

CV Stefan Andersson-Engels

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<http://www.atomic.physics.lu.se/biophotonics>

Personal Born February 21, 1960, in Ängelholm, Sweden. Swedish citizen. Married to Kristina Engels 1987. Two children: Alexander born 1988 and Caroline born 1990.

Personal preparation	Lund University/LTH	Engineering physics	M. Sc	1980-1985
	Lund University/LTH	Medical Laser Physics	PhD	1985-1990
	McMasters University	Medical Physics	postdoc.	1990-1991
	Lund University/LTH	Medical Laser Physics	postdoc	1991-1993
	Lund University/LTH	Medical Laser Physics	Docent/Habilitation	1994

Appointments	Lund University/LTH	Research associate	1993-1997
	Lund University/LTH	Ass. Prof.	1997-1999
	Lund University/LTH	Professor	1999-pres

Tutoring experience I have been the main advisor for 17 PhD students successfully completing their studies, and have been assisting advisor for another completed 8 PhD students. I am presently main advisor for 6 PhD students and assistant advisor for another 2 PhD students.
I have also contributed to successfully guiding 87 students through their MSC projects.

Networks in Academia Member of
Optical Society of America (OSA)
The International Society for Optical Engineering (SPIE)
Coordinated one EC research programme supported by the European Commission (LAIC), and participated as project partner in another seven programmes (OPTIMAMM, MedPhot, Molecular Imaging, BRIGHT, BRIGHTER, Nano UB Sources and Photonics 4 Life).
I am also participating in the European Infrastructure programme LaserLab Europe and the Linneaus project running at Lund Laser Centre.
The group I am leading has also participated within research projects within the "Network for Translational Research in Optical Imaging" programme financially supported by NIH (USA).
The group is also part of a research team working on the project "Neuro-engineering for navigation, intervention and implementation in neurosurgery", with Karin Wårdell as coordinator at Linköping University.
We also have a long ongoing collaboration with AstraZeneca R&D Mölndal, sponsoring one and a half position in the group since about seven years.
I have also been invited to lecture at many summer schools within Biophotonics and Biomedical Optics in Greece, Romania, Bulgaria, Finland, Italy and Ireland. I am together with Prof. Peter Andersen at DTU Photonics in Copenhagen biannually arranging a summer school in Biophotonics since 2003. This school has gained a very high interest/impact in the field and we have been invited to arrange a special section in the Journal of Biomedical Optics (the most central journal within our field of research) from the last two schools.

Commissions of trust	Chair of board, Lund University Medical Laser Centre	2000-pres
	Board member, Lund University Medical Laser Centre	1991-pres
	Deputy board member, Lund Laser Centre	1995-2001
	Deputy board member, SpectraCure AB, Lund, Sweden	2004-2009
	Board member, SpectraCure AB, Lund, Sweden	2009-pres
	Chair of board, Lumito AB, Lund, Sweden	2011-pres
	Program co-chair Gordon Conference on Lasers in Medicine and Biol.	2000
Program co-chair European Conference on Biomedical Optics	2005	

General co-chair European Conference on Biomedical Optics 2007
 Co-organizer biannual Biophotonics summer school 2003-pres
 Chair of Docent Committee at FIME, Lund University 2002-2006
 Participated in numerous international conference programs
 committees and organizations
 Served as an external committee member at more than 10
 dissertations in Sweden, Denmark, Norway, Holland, Italy and Canada
 Served in a committee to assess the qualifications for a position:
 as an Associate Prof. at University of Cyprus 2005
 as a Professor at NTNU in Trondheim, Norway 2011
 as a Research Associate (numerous positions) in Sweden
 Written several letters of evaluation/recommendation in connection with
 promotion of researchers or evaluation of candidates for open positions.

Entrepreneurial achievements

Co-founder of two spin-off companies: *Spectraphos AB*, *SpectraCure AB*, and *Lumito AB*. Co-author of more than 15 patent applications resulting in many granted patents. Received SKAPA innovation prize 2004, the most prestigious entrepreneur prize in Sweden. Grant holder of several research contract from industrial collaborators. Several of the PhD students advised have/have had industrial connections during their studies (Industrial PhD student programmes).

Other merits

Received Erna Ebelings prize, Swedish Society for Medical Engineering and Medical Physics in 2003
 Selected as the first-choice candidate in the appointment of the professorship in Biomedical Physics at the Royal Institute of Technology, Stockholm in 1996

Scientific achievements

Stefan Andersson-Engels started his academic career by studying novel medical diagnostic techniques using laser spectroscopy. The work resulted in a PhD thesis based on 16 scientific publications in 1990. He spent the following year in the group of Profs Brian Wilson and Michael Patterson at McMasters University in Hamilton, Ontario, Canada. During this period he worked especially on research involving light propagation in turbid media, such as tissue. He brought this knowledge back to Lund University and the research now also involved photodynamic therapy and optical mammography, two fields involving much modeling of light propagation in tissue. The group introduced PDT as a clinical modality in Scandinavia, and was also the first to perform time-resolved transillumination imaging of living tissue. The latter work was an important step in the initiation of the research field "photon migration", now having frequent international conferences.

The research interests of Stefan Andersson-Engels remains within laser spectroscopy of tissue mainly for detection, localisation or delineation of diseased regions, but also for measurements of physiological properties. The techniques developed and evaluated in clinical studies at the moment are fluorescence and NIR spectroscopy. The clinical applications of this research could be demarcation of malignant tumours in the skin, oral or laryngeal regions, in the brain or breast or in the gastrointestinal or gynecological tracts. The developed spectroscopic techniques can also be applied for analyzing pharmaceutical preparations and tablets. A second major part of my research is the development and evaluation methods for laser treatments of diseases. Photodynamic therapy, both with superficial and interstitial illumination, is investigated. Mainly skin malignancies and prostate are treated, but other applications are foreseen, especially for IPDT. A concept of interstitial PDT involving spectroscopic measurements to provide an individualized feedback is developed and pursued.

Stefan Andersson-Engels has co-authored more than 160 papers in peer-reviewed journals, with an h-index of 34 according to Google Scholars (AU=(Andersson-Engels S OR Anderssonengels S) NOT AU=(Andersso S)).

Successful PhD candidates with SAE as the main advisor:

Year	Name	Title	Present position
1997	Annika Enejder	Light Scattering and Absorption in Tissue - Models and Measurements	Ass. Prof. at Chalmers University of Technology, Sweden
1998	Christian Sturesson	Medical Laser-Induced Thermotherapy – Models and Applications	Surgeon, Skåne University Hospital, Lund, Sweden
1999	Claes af Klinteberg	On the use of light for the characterization and treatment of malignant tumours	Senior Research Engineer at Anoto AB, Sweden
1999	Charlotta Eker	Optical Characterization of tissue for medical diagnostics	Director PMO at Schneider Electric, Sweden
2000	Jan Sørensen Dam	Optical analysis of biological media - continuous wave diffuse spectroscopy	Medical Physicist at Regionshospitalet Randers, Denmark
2002	Johannes Swartling	Biomedical and atmospheric applications of optical spectroscopy in scattering media	CTO at SpectraCure AB, Sweden
2003	Sara Pålsson	Methods, Instrumentation and Mechanisms for Optical Characterization of Tissue and Treatment of Malignant Tumours	Optical Designer at Safegate International AB, Sweden
2003	Peter Snoer Jensen	Measurements of trace components in aqueous solutions with near and mid infrared Fourier transform spectroscopy	Subject advisor at Ministry of Education, Denmark
2004	Marcelo Soto Thompson	Photodynamic Therapy utilizing Interstitial Light delivery Combined with Spectroscopic Methods	Research Scientist Flatfrog Laboratories AB, Sweden
2004	Eva Samsøe	Laser diode systems for photodynamic therapy and medical diagnostics	Medical physicist at Herlev Hospital, Denmark
2005	Christoffer Abrahamsson	Time-resolved Spectroscopy for Pharmaceutical Applications	Global Expert Advisor, Systems Engineering at Tetra Pak, Sweden
2006	Nazila Yavari	Optical Spectroscopy for tissue diagnostics	Researcher at Uppsala University, Sweden
2007	Jenny Svensson	Optical spectroscopy in biomedicine – detection of embedded inclusions and in vivo pharmacokinetics	Supervisor Technical Documentation at Ecolan Development AB, Sweden
2007	Ann Johansson	Spectroscopic techniques for photodynamic therapy dosimetry	Senior Scientist at Technolas Perfect Vision GmbH, Germany
2008	Tomas Svensson	Pharmaceutical and biomedical applications of spectroscopy in the photon migration regime	Postdoc at LENS - European Laboratory for Non-linear Spectroscopy, Italy
2008	Jesper Holm Lundeman	Blue laser source for laser-induced fluorescence	Research Scientist at Glostrup Hospital, Denmark
2009	Johan Axelsson	Model-based Approaches for Diffuse Optical Imaging and Dosimetry	Postdoc, Dartmouth College, USA

Entrepreneurship Stefan Andersson-Engels

Much of the research performed is very applied and would benefit from slightly further development in order to come to the benefit for patients. Therefore it is natural to pursue the initial development towards commercialization of the results gained in the research environment. Projects directly related to my research has resulted in four startup companies: *a)* SpectraPhos AB 1990-1993, sold to Xillix Inc, Canada; *b)* SpectraCure AB started 2004 and is now successfully running; *c)* GasPorox AB 2007 and is now successfully running; and *d)* Lumito AB started 2011 . I am presently on the board in SpectraCure and Lumito. I have and are also been working with a number of established companies such as *a)* Gambro AB; *b)* Tetra Pak; *c)* Bang&Olufsen; *d)* Johnson&Johnson; *e)* Hoya Holding; *f)* AstraZeneca; and *g)* Elekta .

