Scientific Program

12 Invited Talks, 11 Contributed Oral Presentations, 2 Poster Sessions

Tuesday, March 20

08:30 Registration

09:10 Opening by ISC Chair Annemie Bogaerts & Welcome by General Chairs Klaus-Dieter Weltmann & Hans-Robert Metelmann

Oral Session 1: Chairs: Hans-Robert Metelmann & Klaus-Dieter Weltmann

09:20 Udo Gaipl
Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
“IMMUNE MODULATORY PROPERTIES OF RADIOTHERAPY”

09:50 Mark Kushner
University of Michigan, USA
“CONSEQUENCES OF ENVIRONMENTAL FACTORS IN PLASMA TREATMENT OF LIQUIDS, TISSUES AND MATERIALS”

10:20 Ingo Stoffels
University Hospital Essen, Germany
“LASER-ASSISTED DELIVERY OF COLD ATMOSPHERIC PLASMA IN UNRESECTABLE CUTANEOUS METASTASIS IN MELANOMA PATIENTS”

10:40 Marian Khalili
Drexel University College of Medicine, USA
“NON-THERMAL PLASMA INDUCED IMMUNOGENIC CELL DEATH IN PANCREATIC CANCER”

11:00 Coffee Break
Oral Session 2: Chairs: Sylvia Dewilde & Vandana Miller

11:20 Endre Szili
University of South Australia, Australia
“TREATMENT OF HYPOXIC TUMOURS WITH PLASMA JETS”

11:50 Lluis Mir
Gustave Roussy Cancer Campus, France
“PLASMAS, MEMBRANES, AND TRANSPORT ACROSS THE MEMBRANES”

12:20 Eda Gjika
The George Washington University, USA
“ADAPTATION OF OPERATIONAL PARAMETERS OF COLD ATMOSPHERIC PLASMA AND THEIR ROLE IN CANCER THERAPY”

12:40 Abraham Lin
University of Antwerp, Belgium
“PLASMA ELICITS IMMUNOGENIC DEATH IN MELANOMA CELLS”

13:00 Lunch

Oral Session 3: Chairs: Sander Bekeschus & Christian Seebauer

14:20 Eleonora Turrini
University of Bologna, Italy
“NON- THERMAL PLASMA AS AN INNOVATIVE ANTICANCER STRATEGY ON LEUKEMIA MODELS”

14:50 Hirokazu Hara
Gifu Pharmaceutical University, Japan
“CONTRIBUTION OF INTRACELLULAR MOBILE ZINC TO ANTI-CANCER EFFECTS OF PLASMA-ACTIVATED MEDIUM”

15:20 Jean-Michel Pouvesle
GREMI Université d’Orléans, France
“ATMOSPHERIC PRESSURE MULTIJET PLASMA SOURCES FOR CANCER TREATMENTS”
15:40 Paul Maguire
Ulster University, Ireland
“INVESTIGATING ELECTRON AND RADICAL INTERACTIONS WITH BIOMOLECULES AND CELLS USING A DROPLET IN PLASMA LABORATORY”

16:00 Coffee Break

Oral Session 4: Chairs: Jean-Michel Pouvesle & Thomas von Woedtke

16:30 Nagendra Kumar Kauschik
Kwangwoon University PBRC, South Korea
“IMMUNO-MODULATORY EFFECT OF BIO-PLASMA AGAINST CANCER AND OTHER DREADFUL DISEASE”

17:00 Kim Liedtke
Greifswald University Medicine, Germany
“REDUCTION OF METASTASIS WITH PLASMA-TREATED LIQUID IN MICE: THE ROLE OF MYLEOID CELLS IN THE TUMOR MICROENVIRONMENT”

17:20 Xiaofeng Dai
Jiangnan University, China
“INTRODUCING ASIA-PACIFIC PLASMA ONCOLOGY NETWORK: PROGRESS ON TRIPLE NEGATIVE BREAST CANCER”

17:40 Poster Session

18:40 / 19:10 Departure Shuttlebus to Conference Dinner

19:30 Pre-Dinner Speech with Surprise
20:00 Conference Dinner
Venue: Aula of the University of Greifswald, Domstraße 11
Wednesday, March 21

09:00 Statement by Birgit Hesse
   Minister of Education, Science and Culture of Mecklenburg Western Pomerania

09:20 Max P. Baur and Claus-Dieter Heidecke
   Chairman&Dean and Executive Medical Director of Greifswald University Medicine

09:30 General Chairs Hans-Robert Metelmann and Klaus-Dieter Weltmann
   “Views and Visions of Plasma Medicine in Cancer Treatment”

Oral Session 5: Chairs: Annemie Bogaerts & David Graves

10:00 Sander Bekeschus
   Leibniz Institute for Plasma Science and Technology, Germany
   “PLASMA, CANCER, IMMUNITY”

10:30 Michael Keidar
   The George Washington University, USA
   “GWU-USMI PLASMA MEDICINE RESEARCH PROGRAM”

10:50 Coffee Break & Group Photo

11:00 Press Conference with Minister Birgit Hesse

Oral Session 6: Chairs: Lluis Mir & Endre Szili

11:10 Lanlan Nie
   Huazhong University of Science & Technology, China
   “ON THE PENETRATION DEPTH OF REACTIVE OXYGEN AND NITROGEN SPECIES GENERATED BY A PLASMA JET THROUGH REAL BIOLOGICAL TISSUE”

11:30 Christian Seebauer
   University of Greifswald, Germany
   “COLD ATMOSPHERIC PLASMA FOR THE TREATMENT OF ORAL LICHEN PLANUS AS INTRAORAL PRECANCEROUS LESION”
12:00 ISC Chair Annemie Bogaerts
   University of Antwerp, Belgium

12:10 Lunch

13:10 Poster Session

14:10 Coffee Break

Oral Session 7: Chairs: Eleonara Turrini

14:30 David Graves
   University of California, Berkeley, USA
   “ADVANCED CONTROL OF PLASMA MEDICAL DEVICES”

15:00 Ku Youn Baik
   Kwangwoon University, South Korea
   “EFFECTS OF NON-THERMAL PLASMA ACTIVATED WATER ON THE ANTI-CANCER IMMUNE ACTIVITIES OF MACROPHAGES”

15:20 Sylvia Dewilde
   University of Antwerp, Belgium
   “THE ROLE OF CYTOGLOBIN IN THE PLASMA-TREATMENT OF MELANOMA”

15:50 Vandana Miller
   Drexel University, USA
   “NANOSECOND-PULSED DBD PLASMA FOR A CLINICAL TRIAL OF ACTINIC KERATOSIS”

16:20 Bob Barker Best Student Poster Award

16:40 Discussion by IWPCT ISC Chair
Thursday, March 22
Optional Post Conference program

Medical Visits: @Greifswald University Medicine
A visit to the University Hospital where plasma treatment of patients provides evidence of the translation of this promising technology into practice guided by Prof. Metelmann.

Show Case 1: @Leibniz Institute for Plasma Science and Technology Greifswald
Dr. Wende will give a hands-on course on lipid analysis (lipidomics), where automated analytic strategies to detect changes in skin-derived lipids of volunteers before and after plasma treatment will be presented.

Show Case 2: @Leibniz Institute for Plasma Science and Technology Greifswald
With special emphasize on genotoxic risk assessment of plasmas, the third course is offered by Dr. Bekeschus who will provide laboratory insights on how this challenge can be addressed using different versions of the micronucleus assay with plasma-treated cells.

There are different Tours for the Post Conference Program – you will be informed about your Tour Number:

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