

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"

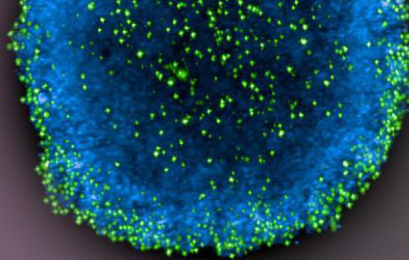
10:20 Ingo Stoffels

University Hospital Essen, Germany
"LASER-ASSISTED DELIVERY OF COLD ATMOSPHERIC PLASMA IN UNRESECTABLE CU
TANEOUS METASTASIS IN MELANOMA PATIENTS"

10:40 Marian Khalili

Drexel University College of Medicine, USA
"NON-THERMAL PLASMA INDUCED IMMUNOGENIC CELL DEATH IN PANCREATIC CAN
CER"

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

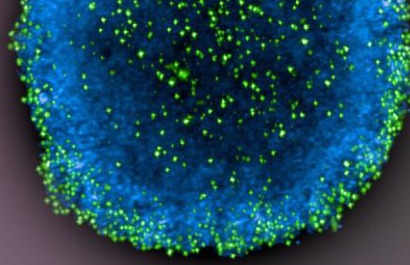
University of Bologna, Italy
"NON-THERMAL PLASMA AS AN INNOVATIVE ANTICANCER STRATEGY ON LEUKEMIA MODELS"

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 MYELOID CELLS IN THE TUMOR MICROENVIRONMENT”

17:20 Xiaofeng Dai

Jiangnan University, China

“INTRODUCING ASIA-PACIFIC PLASMA ONCOLOGY NETWORK: PROGRESS ON TRIPLE NEGATIVE BREAST CANCER”

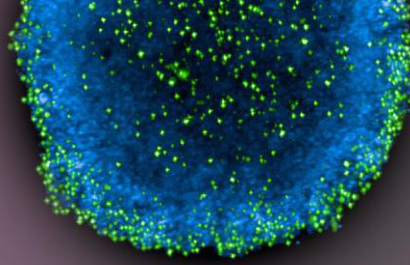
17:40 Poster Session

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: Lluís Mir & Endre Szili

11:10 Lanlan Nie

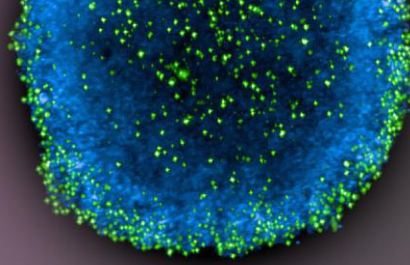
Huazhong University of Science & Technology, China

“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"

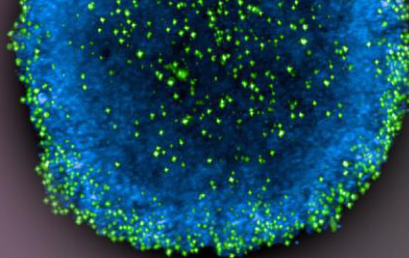
15:00 Ku Youn Baik
Kwangwoon University, South Korea
"EFFECTS OF NON-THERMAL PLASMA ACTIVATED WATER ON THE ANTI-CANCER IMMUNE ACTIVITIES OF MACROPHAGES"

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:

Tour Number	Meeting Time	Meeting Point
1	08:50 am	Leibniz Institute for Plasma Science and Technology
2	08:50 am	Leibniz Institute for Plasma Science and Technology
3	08:50 am	Greifswald University Medicine
4	09:50 am	Greifswald University Medicine
5	09:50 am	Leibniz Institute for Plasma Science and Technology
6	10:50 am	Leibniz Institute for Plasma Science and Technology
7	10:50 am	Leibniz Institute for Plasma Science and Technology