A number of inventions have been protected to facilitate the commercialization process. Below the patents awarded are listed:

1. S. Andersson-Engels, C. Xu, H. Liu, J. Axelsson, N. Svensson, P. Svenmarker, A system, method and luminescent marker for improved diffuse luminescent imaging or tomography in scattering media, WO2010128090, 2010-11-11
2. S. Svanberg, J. Axelsson, J. Swartling, A. Johansson, S. Andersson-Engels, System and method for controlling and adjusting interstitial photodynamic light therapy parameters, US2011034971 , 2011-02-10
3. T.Johansson, C.Eker, J.Malmborg, L.Wesseltoft Mogensen, S.Svanberg, M.Soto Thompson and S.Andersson-Engels, System and Method for therapy and Diagnosis Comprising Translatory Distributor for Distribution of Radiation., Swedish Patent No. 00301406-5, US2007060982, 2007-03-15, WO2004101069
4. M.Soto Thompson, S.Andersson-Engels and S.Svanberg, System and method for therapy and Diagnosis Comprising Optical Components for Distribution of Radiation., Swedish Patent No. 0301411-5, SE2007060804, 2007-03-15, WO2004100789
5. C. Abrahamsson, S. Andersson-Engels, S. Folestad, J. Johansson and S. Svanberg, New Measuring Technique, Method and apparatus for quantitative analysis of a turbid, pharmaceutical sample. Swedish Patent Application 010004-0, WO2004027398, US2006243911, 2006-11-02
6. C.Abrahamsson, S.Andersson-Engels, S.Folestad, J.Johansson, M.Sjöholm, G.Somesfalean and S.Svanberg, Method of analyzing a pharmaceutical sample, Swedish Patent No. PCT WO 2003078983, US2005173637, 2005-08-11
7. L. Montelius, M. Beck, P. Carlberg, C.-G. Wahlström, A. Persson, S. Andersson-Engels, Apparatus and method for aligning surfaces, WO2005040932, 2005-05-06
8. A.Johansson, S.Andersson-Engels, T.Johansson, S.Pålsson, M.Soto Thompson, K.Svanberg and S.Svanberg, System and Method for therapy and Diagnosis Comprising Optical and Mechanical Distributors for Distribution of Radiation., Swedish Patent No. 0301411-5, 2005-01-13, U.S. Patent No. PCT/SE2004/000758, WO2004100761
9. S.Svanberg, S.Andersson-Engels and K.Svanberg, Divider for distributing radiation, U.S. Patent No. SE 503 408, (2001), Therapy and diagnosis system and method with distributor for distribution of radiation US2004260366, 2004-12-23
10. P.E.Andersen, P.M.Petersen, E.Samsøe Andersen, S.Svanberg, K.Svanberg and S.Andersson-Engels, Laser system for treatment and diagnosis, Danish Patent Application no. PA 2001 00938, US2004199223, 2004-10-07

11. M.Bolmsjö, C.Sturesson and S.Andersson-Engels, Sätt och anordning vid värmebehandling av kroppsvävnad, Swedish Patent No. SE9803079 A, Device for heat treatment of body tissue, US6596017, 2003-07-22
12. S.Andersson-Engels, A.Pifferi, C.Lindquist, R.Berg and S.Svanberg, Rekonstruktion av interferens av diffusa fotondensitetsvågor från separata mätningar av flera signaler för detektion av inhomogeniteter i starkt spridande medium, Swedish patent application SE199504038, 1997-05-11
13. S. Svanberg, Stefan Andersson-Engels, R. Berg, J. Johansson, and K. Svanberg, Method for multiple fibre interstitial photodynamic therapy. Swedish Patent 503 408, SE9501278, 1996-06-10
14. K.Svanberg, S. Andersson-Engels, S. Svanberg, I. Wang, Fluorescensdiagnostik av maligna tumör-sjukdomar utnyttjande oralt tillförd delta-aminolevulinsyra, Swedish patent application SE199400605, 1995-08-21
15. S. Andersson-Engels, J. Johansson, U. Stenram, K. Svanberg, and S. Svanberg, Diagnosis by means of fluorescent light emission from tissue. Swedish patent SE19890000612, US5115137, 1992-05-19

In the process I have received several awards for the innovations:

- 2003 Erna Ebelings prize, Swedish Society for Medical Engineering and Medical Physics
- 2004 Skapa Innovation prize in the memory of Alfred Nobel, the most prestigious innovation prize in Sweden (together with Sune Svanberg and Katarina Svanberg)
- 2004 Innovation prize (together with Sune Svanberg and Katarina Svanberg)

Teaching Stefan Andersson-Engels

I am interested in teaching and am thus trying to constantly develop my ability to help students in learning the subjects I am teaching. In doing that I have taken part in two pedagogic courses at Lund University: *Docentkursen vid LTH* and *Pedagogisk Inspirationskurs vid LTH*. I have also studied some books of relevance for my teaching, for instance: Klas Melander *Undervisningen är Död - Länge Leve Lärandet* Celemi, Malmö, 1991, and Barbara Townley, *Reframing Human Resource Management*, Sage Publishing, London, 1994. Below I have listed the courses I have participated in:

1.
 - **Course:** Advanced Optics and Lasers
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, fourth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Lecturing a few classes
 - **Number of Students:** 20-30
 - **Period:** October-December 2007-2009
2.
 - **Course:** Multispectral Imaging
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, fourth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Course responsible and lecturing about half of the classes
 - **Number of Students:** 40
 - **Period:** October-December 2010
3.
 - **Course:** Multispectral Imaging
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, fourth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Lecturing a few classes
 - **Number of Students:** 30-40 per year
 - **Period:** October-December, course given annually 2007 - 2009
4.
 - **Course:** Optics and Optical Design
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, fourth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Lecturing about half of the classes
 - **Number of Students:** 30-40 per year
 - **Period:** September - October, course given annually 2007 - 2010
5.
 - **Course:** Photonics and Optical Communication
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, fourth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Course responsible, lecturing a few classes

- **Number of Students:** 40
 - **Period:** January - March 2011
6.
 - **Course:** Photonics and Optical Communication
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, forth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Course responsible and lecturing most of the classes
 - **Number of Students:** 20-40 per year
 - **Period:** January - March, course given annually 2007 - 2010
 7.
 - **Course:** Physics
 - **Programme:** Chemical Engineering programme at Lund University, second year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Developing and giving the course together with Sven Åberg, Bengt Martinsson and Per-Erik Bengtsson
 - **Number of Students:** 40 per year
 - **Period:** January - March, course given annually 2003 - 2005
 8.
 - **Course:** Laser Safety for Medical Users
 - **Role in Course:** Developed a course together with Prof. Janis Spigulis, University of Riga, Latvia
 - **Period:** 2000
 9.
 - **Course:** Applied Laser Spectroscopy
 - **Programme:** PhD students within Lund Laser Centre
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Developed and gave course together with Stefan Kröl, Eva Åkesson and Clemens Kaminski
 - **Number of Students:** 15 per year
 - **Period:** 1998, 200, 2002
 10.
 - **Course:** Advanced Optics and Photonics
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, forth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Lecturing half of the classes
 - **Number of Students:** 15-30 per year
 - **Period:** January - March, course given annually 1997 - 2006
 11.
 - **Course:** Tissue Optics
 - **Programme:** Elective course for Master in Photonics, and many other programmes at Lund University, forth year at university
 - **ECTS credits:** 7.5 credits
 - **Role in Course:** Developing the course, course responsible and lecturer
 - **Number of Students:** 20-40 per year

- **Period:** March-May, course given annually 1997 - 2011
12.
 - **Course:** Introductory Physics
 - **Programme:** Engineering Physics, Lund University, first year at university
 - **Role in Course:** Developing and giving the course together with Rune Kullberg
 - **ECTS credits:** 7.5 credits
 - **Number of Students:** 90
 - **Period:** October - December 1996
 13.
 - **Course:** Medical Laser Physics
 - **Programme:** Physicians and Biomedical Engineers at Lund University Hospital
 - **Role in Course:** Developing and giving the course
 - **ECTS credits:** 7.5 credits
 - **Number of Students:** 15
 - **Period:** October - December 1995
 14.
 - **Course:** Various Courses at Lund University, *e.g.* Master programme for Radiophysicists, elective courses in Biomedical Instrumentation and Medical Imaging.
 - **Role in Course:** Given lectures in Use of Lasers in Medicine and Tissue Optics
 - **Number of Students:** 10-20
 - **Period:** 2000 - 2011
 15.
 - **Course:** Various Courses at Physics Department at Lund University
 - **Role in Course:** Teaching Assistant during laboratory exercises corresponding to 15% of duties
 - **Period:** 1985-1996

I have also participated in the development of a MATLAB exercise at the Physics course for Chemists at LTH. This exercise gave the students a project to work with graphically illustrating some of the concepts they learned during the course. The project group involved in this development wrote a report, in which we presented an evaluation of this exercise from a pedagogical point of view.

During my studies as an undergraduate student, I gave private lessons for a high-school student in mathematics. I also developed an internal course at Boliden Kemi AB in Helsingborg the summer 1983.

During the years I have gained a lot of experience in supervising students in projects. The course Tissue Optics that I have given 15 times now, is very much based on a larger project. I have also been the advisor for 87 students through their Master projects (usually 30 ECTS credits). Until today I have been the main advisor for 17 PhD students completed their degree, and am presently advising another 6.

Summer school participation Stefan Andersson-Engels

1. International School of Physics "Enrico Fermi", Microscopy Applied to Biophotonics", Varenna, Italy, July 12-22, 2011
Lecture 1: Lifetime and time-of-flight measurements
Lecture 2: Molecular mechanisms of PDT
Lecture 3: Clinical needs in biomedical imaging
2. International Graduate Summer School Biophotonics'11, Ven, Sweden, May 14-21, 2011
Organizer and Participant
3. International Autumn School - Biophysics & Bioelectrochemistry for Medicine: Basic Concepts, New Techniques and Application Perspective, Vulcan, Romania, October 1 - 6 , 2010
Lecture: Optical spectroscopy for tissue diagnostics and treatment control
4. BIGSS 10 - 3rd International Biophotonics & Imaging Graduate Summer School, The Burren, Co. Clare, Ireland, August 28th - September 2nd ,2010
Lectures 1-4: Fluorescence Imaging and Spectroscopy
5. ESP- Photobiology School, Brixen, Italy, June 21-26, 2010
Lectures 1-3: Biomedical Optics
6. International Spring School Biophysics & Bioelectrochemistry for Medicine, Cismadioara, Romania , May 6-9, 2009
Lecture: Imaging of deep tissue structures using fluorescence dyes and upconverting nanocrystals
7. Biophotonics'09, Ven, Sweden, June 6-13, 2009
Organizer and participant
8. International Summer school - ISQE'2008, Bourgas, Bulgaria, Sep 2008 15-19, 2008
Lecture: Biomedical Optical Spectroscopy in Photodynamic Therapy Dosimetry
9. International Autumn School - Biophysics for Medicine, Mangalia, Romania, October 11-16, 2007
Lecture Biomedical Optical Spectroscopy in Photodynamic Therapy Dosimetry
10. Biophotonics'07, Ven, Sweden, June 9-16, 2007
Organizer and participant
11. International Summer school - ISQE'2006, Bourgas, Bulgaria, September, 2006
Lecture: Interstitial Photodynamic Therapy
12. Tampere, Finland 2006
Lecture: Applications of compact laser sources in biomedicine
13. International Autumn School - Modern Biophysical Techniques for Human Health, from Physics to Medicine, Poiana Brasov, Romania, October 5-10, 2005
Lecture: Fluorescence Imaging and Spectroscopy
14. Science and Technology International, Honolulu, Hawaii, USA, June 2005
Lecture 1-2: Tissue Optics
Lecture 3: Fluorescence diagnostics
Lecture 4: Photodynamic Therapy
15. International Graduate Summer School Biophotonics'05, Ven, Sweden, June 18-25, 2005
Organizer and participant

