# i3B newsletter

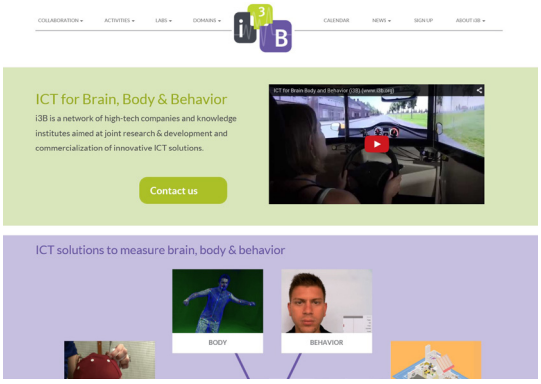
*May 2015*

*Spring arrived together with this latest i3B newsletter, full of interesting topics. We would like to update you with news from the i3B network: new participants, R&D projects, business development, events, personnel exchanges, subsidy calls, the launch of the new i3B website, the organization of the network and last but not least in the spotlight with Jasper Dijkman of Elitac. Happy reading!*

## HEADLINES

### Release i3B website

i3B is pleased to announce the release of her new website. Check it out at www.i3b.org! The goal of our website is to inform and attract potential new participants from science and business, as well as people who are searching for an integrated ICT solution for brain, body and behavior. We invite you to keep sharing your latest i3B related product videos and photos on the website to show the capabilities of our network.




### i3B Speed date

**June 3, 15.30h, Beatrix Theatre, Jaarbeurs Utrecht**

Looking forward to meet you at the i3B network speed date. A speed date for (potential) participants and Scientific Advisory Board members. The scientists are opinion leaders and top researchers in the field of ICT for Brain, Body and Behavior. The ICT entrepreneurs are top notch in the field of measuring brain, body and behavior. Meet the new participants that joined our network. An overview of invited Scientific Advisory Board members can be found on www.i3b.org/governance.

In a 5 to 10 minutes face to face meeting you will introduce yourself, your company, science and how you would like to collaborate with scientists and other businesses and explore new research and business opportunities. Mark your agenda and register at info@i3b.org.

## i3B Café - Impact of ICT on healthcare

**June 3, 17.00h, Beatrix Theatre, Jaarbeurs Utrecht**

The subsequent i3B Café is organized with guest speaker Ben Kröse, professor Ambient Robotics at the University of Amsterdam and lecturer Digital Life at the Amsterdam University of Applied Sciences. His profile: https://benkrose.wordpress.com/about/.

What does the exponential growth of sensors, apps and soon robots mean for our health, for the healthcare professionals, for the privacy of patients and what is the impact for the solution providers? We will have an interactive discussion with the audience.

The i3B Café is open for the Health community active in ICT for Brain, Body and Behavior. Please register at info@i3b.org.

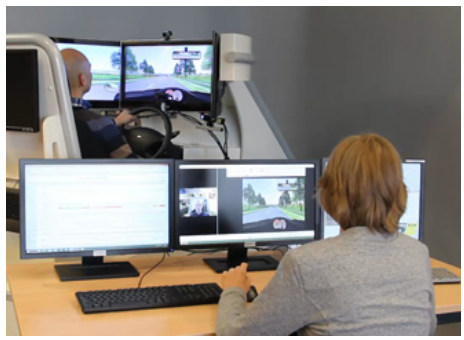




## i3B Seminar - Studying driver behavior using simulators

**June 11, 15.00h, Wageningen**

Driving simulators provide an excellent way to study driver behavior in controlled conditions. In a simulator it is relatively easy to measure detailed information about the driver's behavior and performance using eye tracking, physiological measurements, and other sensors. i3B participants Green Dino, Smart Eye, and Noldus have teamed up to develop a new system which integrates different data modalities: DriveLab. This new solution has been designed in cooperation with HAN University of Applied Sciences, also an i3B participant.



