a prize of DKK 250,000 from the *Direktør Ib Henriksen Foundation*. Among his other achievements, Thomas Bjørnholm has led an international research team that has created a transistor from a single organic molecule.



PHOTO: HEINE PEDERSEN

- 3.11.** The University of Copenhagen hosts, in conjunction with the *Politiken* newspaper, the first *Mød Videnskaben* (Meeting Science) event entitled *Life in space?*, where astronomer Anja Andersen lectures on her research and presents her views on Man’s ever more intense search for life in the universe. See page 42.
- 4.-5.11.** Students from the Master course on *Mediated Self-Presentation* at the Department of Scandinavian Studies and Linguistics hold a conference entitled *Spin!*, focusing on the use of spin and spin doctors in the public debate.

A Harald for Hans

Hans Bonde, three-time Danish judo champion, Professor of History of Exercise and Sport Sciences and researcher in men's studies, has now also been voted 2004 Teacher of the Year at the University of Copenhagen.



PHOTO: LIZETTE KABRÉ

“Imagine that the Copenhagen Marathon ended at the Copenhagen Cathedral and that the bishop blessed the winner and presented him with a crown of thorns.” The students of exercise and sport sciences smile in surprise at Professor Hans Bonde's example. The lesson is well underway, and today's subject is the connection between religion and sport in ancient Greece. The example is just one of Hans Bonde's many unusual ways of explaining the Greek way of thinking to the handful of graduate students in the class.

The 46-year-old professor and judo champion's performance at the blackboard is a sports feat in itself. His hands and face are in constant motion and his words flow naturally with association chains as he clicks efficiently through the Power-Point presentation of photographs, maps and statues from the cradle of culture, tracing a line from the games of antiquity to today's Olympic events.

Danish judo champion

It is time to stretch out after the whirlwind tour of the city-states of ancient Greece. Hans Bonde pauses a moment to

catch his breath before returning to his topic with renewed enthusiasm. The question is whether his high energy level is related to the fact that he has practised judo since the age of 12 and been Danish judo champion three times.

“I think my teaching ability largely comes from practising judo. In judo, you have five minutes with an opponent who will do anything to throw you on the floor, pull your arms off or strangle you. It is a symbolic sudden death, a highly existential challenge that forces you to pick your battle strategy in a matter of moments,” says Hans Bonde.

“It feels like every single time I enter a lecture hall or classroom, I subconsciously draw on the same mental reserves. I have a battle to fight and need to get the group's attention as quickly as possible,” he explains.

Symbiosis

“Judo is an expression of Zen Buddhism and concentrates on, among other things, breaking down the barrier between you and your opponent,” Bonde explains. “The same applies to teaching.”

“Once the invisible barrier between the teacher and the students is broken down, an interactive process of exchange starts, a sort of flow or intellectual dance. Suddenly, I no longer feel separate from the others in the room. From the sports scientist’s point of view, we are simply bodies communicating with bodies. The air molecules I set in motion reach the listeners’ ears, travelling further into their bodies, which in turn are set in motion through the intonation, modulation and rhythm of my voice. There is real physical intimacy, if not true symbiosis,” explains Hans Bonde.

That is how the perfect teaching situation works, according to the judo champion. But there are also classes where tiredness or routine get the upper hand, and where time seems to crawl.

Dramatise your research

For Hans Bonde, whenever teaching is mentioned, the words acting and entertainment frequently spring to mind.

“I have always found the division between entertainment and serious study boring. The best scientist has every chance of becoming the best teacher because he has a clear perception of the structure of the body of knowledge, can tell what’s important and what’s not, and can use a wealth of facts to make associations. Good research depends on a systematic approach and methodical learning, and in the same way, the scientist has to acquire some basic skills to become a good teacher.”

“Half our salary comes from teaching, and a core service is to turn our students into new, skilled employees, researchers and teachers. We cannot avoid learning the methods of the teaching profession. We cannot hide behind our own brilliance!” says Hans Bonde.

Enthusiasm is a matter of always being on the move and asking new questions.

“If you are on the move all the time, conquering new fields, you will also be able to maintain your enthusiasm,” asserts Hans Bonde. □

- 5.11.** The University of Copenhagen is honoured as one of the best universities in Scandinavia and ranked 63rd on the list of the world’s top 200 universities. This UK survey is published in *The Times Higher Education Supplement*, which asked 1,300 academics to participate in the rating.
- 6.11.** Researchers from the University of Copenhagen and the Technical University of Denmark participate in an EU-financed project to develop computer models for developing new medicines. The EU has backed the project with DKK 81 million.
- 8.11.** The University of Copenhagen renews its agreement on educational and research cooperation with the State University of St. Petersburg in Russia.
- 11.11.** The Queen and the Prince Consorte, staff, students and specially invited guests take part in the Annual Commemoration in the Ceremonial Hall. There are talks by Rector Linda Nielsen and Karina Heuer Bach of the United Student Council. The principal speech Religion, security policy and the University is delivered by Professor Ole Wæver of the Department of Political Science. Professor Hans Bonde of the Institute of Exercise and Sport Sciences receives the Annual Teaching Award. See page 36. Five honorary doctorates are conferred, along with 53 doctorates. Seven gold medals and 11 silver medals are presented to students for prize papers. The Students’ Choral Society, the University Choir *Lille MUKO* and The Bigband of the Department of Musicology, *M122*, provide the music for the event. At the evening’s gala performance in the Royal Theatre, three ballets are performed: *Far from Denmark*, *In the Night* and *Fancy Free*.



PHOTO: HEINE PEDERSEN

- 12.11.** Minister for Science, Technology and Innovation Helge Sander lays the foundation stone for the future BioCenter in Universitetsparken. See page 9.

Among his colleagues, he is recognised as the Danish economist who has had the greatest influence on international economic policy ever. However, Professor Niels Thygesen, who retired from the University of Copenhagen in 2004, would prefer to be remembered as a good teacher.



PHOTO: LIZETTE KABRÉ

Mr EMU retires

Niels Thygesen's curriculum vitae can leave most people breathless. He has held important positions with the International Monetary Fund and the Organisation for Economic Cooperation and Development, just to mention a few. In addition, the name of Niels Thygesen is inseparably linked to the European currency union: in 1988 he was the only academic member of the Delors Committee, whose work later formed the basis for EMU. This is, in itself, sufficient for him to be recognised as the most influential Danish economist ever within applied economics.

However, if you ask Niels Thygesen what he would highlight among the many important achievements in his long and outstanding career, his reply is neither OECD, IMF nor EMU:

"My base has always been the University of Copenhagen. I

have been away from it for periods of up to a year a few times, but I have always been fairly certain that I would return."

That is all in the past now. He has reached the age of 70, which means compulsory retirement.

"I have known that the day was approaching for some time, but I'm sad to stop. I will miss it," he admits.

Larger and better

His statement is hardly surprising, for Niels Thygesen has been a part of the University of Copenhagen for more than 40 years. He took his degree in economics in 1960, became an associate professor four years later, and in 1971 he was appointed to the professorship he has held ever since. The University of Copenhagen has changed considerably compared to the much smaller institution that Niels Thygesen graduated from.

"Our courses have definitely improved over time. Students now receive intensive training in economic analyses, which gives them better opportunities in terms of choice of career and studies abroad. In addition, the students are high achievers. They vary, of course, but the good ones are extremely good – even by international standards."