16. LAN Network Workshop, Duala, Cameroon, December, 2004
Lecture 1-2: Tissue Optics
Lecture 3: Fluorescence diagnostics
Lecture 4: Photodynamic Therapy
17. International Autumn School - Biophysics for Medicine: Principles, Applications, Perspectives, Timisu de Sus - Predeal, Romania, October 7-12, 2003
Lecture: Photodynamic Therapy
18. International Graduate Summer School Biophotonics'03, Ven, Sweden, June 15-21, 2003
Organizer and participant
19. Summer School Biophotonics, Heraklion, Crete, Greece, 2001
Lecture: Photodynamic Therapy

Popular Science presentations Stefan Andersson-Engels

Information of the activities of the research is very important, especially as much of the research is funded through taxes. I have tried to participate in popular science activities, partly through contributing to place educational material open on internet, participating in educational days for high-school teachers, and lately also by giving popular science lectures to the general public. I have also once participated in a national science television program (NOVA, Swedish Television). Below is a list of recent popular science presentations:

1.
 - **Meeting series:** Föreläsningsserien Teknik och Naturvetenskap
 - **Audience:** Announced open lecture
 - **Title:** Lunds Laserljus - Makalösa Mätmetoder mot Medicin och Miljö (In Swedish)
 - **Date:** April 12, 2011
 - **Place:** Kristianstad, Sweden
2.
 - **Meeting series:** Per scientam ad saltuem aegroti
 - **Audience:** Announced open lecture
 - **Title:** Laserljus i Medicinens Tjänst (In Swedish)
 - **Date:** March 27, 2008
 - **Place:** Växjö, Sweden
3.
 - **Meeting series:** Per scientam ad saltuem aegroti
 - **Audience:** Announced open lecture
 - **Title:** Laserljus i Medicinens Tjänst (In Swedish)
 - **Date:** March 26, 2008
 - **Place:** Lund, Sweden
4.
 - **Meeting series:** Per scientam ad saltuem aegroti
 - **Audience:** Announced open lecture
 - **Title:** Laserljus i Medicinens Tjänst (In Swedish)
 - **Date:** March 25, 2008
 - **Place:** Halmstad, Sweden
5.
 - **Audience:** High school teachers
 - **Title:** Biofotonik (In Swedish)
 - **Dates:** Frequent contributions during 2000-2010
 - **Place:** Lund, Sweden

Funding Stefan Andersson-Engels since 2000

- EU Laser and Photonics for Biology and Health (Biophical)
650 kSEK
2011-2014
- EU Advanced Optical Techniques in BIO-Imaging and Bio-Processing (OptBio)
1000 kSEK
2007-2011
- EU Ultrabroad bandwidth light sources based on a nano-structuring device
(UB-NANO)
1200 kSEK
2005-2009
- EU World Wide Welfare: High Brightness Semiconductor Laser for Generic Use
(BRIGHTER)
4000 kSEK
2006-2010
- EU Molecular Imaging (MI)
3000 kSEK
2004-2009
- EU Wide Wavelength Light for Public Welfare: High-Brightness Laser Diode
Systems for Health, Telecom and Environment Use (BRIGHT)
2000 kSEK
2004-2006
- EU Optical Mammography (OPTIMAMM)
1415 kSEK
2001-2004
- EU Medical Photonics (MedPhot)
403 kSEK
2002-2006
- EU Virtual European Laser Institute (VELI)
400 kSEK
2000-2004
- EU Laser Assisted Interventions in Cardiology (LAIC)
2000 kSEK
1997-1999
- NIH Measurements of photosensitizer concentration during interstitial photody-
namic therapy
600 kSEK
2006
- VR Biomedical imaging using upconverting nanoparticles as contrast agent
3000 kSEK
2011-2013
- VR Biomedical and Pharmaceutical Optics
2200 kSEK
2008-2010

- VR Time-resolved spectroscopy of turbid media
2200 kSEK
2004-2007
- VR Statistical analysis of fluorescence images
450 kSEK
2004-2007
- VR Mathematical modelling of light transport in structured media
1560 kSEK
2002-2004
- VR Time-resolved spectroscopy of turbid media
845 kSEK
2002-2003
- VR Fluorescence imaging spectroscopy - microscopy and macroscopy
250 kSEK
2001
- VR Optical spectroscopy for medical applications
610 kSEK
2000-2001

LU, Medical faculty Optical spectroscopy for medical applications
900 kSEK
2000-2005

Vinnova Fluorescence spectroscopy of brain tumours
Through NIMED at Linköping University
435 kSEK
2001-2005

Vinnova/SSF/VR Fluorescence spectroscopy of brain tumours
Through Karin Wårdell at Linköping University
1500 kSEK
2007-2012

Vinnova Upconverting nanoparticles for fluorescence imaging
300 kSEK
2010

Innovationsbron Upconverting nanoparticles for fluorescence imaging
100 kSEK
2009

Linneus Centre at LLC Medical laser spectroscopy and imaging
Through Sune Svanberg at Lund Laser Centre
1500 kSEK
2007-2012

Industry AstraZeneca
Time-of-flight spectroscopy of pharmaceuticals
3200 SEK
2007-2011

Industry AstraZeneca
Gas in scattering spectroscopy (GASMAS) of pharmaceuticals
300 SEK
2008

Industry AstraZeneca
Gas in scattering spectroscopy (GASMAS) of pharmaceuticals
2700 SEK
2003-2007

Industry AstraZeneca
Time-resolved spectroscopy of pharmaceuticals
2650 SEK
2000-2003

Industry Elekta
Fluorescence imaging and spectroscopy of brain tumours
250 SEK
2010-2012

Industry SpectraCure
Interstitial Photodynamic Therapy
1500 SEK
2005-2007

Craaford Upconverting nanoparticles
300 SEK
2010-2011

Craaford Sectioning wide-field microscopy
150 SEK
2003-2004

Elfa Camera for dosimetry measurements during IPDT
40 SEK
2003

Papers in peer-reviewed scientific journals

Stefan Andersson-Engels, April 10, 2011

1. C.T. Xu, P. Svenmarker, S. Andersson-Engels, and J. Krohn. Transscleral visible/near-infrared spectroscopy for quantitative assessment of haemoglobin in experimental choroidal tumours. *Acta Ophthalmologica*, 89: In Press, 2011.
Number of citations: 0
2. C Stureson, K Ivarsson, U Stenram, S Andersson-Engels, and K-G Tranberg. Interstitial laser thermotherapy of a rat liver tumour: Effect of hepatic inflow occlusion. *Lasers in Surgery and Medicine*, 43(1):29-35, 2011.
Number of citations: 0
3. J. Swartling, J. Axelsson, G. Ahlgren, K.M. Kälkner, S. Nilsson, S. Svanberg, K. Svanberg, and S. Andersson-Engels. System for interstitial photodynamic therapy with online dosimetry - first clinical experience of prostate cancer. *Journal of Biomedical Optics*, 16:(in press), 2011.
Number of citations: 0
4. J Richter, N Haj-Hossini, S Andersson-Engels, and K Wårdell. Fluorescence spectroscopy measurements in ultrasonic resection of malignant brain tumours. *Lasers in Surgery and Medicine*, 43(1):8-14, 2011.
Number of citations: 0
5. A Juzeniene, P Brekke, A Dahlback, S Andersson-Engels, J Reichrath, K Moan, MF Holick, WB Grant, and J Moan. Solar radiation and human health. *Reports on Progress in Physics*, 74:(in press), 2011.
Number of citations: 0
6. E Krite Svanberg, S Andersson-Engels, and J Åkeson. Physiological influence of basic perturbations assessed by non-invasive optical techniques in humans. *Canadian Journal of Applied Physiology, Nutrition, and Metabolism*, (submitted), 2011.
Number of citations: 0
7. M Bygdegaard, N Haj-Hosseini, K Wårdell, and S Andersson-Engels. Photobleaching-insensitive fluorescence diagnostics in skin and brain tissue. *IEEE Photonics Journal*, (in press), 2011.
Number of citations: 0
8. CT Xu, M Lewander, S Andersson-Engels, E Adolfsson, T Svensson, and S Svanberg. Wall collision line broadening at reduced pressures: towards non-destructive characterization of nanoporous materials. *Applied Physics Letters*, (submitted), 2011.
Number of citations: 0
9. N Yavari, S Andersson-Engels, U Segersten, and P-U Malmström. An overview on preclinical and clinical experiences with photodynamic therapy for bladder cancer. *Canadian Journal of Urology*, (submitted), 2011.
Number of citations: 0
10. H Xie, H Liu, P Svenmarker, J Axelsson, CT Xu, S Gräfe, J Holm Lundeman, HPH Cheng, S Svanberg, N Bendsoe, PE Andersen, K Svanberg, and S Andersson-Engels. Drug quantification in turbid media by fluorescence imaging combined with light-absorption correction using white monte carlo simulations. *Journal of Biomedical Optics*, (submitted), 2011.
Number of citations: 0
11. S. Andersson-Engels and P. E. Andersen. Selected topics in biophotonics: Photodynamic therapy and optical micromanipulation for biophotonics. *Journal of Biomedical Optics*, 15(4):041501, 2010.
Number of citations: 0
12. S. Andersson-Engels and H. Stepp. Therapeutic laser application and tissue interactions: Bringing light into clinical practice. *Journal of Biophotonics*, 3(5-6):259-260, 2010.
Number of citations: 0
13. N. Haj-Hosseini, J. Richter, S. Andersson-Engels, and K. Wardell. Optical touch pointer for fluorescence guided glioblastoma resection using 5-aminolevulinic acid. *Lasers In Surgery and Medicine*, 42(1):9-14, 2010.
Number of citations: 5