You are invited to join this seminar in which we will introduce DriveLab and its unique capabilities that set it apart from existing simulators. In addition, a number of users of driving simulators will present their research. The seminar is hosted by i3B, Green Dino and Noldus Information Technology at Nieuwe Kanaal 5, Wageningen, The Netherlands. We kindly ask you to register in advance. For more details about the agenda and registration: www.i3b.org.

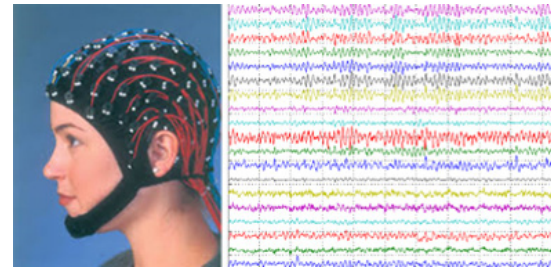
For additional information on Drivelab: www.noldus.com/innovationworks/products/drivelab.

## Hack the brain

**June 5-7, Nieuwmarkt 4, Amsterdam - www.hackthebrain.nl**

During the Brain Hack Education days, scientists, developers, and education professionals to explore how we can influence and improve learning processes in the brain. Over the course of the weekend of June 5-7, we will explore the boundaries of brain hacking together. Along with your team, you'll work on cutting-edge concepts, think up innovative applications, and build real prototypes.

*The Idea* - In the future, will we be able to activate our creativity and concentration with the simple press of a button? Will we learn new languages in our sleep? Or map our strengths and weaknesses with the help of EEG equipment? Can learning processes be tracked in real-time and converted into usable data?



*The Progress* - DIY brain hacking is no longer the stuff of science fiction — it's reality. After a successful first edition of the Brain Hack in 2014, we're digging deeper into the attics of our minds, and exploring new opportunities for learning with our brains.

*The Tools* - During the hackathon, we'll take care of the software and hardware. Would you like to build a prototype? No problem. You'll have the entire FabLab at your disposal. Brain experts and technical guests will also be available throughout the weekend to help you in your quest to develop the ultimate brain hack! i3B is event sponsor, and will judge pitches. The event is free of charge for the first five i3B participants that register on the hack the brain website.

## NEW PARTICIPANTS

i3B is pleased to announce the new participants that joined our network in the last period:

### Donders institute for Brain, Cognition and Behaviour

**www.ru.nl/donders/**

The Donders Institute for Brain, Cognition and Behaviour is a world-class research centre devoted to understanding the mechanistic underpinnings of human cognition and behavior in health and disease. The Institute is home to more than 600 researchers from 35 countries who share the common goal of contributing to the advancement of the brain-, cognitive- and behavioral sciences through investigator-driven research, and improving health, education and technology by applying advances in this field. The Institute's mission includes conducting interdisciplinary research of excellence at the unique interface between genetic, molecular and cellular processes at one end and computational, system-level neuroscience with cognitive and behavioral analysis at the other end. Within this range Donders focuses on four research themes: Language and Communication, Perception, Action and Control, Plasticity and Memory and Brain Networks and Neuronal Communication. The Board of Directors approved participation in the i3B foundation. We are finalizing the participation agreement.

### Sense Labs

**www.sense-labs.com**

Sense Labs is dedicated to advanced knowledge about how sensor data can be used to empower people to change. Our leading technology platform connects smartphones and other wearables

to a sensor cloud. With our intelligent algorithms, we transform the raw sensor data into real time human and environmental behavior measurements. And through our smart coaching engines we empower people. Recognizing earthquakes, managing emergencies, improving healthy lifestyles, supporting mental health; they all have one fundamental thing in common: they benefit from personal context awareness, created from the smartphones and wearable sensors people are all carrying with them nowadays. Sense Labs supports users and their social network by providing real-time context awareness.

Through its subsidiary Sense Health the company has a proven track record in the health domain, including leading solutions for mental healthcare as well as employee wellness. Sense Labs is active in a variety of other area's including geography, agricultural as well as security.

