

4th NIRS International Open Laboratory Workshop  
on

# Cellular and Molecular Effects of Light Ions

April 15, 2009

9:00-12:30 a.m.

**Dr. Naruhiro Matsufuji:**Extending the International Open Laboratory collaboration research plan under  
"Multidisciplinary BIO"**Dr. Naoko Inadama:**Development of the "X'tal-cube" detector: a next generation PET detector using  
semiconductor photodetectors.**Dr. Johanna Kempe:**

Particle transport approaches for biological optimized radiation treatment planning.

**Dr. Yoshitaka Matsumoto:**

RBE for ion beam therapy at high dose.

**Dr. Ryoichi Hirayama:**

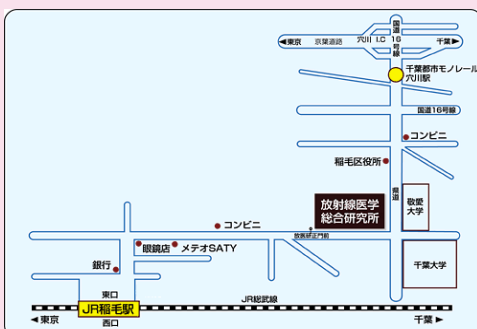
Hypoxia in tumor for particle therapy.

**Dr. Annelie Meijer:**Cellular and molecular responses in tumor and normal cells *in vitro* exposed to  
different light ions, LET and doses.

## SPECIAL LECTURE

**Dr. Anders Brahme:**

Potential development of light ion therapy: Maximizing the apoptotic tumor cell kill.

**Place: Auditorium 2F, Research Building for  
Charged Particle Therapy**

会場： 重粒子線治療推進棟2階大会議室

**Organizers: Dr. Hirohiko Tsujii****Dr. Takeshi Murakami****Dr. Naruhiro Matsufuji**