14. I. K. Ilev, L. H. V. Wang, S. A. Boppart, S. Andersson-Engels, and B. M. Kim. Introduction to the special issue on biophotonics - part 1. *IEEE Journal of Selected Topics In Quantum Electronics*, 16(3):475-477, 2010.
Number of citations: 0
15. J. Krohn, C. T. Xu, P. Svenmarker, D. Khoptyar, and S. Andersson-Engels. Transscleral visible/near-infrared spectroscopy for quantitative assessment of melanin in a uveal melanoma phantom of ex vivo porcine eyes. *Experimental Eye Research*, 90(2):330-336, 2010.
Number of citations: 1
16. H. C. Liu, C. T. Xu, and S. Andersson-Engels. Multibeam fluorescence diffuse optical tomography using upconverting nanoparticles. *Optics Letters*, 35(5):718-720, 2010.
Number of citations: 4
17. K. Svanberg, N. Bendsoe, J. Axelsson, S. Andersson-Engels, and S. Svanberg. Photodynamic therapy: superficial and interstitial illumination. *Journal of Biomedical Optics*, 15(4):041502, 2010.
Number of citations: 0
18. P. Svenmarker, C. T. Xu, and S. Andersson-Engels. Use of nonlinear upconverting nanoparticles provides increased spatial resolution in fluorescence diffuse imaging. *Optics Letters*, 35(16):2789-2791, 2010.
Number of citations: 0
19. T. Svensson, E. Alerstam, J. Johansson, and S. Andersson-Engels. Optical porosimetry and investigations of the porosity experienced by light interacting with porous media. *Optics Letters*, 35(11):1740-1742, 2010.
Number of citations: 2
20. A. Johansson and S. Andersson-Engels. *Laser Imaging and Manipulation in Cell Biology*, chapter Photodynamic Therapy - the Quest for Improved Dosimetry in the Management of Solid Tumors, pages 167-202. Wiley-VCH Verlag, Weinheim, Germany, 2010.
Number of citations: not in Google Scholar
21. E. Alerstam, W.C.Y. Lo, T.D. Han, J. Rose, S. Andersson-Engels, and L. Lilge. Next-generation acceleration and code optimization for light transport in turbid media using GPUs. *Biomed. Opt. Express*, 1(2):658-675, 2010.
Number of citations: 3
22. J. Axelsson, J. Swartling, and S. Andersson-Engels. In vivo photosensitizer tomography inside the human prostate. *Optics Letters*, 34(3):232-234, 2009.
Number of citations: 8
23. T. Svensson, E. Alerstam, D. Khoptyar, J. Johansson, S. Folestad, and S. Andersson-Engels. Near-infrared photon time-of-flight spectroscopy of turbid materials up to 1400 nm. *Review of Scientific Instruments*, 80(6):063105, 2009.
Number of citations: 5
24. C. T. Xu, J. Axelsson, and S. Andersson-Engels. Fluorescence diffuse optical tomography using upconverting nanoparticles (vol 94, 251107, 2009). *Applied Physics Letters*, 95(3):039901, 2009.
Number of citations: 0
25. C. T. Xu, J. Axelsson, and S. Andersson-Engels. Fluorescence diffuse optical tomography using upconverting nanoparticles. *Applied Physics Letters*, 94(25):251107, 2009.
Number of citations: 5
26. A. D. Zacharopoulos, P. Svenmarker, J. Axelsson, M. Schweiger, S. R. Arridge, and S. Andersson-Engels. A matrix-free algorithm for multiple wavelength fluorescence tomography. *Optics Express*, 17(5):3025-3035, 2009.
Number of citations: 10
27. E. Alerstam, S. Andersson-Engels, and T. Svensson. White Monte Carlo for time-resolved photon migration. *Journal of Biomedical Optics*, 13(4):041304, 2008.
Number of citations: 21

28. E. Alerstam, S. Andersson-Engels, and T. Svensson. Improved accuracy in time-resolved diffuse reflectance spectroscopy. *Optics Express*, 16(14):10440-10454, 2008.
Number of citations: 15
29. E. Alerstam, T. Svensson, and S. Andersson-Engels. Parallel computing with graphics processing units for high-speed Monte Carlo simulation of photon migration. *Journal of Biomedical Optics*, 13(6):060504, 2008.
Number of citations: 35
30. S. Andersson-Engels and P. E. Andersen. Selected topics in Biophotonics: Diffuse optics and optical molecular imaging. *Journal of Biomedical Optics*, 13(4):041301, 2008.
Number of citations: 0
31. F. Chauchard, J. Svensson, J. Axelsson, S. Andersson-Engels, and S. Roussel. Localization of embedded inclusions using detection of fluorescence: Feasibility study based on simulation data, LS-SVM modeling and EPO preprocessing. *Chemometrics and Intelligent Laboratory Systems*, 91(1):34-42, 2008.
Number of citations: 2
32. I. K. Ilev, B. C. Wilson, V. Backman, and S. Andersson-Engels. Introduction to the special issue on Biophotonics - part 2. *IEEE Journal of Selected Topics In Quantum Electronics*, 14(1):1-3, 2008.
Number of citations: 1
33. E. Kristensson, M. Richter, S. G. Pettersson, M. Alden, and S. Andersson-Engels. Spatially resolved, single-ended two-dimensional visualization of gas flow phenomena using structured illumination. *Applied Optics*, 47(21):3927-3931, 2008.
Number of citations: 1
34. J. H. Lundeman, O. B. Jensen, P. E. Andersen, S. Andersson-Engels, B. Sumpf, G. Erbert, and P. M. Petersen. High power 404 nm source based on second harmonic generation in ppKTP of a tapered external feedback diode laser. *Optics Express*, 16(4):2486-2493, 2008.
Number of citations: 10
35. R. Rydell, C. Eker, S. Andersson-Engels, A. Krogdahl, P. Wahlberg, and K. Svanberg. Fluorescence investigations to classify malignant laryngeal lesions in vivo. *Head and Neck-journal For the Sciences and Specialties of the Head and Neck*, 30(4):419-426, 2008.
Number of citations: 8
36. T. Svensson, E. Alerstam, M. Einarsdottir, K. Svanberg, and S. Andersson-Engels. Towards accurate in vivo spectroscopy of the human prostate. *Journal of Biophotonics*, 1(3):200-203, 2008.
Number of citations: 15
37. T. Svensson, M. Andersson, L. Rippe, J. Johansson, S. Folestad, and S. Andersson-Engels. High sensitivity gas spectroscopy of porous, highly scattering solids. *Optics Letters*, 33(1):80-82, 2008.
Number of citations: 8
38. T. Svensson, M. Andersson, L. Rippe, S. Svanberg, S. Andersson-Engels, J. Johansson, and S. Folestad. VCSEL-based oxygen spectroscopy for structural analysis of pharmaceutical solids. *Applied Physics B-lasers and Optics*, 90(2):345-354, 2008.
Number of citations: 17
39. C. T. Xu, N. Svensson, J. Axelsson, P. Svenmarker, G. Somesfalean, G. Y. Chen, H. J. Liang, H. C. Liu, Z. G. Zhang, and S. Andersson-Engels. Autofluorescence insensitive imaging using upconverting nanocrystals in scattering media. *Applied Physics Letters*, 93(17):171103, 2008.
Number of citations: 10
40. J. Axelsson, J. Svensson, and S. Andersson-Engels. Spatially varying regularization based on spectrally resolved fluorescence emission in fluorescence molecular tomography. *Optics Express*, 15(21):13574-13584, 2007.
Number of citations: 4
41. N. Bendsoe, L. Persson, A. Johansson, J. Axelsson, J. Svensson, S. Grafe, T. Trebst, S. Andersson-Engels, S. Svanberg, and K. Svanberg. Fluorescence monitoring of a topically applied liposomal temoporfin formulation and photodynamic therapy of nonpigmented skin malignancies. *Journal of*

- Environmental Pathology Toxicology and Oncology, 26(2):117-126, 2007.
Number of citations: 7
42. I. Ilev, B. C. Wilson, V. Backman, and S. Andersson-Engels. Introduction to the special issue on Biophotonics - part 1. IEEE Journal of Selected Topics In Quantum Electronics, 13(6):1593-1595, 2007.
Number of citations: 0
43. A. Johansson, J. Axelsson, S. Andersson-Engels, and J. Swartling. Realtime light dosimetry software tools for interstitial photodynamic therapy of the human prostate. Medical Physics, 34(11):4309-4321, 2007.
Number of citations: 30
44. A. Johansson, J. Svensson, N. Bendsoe, K. Svanberg, E. Alexandratou, M. Kyriazi, D. Yova, S. Grafe, T. Trebst, and S. Andersson-Engels. Fluorescence and absorption assessment of a lipid mTHPC formulation following topical application in a non-melanotic skin tumor model. Journal of Biomedical Optics, 12(3):034026, 2007.
Number of citations: 10
45. J. Svensson, A. Johansson, S. Grafe, B. Gitter, T. Trebst, N. Bendsoe, S. Andersson-Engels, and K. Svanberg. Tumor selectivity at short times following systemic administration of a liposomal temoporfin formulation in a murine tumor model. Photochemistry and Photobiology, 83(5):1211-1219, 2007.
Number of citations: 7
46. T. Svensson, S. Andersson-Engels, M. Einarsdottir, and K. Svanberg. In vivo optical characterization of human prostate tissue using near-infrared time-resolved spectroscopy. Journal of Biomedical Optics, 12(1):014022, 2007.
Number of citations: 34
47. T. Svensson, L. Persson, M. Andersson, S. Svanberg, S. Andersson-Engels, J. Johansson, and S. Folestad. Noninvasive characterization of pharmaceutical solids by diode laser oxygen spectroscopy. Applied Spectroscopy, 61(7):784-786, 2007.
Number of citations: 8
48. A. Johansson, T. Johansson, M. S. Thompson, N. Bendsoe, K. Svanberg, S. Svanberg, and S. Andersson-Engels. In vivo measurement of parameters of dosimetric importance during interstitial photodynamic therapy of thick skin tumors. Journal of Biomedical Optics, 11(3):034029, 2006.
Number of citations: 19
49. S. Palsson, U. Stenram, M. S. Thompson, A. Vaitkuvienė, V. Poskiene, R. Ziobakiene, J. Oyama, M. J. DeWeert, U. Gustafsson, N. Bendsoe, S. Andersson-Engels, S. Svanberg, and K. Svanberg. Methods for detailed histopathological investigation and localization of biopsies from cervix uteri to improve the interpretation of autofluorescence data. Journal of Environmental Pathology Toxicology and Oncology, 25(1-2):321-340, 2006.
Number of citations: 2
50. M. S. Thompson, S. Andersson-Engels, S. Svanberg, T. Johansson, S. Palsson, N. Bendsoe, A. Derjabo, J. Kapostins, U. Stenram, J. Spigulis, and K. Svanberg. Photodynamic therapy of nodular basal cell carcinoma with multifiber contact light delivery. Journal of Environmental Pathology Toxicology and Oncology, 25(1-2):411-424, 2006.
Number of citations: 6
51. J. Johansson, S. Folestad, C. Abrahamsson, T. Svensson, and S. Andersson-Engels. Time-resolved NIR spectroscopy for analysis of solid pharmaceuticals. NIRS News, 17(4):7-9, 2006.
Number of citations: not in Google Scholars
52. A. Johansson, N. Bendsoe, K. Svanberg, S. Svanberg, and S. Andersson-Engels. Influence of treatment-induced changes in tissue absorption on treatment volume during interstitial photodynamic therapy. Medical Laser Application, 21(4):261-270, 2006.
Number of citations: 7