## BrainGaze

**www.braingaze.com**

BrainGaze, a Barcelona based company, develops next-generation eye tracking software that predicts and identifies personal behavior for clinical and commercial applications. Current eye tracking software identifies where a person is looking, i.e. fixation points or gaze paths. BrainGaze technology tells which gaze positions are cognitively attended by the observer.

BrainGaze CTO Hans Supèr discovered that minute eye movements during gaze fixation can predict visual attention and conscious perception. This discovery paves the way for the development of a novel and accurate biomarker of attention and perception for eye tracking applications. The patented method is non-invasive, fast (within minutes), and can be integrated in existing eye tracking devices and software. It is applicable to infants, children and adults.

BrainGaze applies this technique to different fields of use. One of them involves monitoring cognitive development in infants and diagnostics for disorders like autism, ADHD and dyslexia. Another area concerns advertising and web usability analysis, where we can for example measure a consumer's response to advertisements.

## OpenUp Technologies

**www.openuptech.com**

It is OpenUp's dream to contribute to a better world through revealing relevant information realtime and real place. Therefore we strive to discover, to use and to give access to the most innovative technologies.

For this reason OpenUp supplies a worldwide unique platform, linked to a mobile app (iOS/Android). The app recognizes surroundings, while the platform supplies personalized data, often from different databases (big data). Through the device the app is running on, e.g. a smartphone, tablet or augmented reality glasses, the data is being visualized, as an overlay on the actuality.

OpenUp partners with specialized parties and resellers from different branches. They can market solutions we developed together broadly. This is how we develop entrepreneurship together in a fast changing world. A world in which innovative techniques and creative ideas lead to new business models. A world where it's always about one big thing: revealing stories.


*OpenUp in practice: Information on the Melba toast product is presented on your tablet by holding the tablet in front of the Melba toast product. Showing you, based on your personal profile, relevant ingredients, nutrients and for example an allergy warning.*

## Brainquiry

**www.brainquiry.nl**

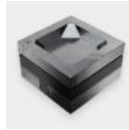
Brainquiry is specialized in wireless, high quality neurofeedback and biofeedback equipment used in the field of Applied Neuroscience. Brainquiry was founded and developed by leading scientists in the field of neurofeedback. The small, wireless (bluetooth) and user-friendly EEG equipment measures your EEG, with active electrodes (DC-amplifiers). Our patented design gives the user full freedom of movement and application. For example the innovative PET EEG can be used for (tele)neurofeedback and biofeedback training, Brain Computer Interface, neuromarketing and scientific research projects. The Brainquiry products are sold worldwide within a network of neurofeedback and biofeedback therapists, universities and research laboratories.

## CenS (Micro) Elektronics

**www.censelect.nl**

CenS (Micro) Electronics is a technology driven company, operating in the field of electronic components, sensors and complementary products for OEM applications. CenS (Micro) Electronics provides 3D MEMS provides sensor technology solutions for human motion monitoring: pressure sensing elements, accelerometer elements and gyros sensing elements.

*Accelerometers*



*Pressure elements*

*Gyroscope*

Experience in market developments with a variety of manufacturers of sensors, analogue and digital components and sub-systems, located all over the world, combined with great interest in semiconductor technology and applications, is the basis for CenS (Micro) Electronics marketing and sales activities. In addition, over 25 years working experience in field sales of electronic components and sensors, for commercial, industrial and medical applications at many customers in the Netherlands and other European countries offers a unique expertise in this fast growing market segment.

# i3B PARTICIPANTS NEWS

This section highlights news from i3B companies relevant for others in our network. Product news for the next newsletter is welcome in the mailbox of tanja.neijboer@i3b.org.

## International merger in market rehabilitation products

i3B participant Motekforce Link, based in Amsterdam, and DIH Technology, based in Beijing, San Diego and Seoul have merged on 20 April 2015. The additional nature of the businesses leads to a substantial synergy whereby increased investments in technology, innovation and worldwide expansion may occur. The merger is a strong base for further growth in Europe, North America and China, and in emerging markets. On the one hand the technologies of Motekforce Link combined with the resources for application development and on the other hand the leading position of DIH in China, will bring the combined rehabilitation technology for the clinic to a next level.

