

## BIOGRAPHICAL SKETCH

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NAME Scott A. Prahl, Ph.D.	POSITION TITLE Senior Research Scientist		
eRA COMMONS USER NAME SCOTT.PRAHL			
EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing and include postdoctoral training.</i> )			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Caltech, Pasadena University of Texas, Austin Academic Medical Center, Amsterdam Harvard Medical School, Boston	BS PhD Postdoc Postdoc	1982 1988 1989 1990	Applied Physics Biomedical Engineering Biomedical Optics Biomedical Optics

### **A. Personal Statement**

*Specific reasons for this particular resume*

### **B. Positions and Honors**

#### Professional Positions

1991 – 1993	Instructor	Harvard Medical School, Boston
1993 – 2006	Assistant Professor	Oregon Graduate Institute
1993 – 2011	Senior Research Scientist	Oregon Medical Laser Center
2012 – 2017	Associate Professor	Oregon Institute of Technology
1993 – Present	Research Assistant Professor	Oregon Health & Science University
2011 – Present	Visiting Professor	Portland State University
2017 – Present	Professor	Oregon Institute of Technology

#### Other Professional Activities

1995 – 2001	Editorial Board	Lasers in Medicine and Surgery
1995 – Present	Physics Chairman	Oregon Academy of Science
2003 – 2007	Medical Imaging Tech. Study Section	NIH SBIR/STTR
2009 – 2010	Ohio Biomedical Research	National Academy of Science
2009 – 2010	BISH	National Science Foundation
2009 – Present	External Advisory Board	Beckman Laser Institute

#### Honors

1991	Dermatology Foundation Award	Dermatology Foundation
2001 – 2002	Distinguished Teaching Award	Oregon Graduate Institute

### **C. Selected peer-reviewed publications**

Most relevant to the current application

- [1] P. A. Patel, J. W. Valvano, J. A. Pearce, S. A. Prahl, and C. R. Denham, "A self-heated thermistor technique to measure effective thermal properties from the tissue surface," *J. Biomechanical*

*Engineering*, vol. 109, pp. 330–335, 1987.

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- [3] S. L. Jacques and S. A. Prahl, “Modeling optical and thermal distributions in tissue during laser irradiation,” *Lasers Surg. Med.*, vol. 6, pp. 494–503, 1987.
- [4] G. Yoon, S. A. Prahl, and A. J. Welch, “Accuracies of the diffusion approximation and its similarity relations for laser irradiated biological media,” *Appl. Opt.*, vol. 28, pp. 2250–2255, 1989.
- [5] M. Keijzer, S. L. Jacques, S. A. Prahl, and A. J. Welch, “Light distributions in artery tissue: Monte Carlo simulations for finite-diameter laser beams,” *Lasers Surg. Med.*, vol. 9, pp. 148–154, 1989.
- [6] C. J. M. Moes, M. J. C. van Gemert, W. M. Star, J. P. A. Marijnissen, and S. A. Prahl, “Measurements and calculations of the energy fluence rate in a scattering and absorbing phantom at 633 nm,” *Appl. Opt.*, vol. 28, pp. 2292–2296, 1989.
- [7] M. R. Prince, G. M. LaMuraglia, C. E. Seidlitz, S. A. Prahl, C. A. Athanasoulis, and R. Birngruber, “Ball-tipped fibers for laser angioplasty with the pulsed-dye laser,” *IEEE J. Quantum Electron.*, vol. 26, pp. 2297–2304, 1990.
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- [10] H. J. van Staveren, C. J. M. Moes, J. van Marle, S. A. Prahl, and M. J. C. van Gemert, “Light scattering in Intralipid-10% in the wavelength range of 400–1100 nm,” *Appl. Opt.*, vol. 31, pp. 4507–4514, 1991.
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- [12] S. A. Prahl, I. A. Vitkin, U. Bruggemann, B. C. Wilson, and R. R. Anderson, “Determination of optical properties of turbid media using pulsed photothermal radiometry,” *Phys. Med. Biol.*, vol. 37, pp. 1203–1217, 1992.
- [13] J. W. Pickering, S. A. Prahl, N. van Wieringen, J. F. Beek, H. J. C. M. Sterenborg, and M. J. C. van Gemert, “Double-integrating-sphere system for measuring the optical properties of tissue,” *Appl. Opt.*, vol. 32, pp. 399–410, 1993.
- [14] S. A. Prahl, M. J. C. van Gemert, and A. J. Welch, “Determining the optical properties of turbid media by using the adding-doubling method,” *Appl. Opt.*, vol. 32, pp. 559–568, 1993.
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