



Program Dag van Biofysica & Biomedische Technologie *13 November Nijmegen*

Linnaeusgebouw, Heyendaalseweg 137, Campus Radboud University

9.30 Coffee and registration

Zaal LIN-3

10.00 Welcome

Raymond van Ee, president Vereniging voor Biofysica & Biomedische Technologie

Session Neurophysics

Chair: John van Opstal, *Dept of Biophysics, Radboud University Nijmegen*

10.10 Routing and computing with neuronal (gamma-band) synchronization

Pascal Fries

Donders Institute for Brain, Cognition, and Behaviour, Radboud University Nijmegen

10.40 The role of feedforward and recurrent connections for visual perception

Pieter Roelfsema

Netherlands Institute for Neuroscience, Amsterdam

11.10 Coffeekbreak

11.30 A mesoscopic view of auditory cortex function obtained with current source density analysis and information theory

Jan Schnupp

Dept. of Physiology, University of Oxford

12.00 How actions alter sensory processing: Reafference in the vestibular system

Kathleen Cullen

Dept. of Physiology, McGill University, Montreal

12.30 Lunch – Poster session – Meet the Board

Zaal LIN-4, 13.00- 13.30

Raymond van Ee, president, presents view of VvB&BMT

Gerrit van Ark, ZonMw, will discuss the NWO grant program 'Nieuwe Instrumenten voor de Gezondheidszorg'

14.00 **Parallel sessions**

Zaal LIN-3

Session Cellular & Molecular Physics

Chair: Erwin Peterman, *VU University Amsterdam*

14.05 **Bench to bedside in reverse: from ophthalmology to optical coherence phase microscopy**

Johannes de Boer

VU University Amsterdam

14.25 **Single-molecule detection and force spectroscopy with solid-state nanopores**

Adam Hall

Technical University Delft

14.45 **Patterning and visualizing functional protein assemblies on surfaces**

Vinod Subramaniam

Technical University Twente

15.05 **Force spectroscopy with magnetic tweezers: what can we learn from tearing chromatin apart**

John van Noort

University Leiden

15.25 **Kinesin's step dissected with single-motor FRET**

Erwin Peterman

VU University Amsterdam

Zaal LIN-4

Session Organ Physics

Chair: Tim Marcus, *VU Medical Center Amsterdam*

14.05 **Continuous airway impedance: from the uncertainty principle to clinical practice**

Joost van den Aardweg

Medical Center Alkmaar

14.25 **Regulation of blood vessel and airway structure and biomechanics: different tasks, common mechanisms?**

Ed van Bavel

Academic Medical Center Amsterdam

14.45 **Towards model-assisted diagnosis of cardiac disease**

Peter Bovendeerd

Technical University Eindhoven

15.05 **3D cardiac strain estimation: What is the benefit of the signals behind the echogram?**

Chris de Korte

Radboud University Nijmegen Medical Center

- 15.25** **Right ventricular function in pulmonary hypertension, assessed by MRI myocardial tagging**
Gert-Jan Mauritz
Dept of Pulmonary Medicine, VU Medical Center, Amsterdam
- 15.45** **Break - Refreshments**
- 16.05** **Zaal LIN-3**
Ceremony PhD thesis award
Raymond van Ee, president *VvB&BMT*
- 16.10** **How swifts control their glide performance with morphing wings**
David Lentink, thesis award winner
Wageningen University & Harvard University
- 16.40** **Closing**
Raymond van Ee, president *VvB&BMT*
- 16.45** **Drinks**

Registration

To register please mail the following information to Irene Helsen: i.helsen@donders.ru.nl

Name:

Affiliation:

e-mail-address:

Presents poster: yes/no

Method of payment: incasso / bank transfer

If incasso, account number:
address:

If bank transfer: transfer €25 to ING bank account 6837579
Attn: VvB&BMT, quote: "Dag van B&BMT"

Registration fee, before November 12: €25

On-site registration fee: €35

Posters

You will have the opportunity to present a poster during the breaks.

Size of poster boards is 90 cm width x 200 cm height. Poster boards will be available for 40 posters. Assignment of poster space will be on a first come first served base.

Posters need to be mounted before 10.00 and will be on display during the whole day.
Refreshments and lunch will be served in the poster space.

When you plan to present a poster, please indicate when you register (see above) or send a separate e-mail to Irene Helsen: i.helsen@donders.ru.nl

Meet the Board

During lunch break there will be opportunity to meet the president and other board members of the Vereniging voor Biofysica & Biomedische Technologie, ask questions and discuss issues of the Vereniging.

Sponsor

The meeting is supported by NWO.



Netherlands Organisation for Scientific Research

How to get there

Venue: Linnaeusgebouw, Heyendaalseweg 137



Train and bus

Train to station Nijmegen – Bus 10 to Heyendaalseweg

or

Train to station Nijmegen Heijendaal – walk ~ 5 minutes

Check website for details: http://www.ru.nl/english/contact/how_to_get_here/

Car

Because of reconstructions around the campus check the website of the Radboud university:

http://www.ru.nl/english/contact/how_to_get_here/by_car/