Motekforce Link is currently leading in the development and integration of several rehabilitation technologies for the medical and research market. The expertise of Motekforce Link lies in the translation from scientific knowledge to clinical products on the basis of real-time feedback about posture and movement, with use of interactive and dynamic Virtual & Augmented Reality systems.


DIH Technology is a leading supplier of intelligent technology for rehabilitation & sports medicine and medication management, with R&D teams Networks in San Diego, Beijing and Seoul. The division Rehab & Sports Medicine distributes and develops several Rehabilitation technology products for the Clinical market. Because of the complementary products and capabilities, DIH is already for several years a partner of Motekforce Link for the marketing and sales of Motek products in China.

Michiel Westermann, director of Motekforce Link will join the board of DIH Technology, consolidated in Hong Kong, next to Jason Chen, CEO of DIH Technology. Michiel Westermann, who will be responsible for the international Rehabilitation division, says: *"I am very enthusiastic about this merger. It enables our development to grow, so that we can even better contribute to the quality from life of many patients, by the definition and development of new standards for the diagnosis and therapy of diseases to the gesture and muscle system."*

## DriveLab simulator shipped to the University of Latvia

i3B participants Green Dino, Smart Eye and Noldus teamed up to develop a new system which integrates different data modalities to study driver behavior in controlled conditions: DriveLab. This new solution has been designed in cooperation with another i3B participant, the HAN University of Applied Sciences. DriveLab was recently shipped to its first customer: the University of Latvia, Department of Psychology, in Riga, Latvia.

This new tool helps researchers to understand driver behavior and the influence of support systems on behavior and performance. It furthermore helps vehicle and electronics developers in testing how their products are being used and what the effect of these products will be on driving behavior, providing them with valuable information for further improving their designs.

# i3B RESEARCH & DEVELOPMENT PROJECTS

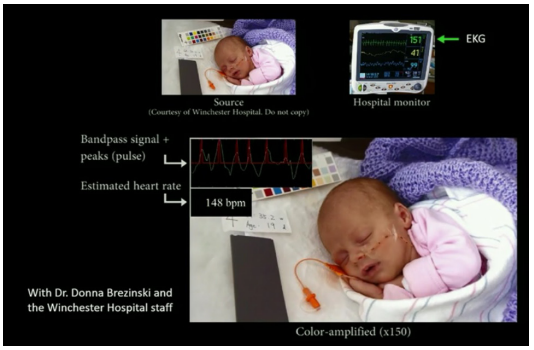
The i3B network develops new Research & Development projects in the application domains health, food, security and mobility. The added value for knowledge institutes is new network, hire new PhD students and equipment through funded R&D projects, resulting in scientific knowledge. Companies benefit by new network and funding for the development of innovative integrated ICT-based solutions that ultimately tackle societal challenges.

The typical role of i3B companies in collaborative projects is the development of sensors, actuators, data acquisition systems, data analysis software, feedback systems and test apparatus. The knowledge institutes provide insight in what to measure and how to interpret brain and behavior data. In addition, i3B has sophisticated laboratories and facilities for concept development, experimentation and field testing with end users.

## Brain and Cognition Research anchored within the Dutch national research organization NWO

NWO published the outlines of its new organization and governance. The organization is organized more efficiently: the current academic areas and foundations are clustered into four areas: Science, Engineering and Applied Sciences, Humanities and Social Sciences, and Health Care Research and Medical Sciences. The National Initiative Brain & Cognition (NIHC) is embedded in the new NWO structure with an organization-wide taskforce with mandates. i3B is the valorization network of NIHC. The interdisciplinary brain and cognition research is anchored within NWO for a minimum of five years.