53. C. Abrahamsson, J. Johansson, S. Andersson-Engels, S. Svanberg, and S. Folestad. Time-resolved NIR spectroscopy for quantitative analysis of intact pharmaceutical tablets. *Analytical Chemistry*, 77(4):1055-1059, 2005.
Number of citations: 17
54. C. Abrahamsson, A. Lowgren, B. Stromdahl, T. Svensson, S. Andersson-Engels, J. Johansson, and S. Folestad. Scatter correction of transmission near-infrared spectra by photon migration data: Quantitative analysis of solids. *Applied Spectroscopy*, 59(11):1381-1387, 2005.
Number of citations: 9
55. F. Chauchard, J. M. Roger, V. Bellon-Maurel, C. Abrahamsson, S. Andersson-Engels, and S. Svanberg. Madstress: A linear approach for evaluating scattering and absorption coefficients of samples measured using time-resolved spectroscopy in reflection. *Applied Spectroscopy*, 59(10):1229-1235, 2005.
Number of citations: 6
56. F. Chauchard, S. Roussel, J. M. Roger, V. Bellon-Maurel, C. Abrahamsson, T. Svensson, S. Andersson-Engels, and S. Svanberg. Least-squares support vector machines modelization for time-resolved spectroscopy. *Applied Optics*, 44(33):7091-7097, 2005.
Number of citations: 7
57. J. S. Dam, N. Yavari, S. Sorensen, and S. Andersson-Engels. Real-time absorption and scattering characterization of slab-shaped turbid samples obtained by a combination of angular and spatially resolved measurements. *Applied Optics*, 44(20):4281-4290, 2005.
Number of citations: 7
58. A. Karlsson, J. P. He, J. Swartling, and S. Andersson-Engels. Numerical simulations of light scattering by red blood cells. *IEEE Transactions On Biomedical Engineering*, 52(1):13-18, 2005.
Number of citations: 23
59. C. af Klinteberg, M. Andreasson, O. Sandstrom, S. Andersson-Engels, and S. Svanberg. Compact medical fluorosensor for minimally invasive tissue characterization. *Review of Scientific Instruments*, 76(3):034303, 2005.
Number of citations: 13
60. C. af Klinteberg, A. Pifferi, S. Andersson-Engels, R. Cubeddu, and S. Svanberg. In vivo absorption spectroscopy of tumor sensitizers with femtosecond white light. *Applied Optics*, 44(11):2213-2220, 2005.
Number of citations: 10
61. A. Pifferi, A. Torricelli, A. Bassi, P. Taroni, R. Cubeddu, H. Wabnitz, D. Grosenick, M. Moller, R. Macdonald, J. Swartling, T. Svensson, S. Andersson-Engels, R. L. P. van Veen, H. J. C. M. Sterenborg, J. M. Tualle, H. L. Nghiem, S. Avriillier, M. Whelan, and H. Stamm. Performance assessment of photon migration instruments: the MedPhot protocol. *Applied Optics*, 44(11):2104-2114, 2005.
Number of citations: 41
62. E. Samsoe, P. Petersen, S. Andersson-Engels, and P. E. Andersen. Second harmonic generation of 405-nm light using periodically poled ktiopo4 pumped by external-cavity laser diode with double grating feedback. *Applied Physics B-lasers and Optics*, 80(7):861-864, 2005.
Number of citations: 4
63. J. Svensson and S. Andersson-Engels. Modeling of spectral changes for depth localization of fluorescent inclusion. *Optics Express*, 13(11):4263-4274, 2005.
Number of citations: 15
64. T. Svensson, J. Swartling, P. Taroni, A. Torricelli, P. Lindblom, C. Ingvar, and S. Andersson-Engels. Characterization of normal breast tissue heterogeneity using time-resolved near-infrared spectroscopy. *Physics In Medicine and Biology*, 50(11):2559-2571, 2005.
Number of citations: 28
65. J. Swartling, J. Svensson, D. Bengtsson, K. Terike, and S. Andersson-Engels. Fluorescence spectra provide information on the depth of fluorescent lesions in tissue. *Applied Optics*, 44(10):1934-1941, 2005.
Number of citations: 33

66. M. S. Thompson, A. Johansson, T. Johansson, S. Andersson-Engels, S. Svanberg, N. Bendsoe, and K. Svanberg. Clinical system for interstitial photodynamic therapy with combined on-line dosimetry measurements. *Applied Optics*, 44(19):4023-4031, 2005.
Number of citations: 27
67. N. Yavari, J. S. Dam, J. Antonsson, K. Wardell, and S. Andersson-Engels. In vitro measurements of optical properties of porcine brain using a novel compact device. *Medical & Biological Engineering & Computing*, 43(5):658-666, 2005.
Number of citations: 4
68. C. Abrahamsson, T. Svensson, S. Svanberg, S. Andersson-Engels, J. Johansson, and S. Folestad. Time and wavelength resolved spectroscopy of turbid media using light continuum generated in a crystal fiber. *Optics Express*, 12(17):4103-4112, 2004.
Number of citations: 29
69. J. P. He, A. Karlsson, J. Swartling, and S. Andersson-Engels. Light scattering by multiple red blood cells. *Journal of the Optical Society of America A*, 21(10):1953-1961, 2004.
Number of citations: 20
70. P. S. Jensen, J. Bak, S. Ladefoged, and S. Andersson-Engels. Determination of urea, glucose, and phosphate in dialysate with fourier transform infrared spectroscopy. *Spectrochimica Acta*, 60(4):899-905, 2004.
Number of citations: 17
71. P. S. Jensen, J. Bak, S. Ladefoged, S. Andersson-Engels, and L. Friis-Hansen. Online monitoring of urea concentration in dialysate with dualbeam Fourier-transform near-infrared spectroscopy. *Journal of Biomedical Optics*, 9(3):553-557, 2004.
Number of citations: 6
72. D. Levitz, L. Thrane, M. H. Frosz, P. E. Andersen, C. B. Andersen, J. Valanciunaite, J. Swartling, S. Andersson-Engels, and P. R. Hansen. Determination of optical scattering properties of highly-scattering media in optical coherence tomography images. *Optics Express*, 12(2):249-259, 2004.
Number of citations: 56
73. A. Pifferi, J. Swartling, E. Chikoidze, A. Torricelli, P. Taroni, A. Bassi, S. Andersson-Engels, and R. Cubeddu. Spectroscopic time-resolved diffuse reflectance and transmittance measurements of the female breast at different interfiber distances. *Journal of Biomedical Optics*, 9(6):1143-1151, 2004.
Number of citations: 46
74. E. Samsoe, P. E. Andersen, S. Andersson-Engels, and P. M. Petersen. Improvement of spatial and temporal coherence of a broad area laser diode using an external-cavity design with double grating feedback. *Optics Express*, 12(4):609-616, 2004.
Number of citations: 6
75. A. M. K. Enejder, J. Swartling, P. Aruna, and S. Andersson-Engels. Influence of cell shape and aggregate formation on the optical properties of flowing whole blood. *Applied Optics*, 42(7):1384-1394, 2003.
Number of citations: 26
76. P. S. Jensen, J. Bak, and S. Andersson-Engels. Influence of temperature on water and aqueous glucose absorption spectra in the near- and mid-infrared regions at physiologically relevant temperatures. *Applied Spectroscopy*, 57(1):28-36, 2003.
Number of citations: 15
77. S. Palsson, L. Gustafsson, N. Bendsoe, M. S. Thompson, S. Andersson-Engels, and K. Svanberg. Kinetics of the superficial perfusion and temperature in connection with photodynamic therapy of basal cell carcinomas using esterified and non-esterified 5-aminolaevulinic acid. *British Journal of Dermatology*, 148(6):1179-1188, 2003.
Number of citations: 11
78. E. Samsoe, P. Malm, P. E. Andersen, P. M. Petersen, and S. Andersson-Engels. Improvement of brightness and output power of high-power laser diodes in the visible spectral region. *Optics Communications*, 219(1-6):369-375, 2003.
Number of citations: 4

79. J. Swartling, J. S. Dam, and S. Andersson-Engels. Comparison of spatially and temporally resolved diffuse-reflectance measurement systems for determination of biomedical optical properties. *Applied Optics*, 42(22):4612-4620, 2003.
Number of citations: 49
80. J. Swartling, S. Palsson, P. Platonov, S. B. Olsson, and S. Andersson-Engels. Changes in tissue optical properties due to radio-frequency ablation of myocardium. *Medical & Biological Engineering & Computing*, 41(4):403-409, 2003.
Number of citations: 11
81. J. Swartling, A. Pifferi, A. M. K. Enejder, and S. Andersson-Engels. Accelerated Monte Carlo models to simulate fluorescence spectra from layered tissues. *Journal of the Optical Society of America A-optics Image Science and Vision*, 20(4):714-727, 2003.
Number of citations: 38
82. J. Johansson, S. Folestad, M. Josefson, A. Sparen, C. Abrahamsson, S. Andersson-Engels, and S. Svanberg. Time-resolved NIR/VIS spectroscopy for analysis of solids: Pharmaceutical tablets. *Applied Spectroscopy*, 56(6):725-731, 2002.
Number of citations: 23
- 82 M. Ozolinsh, I. Lacin, R. Paeglis, A. Sternberg, S. Svanberg, S. Andersson-Engels, and J. Swartling. Electrooptic PLZT ceramics devices for vision science applications. *Ferroelectrics*, 273:131-136, 2002.
Number of citations: 5
83. G. Somesfalean, M. Sjöholm, J. Alnis, C. af Klinteberg, S. Andersson-Engels, and S. Svanberg. Concentration measurement of gas embedded in scattering media by employing absorption and time-resolved laser spectroscopy. *Applied Optics*, 41(18):3538-3544, 2002.
Number of citations: 4
84. T. Johansson, M. Soto Thompson, M. Stenberg, K. af Klinteberg, S. Andersson-Engels, S. Svanberg, and K. Svanberg. Feasibility study of a system for combined light dosimetry and interstitial photodynamic treatment of massive tumors. *Appl. Opt.*, 41(7):1462-1468, 2002.
Number of citations: 25
85. J. S. Dam, C. B. Pedersen, T. Dalgaard, P. E. Fabricius, P. Aruna, and S. Andersson-Engels. Fiber-optic probe for noninvasive real-time determination of tissue optical properties at multiple wavelengths. *Applied Optics*, 40(7):1155-1164, 2001.
Number of citations: 55
86. C. Eker, R. Rydell, K. Svanberg, and S. Andersson-Engels. Multivariate analysis of laryngeal fluorescence spectra recorded in vivo. *Lasers In Surgery and Medicine*, 28(3):259-266, 2001.
Number of citations: 30
87. T. H. Pham, C. Eker, A. Durkin, B. J. Tromberg, and S. Andersson-Engels. Quantifying the optical properties and chromophore concentrations of turbid media by chemometric analysis of hyperspectral diffuse reflectance data collected using a fourier interferometric imaging system. *Applied Spectroscopy*, 55(8):1035-1045, 2001.
Number of citations: 9
88. M. Sjöholm, G. Somesfalean, J. Alnis, S. Andersson-Engels, and S. Svanberg. Analysis of gas dispersed in scattering media. *Optics Letters*, 26(1):16-18, 2001.
Number of citations: 27
89. M. S. Thompson, L. Gustafsson, S. Palsson, N. Bendsoe, M. Stenberg, C. A. Klinteberg, S. Andersson-Engels, and K. Svanberg. Photodynamic therapy and diagnostic measurements of basal cell carcinomas using esterified and non-esterified delta-aminolevulinic acid. *Journal of Porphyrins and Phthalocyanines*, 5(2):147-153, 2001.
Number of citations: 3
90. I. Wang, N. Bendsoe, C. A. F. Klinteberg, A. M. K. Enejder, S. Andersson-Engels, S. Svanberg, and K. Svanberg. Photodynamic therapy vs. cryosurgery of basal cell carcinomas: results of a phase III clinical trial. *British Journal of Dermatology*, 144(4):832-840, 2001.
Number of citations: 132

