

**INTERNATIONAL SOCIETY FOR PROTON DYNAMICS IN CANCER
KYOTO 2012
PROGRAM**

October 12th (Friday)

For all speakers, please bring your own computer for presentation.

8:00-9:00: Registration

9:00-9:10: Opening Remarks and Conference Welcome

-Stefano Fais (ISPDC President)

-Yoshinori Marunaka (The 3rd ISPDC President)

Lecture 1

Chair: Nicola Baldini

9:10-9:40 (30min): Stefano Fais

(abstract 1)

Proton Pump Inhibitor Combined with Chemotherapy for Metastatic Breast Cancer

Session 1

Chair: Angelo De Milito

9:40-10:00 (20min): Hideki Sakai

(abstract 2)

Association of ClC-5 Cl⁻/H⁺ exchanger with H⁺,K⁺-ATPase

10:00-10:20 (20min): Hiromi Hiruma (abstract 3)

Anti-tumor action of the vacuolar H⁺-ATPase inhibitor

10:20-10:40 (20min): Barbara Seliger (abstract 4)

Characterization of Hypoxia-regulated alterations in the metabolism and protein expression of renal cell carcinoma

10:40-11:00 Coffee Break

Session 2

Chair: Katsuyuki Kusuzaki

11:00-11:20 (20min): Angela M. Otto

(abstract 5)

Effects of extracellular pH on the activity of pyruvate kinase and lactate dehydrogenase in MCF-7 cells

11:20-11:40 (20min): Yoshito Nako

(abstract 6)

Enhancement of cytotoxic effect of distilled water using chloride channel blocker in pancreatic cancer cells

11:40-12:00 (20min): Takao Matsubara

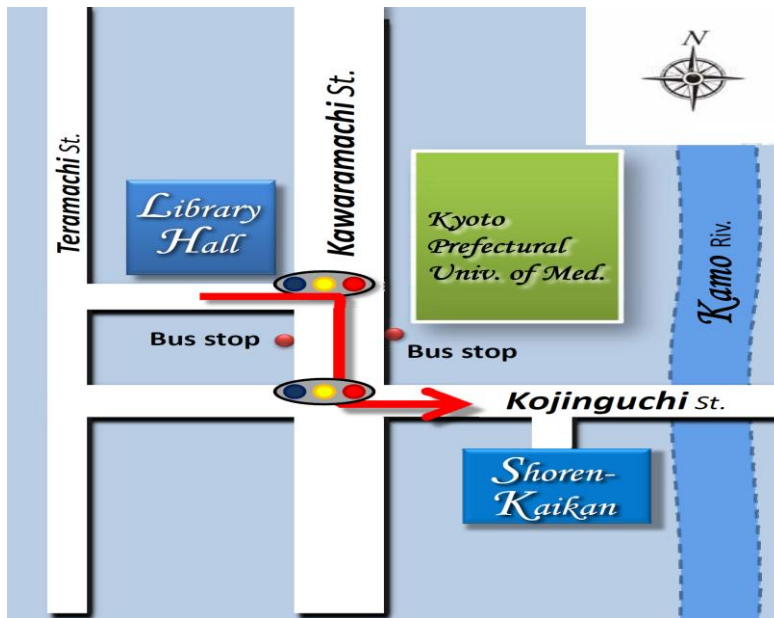
(abstract 7)

A minimally invasive surgery for bone metastases using photodynamic therapy with acridine orange



12:00-14:00 Group Photo
 Lunch and Poster Session

Lunch at the *Shoren Kaikan 3F*



Poster Session at AV room, Library Hall 2F

Lecture 2

Chair: Stefano Fais

14:00-15:50 (110min): Gerald H. Pollack

(abstract 8)

Proton Dynamics and the Fourth Phase of Water

15:50-16:00 Coffee Break

Lecture 3

Chair: Yoshinori Marunaka

16:00-17:00 (60min): Yasunobu Okada

(abstract 9)

Roles of Volume-Regulatory Ion Channels in Cell Survival-Death Switching

Society Administration

17:00-18:00 : ISPDC General Assembly

-Stefano Fais (ISPDC President)

-Antonio Chiesi (ISPDC Treasurer)

18:30: Dinner for All Registered Participants



At the Restaurant of *the Fortune Garden Kyoto.*

<Dinner Map>



October 13th (Saturday)

Lecture 4

Chair: Christian Stock

9:30-10:00 (30min): Larry A. Nagahara

(abstract 10)

Looking beyond conventional understanding of cancer:

What can a physical sciences perspective bring?