National Initiative Brain & Cognition




*See invisible motion, hear silent sounds (motion microscope)*

## i3B Research agenda

In two brainstorm sessions with the Scientific Advisory Board and i3B participants, several project ideas were prioritized with the ambition to establish subsidized R&D projects or to look for launching customers, and to develop an integrated ICT solution. We set the i3B research agenda. The winning ideas were: a smart suit for firefighters, utilizing motion microscope

technology, recognizing crowd emotion, situational awareness and neurofeedback for pilots, monitoring food intake for the elderly, and last but not least a monitoring system for Parkinson patients.

## Measuring Behavior 2016

Measuring Behavior is the premier interdisciplinary event for scientists and practitioners concerned with the study of human or animal behavior. This unique community and its biannual conference focuses on methods, techniques and tools in behavioral research in the widest sense.

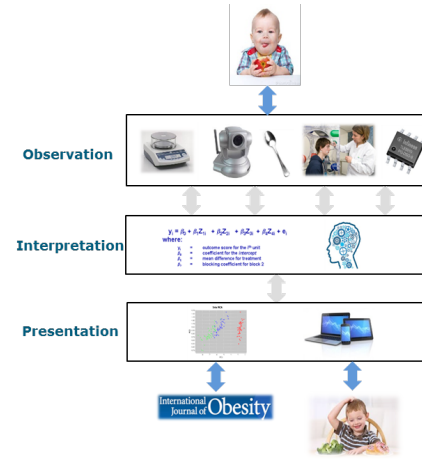
The Scientific Program Committee now invites you to submit Symposia & Workshops proposals for Measuring Behavior 2016. More information is available online www.measuringbehavior.org/mb2016/call-special-sessions.

# R&D PROJECTS BY PARTICIPANTS

i3B submitted several subsidy applications in programs like NWO, STW and ITEA3. In these projects i3B Foundation is a partner, or at least two i3B members are part of the consortium. Highlights:

## FUSE

**Food intake control using multiple sensors**

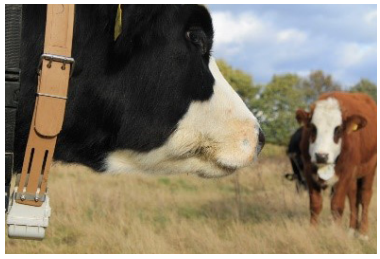



To be able to understand and change human eating behavior and its effect on health, we need to be able to measure food intake. This implies measuring what we eat, how much, when, and in which circumstances. However, measuring food intake is notoriously difficult. Questionnaires are unreliable, physical measurements impact normal behavior, video lacks accuracy and selectivity, and sensors provide only partial information. This project proposal addresses the question what the elements are of a framework for measuring, analyzing and changing food intake. To achieve this, it integrates and interprets data from a diversity of signals, and translates this into actionable feedback for end users. Participants: Unilever, Philips, i3B Foundation, Wageningen University, Utrecht University and VU University Amsterdam. Despite a high ranking, the NWO proposal was unfortunately rejected. The consortium investigates alternative funding options.

## PhenoGroup

**Accurate sensor-based recording of individual behavior in group-housed animals**

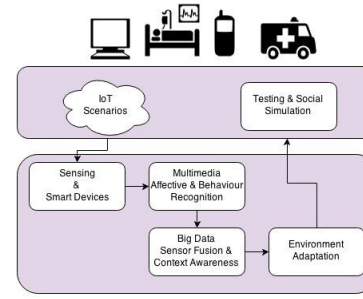
Farm animals are increasingly kept in group housing systems. The industry faces animal behavior and health issues, which require monitoring to enable early detection and adequate solutions. Sensors measure a specific aspect of the animal's performance, but there are no solutions integrating information from multiple sensors. The objective of this project proposal is to develop and apply integrated sensing tools to measure, interpret and ultimately predict behavior of individual animals in group housing, in interaction with their physical and social environment. Participants Wageningen University, University of Twente, i3B Foundation submitted a STW proposal. We expect the outcome in June.