91. S. Andersson-Engels, G. Canti, R. Cubeddu, C. Eker, C. af Klinteberg, A. Pifferi, K. Svanberg, S. Svanberg, P. Taroni, G. Valentini, and I. Wang. Preliminary evaluation of two fluorescence imaging methods for the detection and the delineation of basal cell carcinomas of the skin. *Lasers In Surgery and Medicine*, 26(1):76-82, 2000.
Number of citations: 52
92. J. S. Dam, T. Dalgaard, P. E. Fabricius, and S. Andersson-Engels. Multiple polynomial regression method for determination of biomedical optical properties from integrating sphere measurements. *Applied Optics*, 39(7):1202-1209, 2000.
Number of citations: 44
93. A. M. K. Enejder, C. af Klinteberg, I. Wang, S. Andersson-Engels, N. Bendsoe, S. Svanberg, and K. Svanberg. Blood perfusion studies on basal cell carcinomas in conjunction with photodynamic therapy and cryotherapy employing laser-Doppler perfusion imaging. *Acta Dermato-venereologica*, 80(1):19-23, 2000.
Number of citations: 10
94. T. H. Pham, F. Bevilacqua, T. Spott, J. S. Dam, B. J. Tromberg, and S. Andersson-Engels. Quantifying the absorption and reduced scattering coefficients of tissue-like turbid media over a broad spectral range with noncontact Fourier-transform hyperspectral imaging. *Applied Optics*, 39(34):6487-6497, 2000.
Number of citations: 9
95. S. Svanberg, S. Andersson-Engels, R. Cubeddu, E. Forster, M. Gratz, K. Herrlin, G. Holzer, L. Kiernan, C. af Klinteberg, A. Persson, A. Pifferi, A. Sjogren, and C. G. Wahlstrom. Generation, characterization, and medical utilization of laser-produced emission continua. *Laser and Particle Beams*, 18(3):563-570, 2000.
Number of citations: 5
96. C. Eker, S. Montan, E. Jaramillo, K. Koizumi, C. Rubio, S. Andersson-Engels, K. Svanberg, S. Svanberg, and P. Slezak. Clinical spectral characterisation of colonic mucosal lesions using autofluorescence and δ -aminolevulinic acid sensitisation. *Gut*, 44(4):511-518, 1999.
Number of citations: 53
97. C. af Klinteberg, A. M. K. Enejder, I. Wang, S. Andersson-Engels, S. Svanberg, and K. Svanberg. Kinetic fluorescence studies of 5-aminolaevulinic acid-induced protoporphyrin ix accumulation in basal cell carcinomas. *Journal of Photochemistry and Photobiology B-biology*, 49(2-3):120-128, 1999.
Number of citations: 33
98. C. Sturesson, K. Ivarsson, S. Andersson-Engels, and K. G. Tranberg. Changes in local hepatic blood perfusion during interstitial laser-induced thermotherapy of normal rat liver measured by interstitial laser Doppler flowmetry. *Lasers In Medical Science*, 14(2):143-149, 1999.
Number of citations: 8
99. I. Wang, B. Bauer, S. Andersson-Engels, S. Svanberg, and K. Svanberg. Photodynamic therapy utilising topical δ -aminolevulinic acid in non-melanoma skin malignancies of the eyelid and the periocular skin . *Acta Ophthalmologica Scandinavica*, 77(2):182-188, 1999.
Number of citations: 35
100. M. Bolmsjo, C. Sturesson, L. Wagrell, S. Andersson-Engels, and A. Mattiasson. Optimizing transurethral microwave thermotherapy: a model for studying power, blood flow, temperature variations and tissue destruction - reply. *British Journal of Urology*, 82(6):935-936, 1998.
Number of citations: 0
101. M. Bolmsjo, C. Sturesson, L. Wagrell, S. Andersson-Engels, and A. Mattiasson. Optimizing transurethral microwave thermotherapy: a model for studying power, blood flow, temperature variations and tissue destruction. *British Journal of Urology*, 81(6):811-816, 1998.
Number of citations: 40
102. A. M. K. Nilsson, P. Alsholm, A. Karlsson, and S. Andersson-Engels. T-matrix computations of light scattering by red blood cells. *Applied Optics*, 37(13):2735-2748, 1998.
Number of citations: 62

103. A. M. K. Nilsson, C. Sturesson, D. L. Liu, and S. Andersson-Engels. Changes in spectral shape of tissue optical properties in conjunction with laser-induced thermotherapy. *Applied Optics*, 37(7):1256-1267, 1998.
Number of citations: 89
104. A. Pifferi, P. Taroni, G. Valentini, and S. Andersson-Engels. Real-time method for fitting time-resolved reflectance and transmittance measurements with a Monte Carlo model. *Applied Optics*, 37(13):2774-2780, 1998.
Number of citations: 26
105. K. Svanberg, C. af Klinteberg, A. Nilsson, I. Wang, S. Andersson-Engels, and S. Svanberg. Laser-based spectroscopic methods in tissue characterization. *Advances In Optical Biopsy and Optical Mammography*, 838:123-129, 1998.
Number of citations: 17
106. K. Svanberg, I. Wang, S. Colleen, I. Idvall, C. Ingvar, R. Rydell, D. Jocham, H. Diddens, S. Bown, G. Gregory, S. Montan, S. Andersson-Engels, and S. Svanberg. Clinical multi-colour fluorescence imaging of malignant tumours - initial experience. *Acta Radiologica*, 39(1):2-9, 1998.
Number of citations: 52
107. R. Cubeddu, A. Pifferi, P. Taroni, G. Valentini, G. Canti, C. Lindquist, S. Andersson-Engels, S. Svanberg, I. Wang, and K. Svanberg. Multispectral and lifetime imaging for the detection of skin tumors. *Biomedical Optical Spectroscopy and Diagnostics / Therapeutic Laser Applications. Proc. OSA Trends in Optics and Photonics*, 22:106-109, 1998.
Number of citations: not in Google Scholars
108. S. Andersson-Engels, C. af Klinteberg, K. Svanberg, and S. Svanberg. In vivo fluorescence imaging for tissue diagnostics. *Physics In Medicine and Biology*, 42(5):815-824, 1997.
Number of citations: 120
109. H. Heyerdahl, I. Wang, D. L. Liu, R. Berg, S. AnderssonEngels, Q. Peng, J. Moan, S. Svanberg, and K. Svanberg. Pharmacokinetic studies on 5-aminolevulinic acid-induced protoporphyrin ix accumulation in tumours and normal tissues. *Cancer Letters*, 112(2):225-231, 1997.
Number of citations: 53
110. O. Jarlman, R. Berg, S. AnderssonEngels, S. Svanberg, and H. Pettersson. Time-resolved white light transillumination for optical imaging. *Acta Radiologica*, 38(1):185-189, 1997.
Number of citations: 16
111. D. L. Liu, S. Andersson-Engels, C. Sturesson, K. Svanberg, C. H. Hakansson, and S. Svanberg. Tumour vessel damage resulting from laser-induced hyperthermia alone and in combination with photodynamic therapy. *Cancer Letters*, 111(1-2):157-165, 1997.
Number of citations: 16
112. D. L. Liu, K. Svanberg, I. Wang, S. AnderssonEngels, and S. Svanberg. Laser Doppler perfusion imaging: New technique for determination of perfusion and reperfusion of splanchnic organs and tumor tissue. *Lasers In Surgery and Medicine*, 20(4):473-479, 1997.
Number of citations: 15
113. A. M. K. Nilsson, D. Heinrich, J. Olajos, and S. Andersson-Engels. Near infrared diffuse reflection and laser-induced fluorescence spectroscopy for myocardial tissue characterisation. *Spectrochimica Acta Part A-molecular and Biomolecular Spectroscopy*, 53(11):1901-1912, 1997.
Number of citations: 25
114. A. M. K. Nilsson, G. W. Lucassen, W. Verkruysse, S. Andersson-Engels, and M. J. C. van Gemert. Changes in optical properties of human whole blood in vitro due to slow heating. *Photochemistry and Photobiology*, 65(2):366-373, 1997.
Number of citations: 49
115. C. Sturesson and S. Andersson-Engels. Tissue temperature control using a water-cooled applicator: Implications for transurethral laser-induced thermotherapy of benign prostatic hyperplasia. *Medical Physics*, 24(3):461-470, 1997.
Number of citations: 9

116. C. Sturesson, D. L. Liu, U. Stenram, and S. Andersson-Engels. Hepatic in flow occlusion increases the efficacy of interstitial laser-induced thermotherapy in rat. *Journal of Surgical Research*, 71(1):67-72, 1997.
Number of citations: 56
117. I. Wang, S. Andersson-Engels, G.E. Nilsson, K. Wardell, and K. Svanberg. Superficial blood flow following photodynamic therapy of malignant non-melanoma skin tumours measured by laser Doppler perfusion imaging. *British Journal of Dermatology*, 136(2):184-189, 1997.
Number of citations: 27
118. C. S. von Holstein, A. M. K. Nilsson, S. Andersson-Engels, R. Willen, B. Walther, and K. Svanberg. Detection of adenocarcinoma in Barrett's oesophagus by means of laser induced fluorescence. *Gut*, 39(5):711-716, 1996.
Number of citations: 57
119. R. Berg, S. Andersson-Engels, O. Jarlman, and S. Svanberg. Time-gated viewing studies on tissue-like phantoms. *Applied Optics*, 35(19):3432-3440, 1996.
Number of citations: 16
120. O. Jarlman, R. Berg, S. Andersson-Engels, S. Svanberg, and H. Pettersson. Laser transillumination of breast tissue phantoms using time-resolved techniques. *European Radiology*, 6(3):387-392, 1996.
Number of citations: 2
121. C. Lindquist, A. Pifferi, R. Berg, S. Andersson-Engels, and S. Svanberg. Reconstruction of diffuse photon-density wave interference in turbid media from time-resolved transmittance measurements. *Applied Physics Letters*, 69(12):1674-1676, 1996.
Number of citations: 7
122. C. Sturesson and S. Andersson-Engels. Mathematical modelling of dynamic cooling and pre-heating, used to increase the depth of selective damage to blood vessels in laser treatment of port wine stains. *Physics In Medicine and Biology*, 41(3):413-428, 1996.
Number of citations: 44
123. C. Sturesson and S. Andersson-Engels. Theoretical analysis of transurethral laser-induced thermotherapy for treatment of benign prostatic hyperplasia. evaluation of a water-cooled applicator. *Physics In Medicine and Biology*, 41(3):445-463, 1996.
Number of citations: 9
124. K. Svanberg, D. L. Liu, I. Wang, S. Andersson-Engels, U. Stenram, and S. Svanberg. Photodynamic therapy using intravenous delta-aminolaevulinic acid-induced protoporphyrin ix sensitisation in experimental hepatic tumours in rats. *British Journal of Cancer*, 74(10):1526-1533, 1996.
Number of citations: 19
125. C. af Klinteberg, C. Lindquist, A. Pifferi, R. Berg, S. Andersson-Engels, and S. Svanberg. Diffusely scattered femtosecond white light examination of breast tissue. *Medical and Biological Applications, Proc. OSA Trends in Optics and Photonics*, 6:30-35, 1996.
Number of citations: 9
126. C. Lindquist, S. Pifferi, A. Andersson-Engels, R. Berg, and S. Svanberg. Reconstruction of diffuse photon density wave interference for detection of small inhomogeneities in turbid media. *Advances in Optical Imaging and Photon Migration, Proc. OSA Trends in Optics and Photonics*, 2:148-151, 1996.
Number of citations: not in Google Scholars
127. A.M.K. Nilsson, R. Berg, and S. Andersson-Engels. Measurements of the optical properties of tissue in conjunction with photodynamic therapy. *Biomedical Optical Spectroscopy and Diagnostics, Proc. OSA Trends in Optics and Photonics*, 3:234-244, 1996.
Number of citations: not in Google Scholars
128. A. Pifferi, R. Berg, P. Taroni, and S. Andersson-Engels. Fitting of time-resolved curves with a Monte-Carlo model. *Advances in Optical Imaging and Photon Migration, Proc. TOPS Trends in Optics and Photonics*, 2:311-314, 1996.
Number of citations: not in Google Scholars