Niels Thygesen is known to be a very popular supervisor and to have a unique ability to remember details about his many former students.

“Many of those I supervised now hold positions in government ministries and large banks,” he says with pride.

The first time Niels Thygesen supervised a thesis student was back in 1965. The student’s name was Bodil Nyboe Andersen.

“Bodil makes me proud,” he smiles.

Today she is the Governor of the Danish central bank, Denmark’s Nationalbank, and chairman of the new University Board.

Mr International

Niels Thygesen’s vast international network is attributable to his finely tuned analytical skills. A perfect example of his ability to predict the future is EMU – a project which he was among the first and most eager to work seriously on.

“Viewed in retrospect I’m struck by how many times he predicted a monetary union back in the 1980s, long before EMU was introduced,” says his colleague, Professor Peter Birch Sørensen.

“Many people said, ‘It’s wishful thinking. It will never come true.’ But time and again he warned people against underestimating the determination of key decision-makers to realise the project.”

And the rest is history, as they say.

“He is truly an international heavy-weight. It goes without saying: he helped to develop the Delors Report. Consequently, he has had an incredible influence on today’s world. Not many people can write that on their CVs,” says another colleague, Professor Henrik Jensen.

The next line on Niels Thygesen’s CV will read ‘retired’, although he still finds time for various chairmanships.

“I have a wife who is considerably younger than myself and a 10-year-old son, so my family will also take up some of my time,” he smiles.

What would he most like to be remembered for?

“Actually, I would really like to be remembered as a good teacher. That means a lot to me.” □

- 15.11.** Professor Bente Klarlund Pedersen of the Clinical Institute of Internal Medicine receives DKK 25 million from the *Danish National Research Foundation* to set up the Centre for Inflammation and Metabolism at Rigshospitalet – Copenhagen University Hospital, where Bente Klarlund Pedersen is chief physician at the Epidemiology Clinic. The research centre will examine how muscles affect fatty tissue and the brain.
- 15.11.** Research from the Institute of Molecular Biology and Physiology and the Finsen Laboratory shows that it is possible to block the enzyme that the body uses to spread cancerous tumours. See page 8.
- 15.11.** The student counselling service celebrates its 40th anniversary.
- 16.11.** The *Religion in the 21st Century* research priority area holds a one-day seminar, *Religionernes ret (Religious law)*, at which lawyers, theologians, historians of religion, anthropologists, social scientists and psychologists discuss the place in society of religious communities and groups.
- 17.11.** The Minister for Science, Technology and Innovation gives the go-ahead for a number of the country’s leading businesses and research institutions, including the University of Copenhagen, to jointly develop the *NaNet* high-technology network for research into and commercial exploitation of nanotechnology.
- 18.11.** The results of the election of the internal members of the University Board are published. For the academic staff, Henrik Prebensen and Jens Kristiansen are elected, and the T&A personnel elected Ingrid Kryhlmand. After a second ballot in December, the two student representatives Katrine Møller and Rie Kjær Poulsen are elected. See page 46.
- 18.11.** Actor and film director Paprika Steen is this year’s recipient of the *Ingmar Bergman Travel Grant*. See page 42.
- 19.11.** The anthropologist Anne Line Dalsgaard receives the *Basker prize’s Honourable Mention* for her ethnographical study *Matters of Life and Longing: Female Sterilisation in Northeast Brazil*.



- 22.11.-** *Are you still all there?* asks the University of Copenhagen on large posters throughout the Copenhagen Metropolitan Area as part of a campaign to increase awareness of the University’s continuing and further education propositions.
- 5.12.**
- 24.11.** Professor Jens Hjorth of the Niels Bohr Institute receives the *Lundbeck Foundation’s Award for Young Researchers* of DKK 150,000 for his outstanding research in astrophysics.

Home and pain

The graphic and installation artist, Mona Hatoum, was awarded the 2004 Sonning Prize in April. She herself refers to it as an amazing honour.



PHOTO: JOACHIM RODE

“At first I was just delighted to win some money – and a nice sum at that. But when I saw the list of previous prize-winners I realised what an amazing honour it is to be selected alongside those people,” explains Hatoum.

The Sonning Prize is awarded every other year by the University of Copenhagen for “commendable work that benefits European culture”. Mona Hatoum perceives a great honour in even the wording.

“In the UK, art is often seen as a drain on resources and taxpayers’ money. So to see yourself selected as someone who has made a contribution to European culture is a really big deal for an artist. But also for someone who is not originally European, it’s a huge honour to be regarded as capable of contributing to European culture,” says the British-Palestinian artist.

The prize committee explains its choice of Mona Hatoum by the fact that she has evolved an aesthetically distinct, politically nuanced language for reflecting on the identity of refugees and immigrants in the transition between contemporary Europe and their non-European birthplace. But her works hold far more than that.

“I also create works for people who have just migrated from rural to urban areas, for people who have been through trauma, confusion and despair; they will also be able to relate to the works. I want to explore these issues so people can identify with them in their own way.”

Home that hurts

The concept of home is a central theme in many of Hatoum’s works, albeit far removed from any safe or inviting associations. The doormat that greets visitors is made of sharp nails; the sofa of metal and the mattress on the child’s cot is replaced by razor-sharp wires.

The concept of home has always been a troubling dimension for Hatoum. She was born in 1953 in Lebanon to Palestinian parents. Her father worked for the British Embassy in Beirut, and in 1975 Hatoum travelled to London for the first time. Meanwhile, civil war broke out in Lebanon so she was forced to remain in the UK.

“Obviously, I have problems with the notion of home as a sanctuary,” she explains.

“I try to challenge that in my work by using ordinary, everyday objects, such as a child’s cot, which on the surface resembles a normal bed, with a pleasant and cosy allure. But as you get closer you find that the object is not what you expected. It turns into something else, revealing something beneath the surface, something menacing that evokes violence, pain and abuse, even. So I try to destroy your expectations, and get you to question the reality that surrounds you.”

Open works

It is easy to relate Hatoum’s art to her own background. But she doesn’t care for attempts to reduce her art to a single message.



One example is the installation work, *Light Sentence*, in which a series of small metal cages are stacked up to form a horseshoe shaped wall. The cages look as if they came from a laboratory, but are all empty, with doors left open. In the middle of the horseshoe a bare bulb on a wire moves slowly up and down, causing the wire of the cages to merge in a mesh of shadows.

“I overheard someone saying that it portrayed the prison-like conditions inhabited by refugees. But for me, the installation was more a reflection on arriving in the West and seeing how people on low incomes were assigned very basic housing in the suburbs; in France they actually call them ‘rabbit hutches’,” Hatoum explains.

“I try to convey a sense of restlessness and instability, and that may relate to the fact that I myself have been exiled and seen a lot of upheaval. But it might also be about questioning the stability of the ground you tread on,” says Hatoum, who challenges herself with surroundings and media.

“For each new work there’s a new medium and a new idea. Obviously sometimes there may be similarities, but not like with a conventional artist, who selects a simple medium and then spends his life perfecting it. But I’m always restless,” says Hatoum. □

The Sonning Prize is for DKK 1 million, and since 1950 has been awarded to such distinguished figures as Winston Churchill, Niels Bohr, Alvar Aalto, Václav Havel, Günter Grass and Jørn Utzon.