## EmoSpaces

**Enhanced Affective Wellbeing based on Emotion Technologies for adapting IoT spaces**

The role of emotion and affect in judgments and decisions in critical situations is obvious, but the technological possibilities are not yet fully utilized. Detecting and predicting emotions and affect of multiple interconnected people could be a great advantage, for example in crisis management or in shared healthcare for the elderly in their homes. To this end, the project proposal will define an Internet of Things (IoT) platform to develop cost-effective affective services. It integrates technologies like multimedia affect recognition, semantic sensor fusion, context-aware adaptation and social simulation. Participants: Almende, Evalan, VicarVision, Noldus, TU Delft, Radboud University, University of Twente, Thales, i3B Foundation. An application was submitted in ITEA3. After successfully passing the European reviews, the national defense of the project will take place in May.

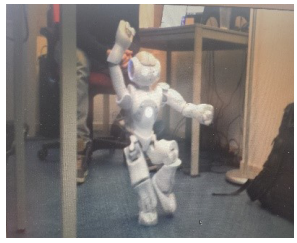


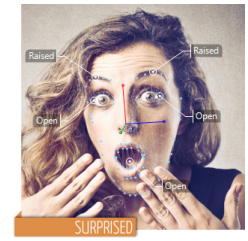

# BUSINESS DEVELOPMENT & EVENTS

i3B acts as a matchmaker between its participants and end-users in relevant domains and industry sectors, in order to bring supply and demand in our field together. For participants, i3B is exploring different formats: matchmaking events, seminars, publications, exhibits, booth sharing at conferences to increase exposure without increasing cost, etc. Here is an update on recent activities:

- **February 18 & March 6 - i3B brainstorms with Scientific Advisory Board and participants**
- **March 6 - i3B Café - Donders institute at VicarVision, Amsterdam**
  Prof. Dr. Richard van Wezel, one of the Directors of the Donders Institute for Brain, Cognition and Behaviour was guest speaker in the i3B Café at VicarVision in Amsterdam.

The Donders Institute for Brain, Cognition and Behaviour is a world-class research centre devoted to understanding the mechanistic underpinnings of human cognition and behavior in health and disease. Richard updated us on the latest developments and possible fields of collaboration with businesses.






Afterwards VicarVision showed special demos of FaceReader, its tool for emotion recognition. A dancing NAO robot on a Michael Jackson song, and transforming the face of a person in the audience, to Brad Pitt. All in all a great event, with lots of famous visitors ☺.

## Other events

- **February 10 - Pitch your solution for the disabled, Arnhem**
  i3B participated in the brainstorm to assist with finding solutions for the disabled at the field lab Het Dorp, Arnhem. The challenges were gathered by Siza in cooperation with the regional development agency OOST N.V.
- **March 5 - i3B meets KLM, Schiphol**
  i3B participants TMSI and ANT Neuro presented their solutions to assess situational awareness of pilots and neurofeedback training to representatives of KLM.
- **March 18 - Health Valley Event, Nijmegen**
  The annual Health Valley Event in Nijmegen is well known with more than 1000 participants. i3B was represented with a booth, which led to exposure for current i3B participants and resulted in new i3B participants, to further strengthen our network.
- **March 31 - Automotive Congress, Talking Traffic, Helmond**
- **April 14 - Food Innovation meeting, Ede**
  Alliance Food Gelderse Vallei, Rabobank and OOST NV organized the Food Innovation meeting. i3B was present at the workshop on initiating new food innovation collaborations and promoted the ICT solution: Food Choice Simulator (developed in the FOCOM project).
- **April 30 - Twente Safety and Security congress, Enschede**
  i3B was speaker at the instrumented training workshop.
- **May 26 - i3B at RUN BSI**
  i3B presents the valorization opportunities at the Radboud University, Behavioral Science Institute.

## Business development

Please inform us on end users that are looking for (integrated) ICT solutions for Brain, Body & Behavior. i3B can organize a match-matching event, like the recent event 'Thales meets i3B'. Please inform us on the conferences or tradeshows you would like to attend, where we can set up a joint i3B proposition with other i3B members.

