

The Emergence of Biotechnology and Biomedicine

This month's feature section highlighting biomedical optics reflects OSA's strong and growing emphasis on this emerging field. In our opening article, Tom Baer (Biometric Imaging) describes how optics-related technologies are making inroads in biotechnology and health-care. Chris Contag (Stanford Univ.) reports on just-published results using a bioluminescent tag to label a pathogen and track its progression through a living animal. Optical techniques available for biodiagnostics is covered by Eva M. Sevick-Muraca and colleagues (Purdue Univ.).

From peer-reviewed journals to technical groups, from peer reviewed topical meetings to bulletin boards, from CLEO® to *Optics & Photonics News*, OSA provides quality information and opportunities to learn from and with the leaders in the field. If you need to keep up with this rapidly developing area, here's a sampling of what OSA has to offer:

- Topical meetings on optical imaging and biomedical optical spectroscopy in March 1996 (see pp. 37-38), each followed by a TOPS (Trends in Optics & Photonics Series) volume covering the meeting and related journal articles.
- "Optical Technology and Biomedical Optics," an expanded

division of the widely cited *Applied Optics*, providing a peer-reviewed venue for research and publishing. Associate Editor Stephen A. Burns, Topical Editors Rebecca Richards-Kortum and Marwood N. Ediger, and Advisory Editor Britton Chance plan a July feature issue on "Optical Technology in Medicine and Biology."

- Short, rapidly published communications in *Optics Letters*, with Tom Deutsch serving as topical editor in biomedicine.
- A two-day biomedical program at CLEO® featuring top researchers on topics such as emerging applications in fluorescence, biophysics, and cellular imaging.
- A free bulletin board for sharing news and ideas, accessed through OSA's OpticsNet (<http://www.osa.org>).
- A new Optics in Biology and Medicine technical division offering free affiliation with technical groups in Biomedical Optical Imaging and Biomedical Optical Spectroscopy, plus a new OSA Application Area on Biomedical Instrumentation.
- Upcoming *OPN* articles on clinical imaging techniques for medicine and gene sequencing instrumentation (March) and a July special issue on biomedical applications: photodynamic therapy, optical techniques for cardiology, and biomedical fiber optics.