



FROM VISION TO DECISION

NEWSLETTER

YEAR 4, NUMBER 2

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Dear MedViz Supporter



I am happy to draw your attention to our new **MedViz Photo and Illustration Competition**. MedViz wishes to use scientific pictures to profile its activity. This is because all our activities are based on images, image information and its utilization for improved diagnoses resulting in better patient treatment. The advertisement has been sent to all our members. The three best pieces will be awarded a personal reward of 1.000 NOK and free participation at the next **MedViz Conference 2015**.

This picture by Kai S. Beckwith was the winner from 2014.

In the present issue, you can read an interview with Dr. Tina Pavlin from the Molecular Imaging Centre (MIC) at Department of Biomedicine, UiB and there are some interesting summaries from late and upcoming events. Last week we took a look at the COMSOL Multiphysics software, applied for simulations, based on the applications of Partial Differential Equations. It seems to be an interesting platform for fluidics and dynamics, but less useful for acoustics. We quote Spiros Kotopoulos saying: "If people are to do this kind of work, I would recommend they hire someone in for a private course for two-three days." Spiros has added a [link](#) to a simulation of blood flow through the heart by Comsol. If anyone else has gained experience with Comsol, we would be interested to collect and gather this experience in the MedViz network. Please reply to ragnar.nortvedt@helse-bergen.no

Interview with Dr. Tina Pavlin

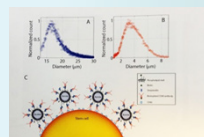
Tina Pavlin was born in 1974 in Nova Gorica, Slovenia, which is located on the Slovenian-Italian border and is about half an hour from Trieste. -I left home when I was 16 to follow the International Baccalaureate (IB) Program in Ljubljana, says Tina. IB gave me a good background in mathematics, science and English, and its excellent reputation helped me get accepted with full scholarship into Princeton University, New Jersey, on the East coast of the USA. In 1997 I received the degree of Bachelor of Arts (AB) from Princeton with a major in physics and a certificate (a kind of minor degree) in German Language and Literature. The Bachelor thesis that I had to write in my 4th year of studies was in cosmology, because at that time I wanted to become a theoretical cosmologist. [Read the interview](#)



Late event

StemBells in Rotterdam

The 20th European Symposium in Ultrasound Contrast Imaging was arranged in Rotterdam January 22-23. Professor Odd Helge Gilja was invited to give a presentation on the world's first study of ultrasound-assisted treatment of pancreas cancer. This is a phase-I study, which in addition to showing low toxicity, demonstrated prolonged survival in patients with inoperable locally advanced disease. The study has raised considerable international attention and two papers have already been published. *StemBells* is a new concept highlighted in Rotterdam: Stem cells covered by US microbubbles, labeled with specific antibodies, which can be applied for target delivery of stem cells, e.g. to heal injured myocardium after infarction. *StemBells* can be applied for ultrasound imaging and potentially for targeted therapy after loading the microbubbles with a bioactive agent.



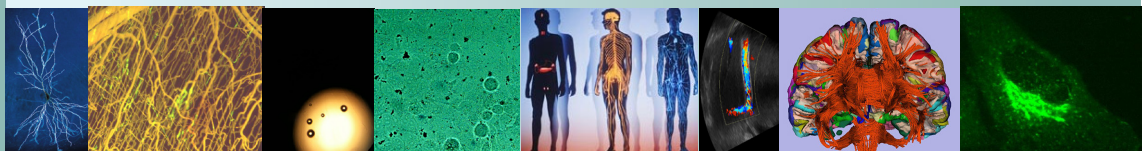
The Figure is published in the book Stem Bells. A novel stem cell delivery platform using microbubbles and ultrasound, by Tom J.A. Kokhuis (2014, 181 p., ISBN 978-94-610-8811-6).