129. D. L. Liu, I. Wang, S. Andersson-Engels, C. H. Hakansson, U. Stenram, and K. Svanberg. Intra-operative laser-induced photodynamic therapy in the treatment of experimental hepatic tumours. *European Journal of Gastroenterology & Hepatology*, 7(11):1073-1080, 1995.
Number of citations: 6
130. A. M. K. Nilsson, R. Berg, and S. Andersson-Engels. Measurements of the optical-properties of tissue in conjunction with photodynamic therapy. *Applied Optics*, 34(21):4609-4619, 1995.
Number of citations: 38
131. M. S. Patterson, S. Andersson-Engels, B. C. Wilson, and E. K. Osei. Absorption-spectroscopy in tissue-simulating materials - a theoretical and experimental-study of photon paths. *Applied Optics*, 34(1):22-30, 1995.
Number of citations: 72
132. C. Sturesson and S. Andersson-Engels. A mathematical model for predicting the temperature distribution in laser-induced hyperthermia. experimental evaluation and applications. *Physics In Medicine and Biology*, 40(12):2037-2052, 1995.
Number of citations: 51
133. S. Andersson-Engels, R. Berg, K. Svanberg, and S. Svanberg. Multi-colour fluorescence imaging in connection with photodynamic therapy of δ -amino levulinic acid (ALA) sensitised skin malignancies. *Bioimaging*, 3(3):134-143, 1995.
Number of citations: 25
134. C. Sturesson, S. Andersson-Engels, and S. Svanberg. Laser-Induced Interstitial Thermotherapy, chapter A numerical model for the temperature increase in surface applied laser-induced thermotherapy with applications to tumour blood flow estimations, pages 157-173. SPIE Optical Engineering Press, Bellingham, USA, 1995.
Number of citations: 2
135. W. Alian, S. Andersson-Engels, K. Svanberg, and S. Svanberg. Laser-induced fluorescence studies of meso-tetra(hydroxyphenyl)chlorin in malignant and normal-tissues in rats. *British Journal of Cancer*, 70(5):880-885, 1994.
Number of citations: 37
136. S. Andersson-Engels, J. Johansson, and S. Svanberg. Medical diagnostic system based on simultaneous multispectral fluorescence imaging. *Applied Optics*, 33(34):8022-8029, 1994.
Number of citations: 47
137. S. Andersson-Engels, I. Rokahr, and J. Carlsson. Time-and wavelength-resolved spectroscopy in two-photon excited fluorescence microscopy. *Journal of Microscopy-Oxford*, 176:195-203, 1994.
Number of citations: 9
138. D. L. Liu, K. Svanberg, I. Wang, S. Andersson-Engels, U. Stenram, and S. Svanberg. Laser-induced ALA photodynamic therapy in the treatment of rat-liver tumor. *Hepatology*, 20(4):A279-A279, 1994.
Number of citations: 1
139. K. Svanberg, T. Andersson, D. Killander, I. Wang, U. Stenram, S. Andersson-Engels, R. Berg, J. Johansson, and S. Svanberg. Photodynamic therapy of nonmelanoma malignant tumors of the skin using topical delta-amino levulinic acid sensitization and laser irradiation. *British Journal of Dermatology*, 130(6):743-751, 1994.
Number of citations: 285
140. O. Trepte, I. Rokahr, S. Andersson-Engels, and K. Carlsson. Studies of porphyrin-containing specimens using an optical spectrometer connected to a confocal scanning laser microscope. *Journal of Microscopy-oxford*, 176:238-244, 1994.
Number of citations: 9
141. R. Berg, S. Andersson-Engels, C. af Klinteberg, S. Svanberg, and O. Jarlman. Optical imaging for medical diagnostics using femtosecond white light. *Advances in Optical Imaging and Photon Migration, Proc. OSA Trends in Optics and Photonics*, 21:126-128, 1994.
Number of citations: not in Google Scholars

142. S. Andersson-Engels, J. Ankerst, J. Johansson, K. Svanberg, and S. Svanberg. Laser-induced fluorescence in malignant and normal tissue of rats injected with benzoporphyrin derivative. *Photochemistry and Photobiology*, 57(6):978-983, 1993.
Number of citations: 27
143. S. Andersson-Engels, R. Berg, A. Persson, and S. Svanberg. Multispectral tissue characterization with time-resolved detection of diffusely scattered white-light. *Optics Letters*, 18(20):1697-1699, 1993.
Number of citations: 45
144. L. X. Liu, K. Svanberg, I. Wang, U. Stenram, S. Andersson-Engels, and S. Svanberg. Liver twin tumors - a new experimental hepatic tumor model in the investigation of various treatment strategies. *Medical Science Research*, 21(19):703-706, 1993.
Number of citations: 6
145. R. Berg, S. Andersson-Engels, and S. Svanberg. *Medical Optical Tomography: Functional Imaging and Monitoring*, chapter Time-resolved transillumination imaging, pages 397-424. SPIE Optical Engineering Press, Bellingham, USA, 1993.
Number of citations: 14
146. S. Andersson-Engels, R. Berg, and S. Svanberg. Effects of optical constants on time-gated transillumination of tissue and tissue-like media. *Journal of Photochemistry and Photobiology B-biology*, 16(2):155-167, 1992.
Number of citations: 25
147. S. Andersson-Engels, A. Gustafson, J. Johansson, U. Stenram, K. Svanberg, and S. Svanberg. Investigation of possible fluorophores in human atherosclerotic plaques. *Lasers in Life Science*, 5:1-11, 1992.
Number of citations: 13
148. S. Andersson-Engels and B.C. Wilson. In vivo fluorescence in clinical oncology: fundamental and practical issues. *Journal of Cellular Pharmacology*, 3:66-79, 1992.
Number of citations: 51
149. S. Andersson-Engels, R. Berg, J. Johansson, U. Stenram, K. Svanberg, and S. Svanberg. *Photodynamic Therapy: Basic Principles and Clinical Applications*, chapter Laser Spectroscopy in Medical Diagnostics, pages 387-424. Marcel Dekker Inc., New York, USA, 1992.
Number of citations: 3
150. S. Andersson-Engels, J. Johansson, K. Svanberg, and S. Svanberg. Fluorescence imaging and point measurements of tissue - applications to the demarcation of malignant-tumors and atherosclerotic lesions from normal tissue. *Photochemistry and Photobiology*, 53(6):807-814, 1991.
Number of citations: 116
151. P. Kauranen, S. Andersson-Engels, and S. Svanberg. Spatial-mapping of flame radical emission using a spectroscopic multicolor imaging-system. *Applied Physics B-photonics and Laser Chemistry*, 53(4):260-264, 1991.
Number of citations: 13
152. S. Andersson-Engels, Å. Elner, J. Johansson, S. Karlsson, L. Salford, L. Strömblad, K. Svanberg, and S. Svanberg. Clinical recording of laser-induced fluorescence spectra for evaluation of tumour demarcation feasibility in selected clinical specialities. *Lasers in Medical Science*, 6:415-424, 1991.
Number of citations: 40
153. S. Andersson-Engels, R. Berg, S. Svanberg, and O. Jarlman. Time-resolved transillumination for medical diagnostics. *Optics Letters*, 15(21):1179-1181, 1990.
Number of citations: 171
154. S. Andersson-Engels, J. Johansson, U. Stenram, K. Svanberg, and S. Svanberg. Malignant-tumor and atherosclerotic plaque diagnosis using laserinduced fluorescence. *IEEE Journal of Quantum Electronics*, 26(12):2207-2217, 1990.
Number of citations: 59

