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CALL FOR PAPERS

ABSTRACT DEADLINE: NOVEMBER 1, 2005

REMINDER: *In fairness to all potential authors, late abstracts will not be accepted.*

MRS Symposium Y: Nanostructured Probes for Molecular Bio-Imaging

The integration of biomolecular engineering, nanotechnology, and biology is expected to produce major breakthroughs in molecular biology, bioengineering, biotechnology, medical diagnostics, and therapeutics. Due to the size compatibility of nanoscale structures with proteins and nucleic acids, the creation and use of nanoprobe provides unprecedented opportunities in achieving a fundamental understanding of biological processes and drastic improvements in disease detection, therapy, and prevention. This symposium will bring together biologists, biochemists, bioengineers, and biophysicists to showcase the recent development of nanostructured probes for, and their applications in, molecular bio-imaging.

Specific topics include, but are not limited to:

- Quantum-dot bioconjugates for cellular and biomolecular imaging
- Metal nanoshells and metal nanoparticles for biomolecular imaging
- Molecular beacons for living-cell gene detection
- Magnetic nanoparticle probes for cellular and tissue bio-imaging
- Peptide-based cellular delivery of probes
- Nanostructured probes for molecular targeting and bio-imaging
- Application of nanostructured probes to disease studies
- Development of advanced imaging methods

The symposium will consist of both invited and contributed talks.

Invited speakers include: **R. Dickson** (Georgia Inst. of Technology), **J. Frangioni** (Harvard Univ.), **S. Gambhir** (Stanford Univ.), **D. Hammer** (Univ. of Pennsylvania), **S. Hell** (Univ. of Heidelberg, Germany), **T. Jovin** (Max-Planck-Inst., Göttingen, Germany), **F. Kramer** (PHRI), **N. Nitin** (Georgia Inst. of Technology), **P. Selvin** (Univ. of Illinois, Urbana-Champaign), **A. Smith** (Emory Univ.), **D. Spector** (Cold Spring Harbor Lab), **V. Torchilin** (Northeastern Univ.), **S. Weiss** (Univ. of California-Los Angeles), and **R. Weissleder** and **S. Xie** (Harvard Univ.).

Symposium Organizers

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For additional meeting information, visit the MRS Web site at www.mrs.org/meetings/ or contact:



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