[Click for details on the figure](#)

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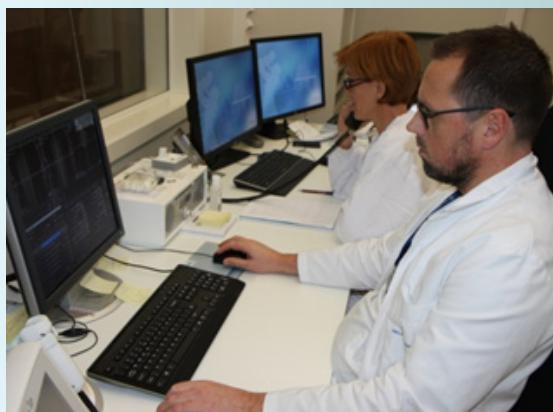


HELSE BERGEN
Haukeland University Hospital



Opening of the new MR Centre at Haukeland University Hospital

The official opening of the MR Centre at Dept. of Radiology, Haukeland University Hospital will take place on Wednesday February 4. The entrance is located nearby “The bed elevator North” at the same level as the parking floor in Sentralblokken. «Actually we have got the opportunity to reverse the use of parts of the parking area to establish the MR Centre», says Section Manager for MR Torunn Øvredal, who has given MedViz an exclusive guided tour in the voluminous and pleasant facilities. See also [MedViz Newsletter from April 2013](#) including the article “News: Unique opportunities for MRI research”. «Just take a look at the artistic photos on the walls from one of our staff members, fMRI radiographer Roger Barndon, meant to inspire both the staff and the patients», Torunn says enthusiastically. The whole MR Centre is currently equipped with two modern state-of-the-art 3 Tesla MR machines and they have further plans for one 1,5 Tesla machine, located in three separated areas, each one having its own rooms for preparation, dressing and toilets, control and working space for the staff. «In this way each imaging system might be devoted for the current prioritized diagnoses, and this will make our work and the patient service more efficient than today», Torunn says. In addition, the MR Centre facilities also include several offices, kitchen and a meeting room, ideal for researchers and other staff to meet and discuss imaging challenges and opportunities, which is in line with the MedViz philosophy, as well. «We want to invite and gather all interesting expertise here for shorter or longer periods», Torunn claims, showing us into two control rooms where cardiologists, radiologists, radiographers and physicists already are working. «You are all heartily welcome!» Torunn Øvredal concludes.



The Cardio radiographers Jarle B. Seter and Merete Skjolden Lemme are already in action in one of the three control rooms.



Three colleagues at Dept. of Radiology (from the left) radiographer Jan Ankar Monssen, physicist Erling Andersen and radiologist Lars A. Rokne Reisæther claim to be very satisfied with the new working facilities

Upcoming events

04. February: Official opening of the new MR Centre at Haukeland University Hospital.

12. March 2015: Deadline for European Research Council (ERC) [Consolidator Grants](#), which are designed to support excellent Principal Investigators.

15.-16. June 2015: MedViz Conference, Bergen. This event will be organized together with the PET Center at HUH and the MIC research group at Department of Biomedicine, UiB. The main focus will be innovation within medical imaging and visualization.

13.-14. August: [Bridging Nordic Imaging Seminar](#) in Turku, Finland.

14.-15. September: [VCBM Workshop in Chester](#), UK, where The Pioneer in “computational medicine” Prof. Denis Noble will be the keynote speaker. All MedViz colleagues are encouraged to submit papers and join the workshop. Deadline for paper submission: June 21.

Ragnar Nortvedt
Program Manager

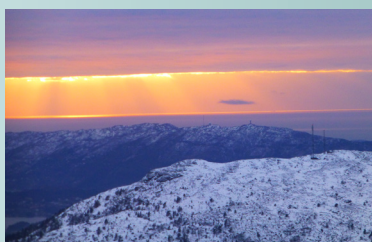


Photo from Ulriken towards Løvstakken, Liatårnet and The North Sea