

# CONFERENCE PROGRAM, DAY 1

09:00–09:15 **OPENING SESSION**  
Greetings: President of the Republic of Lithuania Her Excellency Dalia Grybauskaitė

09:15–10:00 **KEYNOTE LECTURE:**  
NOBEL PRIZE WINNER PROF. BRIAN KOBILKA

10:00–11:00 **PANEL DISCUSSION:**  
HIGHLIGHTS IN THE BALTICS — ECOSYSTEMS FOR GLOBAL RESEARCH AND TECHNOLOGIES

**RDI LANDSCAPE IN THE BALTICS**  
Representatives of Lithuania, Latvia and Estonia (tbc)

**PRESENTATION ABOUT RDI LANDSCAPE IN IRELAND**  
Mark Ferguson, Director General, Science Foundation Ireland and Chief Scientific Adviser to the Government of Ireland

11:00–11:30 **POSTER SESSION / COFFEE BREAK**

11:30–12:50

## SESSION 1

**MECHANISM OF DEGENERATIVE AND GENETIC DISEASES**

**PRECISION MEDICINE IN NEUROPSYCHIATRY**

Dr. David Goldstein, Institute for Genomic Medicine, the John E. Borne Professor of Genetics and Development, USA

**EXPANDING THE POTENTIAL OF GENE EDITING APPLICATIONS**

Dr. Giedrius Gasiūnas, CasZyme, Lithuania

**MECHANOTRANSDUCTIVE L-TYPE CALCIUM CHANNELS AS A THERAPEUTIC TARGET FOR METABOLIC MODULATION OF OSTEOARTHRITIC CARTILAGE**

Dr. Eiva Bernotienė, Institute Centre for Innovative Medicine, Lithuania

**GAUCHER DISEASE AND PARKINSON: FROM CLINICAL OBSERVATIONS TO PREVENTION**

Prof. Ari Zimran, Shhare Zedek Medical Center and Medical Practice Consultant, Israel

## SESSION 2

**IMMUNO-ONCOLOGY TREATMENT — CHALLENGES AND OPPORTUNITIES**

**INDUSTRY ON THE EDGE: THE SPEED OF CLINICAL SUCCESS IN CELL THERAPY AND THE CHALLENGE OF COMMERCIALIZATION**

Dr. Øystein Åmellem, Thermo Fisher Scientific, Norway

**THE ROLE OF CELLULAR AND GENE THERAPY IN 2018: CAR-T CELL THERAPY**

Dietger Niederwieser, University of Leipzig, Germany

**ENTRYBODIESTM: CELL-PERMEABLE ANTIBODY FRAGMENTS IN ONCOLOGY**

Dr. Priit Kogerman, Lepritech, Estonia

**PREDICTING IMMUNOTHERAPY RESPONSE: BEST CLINICAL PRACTICE IN ONCOLOGY**

Dr. Ana Finzel Pérez, OncoDNA, Gosselies, Belgium

## SESSION 3

**3D PRINTING IN MEDICINE**

**SURFACE MODIFICATION OF ADDITIVELY MANUFACTURED TITANIUM SCAFFOLD: EXAMINATION OF TOPOGRAPHY, STRENGTH, AND BIOINTEGRATION**

Dr. Jules Poukens, Ortho Baltic, Hasselt University, University of Leuven, Belgium

**ADDITIVE MANUFACTURING BRINGS BACK THE SUBPERIOSTEAL IMPLANTS AGAIN FOR INNOVATIVE PROMISING TREATMENT**

Dr. Andrejus Surovas, Implantatas, Lithuania

**ORTHOPAEDIC POLYMER MP-1™ APPLICATION FOR 3D PRINTING**

Alisa Buchman, MMATECH, Israel

**MESOSCALE 3D OPTICAL LITHOGRAPHY FOR BIOMEDICINE**

Dr. Mangirdas Malinauskas, Vilnius University, Lithuania

**SMART PATIENT-SPECIFIC CRANIAL IMPLANTS. COMBINATION OF 3D PRINTING AND SENSORICS**

Maxime Maugeon: PhD candidate, LSMU, KTU, Ortho Baltic, Lithuania

12:50–14:00 **LUNCH**

14:00–14:30 **PLENARY:**  
EMERGING TECHNOLOGY USING MAGNET FOR CARTILAGE REPAIR – CLINICAL RESULTS

Prof. Mitsuo Ochi, President, University of Hiroshima, Japan

14:30–15:00 **PLENARY:**  
NEW MOLECULAR TOOLS FOR EPIGENOME ANALYSIS: TOWARDS ADVANCED DIAGNOSTICS OF DISEASE

Prof. Saulius Klimašauskas, Vilnius University, Lithuania

**POSTER SESSION / COFFEE BREAK**

15:30–17:00

## SESSION 4

**PERSONALIZED MEDICINE AND DIAGNOSTICS**

**GENOMICS-DRIVEN BIOMARKER DISCOVERY AND DEVELOPMENT AT CHOP AND APPLICATIONS IN PATIENT CARE**

Dr. Hakon Hakonarson, Director of the Center for Applied Genomics at the The Joseph Stokes Jr. Research Institute of Children's Hospital of Philadelphia

