HEALTH-RI CONFERENCE 2017

Empowering Personalized Medicine & Health Research

When: December 8th, 2017 | Venue: Utrecht, The Netherlands

PROGRAM 2017

The 2017 Health-RI conference covers the latest developments and opportunities in biobanking, FAIR data management, ethical and legal aspects, IT solutions, and exciting science.

Time	Program	
09:00 - 09:30	**Registration**	
09:30 - 10:00	**Opening**	
10:00 – 11:15	**Perspectives on personalized medicine & health research from policy makers, scientists and citizens** Speakers: Jeroen Geurts, Dirk-Jan van der Pol, Andrew Morris	
11:15 - 11:45	**Break**	
11:45 - 12:30	**Clinical research in medical science: Interpretation of these data and future developments"** Speakers: Taco Gosens, Wim Schreurs Since 10 years orthopaedic surgeon register the outcome of arthroplasty surgery in the Dutch Arthroplasty Register, the LROI. This ensures them of an overview of their own performance and a quality check. Furthermore, it enables the surgeons to perform research with the clinical data that have been collected by themselves and their colleagues. The first publications in peer-reviewed journals describing research with these data and its outcome have already been published. But collecting data and performing research with these data is not as easy as it looks. Many strategic and operational issues have to be addressed like the technique of registration, the encoding of the implants and several legal (privacy) issues. Looking into the future, linkage to for example a complication registration could further enlarge the opportunities for quality feedback and research with clinical data by the medical specialist.	**Science goes FAIR** Speakers: Luiz Bonino, Michel Dumontier FAIR (Findable Accessible Interoperable Reusable) data is quickly becoming the new standard. A FAIR data backbone is the core of Health-RI. But what does FAIR data mean in practice and how can scientists make their data FAIR? Suppose data is becoming more FAIR, what novel science then becomes possible?
12:30 – 14:00	**Lunch with Posters and Demos**	
	Satellite session organized by conference sponsors (Organized by Castor EDC) Speaker: Derk Arts The past decennia we have seen disruptive technology create lasting improvements in many areas of our lives. Why is medical research lagging behind? What can and should we do to make up for this lack of real progress? During this session we try to answer that question.	

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14:00 – 14:45	**MultiOMICS in biomarker discovery** Speakers: Eline Slagboom, Lodewyk Wessels Technological advances in the genetics field enabled mapping of rare and common complex trait- and disease-susceptibility loci. Quantitative omics data (transcriptome, metabolome and epigenome) and bioinformatic analyses further substantiated the knowledge base of the biology of the human genome. Patient, family and population based studies enriched for these data generated novel (composite) biomarkers for classification of at risk individuals and monitoring the response to interventions.	**Biomedical research tools, big data analyses and collaborative IT platforms** Speakers: Peter Michielse, Wessel Kraaij Health research requires collaborative working environments and tools to support the researcher in analysing the wealth of available data, as well as trusted and engaging environments to collect new data of healthy people. In this session, we will zoom into enabling facilities and methods in biomedical research and health data analytics. Working environments include self-service tools, virtual analytics workspaces using machine learning and secure access management. This will be set in the context of European infrastructure developments such as the European Open Science Cloud. In terms of big data the combined analysis of clinical data, research data, patient experiences and lifestyle data has a large potential for developing personalized medicine and health advice but also to support self-management and joint management of the individual health status. Organisational and governance issues that are required for secure implementation of these techniques will be outlined in the context of example studies.
14:45 – 15.30	**Imaging data as a biomarker resource in prevention and personalized medicine** Speakers: Hugo Aerts, Meike Venooij Quantitative image analysis approaches, including the extraction of quantitative imaging biomarkers, and the use of multi-feature approaches such as radiomics, are increasingly used in biomedical research and clinical practice. The further development of this field will play a key role in order to facilitate precision medicine. In this session developments in dementia research and oncology will be discussed.	**Interconnecting health data: ethical, legal and social challenges** Speakers: Jasper Bovenberg, Erik Flikkenschild Big Data thrives on recombining data collected and stored in different locations. Tracing people's health throughout their life course as they move through different forms of health care is a prerequisite for many forms of health research. This requires linking data at the level of individuals. Researchers need to be able to tell which data belongs together, even if they don't need to identify people. The ethico-legal and technical challenges relating to identification and pseudonymisation are closely intertwined. This session, discusses the ways projects are tackling these challenges.
15:30 - 16:00	**Break**	
16:00 - 16:45	**Pitch a Project** Short presentation showcasing the value of an integrated infrastructure for Personalized Medicine & Health	
16:45 - 17:00	**Wrap-up & Closure**	
17.00	**Drinks & Bites**	