Session 3

Chair: Shinji Asano

10:00-10:20 (20min): Stephan J. Reshkin

(abstract 11)

The NHE1 drives pancreatic ductal adenocarcinoma motility and invasion via an EGFR/NHERF1 axis

10:20-10:40 (20min): Kohei Shiota

(abstract 12)

Sodium / Proton exchanger 1 (NHE1) as a molecular target for “anti-invasion therapy” of malignant gliomas

10:40-11:00 (20min): Christian Stock

(abstract 13)

NHE1 and Merlin – A magic interplay?

11:00-11:20 Coffee Break

Session 4

Chair: Stephan J. Reshkin

11:20-11:40 (20min): Francesca Perut

(abstract 14)

Carbonic anhydrase IX inhibitors as effective therapeutic tools for osteosarcoma treatment

11:40-12:00 (20min): Mario Perez-Sayans Garcia

(abstract 15)

CA IX expression in dysplastic oral lesions. A pilot study.

12:00-14:00 Lunch and Poster Session

Lunch at the *Shoren Kaiikan 3F* (see the map in Page 2)

Session 5

Chair: Hideki Sakai

14:00-14:20 (20min): Sofia Avnet

(abstract 16)

Acidic pHe promotes chemoresistance of human osteosarcoma cells through different survival adaptation mechanisms

14:20-14:40 (20min): Shinji Asano

(abstract 17)

Effects of ezrin knockdown on the architecture and development of gastric glandular epithelia.



14:40-15:00 Coffee Break

Session 6

Chair: Hiromi Hiruma

15:00-15:20 (20min): Shigekuni Hosogi (abstract 18)

Cl⁻ channels/transporters as new targets for cancer therapies based on disruption of autophagy ability via modification of lysosome acidification.

15:20-15:40 (20min): Angelo De Milito (abstract 19)

Autophagy is a protective and adaptive mechanism for cancer cells under acidic stress

Session 7

Chair: Angela M. Otto

15:40-16:00 (20min): Yasumasa Kato (abstract 20)

Epithelial-mesenchymal transition and extracellular acidic pH.

16:00-16:20 (20min): Gloria Bonuccelli (abstract 21)

Mesenchymal stromal cells and the pathogenesis of osteosarcoma

16:20 Prizes for the best short Talks/Poster

16:40 Closing Remarks

Katsuyuki Kusuzaki (The 3rd ISPDC Vice President)



Poster Presentations

Board size: 90 cm(width) x 210 cm (height)

- Hiroaki Miyazaki** (abstract 22)
Intracellular chloride regulates cell proliferation through the activation of stress-activated protein kinases in MKN28 human gastric cancer cells
- Hiroki Shimizu** (abstract 23)
Expression and role of Aquaporin 5 in esophageal squamous cell carcinoma
- Hajime Yano** (abstract 24)
Analyses of the modes of action of 5-(N-ethyl-N-isopropyl)-amiloride (EIPA) on inhibition of glioma cell invasions
- Takao Matsubara** (abstract 25)
Acridine orange used for photodynamic therapy accumulates in malignant tumor cells by control the tumor microenvironments
- Takuto Fujii** (abstract 26)
Association of non-pumping sodium pump with volume-sensitive outwardly rectifying anion channels in human cancer cells
- Paola Pellegrini** (abstract 27)
A drug-screening model to identify compounds active in cells under metabolic stress
- Maki Kitagawa** (abstract 28)
A role of K^+ - Cl^- cotransporter in the cell cycle regulation of breast cancer MDA-MB-231 cells
- Hongxin Sun** (abstract 29)
Insulin enhances forskolin-stimulated Cl^- secretion in renal epithelia A6 cells
- Hiroki Hayata** (abstract 30)
Involvement of the extracellular pH in skeletal muscle insulin resistance
- Mark A. Rosenberg** (abstract 31)
Treatment of advanced-stage cancer with protoplasmic acidification, extracellular alkalinization, induced-hyperglycemia, and whole body hyperthermia.
- Jin Song** (abstract 32)
Targeting acidic tumor microenvironment as an approach against chemoresistance