- 25.11.** The University of Copenhagen is granted DKK 4 million by the Ministry of Science, Technology and Innovation for a high-technology biomedical knowledge network, entitled *Biologue*, to strengthen the battle against such afflictions as cancer, diabetes and cardiovascular disease. The network is a cooperative venture involving a large number of pharmaceutical companies, universities, hospitals and research units.
- 25.11.** Political science student Peter Dalby is elected chairman of the United Student Council.
- 25.11.** In the journal *Nature*, physicists from the Niels Bohr Institute demonstrate that it is possible to transfer information in a very weak light wave to a collection of atoms. The discovery may be of crucial importance for the development of quantum computers and for a future quantum Internet, with essentially unlimited data transfer speeds. The discovery was made by the Russo-American professor Eugene Polzik and two of his assistants, Assistant Research Professor Brian Julsgaard and PhD student Jacob Sherson.
- 26.11.** The Department of Media, Cognition and Communication organises a public symposium entitled *Hearts and Minds: the USA, the media and the battle for minds*, examining the 2004 American presidential election.
- 1.12.** Professor John Mundy of the Institute of Molecular Biology and Physiology takes up the post of coordinator of the EU-funded *TransDeath* project, with participants from the UK, France, Italy, Greece, Turkey and Israel. The aim is to research organisms’ “programmed cell death” in the plant and animal kingdoms and thus contribute to the development of, for example, a new generation of cancer medicines.
- 1.12.** Mikael Rothstein, Associate Professor in History of Religion at the Department of Cross-cultural and Regional Studies speaks at the annual *Mød Videnskaben* (Meeting Science) event on sects and alternative religious movements. The event is once again organised in cooperation with the daily newspaper *Politiken*.
- 6.12.** The Danish National Research Foundation grants DKK 18 million towards the creation of the country’s first textile research centre at the University of Copenhagen. The centre is established in 2005 and will be headed by research scholar Marie-Louise Nosch of the Saxo Institute. Denmark possesses one of the world’s best collections of archaeological textiles, but there has been no comprehensive cultural analysis of the collection for a more than 50 years.
- 10.12.** After 33 years as Professor of Economics, Niels Thygesen bids farewell to the University of Copenhagen. See page 38.
- 12.12.** Professor Jes Olesen of the Department of Clinical Neurosurgery and Psychiatry receives the *2004 Niels A. Lassen Prize* – a medal and DKK 25,000 – for his work in neurology, which has provided an important insight into the mechanisms of disease and treatment methods for several types of headache.
- 14.12.** Rector Linda Nielsen and Minister for Science, Technology and Innovation Helge Sander sign the University’s performance contract.

Stardust

3.11. The decision by the Ministry of Science, Technology and Innovation to present astronomer Anja Andersen with the *2004 Research Communication Award* could hardly come as a surprise to anyone attending the *Meeting Science* lecture series launched by the University of Copenhagen and the Danish daily *Politiken* in November.

She spellbound the audience of about 200 for 90 minutes with her explanations about stardust, space travel, the Big Bang and life on other planets – a possibility the astronomer by no means rules out. Morten Jastrup, science editor at *Politiken*, moderated the subsequent discussion, a role he also took on at a later, equally popular lecture by theological historian Mikael Rothstein. □



PHOTO: HEINE PEDERSEN

The Crown Princess Mary Scholarship

10.5. As a direct neighbour to Copenhagen Cathedral, the University of Copenhagen afforded a grandstand view of the wedding of the Crown Prince and Crown Princess of Denmark last May. The University's wedding gift took the form of financial assistance for Australian students attending, for example, Crown Princess Mary's former university, the University of Tasmania.

The Crown Princess Mary Scholarship will be awarded annually on the couple's wedding anniversary to two students from the University of Copenhagen's partner universities in Australia. Rector Linda Nielsen, Pro-Rector Jørgen Olsen and John E. Andersen, head of the International Office, presented the gift the week before the wedding.

"Our gift to the royal couple is intended to strengthen teaching and research collaboration between Australia and Denmark and improve opportunities for international study for students from both countries," said Linda Nielsen. □



PHOTO: STEEN BROGAARD

PHOTO: MIKKEL ØSTERGAARD



Goodnight!

8.10. The most comfortable way to study a beautiful ceiling is to lie on your back, so that was exactly what some of the guests did during their visit to the University's Ceremonial Hall on the *Copenhagen Night of Culture*. The Medical Museion and the Niels Bohr Institute also welcomed gazing, pointing and listening visitors on the Night of Culture in October. □

Paprika Steen received the Bergman award

18.11. Actor and film director Paprika Steen was this year's recipient of the University of Copenhagen's *Ingmar Bergman travel grant*. At the presentation, Paprika Steen revealed that she has always secretly dreamed of being Ingmar Bergman's muse.

"It's a great honour to receive an award in Ingmar Bergman's name. My fascination with his work began with *Fanny and Alexander*, and he has fascinated me ever since, especially his courage in exposing his own humanity," she explained in her acceptance speech.

Film journalist Ebbe Iversen, a member of the grant committee, was generous in his praise of Paprika Steen, commenting: "I know three great film personalities who can both direct films and act in them – Orson Welles, Clint Eastwood and Paprika Steen."

The award was made possible by virtue of the *Sonning Prize* presented to Ingmar Bergmann in 1989. He acknowledged this honour by returning the money to the University of Copenhagen, and his generosity has since formed the basis for the annual grant of DKK 50,000. □



PHOTO: TOMAS BERTELSEN

14.12. Associate Professor Jacob Skovgaard Pedersen of the Carsten Niebuhr Institute of Near Eastern Studies is appointed director of the newly created Dano-Egyptian Dialogue Institute in Cairo.



PHOTO: JENS FINK-JENSEN

15.12. The Academic Council holds its very last meeting, having been a part of the University's 525-year history for more than 400 years. From the beginning of 2005, as a result of the new University Act, the new University Board takes office. See page 46.

16.12. The University of Copenhagen ranks as number 2 in the Nordic region in a list of the world's 100 best universities for science. The University ranks 44th in the world.

16.12. Medical students face a shortage of corpses. In 2004, only 125 people bequeathed their bodies to the University of Copenhagen for medical teaching, and at least 500 bequests are needed if students 10 or 20 years hence are to be offered courses in dissection. The corpses are also used by doctors and surgeons who want to practise for a difficult operation. "If the students are not able to study anatomy on actual bodies, they are less familiar with human physiology and hence make poorer doctors," says Jørgen Trantum-Jensen, junior head of department, Institute of Medical Anatomy in *JP København*.

17.12. Political science student Kirstine Sandøe of the University of Copenhagen wins the first prize of DKK 20,000 in an essay competition on corporate social responsibility, organised by the independent think tank *Copenhagen Centre*.

17.12. Professor Ulrik Rammeskov Bang-Pedersen of the Faculty of Law receives a prize of DKK 150,000 from the *Reinholdt W. Jorck and Hustrus Foundation* for his research into financial law.

22.12. The Medical Museion receives a research grant of DKK 10.5 million from the *Novo Nordisk Foundation*. The grant is the largest ever for research in the history of medicine in Scandinavia and will be spent on the three-year research project *Danish Biomedicine 1955-2005* under the leadership of Professor Thomas Söderqvist of the Institute of Public Health.