## Subsidy programs

i3B was present and presented the network at several subsidy programs related conferences, for example ITEA3 Smart industry, INTERREG Germany-Netherlands, Eurostars, etc.

## Calendar of events

Events, symposia relevant for the ICT for Brain, Body and Behavior network are listed on www.i3b.org. Please send your event or the event where you will be present with a booth to tanja.neijboer@i3b.org. i3B will add these events/conferences to the calendar including a reference to the i3B participant that you can meet at the conference. By doing so, we create a comprehensive overview of relevant conferences, events for the network.

# EXCHANGE STUDENTS/RESEARCHERS IN THE NETWORK

The exchange of students/researchers/entrepreneurs in the i3B network contributes to knowledge transfer and the research and development of innovative ICT products. Entrepreneurs in our network are able to give courses on entrepreneurship for students. If an i3B participant looks for an exchange student/researcher, please contact us. We will refer you to the right address.

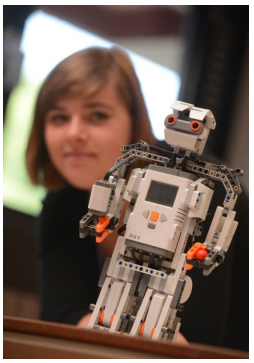
## RUN students will execute research to connect i3B with field labs.

In the i3B Lab in Wageningen the prototypes of the technology providers are tested in relevant but small-scale lab environments with representative test subjects. The prototypes are technically validated, debugged, iteratively improved and combined with tools from other partners into integrated systems. As soon as they are robust enough they are offered to the next link in the chain, field labs. Field labs are controlled environments, modeled after the real world, where tests and valorization is done with end-users, like at Restaurant of the Future and InnoSportslab in Papendal.

RUN students will perform research to determine willingness and ability for i3B collaboration with field labs and if yes, to investigate a business model.

## Companies looking for an intern

**'Human Factors and Engineering Psychology'**
**Master specialization Psychology**



Human Factors and Engineering Psychology (HFE) is the science that focuses on the intersection of behavior, cognition, technology and virtual environment. The core element of this master is the interaction between people and technology.

As a human factors expert, our students work together in interdisciplinary teams within large international companies where they apply their knowledge of 'human-computer interaction', 'resilience engineering' and 'usability testing'. They investigate, for example, the usability of websites and applications and how to fit the require-

ments of a user to the operation of a system. Moreover, they use and implement psychological tests to predict and assess the human performance.

Starting 2014 the internship is an obligatory element of the master curriculum. The main objective is to create practical and innovative solutions, for existing and new technologies, from the human factors perspective.

Are you interested in offering an internship or graduation project? Please contact Florence Lehnert, Internship coordinator f.k.lehnert@utwente.nl, +31 (0)53 489 3441.

For additional information about the associated department see: www.utwente.nl/bms/cpe/en/

## SUBSIDY CALLS

An overview of open and forthcoming subsidy calls related to ICT, brain, body and behavior in 2015:

| DEADLINE | AGENCY/PROGRAM | TOPIC |
|---|---|---|
| August 1, 2015 | EFRO | Region East Netherlands<br>Feasibility and collaboration development projects |
| August 27, 2015 | Horizon 2020 | FCT 1 Tools and infrastructure for the extraction, fusion, exchange and analysis of big data including cyber-offenses generated data for forensic investigation |
| August 27, 2015 | Horizon 2020 | FCT 15 Role of new social media networks and their use for public security purposes |
| September 1, 2015 | MIT | Collaborative R&D projects in Netherlands |
| September 19, 2015 | Eurostars | Helping SMEs to innovate and compete internationally |
| October 1, 2015 | INTERREG<br>NORTH WEST EUROPE | Collaborative projects |
| December 1, 2015 | Horizon 2020 | Fast track to innovation: promote innovation by reducing the time it takes to bring innovative ideas to market |
| December 16, 2015 | Horizon 2020 | ICT 37, Open disruptive ICT technologies for SME |
| 2015 | EFRO | Region West Netherlands |
| 2015 | EFRO | Region North Netherlands |
| 2015 | EFRO | Region South Netherlands |
| 2015 | Horizon 2020 | Innovation prizes |
| Open all year | Horizon 2020 | Innovation in ICT, SME instrument |
| Open all year | Horizon 2020 | SFS 8 Resource efficient eco innovative food production |

