



# FROM VISION TO DECISION

## NEWSLETTER

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### Dear MedViz Supporter

The current Newsletter is presenting the highlights from the Helse Vest Research Conference 2014. You can also read an interview with Dr. Veronika Šoltészová from Christian Michelsen Research and University of Bergen. In collaboration between HiB, UiB and MedViz, the UH-Nett Vest supported project Computational medicine: numerical models for medical images and signals will organise a bimonthly Mathematics Clinic (“Matematisk poliklinikk”), an open forum for interdisciplinary problem-solving and spirited discussions, set in an informal atmosphere at [Litteraturhuset i Bergen](#). One ambition is to facilitate problem solving by increasing the awareness of medical and biological skillsets and mindsets in the computational mathematics community, and vice versa. Another ambition is to present **transdisciplinary** mathematical-medical challenges and developments to the public. The title for a first meeting in January 2015 will (tentatively) be “Man and Machine” (“Menneske og datamaskin”), and details will be announced soon.

### Helse Vest Health Research Conference at Solstrand Hotel & Bad



The HV Research Conference 2014 took place 30-31 October in the facilities of Solstrand Hotel & Bad in Os. This has become a traditional event, housing 105 participants this year. Professional Director Baard-Christian Schem from Helse Vest pointed out the highlights in the program, namely international focus, particularly through potential Horizon 2020 projects, collaboration between the health regions, research infrastructure and Biobank Norge, user involvement and communication of results. Baard-Christian referred to 37 received

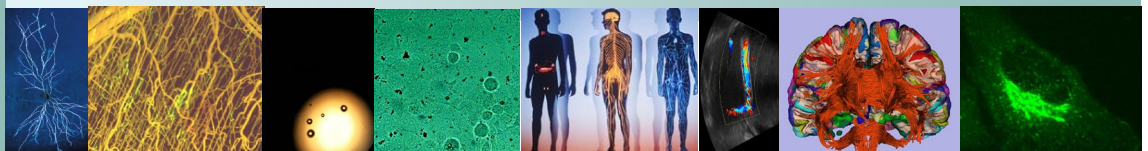
research applications to become a strategic priority area under Helse Vest in the coming five years, within six predefined thematic fields. The chosen areas will be decided in November. He also announced that an upcoming new HV research strategy for 2016-20 will be launched in 2015.

[Read more from Helse Vest Research Conference](#)

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HELSE BERGEN  
Haukeland University Hospital



## Interview: Veronika Šoltészová

### Background



Veronika Šoltészová was born and grew up in Bratislava in Slovakia (former Czechoslovakia) with approximately 5-600.000 inhabitants. After high school in natural sciences (8 years in Slovakia) Veronika took German evening courses to improve her language skills before she started to commute to Vienna in Austria because the Bachelor education and opportunities were better in Vienna. Quite many young and talented people still go abroad from Slovakia and if they want to do science, they stay abroad. - It is a pity, she says.

She also participated in the ERASMUS exchange study program and spent six months in Troyes, France before she took her Master in computer graphics and digital image processing. Veronika focused on computer graphics and visualization. Her curriculum included a course in medical visualization and she chose to do her obligatory internship (Praktikum) with the medical visualization group at the company VRVis, managed by Helwig Hauser at that time. Her internship project was on brain tumor segmentation with the level sets method using graphics hardware. Her master thesis was on visual queries in neuronal data exploration, supervised by Stefan Bruckner and Eduard Gröller. She worked with microscopy data of the neuronal system of the fruit fly, provided by the Institute of Molecular Pathology in Vienna. Together with the project collaborators, she filed a patent application in 2009, Veronika says. –And then, through Ivan Viola, who I knew from the Viennese visualization milieu, I became aware of the opportunity to take a PhD at the University of Bergen.

[Read the interview](#)

## Upcoming events

**12. Nov. at 13:00:** PhD trial lecture, by Erik Hanson, Dept. of Mathematics, Room 534

**21. Nov. at 12:00 :** MedViz Seminar: Particle therapy and imaging, in the MedViz Incubator, Møllendalsbakken 7, 5th floor.

Helge Pettersen: Imaging the proton stopping power with proton computed tomography  
Kristian Ytre-Hauge: Radiation therapy with proton and carbon ions

**25. November:** Particle therapy, by CEO Stener Kvinnsland (HUS), presentation 19:00 at Nansensenteret, Thormøhlensgt.47

<http://www.ntva.no/meeting/tirsdag-25-november/>

**10. December:** PhD defence by Erik Hanson. Title: “Image processing methods for 4D magnetic resonance acquisitions from brain and kidney”. Supervisors: Prof. Alexander Malyshev, Dept. of Mathematics, UiB and Prof. Arvid Lundervold, Dept. of Biomedicine, UiB.

**12. December:** MedViz Christmas Seminar together with Visual Computing Forum, Dept. of Informatics. The seminar takes place in the MedViz Incubator, Møllendalsbakken 7, 5th floor.

Two international speakers: Dr. Bernhard Kainz from London and Prof. Ivan Viola from Vienna

**15.-16. June 2015:** MedViz Conference, Bergen

**14.-15. September 2015:** VCBM Workshop in Chester, UK, where The Pioneer in “computational medicine” Prof. Denis Noble will be the keynote speaker.

**Ragnar Nortvedt**  
Program Manager