26.12. Associate Professor Anne Jerslev of the Department of Media, Cognition and Communication receives DKK 3.5 million from the Danish Research Council for the Humanities for the project *Hvor går grænsen? Højspændingsæstetik og etisk kvalitet i den aktuelle mediekultur* (*Where are the boundaries? High-voltage aesthetics and ethical quality in current media culture*). □

Geological colour explosion



PHOTO: JAKOB LAUTRUP



PHOTO: DAVID TROOD

The world is created and crushed all over again in the Geological Museum's newly decorated rotunda. In the space of six months, painter and geologist, Per Kirkeby, has transformed the white vaulted ceiling into an intense, colourful journey into the world of geology.

Rocks tumble and glaciers calve. A fossil appears in a corner and a couple of droplets course down a wall. Our eyes continue to find new motifs to pick out in the Geological Museum's newly decorated rotunda.

The man behind the unsettling hues and shapes that ornament the Øster Voldgade entrance of the Museum is the painter Per Kirkeby. Together with his assistant Erik Peitersen, Kirkeby has transformed, in the space of six months, the white vaulted ceiling into a dramatic, colourful journey into the world of geology.

Director of the Museum, Minik Rosing, was at first somewhat disconcerted to find a table full of empty beer bottles after the artists had moved in. However, the beer had been added to the paint. And with white spirit and every finesse, they have created a surface that resembles the rocks which geologists are so keen to collect and interpret.

As a geologist and internationally acclaimed artist, Kirkeby was the obvious choice. However, although sketches from his own travels in Greenland and geological background knowledge have been incorporated, the decoration is no primer in geology.

"Kirkeby's work seems more to show geology in its vaster aspects – the shifting continents, the changeability of the climate and the Earth's creation," explains Rosing.

The decoration of the stairway rotunda, which leads to the auditorium, exhibitions and administration offices at the Geological Museum, is one of Kirkeby's largest works.

"The decoration of the rotunda would not have been possible had the premises not meant something to Kirkeby personally," says Rosing.

Per Kirkeby studied geology in the very same building from 1957-64. Not until the 1970s did the Geological Institute move to the other side of the street, where it now shares space with, among others, the geographers.

The Geological Museum financed the scaffolding and finishing of the walls, while Ny Carlsbergfondet donated the artistic decoration itself. □

The Geological Museum is open daily from 1 pm to 4 pm, except Mondays. See also Jakob Laurrup's photos of Kirkeby working on the rotunda at www.nathimus.ku.dk/geomus/velkom_m.htm

Copycats

The Zoological Museum's exhibition *Bionics* shows how man is inspired by and learns from nature's creations and designs.



PHOTO: GEERT BROVAD

A volcano erupts on a white wall. Lava spews out in long, thin strands, solidifies and turns into something vaguely reminiscent of an old woman's hair. When the hairs are packed tightly together, they make a blanket that can keep out the worst cold. An invention by people who were freezing. The first stage of rock wool production mimics this volcanic process: stone is melted and forced through chambers to turn it into long strands that are cooled and compressed.

If you already knew that the idea for housing insulation came from volcanoes, the Zoological Museum is certain to have other exhibits that will add to your knowledge. In September, it opened an exhibition entitled *Bionics – Man Learns from Nature*. The exhibition shows birds, spiders, mussels, burs, beetles and other small wonders of nature alongside the inventions they inspired.

Even in only slightly foggy weather, *Stenocara gracilipes*, the racing-stripe darkling beetle that lives in Namibia, can gather fog by standing on its head and letting moisture condense on the bumpy surface of its rear abdomen, a technique that has

inspired a system for collecting water using rough, water-repellent tarpaulin.

An apartment complex in Zimbabwe's capital, Harare, has been constructed on the same principles as a termite nest, directing cold air from the basement through channels to the rest of the building.

An ice axe is an imitation of a woodpecker's beak, while a vacuum cleaner uses the same navigation technique as a porpoise – sonar emission. And then we have paper, something we all take for granted, which was first invented in the mid-1800s after a natural historian had observed a wasp chewing wood to create a papery pulp. Before that, paper had been made from cotton, just like today's bank notes. □

The exhibition runs until 7 August 2005.



PHOTO: GEERT BROVAD

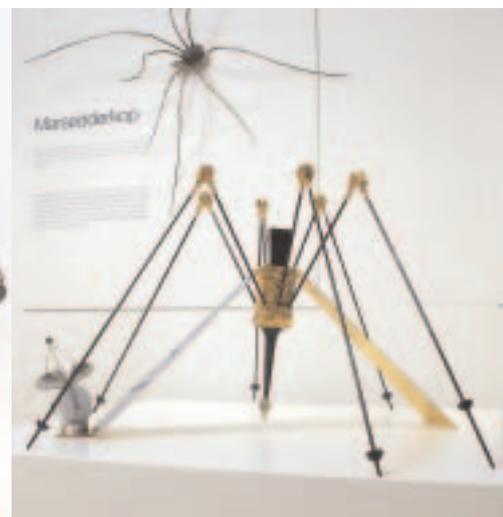
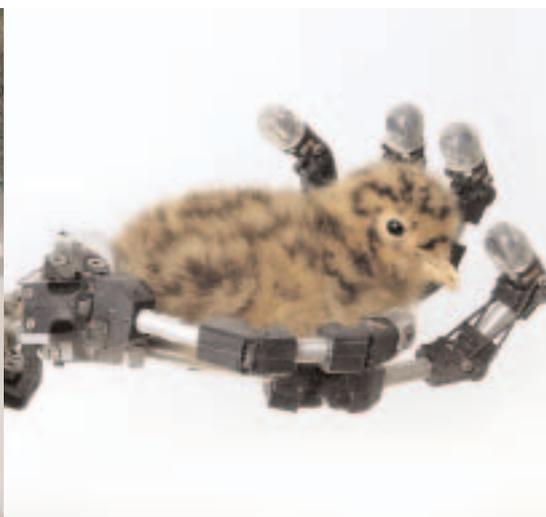




PHOTO: HEINE PEDERSEN

The new University Board

In 2004, we bade farewell to the Academic Council and welcomed the new University Board.

Bodil Nyboe Andersen

Governor, Danmarks Nationalbank

Date of birth: 9 October 1940

In 1966, Bodil Nyboe Andersen graduated with an MSc (Economics) from the University of Copenhagen. It was a time of student uprisings, professorial autonomy was coming to an end and the Department of Economics was in a state of upheaval. She was one of the driving forces behind the curriculum reform in 1970. In 1981, she was appointed managing director of Andelsbanken and later of Unibank, and since 1990 she has been Governor of Denmark's central bank. Bodil Nyboe Andersen is Chairperson of the University Board.

Claus Bræstrup

CEO, H. Lundbeck A/S

Date of birth: 18 January 1945

Claus Bræstrup graduated as a chemical engineer from DIA (Denmark's Engineering Academy, now the Technical University of Denmark) in Copenhagen in 1967 and also holds an MSc in Biochemistry from the University of Copenhagen, 1971. His job at the pharmaceutical company H.Lundbeck A/S has been called possibly the most demanding in Danish trade and industry at the present time. According to Mads Krosgaard Thomsen, CEO of Novo Nordisk, he is highly focused and always goes for the ball, never the man. He believes the University's new management structure will strengthen both teaching and research and enable tough but important decisions to be made. Claus Bræstrup has been elected Deputy Chairperson of the University Board.