**RETURN OF RESEARCH RESULTS TO PARTICIPANTS OF ESTONIAN BIOBANK**

Dr. Neeme Tõnisson, Estonian Genome Centre of the University of Tartu, Estonia

**RECONSTRUCTING THE KIDNEY FROM HUMAN IPS CELLS**

Prof. Ryuichi Nishinakamura, Kumamoto University, Japan

**HUMAN PLURIPOTENT STEM CELLS: HURDLES AND NEEDS FOR APPLICATION**

Prof. Andreas Kurtz, Charite University Medicine Berlin, Germany

**THE ROLE OF MODERN GENOMIC TECHNOLOGIES IN PRECISION HEALTHCARE**

Prof. Lina Basel, Rabin Medical Center, Tel Aviv University, Israel

## SESSION 5

**DIGITAL HEALTH**

**BIG DATA AND THE TRANSFORMATION OF HEALTHCARE**

Dr. Martin Kohn, former CMS at IBM, USA

**INTERNET OF THINGS INTEGRATION INTO ELDERLY PEOPLE LIFE**

Prof. Egidijus Kazanavičius, Faculty of Informatics, Kaunas University of Technology, Lithuania

**ANONYMIZED IDENTIFICATIONAL TECHNOLOGY AND ITS USE IN EHR CLINICAL TRIAL PATIENT RECRUITMENT**

Dr. Tigran Arzumanov, Clineron, Switzerland

**VR TECHNOLOGIES FOR HEALTH**

Prof. Tomas Blažauskas, Faculty of Informatics, Kaunas University of Technology, Lithuania

## SESSION 6

**STEM CELLS**

**OPTIMIZATION OF MESENCHYMAL STEM CELL MANUFACTURING: THE EFFECTS OF VARIOUS XENO-FREE MEDIA ON CELLS PROLIFERATION, PHENOTYPE AND DIFFERENTIATION POTENTIAL**

Dr. Jekaterina Kazantseva, Cellin Technology, Estonia

# CONFERENCE PROGRAM, DAY 2

09:00–10:00 PLENARY DISCUSSION  
GLOBAL LIFE SCIENCES ECOSYSTEMS — TRENDS AND KEY TO SUCCESS (TBC)

10:00–10:30 POSTER SESSION / COFFEE BREAK

10:30–12:15

## SESSION 7

LASER APPLICATIONS IN LIFE SCIENCES

HOW TO IMPROVE DISEASE DIAGNOSIS USING THE COMBINATION OF LASERS AND ULTRASOUND?

Mantvydas Jašinskas, EKSPILA, Lithuania

DYNAMIC OPTICAL IMAGING: FROM PROGRAMMABLE MICROSCOPY WITH SLMS TO TUNABLE LENSES

Prof. Dr. Monika Ritsch-Marte, Division for Biomedical Optics Department for Physiology and Medical Physics Medical University of Innsbruck, Austria

SUB-MICRO HYBRID SUBTRACTIVE-ADDITIVE 3D FABRICATION OF MEDICAL DEVICES USING FEMTOSECOND LASER: TOWARDS WIDESPREAD SOLUTION

Linas Jonušauskas, Femtika, Lithuania

DETECTION OF OTC DRUGS IN BIOLOGICAL FLUIDS BY MEANS OF COLLOIDAL SERS WITH NEAR INFRARED LASER EXCITATION

Valdas Šablinskas, Vilnius university, Lithuania

## SESSION 8

RESEARCH AS AN IMPULSE FOR THE INDUSTRY POWERED BY HEALTH-CAPITAL CLUSTER

FROM BCRT TO BECAT – THE PATH TO INNOVATIVE THERAPIES IN REGENERATIVE MEDICINE

Prof. Dr. med. Petra Reinke, Charité – Universitätsmedizin Berlin, Germany

TRANSLATION OF BIOCHEMICAL RESEARCH INTO DRUG DESIGN TO TREAT METABOLIC AND NEURODEGENERATIVE DISEASES

Prof. Dr. Hans-Ulrich Demut, Fraunhofer Society, Institute for Cell Therapy and Immunology Leipzig, Institute of Bioanalytics and Bioprocesses Potsdam-Golm, Germany

