Congratulations
To Anders Björklund, David Bryder, Jonas Erjefält, Per Hellstrand, Germund Hesslow, Henrik Jörntell, Anders Malmström, Katrin Mani, Åke Oldberg, Malin Parmar, Åsa Petersén, Stefan Baumgartner and Udo Häcker to VR. Cecilia Lundberg got both VR and a new professor’s title! Lena Uller got 5 million SEK from Vinnova. Patrik Brundin got a big contribution from Knut and Alice Wallenberg. Joakim Esbjörnsson got 350 000 SEK from the Tegger foundation. Last but not least, congratulations to Lisette Eklund for a monetary contribution to spark-safe refrigerators!

News on the Government Autonomy Bill
The right to be considered for promotion to senior lecturer and professor according to the old rules has been prolonged to June 30th 2011.

Utbildningsbidrag/Special Education Assistance

Biomedicine/Experimental Diabetes Research: “Structure–function relationship studies of adiponutrin, a protein implicated in the development of liver steatosis and hepatic insulin resistance.” Last application date 2010-12-10. Ad in Swedish.

Clinical Medicine: “The role of the novel messenger CART in Type 2 diabetes and the potential as anti-diabetic drug.” Last application date: 2010-12-10 Ad in English.


Biomedicine/Neurobiology: “Experimental treatments for Parkinson’s disease with a focus on glutamate mGlur4 receptor.” Last application date 2010-12-13 Ad in English.
Getting to know

I’m taking pictures in Ragnar Mattsson’s class. He is eager that I learn something at the same time and sets up an extra microscope so that I can see the eggs properly. Ragnar’s two co-workers, Sara and Mary-Ann, are instructing the students at two other microscopes.

“Our course is about egg preparation and how to modify eggs,” Ragnar explains. “We modify them by injecting genes.” The mouse embryo in the microscope is so small it actually has the wall of the egg cell intact. The original cell has only divided two or three times.

Sara Andersson puts something that looks like a blunt syringe attached to a thin hose between her lips. By inhaling she is able to control a column on air and move the eggs with precision. With a background in chemistry I think the method looks questionable at best, but Ragnar tells me it’s safe. I notice that Sara and Mary-Ann have really steady hands.

“In the course we also mention IVF or ‘in vitro fertilization’,” Ragnar tells me. “This method was first performed in rabbit in the fifties. Robert Edwards [this year’s Nobel Prize winner in medicine] adapted it to humans. It wasn’t all that easy. One of the challenges was to obtain the eggs from the female ovaries.”

“I used to work in an IVF clinic,” Mary-Ann Sällström cuts in. “But it got very repetitive.” She smiles. “Modifying human eggs was out of the question.” In her current job, IVF is more of an emergency solution when there’s a shortage of male breeder mice.

Ragnar conducts research 70% of his time. He is also part of the transgenic service organization. The other research groups order different services from Ragnar, Sara and Mary-Ann. “Some of them need us to have their mice ‘decontaminated’. Maybe their mice didn’t have the qualities they ordered. Then we have to ‘wash’ the eggs and plant them into a healthy mother. This is called ‘embryo transfer’.”

Ragnar is a professor in Reproductive Immunology. He did his PhD in Uppsala and specialized in animal physiology, not medicine. He came to Lund in 1998. “Since you had previously worked with animal physiology, wasn’t it a difficult step to treat animals more like means for medical experiments?”

“This is difficult for everyone. The ethics I advocate are about avoiding doing things to animals that you couldn’t imagine going through yourself; For example, being unexpectedly shot and falling dead on the spot wouldn’t make you suffer personally. But in a social context it would be terrible for your family. You have to be really careful with

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The Nobel Prize in perspective

“In vitro fertilization has meant a great deal to many couples out there. Having a child is perhaps the most fantastic experience you can have. For the individual it has brought lots of joy.

However, Alfred Nobel’s intention was for the prize to be awarded for discoveries that have benefited mankind. Despite the importance for the people who conceive in this way, in a global context, infertility can be regarded as a ‘luxury’ problem. For mankind as a whole, maybe contraceptives have been, and will be, more beneficial.

The transgenic technique, that I also use, was awarded the prize in 2007. I do agree that the techniques are important for science and enjoy being in such a nobel field.”
When he is not tailoring mouse models for others, Ragnar studies which genes that govern reproduction: "We study mice and try to find the corresponding human genome. Then we test it in vitro to try to prove the theory. Hands on, we study mice, how large litters they have, how they mate and what characteristics the males seem attracted to.” Apparently Ragnar and his crew can tell if a mouse got lucky last night just by looking at it.

Ragnar makes a gentle impression and is a popular teacher. But when I ask him how he deals with setbacks in the lab there is no secret: "I do get angry! First, I vent with friends. Then, to get my mind off things, I chop wood, go for a walk in the forest or get out my oil paints. If you can't deal with setbacks you don’t belong in research. Luckily I have a great team that I work with. We have always worked well together. I'm incredibly grateful for that.”

Anna Appelberg

Sara Andersson demonstrating precision work.
EMV Glögg / Glüwein
Dec 10th

Welcome!
Click here to register!

Traditional EMV Christmas gathering with Glögg (Glüwein) on D15 at 14:00
Publications

Is shortening of telomeres the missing link between ageing and the Type 2 Diabetes epidemic?
Mulder H.

A simple method for large-scale generation of dopamine neurons from human embryonic stem cells.
Morizane A, Darsalia V, Guloglu MO, Hjalt T, Carta M, Li JY, Brundin P.

Proteasome Inhibition Improves the Muscle of Laminin α2 Chain Deficient Mice.
Carmignac V, Quéré R, Durbeej M.

Gene therapy for dopamine replacement.
Björklund T, Cederfjäll EA, Kirik D.
Prog Brain Res. 2010;184:221-35. PMID: 20887878

Viral vector-mediated overexpression of α-synuclein as a progressive model of Parkinson’s disease.
Ulusoy A, Decressac M, Kirik D, Björklund A.
Prog Brain Res. 2010;184:89-111. PMID: 20887871

Click here today to sign up!
Having a Ball

For the first time in history the faculty treated all PhD Students to an evening including lectures, a panel discussion and dinner at the AF building.

Elisabet Ohlin and Emma Henriksson were two of the EMV representatives in the organizing committee. Thank you! Well done!