Boel Flodgreen

Professor, Lund University

Date of birth: 17 November 1942

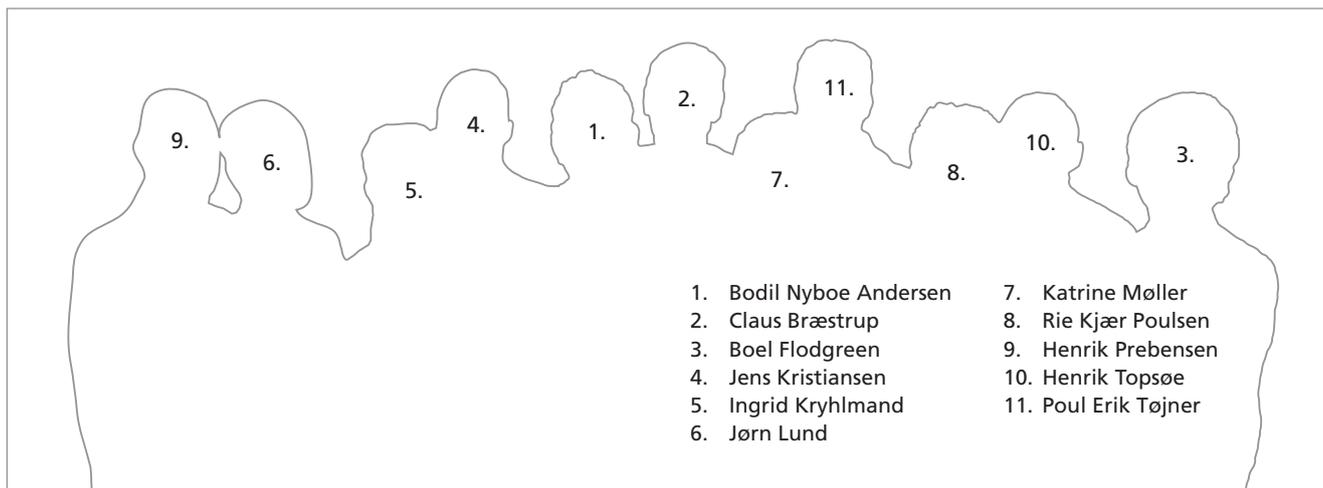
Boel Flodgreen was awarded a legal doctorate from Lund University in 1978. She is a Professor of Commercial Law and was Rector of the 350-year-old Lund University for 10 years, until 2002. Having served on numerous boards in the Swedish university sector, she brings extensive experience to the University Board. The process of transferring upper management of Lund University from the Rectorate to a university board has been ongoing for almost 15 years. Boel Flodgreen stresses the importance of board members working for the common good of the whole University rather than focusing on specific personal or academic interests.

Jens Kristiansen

Professor, University of Copenhagen

Date of birth: 1 February 1962

Jens Kristiansen received a law degree from the University of Copenhagen in 1986. He took up a position at the Faculty of Law in 1991, and has been a professor of labour law since 1999. Previously, he worked for the Danish Ministry of Justice and various private law firms. As a representative for young researchers at the University of Copenhagen and father of three, he maintains that the ability to balance the demands of work and family life is crucial to his professional activities.



Ingrid Kryhlmund

Head of Section and Senior Trade Union Representative for the Union of Commercial and Clerical Employees in Denmark (HK), University of Copenhagen

Date of birth: 9 October 1959

Ingrid Kryhlmund trained as a medical secretary and has worked in this capacity at several hospitals in Greater Copenhagen and Greenland. In 1987, she was hired for a position as medical secretary at the former Department of Genetic Biology, now the Department of Medical Biochemistry and Genetics. She has been active in University politics since the start of her employment with the University of Copenhagen, serving as an elected Deputy Head of Department, a member of the Department Board and the Faculty Council, Vice-Chairperson of the Joint Consultation Committee of the Faculty of Health Sciences and as trade union representative. She was elected Senior Trade Union Representative in 1997. Technical-administrative personnel (TAPs) will be the primary focus of her work for the Board, but she will broaden her perspective as necessary in specific situations when it is in the overall interest of the University.

Jørn Lund

Director, Society for Danish Language and Literature

Date of birth: 30 January 1946

Jørn Lund graduated in 1972 with an MA in Danish and psycholinguistics from the University of Copenhagen. He was an associate professor at the University from 1975 until his appointment as professor of Danish in 1980. He previously held the position of editor-in-chief of *Den Store Danske Encyklopædi* (The Great Danish Encyclopaedia) and was a director at the publishers Gyldendal A/S. He is Director of the Society for Danish Language and Literature, which is currently involved in several major projects including *Den Danske Ordbog* (The Danish Dictionary) and the first complete collection of Hans Christian Andersen's works.

Katrine Møller

Student, University of Copenhagen

Date of birth: 12 September 1977

Katrine Møller is studying social science at the Department of Sociology at the University of Copenhagen. She has been chairperson of the United Student Council and is now a member of the Financial Committee. Like the other board members, she wants to help create a good, efficient university that gives high priority to freedom of research, academic study and diversity.

Rie Kjær Poulsen

Student, University of Copenhagen

Date of birth: 29 August 1973

Rie Kjær Poulsen is studying at the Saxo Institute's History Section at the University of Copenhagen and is also affiliated with the United

Student Council. She and Katrine Møller make a strong team and want to work for transparency on the new Board so everyone at the University of Copenhagen can be involved in the decision-making processes.

Henrik Prebensen

Associate Professor, University of Copenhagen

Date of birth: 8 April 1939

Henrik Prebensen holds an MA in French and history from the University of Copenhagen, 1965. Following a period as associate professor at the University of Nancy, France, he has held a wide variety of positions at the University of Copenhagen. He is currently an associate professor at the Department of English, Germanics and Romance Studies. As a member of the Board, he intends to work for the greatest possible openness and academic freedom, and for the University's ability to collaborate with other sectors, especially with business and industry, but on the University's own terms.

Henrik Topsøe

Manager of Fundamental Research, Haldor Topsøe

Date of birth: 10 August 1944

Henrik Topsøe graduated as a chemical engineer from DIA (Denmark's Engineering Academy, now the Technical University of Denmark) in Copenhagen in 1967 and holds a PhD from Stanford University, 1972. His specialist fields include catalysts that can convert harmful substances or provide a basis for new energy technologies. Henrik Topsøe believes basic research is an important task for universities, and the Board's main challenge is therefore to ensure the University of Copenhagen attracts the best teachers and researchers, who in turn will attract students of the highest calibre.