FROM BASIC SCIENCE TO INDUSTRIAL APPLICATIONS: CARBOHYDRATE VACCINES AND CONTINUOUS DRUG PRODUCTION

Prof. Dr. Peter H. Seeberger, Max Planck Institute of Colloids and Interfaces, Germany

## SESSION 9

SCANBALT FORUM

09:00 – 10:00  
BALTIC SEA REGION MACRO-REGIONAL ACCELERATOR AND STRATEGY DEVELOPMENT

Speakers:

Jaanus Pikani, Chairman, ScanBalt fmba, Estonia

Peter Frank, General Secretary, ScanBalt fmba, Denmark

**(by invitation, interested persons can contact pf@scanbalt.org)**

10:30–11:45

HEALTH IT SME DEVELOPMENT IN THE BALTIC SEA REGION

WELCOME BY MODERATOR

Thomas Frahm, Project director, Life Science Nord

**Introduction to BaltCityPrevention**

Sami Perälä, Director, EPTK

**BSR as one market – Top 3 to do's from a company perspective**

Didzis Glazitis, CEO, Telemedica

**BSR as Health IT investment target – Should investors take an interest?**

Seppo Mäkinen, Partner, Pathena Investments

**Public Health Authorities – Need for new technologies in prevention?**

Elisebet Kivimäki, Into Seinäjoki Oy

**Round table: How do we collaborate to make BSR a global hotspot for health it?**

**Concluding remarks:** Sami Perälä, EPTK

11.45 – 12.15

INSPIRATIONAL TALK AND DISCUSSION: HEALTH SECTOR OPPORTUNITIES IN SOUTH-EAST ASIA: EXPERIENCE FROM VIETNAM

**Inspirational talk:** Sulev Kõks, Professor, Tartu University, EATRIS National Director

Moderator: Jaanus Pikani, Chairman, ScanBalt

13.15 – 14.30

INDIA – EU COLLABORATION ON LIFE SCIENCES AND THE HEALTH SECTOR

Sharda Balaji, Founder, NovoJuris Legal

Paul Lillrank, Professor, Aalto University

V K Singh, Managing Director, Innovatio-Curis

Sachin Gaur, Entrepreneur, mobile and Internet solutions

12:15–13:15 LUNCH

13:15–14:00 PLENARY:  
BIOMEDICAL DIAGNOSTIC, MONITORING AND THERAPEUTIC TECHNOLOGIES (TBC)

14:00–14:30 PLENARY:  
HOW TOP-PERFORMING ORGANIZATIONS IMPROVE PATIENT OUTCOMES THROUGH DIGITALIZATION  
Dr. Clemens Suter-Crazzolara, Chief Product Expert, SAP, German

14:30–16:00

## SESSION 10

LIFE SCIENCES MEET TECHNOLOGIES FOR BETTER HEALTHCARE SOLUTIONS

CREATING PIONEERING OPPORTUNITY IN GREATER MANCHESTER

Prof. Jackie Oldham, The University of Manchester, United Kingdom

BIOACTIVE MATERIALS FOR ADVANCED PHARMACEUTICAL AND HEALTHCARE SOLUTIONS

Dr. Aistė Jekabsonė, Lithuanian University of Health Sciences, Neuroscience Institute, Lithuania

THERANOSTICS – COMPLEMENTARY ENGINEERING AND MEDICINE

Prof. Eugenijus Kaniušas, Institute of Electrodynamics, Microwave and Circuit Engineering, Vienna University of Technology, Austria

IMPACT OF DIGITISATION ON PHARMACEUTICAL MANUFACTURING

Matt Moran, Biopharmachem Ireland, Ireland

## SESSION 11

DIAGNOSTIC TECHNOLOGIES

APPLICATION OF ULTRASONIC TECHNOLOGIES FOR CHARACTERIZATION AND PROPERTIES MEASUREMENT OF BIOLOGICAL TISSUES AND LIQUIDS

Prof. Dr. Renaldas Raišutis, Kaunas University of Technology, Lithuania

URINE LIQUID BIOPSY FOR PROSTATE CANCER DIAGNOSTICS

Julius Gagilas, Diagnolita, Lithuania

MINIATURIZED AND MULTIPLEXED DIAGNOSTIC ASSAYS – FROM R&D TO PRODUCTION AND MARKET

Paulina Gozdzińska, SCIENION AG, Germany

INDEPENDENT DIAGNOSTIC INFORMATION CONTENT OF BIOELECTRIC AND BIOMAGNETIC RECORDINGS

Prof. Jaakko Malmivuo, Technische Universität Berlin, Germany

NEW PERSONAL HEALTH DEVICES FOR UNOBTRUSIVE MONITORING OF CHRONIC DISEASES

Prof. Vaidotas Marozas, Kaunas University of Technology, Lithuania