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Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XX

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Editors

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Introduction

The 2011 conference on aspects of photodynamic therapy (PDT) was labeled as the 20th such meeting sponsored by SPIE. This all began with a 1987 gathering in Cambridge, Massachusetts, organized by Doug Neckers and Tayyaba Hasan. Tom Dougherty organized PDT sessions for SPIE in 1989 and 1991 at Los Angeles, but some of these apparently did not figure into the numbering system. As a result the session held in 1993 was listed as 'Optical methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy II.' So it could be argued that the 2011 meeting was actually the 23rd such conference.

The origins of the field are well-known, beginning with the studies by Raab and von Tapiener in 1900. PDT was periodically re-invented, notably by Sam Schwartz and Robert Lipson in the 1960s, but the current era began with the pre-clinical and clinical work initiated by Tom Dougherty in the early 1970s. PDT has been shown capable of significant cancer control in a variety of settings, and it is widely used in many places. Clinical applications in the United States appeared to be slowed by the reluctance of pharmaceutical groups to support a procedure that does not promise substantial rewards. Use of PDT for treatment of macular degeneration was such an application, but that field has now moved in a different direction.

The annual SPIE conferences serve a useful purpose, bringing together workers in a variety of disciplines associated with PDT who can compare notes and report on recent progress. The opportunity to check out the exhibits of lasers, optical devices, and photonics technology, and to encounter those working in related fields are additional advantages. For 2012, we plan to incorporate a panel discussion that will include both leaders in the field and representatives from the NIH, with a view toward discussing mechanisms for support for PDT-related work not necessarily involving pharmaceutical companies.

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