

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)

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

CONFERENCE PROGRAM, DAY 1

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

SESSION 5

SESSION 6

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, Charité University Medicine Berlin, Germany

THE ROLE OF MODERN GENOMIC TECHNOLOGIES IN PRECISION HEALTHCARE

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

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 Arzumanyan, Clinerion, Switzerland

VR TECHNOLOGIES FOR HEALTH

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

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)
Mark Ferguson, Director General, Science Foundation Ireland and Chief Scientific Adviser to the Government of Ireland

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

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

Linās 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

TINY SELF-CONTAINED OPTICAL ENGINES FOR CELL COUNTING IN MICROFLUIDICS

Evaldas Pabrėža, Integrated Optics, 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, EPTEK

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 Makinen, 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, EPTEK

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

CONFERENCE PROGRAM, DAY 2

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

SESSION 11

LIFE SCIENCES MEET TECHNOLOGIES
FOR BETTER HEALTHCARE SOLUTIONS

DIAGNOSTIC TECHNOLOGIES

CREATING PIONEERING OPPORTUNITY
IN GREATER MANCHESTER

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

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

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

BIOACTIVE MATERIALS FOR
ADVANCED PHARMACEUTICAL AND
HEALTHCARE SOLUTIONS

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

URINE LIQUID BIOPSY FOR PROSTATE
CANCER DIAGNOSTICS

Julius Gagilas, Diagnolita, Lithuania

THERANOSTICS – COMPLEMENTARY
ENGINEERING AND MEDICINE

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

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

Paulina Gozdzialaska, SCIENION AG,
Germany

IMPACT OF DIGITISATION ON PHAR-
MACEUTICAL MANUFACTURING

Matt Moran, Biopharmachem Ireland,
Ireland

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