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Biophotonics '09

Submit your work presented at Biophotonics '09 for publication in

Journal of Biomedical Optics

The Graduate Summer School Biophotonics '09 is pleased to announce that a special section will appear in Journal of Biomedical Optics (JBO) entitled "Selected Topics in Biophotonics: Photodynamic Therapy and Optical Micromanipulation for Biophotonics" comprising review papers and contributed papers from the school.

The special section comprises two review articles:

- Katarina Svanberg and Hubert van den Bergh(*), "Photodynamic therapy: Fundamentals and clinical applications
- Kishan Dholakia, "Optical micromanipulation for biophotonics"

(*) author to be confirmed

Call for papers

Every second year, an international graduate summer school is held on Ven in Sweden organised between Lund University in Sweden and the Technical University of Denmark in Denmark (www.biop.dk/biophotonics09/). At the school 75 graduate students and post docs from all over the World participate. When applying for admission into the school, students submit a three-page summary of their research which is reviewed by the organisers. Students are selected on the basis of their summary. This call for papers reflects core topics of the school and spans the fields of photodynamic therapy and optical micromanipulation for biophotonics.

Photodynamic therapy (PDT) has shown great potential as an effective and targeted therapy, and is clinically accepted for several clinical indications, including age-related macular degeneration (AMD) and non-melanoma skin cancer. However, other indications and new drugs are constantly being researched and new methodologies are being investigated. Areas of interest for this special section include, but are not limited to:

- Novel dosimetry concepts in PDT
- Spectroscopy to improve understanding on photodynamic reactions and treatment response
- PDT for new indications
- Novel concepts for improved specificity
- Photochemical internalization
- In vivo studies of novel PDT agents, including nanoparticles

Optical tweezers is a powerful non-contact technique where micrometre sized particles can be grabbed, moved and generally manipulated solely with light. Optical tweezers have forged an important bridge between physics, chemistry and biology. Using novel light sources we can perform new bioscience, e.g., femtosecond optical traps that may be used for cell detection and simultaneous trapping and two-photon excitation. Areas of interest for this special section include, but are not limited to:

- Optical trapping for cell sorting and manipulation
- Optical trapping and microfluidics
- Femto-second optical traps
- Light sources and systems for optical trapping

Manuscript submission deadline and publication

The manuscript submission deadline is 1 October 2009. The special section is part of the JBO issue published July/August 2010.

Guest editors

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