# ORGANIZATION OF THE I3B NETWORK

## Executive Board

i3B is pleased to announce the extension of our Executive Board with a serial entrepreneur from the i3B network: *Marc Grootjen* of amongst others Eagle Science and Elitac. Marc's joining the Executive Board creates a balance of science and business members in the Board. It will also reduce the workload of other Board members. *Ron van Rossum*, Financial manager of the Amsterdam Economic Board is the new i3B Executive Board treasurer. Ron has a solid financial background and extensive network to further build on the i3B ambitions. Ron will replace Frank Willemsen who stood at the financial basis of i3B Foundation. We would like to thank Frank for his valuable contribution in these past years.

## Scientific Advisory Board

*Richard van Wezel*, one of the Directors of the Donders Institute for Brain, Cognition and Behaviour accepted the role of new chairman of the i3B Scientific Advisory Board. Richard will replace *Nico van Meeteren* who is the new Managing Director of the Life Science and Health foundation and secretary of the Topsector Life Science & Health. We also welcome two new members to the Scientific Advisory Board: *Carolina de Weerth* of the Radboud University, Behavioral Science Institute and *Matt Coler*, Head of Cognitive Systems at INCAS3.

## Board of supervisors

The Board of Supervisors was extended with two new members: *Rob Heinsbroek*, senior Policy Officer of the National Initiative Brain & Cognition and *Joop Pauwelussen*, Director Automotive at the HAN University of Applied Sciences. The Board of Supervisors will thus have an input from the triple helix: business, science and government.

For a full overview of the organization of the network: www.i3b.org/governance.

# PARTICIPANT IN THE SPOTLIGHT

In this newsletter is in the spotlight Jasper Dijkman of Elitac B.V.

## Who is Jasper Dijkman?

Jasper is Managing Director of Elitac B.V. Elitac develops and sells tactile displays: information you can feel! Typical markets are high pressure operational environments like agents on motorbikes, soldiers and Unmanned Aerial Vehicle operators. These persons receive navigation information among others through vibrating sensors in their 'on body' jacket. Elitac sells products for science purposes like a modular science suit, tactile belts. Elitac also scales up 'producible' solutions for the consumer market. A typical consumer market solution is the E health fysio app: providing tactile feedback on a healthy body posture when working behind a desk.

## Inspiration: Favorite Brain and Behavior valorization

Combining virtual reality with tactile sensing is a source of inspiration for Jasper. Imagine a virtual reality rollercoaster ride that also provides feedback through feeling the pressure on your stomach when making a rollercoaster turn. Other applications are feeling the pressure on your hand when you see that you opening a door or touching another person in a virtual reality environment, physically not in the same room.

## i3B Added Value: Collaboration

Elitacs' products main added value is the low cognitive load for a person when performing a complex operational task. For the validation of these tactile solutions collaboration with knowledge institutes in field labs is a must. Elitac also collaborates with knowledge institutes on more fundamental research challenges like finding new ways to present complex information in a simple way through a t-shirt, endurance of battery power and the optimal fit of the suit.

From the market perspective we also collaborate. Our displays are typical wearables that deliver output. An integrated solution also requires input of other organizations to provide solutions like sensor data, localization and wireless communication.

## Golden tip

*"FEEL the world around you!"*

Send us a recommendation of someone you would like to see in the spotlight of our next i3B newsletter.

Simon Haafs
Managing Director

i3B Foundation | Stichting i3B
Nieuwe Kanaal 5 | 6709 PA Wageningen | The Netherlands
+31-317-473300 | info@i3b.org | www.i3b.org

*i3B is supported by*

National Initiative Brain & Cognition

NWO Nederlandse Organisatie voor Wetenschappelijk Onderzoek