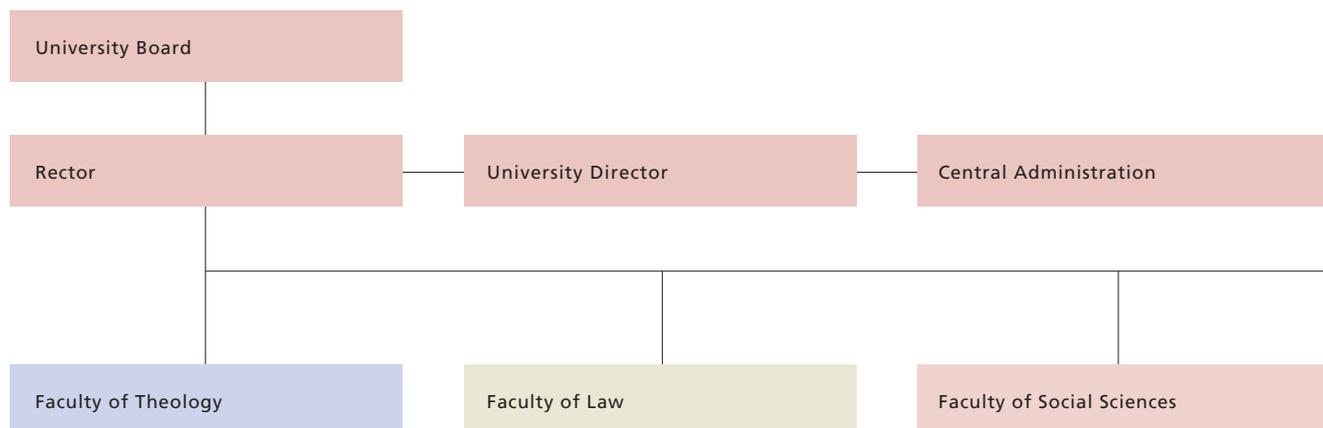
Poul Erik Tøjner

Director, Louisiana Museum of Modern Art

Date of birth: 25 February 1959

Poul Erik Tøjner holds an MA in Nordic Philology from the University of Copenhagen, 1987. Before his appointment in 2000 as Director of Louisiana Museum of Modern Art, he has held positions as arts and culture editor at the Danish feature newspaper *Weekendavisen*, and art and literary critic for the Danish dailies *Information* and *Kristeligt Dagblad*. He has also authored works on such well-known cultural figures as Per Kirkeby, Edward Munch and Arne Jacobsen. He wants to help preserve the idea of a university as a publicly accessible space for producing knowledge in a democratic society. In his opinion, the University has a duty to maintain a broad perspective that transcends topical concerns.

Organisation as of 1 January 2005



The Faculty is organised as a unitary faculty without departments and with sections directly under the Faculty.

Centres:

- Centre for African Studies
- Centre for Christianity and Art
- Centre for the Study of the Cultural Heritage of Medieval Rituals
- Center for Subjectivity Research
- Søren Kierkegaard Research Centre

The Faculty is organised as a unitary faculty without departments and with sections directly under the Faculty.

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

Centres:

- Centre for Research in Existence and Society
- Centre for Industrial Economics (CIE)
- Development Economics Research Group (DERG)
- Economic Policy Research Unit (EPRU)
- Employment Relations Research Centre (FAOS)

Department mergers

In 2003 the Academic Council decided to merge the following departments and museum in the Faculty of Science:

- *August Krogh Institute* and *Institute of Molecular Biology* – to *Institute for Molecular Biology and Physiology*.
- *Botanic Garden* and *Botanical Museum* – to *Botanic Garden & Museum*.

Faculty of Health Sciences

Theoretical Departments:

- Department of Pharmacology
- Institute of Public Health
- Department of Medical Anatomy
- Department of Medical Biochemistry and Genetics
- Department of Medical Physiology
- Institute of Medical Microbiology and Immunology
- Institute of Molecular Pathology
- School of Dentistry
- Institute of Forensic Medicine
- Institute of Eye Pathology

Clinical Departments:

- Department of Diagnostic Radiology
- Institute of Gynaecology/Obstetrics and Paediatrics
- Institute of Internal Medicine
- Department of Clinical Neurosurgery and Psychiatry
- Institute of Oto-Rhino-Laryngology, Ophthalmology and Dermato-Venerology
- Institute of Surgery and Anaesthesiology

Other Units:

- Department of Experimental Medicine
- Central Research Unit of General Practice
- Copenhagen Muscle Research Centre
- Medical Museion

Faculty of Humanities

- Department of Arts and Cultural Studies
- Department of English, Germanic and Romance Studies
- Department of Cross-Cultural and Regional Studies – Language, Religion and Society
- Department of Media, Cognition and Communication
- Department of Musicology
- Department of Scandinavian Research
- Department of Scandinavian Studies and Linguistics
- Saxo-Institute

Centres:

- Centre for Language Technology

Faculty of Science

- Arctic Station
- Department of Chemistry
- Department of Computer Science
- Institute of Biology
- Geological Institute
- Institute of Exercise and Sport Sciences
- Institute of Geography
- Institute of Mathematical Sciences
- Institute for Molecular Biology and Physiology
- Natural History Museum of Denmark
 - Botanic Garden & Museum
 - Geological Museum
 - Zoological Museum
- Niels Bohr Institute
- The Øresund Aquarium

Centres:

- Bioinformatics Centre
- Centre for Science Education
- Centre for Philosophy of Nature and Science Studies (CPNSS)
- Center for Planetary Science
- Centre for Social Evolution and Symbiosis
- Copenhagen Global Change Initiative (COGCI)
- Danish Archaea Centre (DAC)
- Danish Centre for Grid Computing (DCGC)
- Nano-Science Center

Outside the Faculties

- School of Oral Health Care

Key figures

	2000	2001	2002	2003	2004
Part objective					
No. of students	34,165	33,801	32,595	32,314	32,270
No. of 60 ECTS credits*	16,395	16,452	16,502	16,493	16,478
Student intake as of 1 October	5,126	4,802	4,857	4,843	4,889
No. of first priority applicants	9,391	8,235	8,449	8,357	8,124
Average age of accepted applicants	23.5	23.7	23.9	23.8	24.0
Median age of accepted applicants	22.0	22.0	22.0	22.0	22.0
No. of Bachelors	2,614	2,488	2,743	2,708	2,821
Average age, Bachelors	27.1	27.0	27.0	26.9	26.9
Average completion time, Bachelors	4.3	4.2	4.2	4.1	4.3
No. of Masters	2,241	2,437	2,677	2,598	2,573
Average age, Masters	30.3	30.2	30.2	30.5	30.5
Average completion time, Masters	7.7	7.7	7.5	7.5	7.7
No. of tuition-paying students – 60 ECTS credits	1,142	1,153	1,151	1,178	1,073
Masters – full course of study (Master, Diploma)	111	93	120	101	224
Total no. of research education staff – full-time equivalents	1,125	1,050	1,032	1,017	1,020
Total no. of research education students as of 1 October	1,194	1,217	1,173	1,154	1,042
No. of research education students as of 1 October, men	636	630	596	574	502
No. of research education students as of 1 October, women	558	587	577	580	540
No. of PhD theses	285	264	255	245	277
Students triggering internationalisation grants	1,384	1,401	1,462	1,559	1,691
Incoming exchange students	830	684	730	756	924
Outgoing exchange students	554	717	732	803	767
No. of Doctorates	44	38	32	52	45
No. of research publications according to Annual Report	4,847	5,029	5,701	5,238	5,360
No. of research education students, old scheme, as of 1 October, total	9	3	0	0	0
No. of research education students, old scheme, as of 1 October, men	5	3	0	0	0
No. of research education students, old scheme, as of 1 October, women	4	0	0	0	0
Median completion time, Bachelors	4	4	4	4	4
Median completion time, Masters	7	7	7	7	7
Median age, Bachelors	26.0	26.0	26.0	26.0	26.0
Median age, Masters	29.0	29.0	29.0	29.0	29.0

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

Exchange rates in 2004

1 DKK equals approximately:

EUR 0.14

USD 0.18

Financial performance in 2004

The University's overall result is a profit of DKK 13.0 million in total for ordinary and external activities. Ordinary activities account for a DKK 39.8 million reduction in expenditure. Ordinary activities are the part of the University's activities that are financed directly via the Government Budget. The reduction in expenditure is mainly attributable to technical adjustments of the accounts for 2003, as well as extraordinary income relating to previous years. The result is 1.2 per cent of total turnover on ordinary activities.

