

## Increasing Success in Drug Discovery by Biomarkers: an interactive symposium

- 16:00: introduction by **Johannes Freuhauf**, LabCentral & **Rudy Schreiber**, Suadeo, Boston
- 16:15: **Martin Smit**, University Medical Center Groningen: the big picture: the role of biomarkers in drug discovery
- 16:30: **Ymke van der Geld & Ep Oosting**, Biomarker Bay: understanding the challenges: identification and validation of biomarkers
- 16:45: **Steven Arnold**, Massachusetts General Hospital: Case Study Alzheimer's: overview of biomarkers
- 17:00: break
- 17:15: **Judith Steen**, Boston Children's Hospital: Tau biomarkers in AD and other tauopathies
- 17:30: **Satrajit Ghosh**, MIT. Approaching Mental Health from A Data Science Perspective.
- 18:00: Panel discussion

18:15: networking opportunities with drinks

**September 14th @ 4.00 pm**

## **Rudy Schreiber**



Rudy is Director Business Development US for the Healthy Aging Campus in Groningen, the Netherlands. He got his B.S. in Medicinal Biology and his Ph.D. in Neuropharmacology from the University of Groningen. He started his career in central nervous system (CNS) drug discovery in 1993. Subsequently he progressed from bench scientist to senior leadership roles at global pharmaceutical companies, including Servier (France), Bayer (Germany), Roche (CA) and Sepracor (now Sunovion Pharmaceuticals, MA). From 2010 till 2012 he was the SVP of the Neurobiology group of the contract research organization, Evotec (Germany). Rudy's drug discovery experience covers a wide range of psychiatric and neurologic indications as well as many different molecular targets. Rudy now lives in Boston and consults to the pharmaceutical industry in the area of CNS drug discovery (<http://suadeo-consulting.com>). A specific area of interest and strength is the support of start-up companies. Especially his extensive network in the pharma and biotech industry and his experience in working with and at CROs has been valuable in getting companies quickly off the line and reaching their goals.

## **Martin Smit**



Co-founder and management board member, Biomarker Bay. Director Graduate School of Medical Sciences. Program Manager Life Sciences HANNN. Center of Development & Innovation, University Medical Center Groningen.

Martin Smit received his PhD in biochemistry in Groningen. His academic research was in protein turn-over and lipid metabolism. He has more than 18 years of drug discovery experience in pharmaceutical industry at NV Organon, Schering-Plough, and Merck within a broad range of therapeutic areas: thrombosis, atherosclerosis, women's health, metabolic diseases, hormone dependent cancers, and inflammatory diseases. He managed projects in public-private partnership and international collaborations and has a track-record in implementing new drug discovery strategies and changing organizations. In his position in industry he was head of Molecular Pharmacology and DMPK, which included high-throughput screening, protein crystallization, in vitro pharmacology, drug metabolism, and pharmacokinetics.

## **Ymke van der Geld**



Business development manager CDI – center for development & innovation, Biomarker Bay – Bbay. University Medical Center Groningen. Ymke has a background in biomedical sciences. She studied Medical Biology at the University of Groningen and obtained her PhD in Medical Biology with a specialization in immunology and autoimmune disease at the University of Groningen in 2000. After her PhD she worked 5 years as a senior scientist in different disease areas at the University Medical center in Groningen, The Netherlands (e.g. Pulmonology, rheumatology). In 2005 she joined the contract research organization (PRA Health sciences) first as a project manager for bioanalytical studies of large molecules and later as director of business development and was responsible for bioanalytical studies for clinical trials with a focus on the bioanalysis of biological, biomarkers and flowcytometric analysis. In 2011 she joined the management team of the large Dutch cohort study Lifelines where she was responsible for project management and the development of new relationships with food industry, diagnostic industry and pharmaceutical industry. In 2014 she joined the Center for Development and Innovation at the UMCG where she was one of the project leaders responsible for the implementation of a quality system for all studies on human subjects.

## Satrajit Ghosh



Satrajit is a principal research scientist at the McGovern Institute for Brain Research at MIT, an assistant professor in the Department of Otolaryngology at Harvard Medical School, and a faculty member in the Speech and Hearing Biosciences and Technology program in the Harvard Division of Medical Sciences. His research interests span computer science and neuroimaging, specifically in the areas of applied machine learning, software engineering, and applications of neuroimaging. The primary focus of his research group is to develop knowledge discovery platforms by integrating a set of multidisciplinary projects that span precision medicine in mental health, imaging genetics, machine learning, and dataflow systems for reproducible research. He is a lead architect of the Nipype dataflow platform, an ardent proponent of decentralized and distributed Web solutions for data sharing, querying, and computing, and a strong believer in solving problems through collaboration and crowd-sourcing.

## Ep Oosting



Co-founder and management board member, Biomarker Bay.

Technical Director ABL BV. Since 1990 he is working at Analytical Biochemical Laboratory (ABL) in Assen, The Netherlands. First as Manager Laboratories and Study Director, now as Technical Director.

Mr. Oosting studied Pharmacology at the University of Groningen and specialized in clinical biochemistry. Mr. Oosting worked at several CRO's but the last 25 years at several positions at ABL, a pharmaceutical contract laboratory specialized in bioanalytics.

## Steven Arnold



Dr. Steven E. Arnold is Translational Neurology Head of the Interdisciplinary Brain Center at Massachusetts General Hospital, Harvard Medical School.

After receiving his M.D. from Boston University, Dr. Arnold completed residency training in Psychiatry at the New York State Psychiatric Institute / Columbia Presbyterian Medical Center in New York and residency training in Neurology at the University of Iowa Hospitals and Clinics in Iowa City. He also completed fellowship training in Behavioral Neurology / Cognitive Neuroscience and was a post-doctoral associate in Neuroanatomy in Iowa. Dr. Arnold is board certified in both neurology and psychiatry. After his training, Dr. Arnold joined the faculty at the University of Pennsylvania where he was Professor of Psychiatry and Neurology until his move to Pennsylvania's Institute of Aging.

## Judith Steen



Dr. Judith Steen is an Associate Professor of Neurobiology at Harvard Medical School, a member of the Harvard Stem Cell Institute and the director of the Neuroproteomics Laboratory in the F. M. Kirby Neuroscience Center at Boston Children's Hospital. Her laboratory works to understand neurodegenerative disease using systems biology approaches. The laboratory develops novel qualitative and quantitative methodologies at the interface of proteomics and transcriptomics, with a special emphasis on computational proteomics approaches. Over the last ten years several novel quantitative methods and bioinformatics tools were developed by the Steen Laboratory, which are being applied to understand the biology of neurodegeneration, to find molecular targets for therapeutics, and to identify biomarkers of the neurodegenerative process. Further functional studies using biochemical, molecular and cell biology approaches are used to verify and understand the role of the targets and biomarkers in the context of disease. The goal of this approach is to use molecular information provided by our quantitative proteomics measurements in order to find the means to ameliorate neurodegeneration.