

# CONFERENCE PROGRAM, DAY 1

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

09:15–10:00 **NOBEL PRIZE WINNER LECTURE (TBC)**

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 of 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**  
Prof. 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. Helen Sadik, OncoDNA, Belgium

## SESSION 3

### 3D PRINTING IN MEDICINE

**MESOSCALE 3D OPTICAL LITHOGRAPHY FOR BIOMEDICINE**  
Dr. Mangirdas Malinauskas, Vilnius University, Lithuania

**SURFACE MODIFICATION OF ADDITIVELY MANUFACTURED TITANIUM SCAFFOLD: EXAMINATION OF TOPOGRAPHY, STRENGTH, AND BIOINTEGRATION**  
Skirmantas Norkus, Ortho Baltic, Kaunas University of Technology, Lithuania

**ADDITIVE MANUFACTURING BRINGS BACK THE SUBPERIOSTEAL IMPLANTS AGAIN FOR INNOVATIVE PROMISING TREATMENT**  
Dr. Andrejus Surovas, Implantatas, Lithuania

**ORTHOPAEDIC POLYMER MP-1TM APPLICATION FOR 3D PRINTING**  
Alisa Buchman, MMATECH, Israel

**SMART PATIENT-SPECIFIC CRANIAL IMPLANTS. COMBINATION OF 3D PRINTING AND SENSORICS**  
Maxime Maugeon, PhD candidate, Lithuanian university of Health Sciences, 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, Director and Chief Scientist, Institute of Biotechnology, Vilnius University

15:00–15:30 **POSTER SESSION / COFFEE BREAK**

15:30–17:00

## SESSION 4

### PERSONALIZED MEDICINE AND DIAGNOSTICS

**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. Jakaterina Kazantseva, Cellin Technology, Latvia

**TBC**

# 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, EKSPLA, Lithuania

TINY SELF-CONTAINED OPTICAL ENGINES FOR CELL COUNTING IN MICROFLUIDICS

Evaldas Pabrėža, Integrated Optics, Lithuania

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

Prof. 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

Prof. Valdas Šablinskas, Vilnius university, Lithuania

## SESSION 8

RESEARCH AS AN IMPULSE FOR THE INDUSTRY POWERED BY HEALTHCAPITAL CLUSTER

COMING SOON

## SESSION 9

### SCANBALT FORUM

08:00–09:00

SCANBALT GENERAL ASSEMBLY AND BOARD MEETING

Members only

09:00 — 10:00

BALTIC SEA REGION MACRO-REGIONAL ACCELERATOR AND STRATEGY DEVELOPMENT

By invitation, interested persons can contact [pf@scanbalt.org](mailto:pf@scanbalt.org)

13:15–14:00

ACCESS TO FOREIGN MARKETS AND EXPORT OF KNOWLEDGE

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 (TBC)

14:30–16:00

## SESSION 9

### 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 10

### DIAGNOSTIC TECHNOLOGIES

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

Prof. 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

NEW PERSONAL HEALTH DEVICES FOR UNOBTRUSIVE MONITORING OF CHRONIC DISEASES

Prof. Vaidotas Marozas, Kaunas University of Technology, Lithuania

## SESSION 11

### SCANBALT FORUM

INDIA – EU COLLABORATION ON LIFE SCIENCES AND HEALTH SECTOR