A review of the University's project portfolio has led to project closures, etc. and consequently the faculties' operating profit on ordinary activities has improved by approx. DKK 50 million.

With breakeven at faculty level, cf. Table 1, total additional expenditure in 2004 was DKK 50 million, taking into account the extraordinary project closures. An accumulated DKK 154.0 million from ordinary activities will be carried forward from 2004 to 2005. As a share of the University's total ordinary activities, provisions constitute 4.8 per cent.

The faculties' financial buffer for ordinary activities is considered satisfactory. The provisions are a deliberate attempt to build up a financial reserve to cushion the faculties from future fluctuations in revenue and expenditure, mainly due to fluctuations in ECTS credits, as well as new initiatives as a result of the new management structure, the new student guidance system, etc.

Under external activities, technical adjustments of grant-based research accounts in the range of DKK 40 million a year were made in both 2003 and 2004. If these technical adjustments are omitted, grant-based research accounts were at the same level in 2004 as in the preceding years. In a period of increasing focus on external grants and increasing significance of external activities to the University's finances, this area will attract still more attention in the coming years. Under external activities, commercial activities research and other grant-

Table 2: Revenue from external activities 2004

DKK million	2000	2001	2002	2003	2004
Commercial activities	39.3	13.8	16.6	14.6	18.6
Forensic examinations	70.7	83.7	102.6	113.3	107.5
Grant-funded research activities	530.3	578.4	590	643.5	642.6
Other grant-funded activities	21.1	22.5	16.4	27.4	18.4
Total income from external activities	661.4	698.4	725.6	798.9	787.1

funded activities play a limited role in the finances of the University and do not fluctuate greatly in absolute figures. After some years' growth, forensic examinations fell slightly from 2003 to 2004, cf. Table 2.

The University's Statement of Revenue and Expenditure for 2004 reflects that the University is dedicated to financial planning. For the fourth consecutive year, the University has recorded a reduction in expenditure, driven partly by postponement of activities (and thus expenditure) and partly by a deliberate attempt to build a reserve to enable the University to withstand fluctuations in revenue and expenditure. In connection with the transition to self-governing status and the introduction of cost-based accounts, targeted efforts have been made to develop financial planning and control procedures in the past year. Consequently, the financial reform project KU2005 made its mark on administrative development within the University in 2004. The financial reform project is aimed at developing a uniform and coherent approach to financial planning and control throughout the University. This includes decentralisation of the financial system to department level, as well as coherent budgeting and follow-up to give all administrative levels new budgeting tools and a general overview of their finances via relevant management information in real time. This enables the University to perform the necessary finance and planning control under the new structure. □

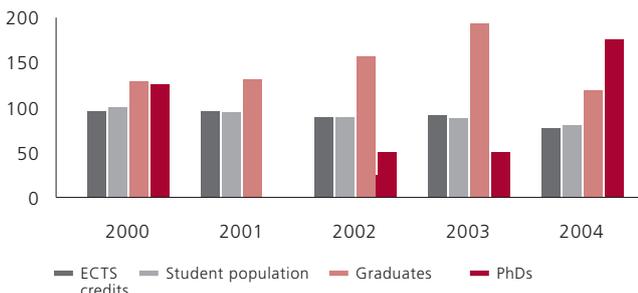
Table 1: Expenditure and profit/loss from ordinary activities 2004

In DKK millions	Expenditure framework 2004	Net expenditure 2004	Profit/Loss 2004	Beginning of 2004	Carried forward to 2005
Faculties, total	1,974.0	1,974.7	-0.3	134.7	134.4
Other, total *	1,000.8	960.7	40.1	-20.4	19.7
Total	2,975.2	2,935.0	39.8	114.3	154.0

Note*: *Other, total* is comprised of buildings, the Central Administration, the School of Oral Health Care and the Biotech Research and Innovation Center (BRIC).

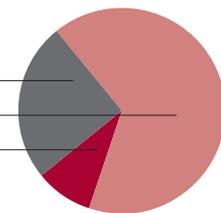
Education

Index (1999 = 100)



Staff mix

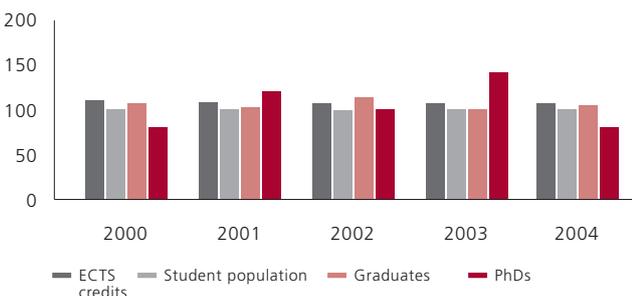
T&A personnel 26%
Academic staff 66%
Part-time academic staff 8%



Purpose-allocated costs in DKK million	2000	2001	2002	2003	2004
Ordinary education	12.984	13.527	14.081	13.189	13.533
Basic research	9.285	9.531	10.028	9.571	9.846
Research funded by grants	2.513	3.413	8.457	11.121	11.974

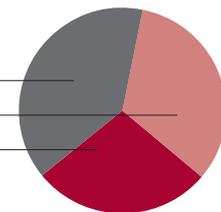
Education

Index (1999 = 100)



Staff mix

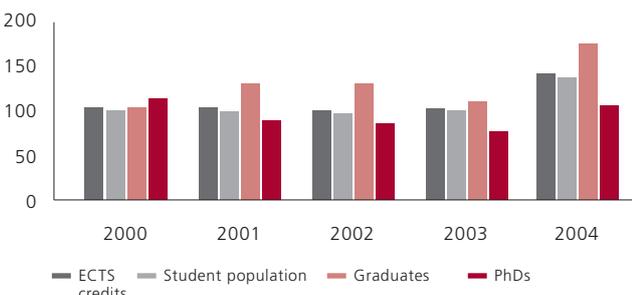
T&A personnel 39%
Academic staff 32%
Part-time academic staff 29%



Purpose-allocated costs in DKK million	2000	2001	2002	2003	2004
Ordinary education	52.939	56.152	55.907	56.654	64.599
Basic research	14.406	20.310	24.008	23.205	26.564
Research funded by grants	3.043	3.691	5.451	5.547	5.490

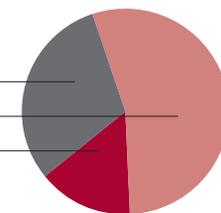
Education

Index (1999 = 100)



Staff mix

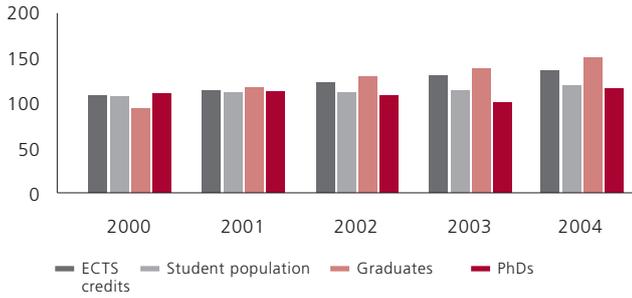
T&A personnel 30%
Academic staff 55%
Part-time academic staff 15%



Purpose-allocated costs in DKK million	2000	2001	2002	2003	2004
Ordinary education	58.169	58.942	62.802	69.443	91.268
Basic research	54.869	57.326	55.010	54.455	86.925
Research funded by grants	42.647	41.417	45.807	38.667	63.346

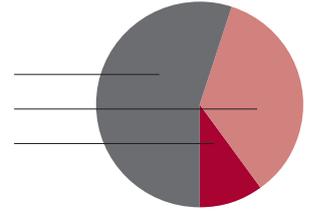
Education

Index (1999 = 100)



Staff mix

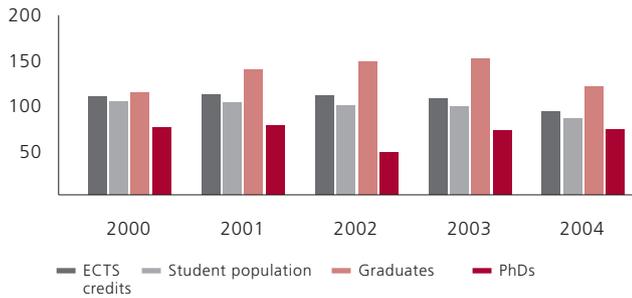
T&A personnel 55%
Academic staff 35%
Part-time academic staff 10%



Purpose-allocated costs in DKK million	2000	2001	2002	2003	2004
Ordinary education	177.088	178.024	210.189	220.885	246.203
Basic research	208.657	200.669	212.218	225.996	245.040
Research funded by grants	153.517	164.203	168.916	169.885	176.249

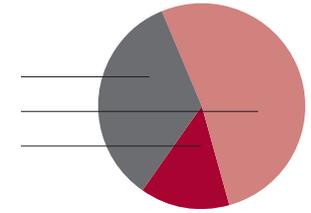
Education

Index (1999 = 100)



Staff mix

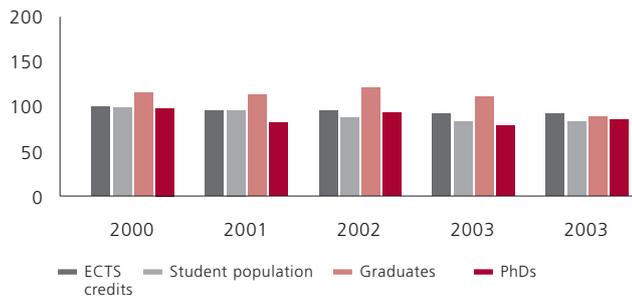
T&A personnel 34%
Academic staff 52%
Part-time academic staff 14%



Purpose-allocated costs in DKK million	2000	2001	2002	2003	2004
Ordinary education	187.435	184.178	201.808	218.377	196.849
Basic research	135.208	132.453	137.153	138.762	136.722
Research funded by grants	51.102	55.540	56.092	59.801	66.340

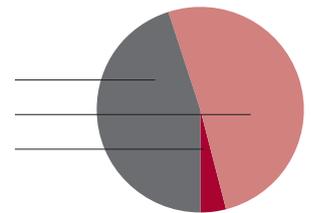
Education

Index (1999 = 100)



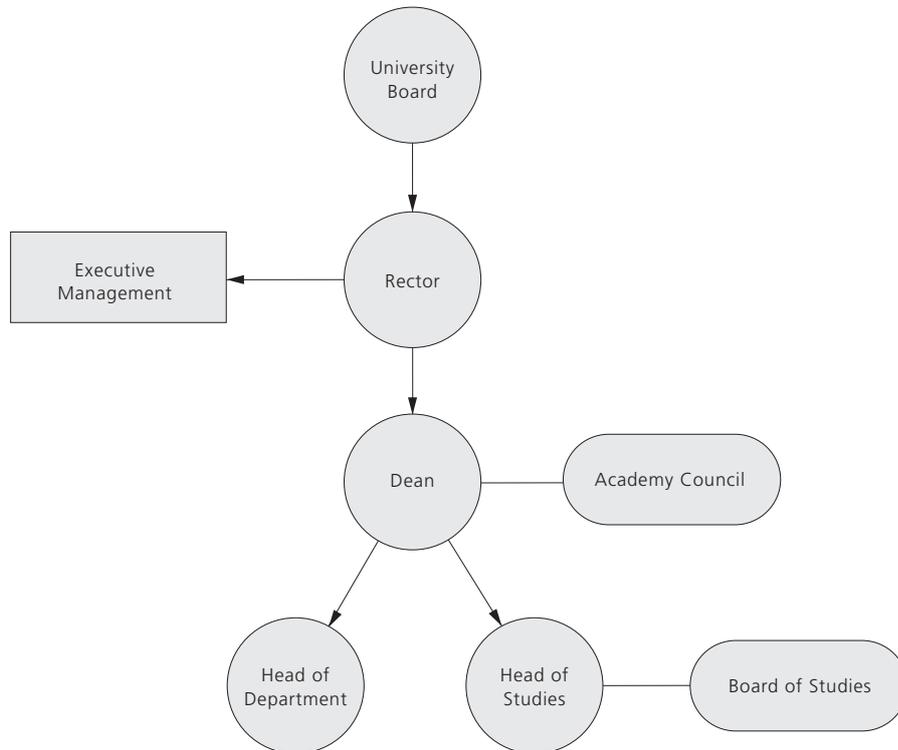
Staff mix

T&A personnel 45%
Academic staff 51%
Part-time academic staff 4%



Purpose-allocated costs in DKK million	2000	2001	2002	2003	2004
Ordinary education	194.549	198.347	215.945	213.428	232.148
Basic research	240.468	250.061	263.233	255.450	283.212
Research funded by grants	270.036	271.868	290.698	257.353	258.357

Steering structure as of 1 January 2005



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The Core Values of the University of Copenhagen

The University of Copenhagen contributes to development and growth in society through three inseparable activities: research, education and the exchange of knowledge.

The University is unique in its academic diversity and continuously establishes new patterns for interdisciplinary work. Issues are perceived in broad academic and historical contexts.

The University's values come to expression through *truth-seeking, responsibility, freedom and commitment*.

- The University of Copenhagen's research is free from financial, ideological and political interests. The research extends the limits of awareness and challenges traditional ideas. At the core is the basic research, which is at an international level. The research is conducted in a responsible manner with regard to its subject, methodology and application of results.
- The University of Copenhagen's research-based education programmes further the students' academic competence, curiosity and independence. The programmes are based on the highest possible academic quality and foster the students' abilities to make qualified choices and to perform essential functions in society.
- The University of Copenhagen's knowledge is managed responsibly and disseminated in a free, committed, trustworthy and challenging dialogue with the surrounding world. The University is a responsible and critical participant in the public debate and takes part, both nationally and internationally, in constructive and binding partnerships.

The University's tasks are performed in a creative and attractive environment in which employees and students are met with openness, respect, a sense of community and co-determination.

Adopted by the Academic Council on 15 September 2004.

.....truth-seeking.....responsibility.....freedom.....commitment.....



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