155. S. Andersson-Engels, J. Johansson, U. Stenram, K. Svanberg, and S. Svanberg. Time-resolved laser-induced fluorescence spectroscopy for enhanced demarcation of human atherosclerotic plaques. *Journal of Photochemistry and Photobiology B-biology*, 4(4):363-369, 1990.
Number of citations: 17
156. S. Andersson-Engels, J. Johansson, and S. Svanberg. The use of time-resolved fluorescence for diagnosis of atherosclerotic plaque and malignant tumors. *Spectrochimica Acta Part A-molecular and Biomolecular Spectroscopy*, 46(8):1203-1210, 1990.
Number of citations: 21
157. S. Andersson-Engels, J. Johansson, S. Svanberg, and K. Svanberg. Fluorescence diagnosis and photochemical treatment of diseased tissue using lasers II. *Analytical Chemistry*, 62(1):A19-A27, 1990.
Number of citations: 17
158. S. Andersson-Engels, J. Johansson, K. Svanberg, and S. Svanberg. Fluorescence diagnosis and photochemical treatment of diseased tissue using lasers: Part I. *Biochim. Clin.*, 14:936-942, 1990.
Number of citations: not in Google Scholars
159. S. Andersson-Engels, J. Johansson, K. Svanberg, and S. Svanberg. Fluorescence diagnosis and photochemical treatment of diseased tissue using lasers: Part II. *Biochim. Clin.*, 14:1043-1051, 1990.
Number of citations: not in Google Scholars
160. S. Andersson-Engels, J. Ankerst, A. Brun, A. Elner, A. Gustafson, J. Johansson, S. E. Karlsson, D. Killander, E. Kjellén, E. Lindstedt, S. Montán, L. G. Salford, B. Simonsson, U. Stenram, L. G. Strömblad, K. Svanberg, and S. Svanberg. Tissue diagnostics using laser-induced fluorescence. *Berichte Der Bunsen-gesellschaft-physical Chemistry Chemical Physics*, 93(3):335-342, 1989.
Number of citations: 1
161. S. Andersson-Engels, J. Johansson, S. Svanberg, and K. Svanberg. Fluorescence diagnosis and photochemical treatment of diseased tissue using lasers I. *Analytical Chemistry*, 61(24):A1367-A1373, 1989.
Number of citations: 13
162. S. Andersson-Engels, J. Ankerst, J. Johansson, K. Svanberg, and S. Svanberg. Tumour marking properties of different haematoporphyrins and tetrasulfonated phthalocyanine - a comparison. *Lasers in Medical Science*, 4:115-123, 1989.
Number of citations: 12
163. S. Andersson-Engels, A. Brun, E. Kjellén, L.G. Salford, L.-G. Strömblad, K. Svanberg, and S. Svanberg. Identification of brain tumours in rats using laser-induced fluorescence and haematoporphyrin derivative. *Lasers in Medical Science*, 4:241-249, 1989.
Number of citations: 11
164. S. Andersson-Engels, A. Gustafson, J. Johansson, U. Stenram, K. Svanberg, and S. Svanberg. Laser-induced fluorescence used in localizing atherosclerotic lesions. *Lasers in Medical Science*, 4:171-181, 1989.
Number of citations: 15
165. S. Andersson-Engels, J. Ankerst, S. Montán, K. Svanberg, and S. Svanberg. Aspects of tumour demarcation in rats by means of laser-induced fluorescence and haematoporphyrin derivatives. *Lasers in Medical Science*, 3:239-248, 1988.
Number of citations: 6
166. P. S. Andersson, S. Montán, T. Persson, S. Svanberg, S. Tapper, and S. E. Karlsson. Fluorescence endoscopy instrumentation for improved tissue characterization. *Medical Physics*, 14(4):633-636, 1987.
Number of citations: 14
167. P. S. Andersson, S. Montán, and S. Svanberg. Multi-spectral system for medical fluorescence imaging. *IEEE Journal of Quantum Electronics*, 23(10):1798-1805, 1987.
Number of citations: 57

168. P. S. Andersson, S. Montán, and S. Svanberg. Remote sample characterization based on fluorescence monitoring. *Applied Physics B-photonics and Laser Chemistry*, 44(1):19-28, 1987.
Number of citations: 5
169. P.S. Andersson, A. Gustafson, U. Stenram, K. Svanberg, and S. Svanberg. Diagnosis of arterial atherosclerosis using laser-induced fluorescence. *Lasers in Medical Science*, 2:261-266, 1987.
Number of citations: 25
170. P. Andersson, E. Kjellén, S. Montán, K. Svanberg, and S. Svanberg. Autofluorescence of various rodent tissues and human skin tumour samples. *Lasers in Medical Science*, 2:41-49, 1987.
Number of citations: 24

Papers in conference proceedings
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Referenser

- [1] Haynes P. H. Cheng, Pontus Svenmarker, Haiyan Xie, Peter Tidemand-Lichtenberg, Ole B. Jensen, Niels Bendsoe, Katarina Svanberg, Paul Michael Petersen, Christian Pedersen, Stefan Andersson-Engels, and Peter E. Andersen. Autofluorescence of pigmented skin lesions using a pulsed uv laser with synchronized detection: clinical results. In J Popp, VV Tuchin, and DL Matthews, editors, *BIOPHOTONICS: PHOTONIC SOLUTIONS FOR BETTER HEALTH CARE II*, volume 7715 of *Proceedings of SPIE-The International Society for Optical Engineering*, pages 77151K–1, 2010. Conference on Biophotonics - Photonic Solutions for Better Health Care II, Brussels, BELGIUM, APR 12-16, 2010.
- [2] N. Haj-Hosseini, J. Richter, S. Andersson-Engels, and K. Wardell. Photobleaching behavior of protoporphyrin ix during 5-aminolevulinic acid marked glioblastoma detection. In N Kollias, B Choi, H Zeng, RS Malek, BJB Wong, JFR Ilgner, KW Gregory, GJ Tearney, L Marcu, H Hirschberg, and SJ Madsen, editors, *PHOTONIC THERAPEUTICS AND DIAGNOSTICS V*, volume 7161 of *Proceedings of SPIE-The International Society for Optical Engineering*, 2009. Conference on Photonic Therapeutics and Diagnostics V, San Jose, CA, JAN 24-26, 2009.
- [3] S. Andersson-Engels, J. Axelsson, A. Johansson, J. Johansson, S. Svanberg, and T. Svensson. Time-of-flight laser spectroscopy in biomedical diagnostics. In *AOE 2007: ASIA OPTICAL FIBER COMMUNICATION & OPTOELECTRONIC EXPOSITION & CONFERENCE, CONFERENCE PROCEEDINGS*, pages 236–238, 2008. Asia Optical Fiber Communication and Optoelectronic Exposition and Conference, Shanghai, PEOPLES R CHINA, OCT 17-19, 2007.
- [4] N. Haj-Hosseini, S. Andersson-Engels, and K. Wardell. Evaluation of a fiber-optic based pulsed laser system for fluorescence spectroscopy. In A Katashev, Y Dekhtyar, and J Spigulis, editors, *14TH NORDIC-BALTIC CONFERENCE ON BIOMEDICAL ENGINEERING AND MEDICAL PHYSICS*, volume 20 of *IFMBE Proceedings*, pages 363–366, 2008. 14th Nordic-Baltic Conference an Biomedical Engineering and Medical Physics, Riga, LATVIA, JUN 16-20, 2008.
- [5] J. Thomsen, N. Bendsoe, K. Svanberg, S. Andersson-Engels, T. M. Jorgensen, L. Thrane, H. E. Larsen, F. Pedersen, and P. E. Andersen. Optical doppler tomography for monitoring vascularization during photodynamic therapy of skin cancer lesions. In J Popp, W Drexler, VV Tuchin, and DL Matthews, editors, *BIOPHOTONICS: PHOTONIC SOLUTIONS FOR BETTER HEALTH CARE*, volume 6991 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, page 699118, 2008. Conference on Biophotonics - Photonic Solution for Better Health Care, Strasbourg, FRANCE, APR 08-10, 2008.
- [6] Dimitris Gorpas, Kostas Politopoulos, Dido Yova, and Stefan Andersson-Engels. Data fitting and image fine-tuning approach to solve the inverse problem in fluorescence molecular imaging. In DL Farkas, DV Nicolau, and RC Leif, editors, *IMAGING, MANIPULATION, AND ANALYSIS OF BIOMOLECULES, CELLS, AND TISSUES VI*, volume 6859 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, page 68591H, 2008. Conference on Imaging, Manipulation and Analysis of Biomolecules, Cells, and Tissues VI, San Jose, CA, JAN 21-23, 2008.
- [7] Michail A. Ilias, Johan Richter, Frida Westermark, Martin Brantmark, Stefan Andersson-Engels, and Karin Wardell. Evaluation of a fiber-optic fluorescence spectroscopy system to assist neurosurgical tumor resections. In CD Depeursinge, editor, *NOVEL OPTICAL INSTRUMENTATION FOR BIOMEDICAL APPLICATIONS III*, volume 6631 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, page 66310W, 2007. Conference on Novel Optical Instrumentation for Biomedical Applications III, Munich, GERMANY, JUN 17-19, 2007.
- [8] Jesper Holm, Ole Bjarlin Jensen, Bernd Sumpf, Goetz Erbert, Stefan Andersson-Engels, Peter E. Andersen, and Paul Michael Petersen. Novel low-loss 3-element ring resonator for second-harmonic generation of 808nm into 404nm using periodically poled ktp. In PE Powers, editor, *Nonlinear Frequency Generation and Conversion: Materials, Devices, and Applications VI*, volume 6455 of

- PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, page 645504, 2007. Conference on Nonlinear Frequency Generation and Conversion - Materials, Devices, and Applications VI, San Jose, CA, JAN 23-24, 2007.
- [9] Ann Johansson, Johan Axelsson, Johannes Swartling, Thomas Johansson, Sara Palsson, Johan StenSSon, Margret Einarsdottir, Katarina Svanberg, Niels Bendsoe, Karl Mikael Kalkner, Sten Nilsson, Sune Svanberg, and Stefan Andersson-Engels. Interstitial photodynamic therapy for primary prostate cancer incorporating realtime treatment dosimetry. In D Kessel, editor, *Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XVI*, volume 6427 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, page 64270O, 2007. Conference on Optical Methods for Tumor Treatment and Detection - Mechanisms and Techniques in Photodynamic Therapy XVI, San Jose, CA, JAN 20-21, 2007.
- [10] Jenny Svensson, Ann Johansson, Niels Bendsoe, Susanna Grafe, Tilmann Trebst, Stefan Andersson-Engels, and Katarina Svanberg. Pharmacokinetic study of a systemically administered novel liposomal temoporfin formulation in an animal tumor model. In D Kessel, editor, *Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XVI*, volume 6427 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, page 64270T, 2007. Conference on Optical Methods for Tumor Treatment and Detection - Mechanisms and Techniques in Photodynamic Therapy XVI, San Jose, CA, JAN 20-21, 2007.
- [11] J. Axelsson, J. Svensson, and S. Andersson-Engels. Prior information in fluorescence molecular tomography based on multispectral fluorescence emission - art. no. 64340d. In B Chance, RR Alfano, BJ Tromberg, M Tamura, and EM SevickMuraca, editors, *Optical Tomography and Spectroscopy of Tissue VII*, volume 6434 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 64340D–1, 2007. Conference on Optical Tomography and Spectroscopy of Tissue VII, San Jose, CA, JAN 21-24, 2007.
- [12] J. Svensson, J. Axelsson, A. Johansson, N. Bendsoe, K. Svanberg, and S. Andersson-Engels. Multispectral fluorescence imaging for tumor detection and molecular biology. In *2006 IEEE LEOS Annual Meeting Conference Proceedings, Vols 1 and 2*, IEEE Lasers and Electro-Optics Society (LEOS) Annual Meeting, pages 227–228, 2006. 19th Annual Meeting of the IEEE-Lasers-and-Electro-Optics-Society, Montreal, CANADA, OCT 29-NOV 02, 2006.
- [13] A. Johansson, J. Svensson, S. Andersson-Engels, N. Bendsoe, K. Svanberg, I. Bigio, E. Alexandratou, M. Kyriazi, D. Yova, S. Graefe, and T. Trebst. mthpc pharmacokinetics following topical administration. In GL Cote and AV Priezzhev, editors, *Optical Diagnostics and Sensing VI*, volume 6094 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, page 60940C, 2006. Conference on Optical Diagnostics and Sensing VI, San Jose, CA, JAN 24-25, 2006.
- [14] J Svensson, A Johansson, K Svanberg, and S Andersson-Engels. Tissue temperature monitoring during interstitial photodynamic therapy. In TP Ryan, editor, *Thermal Treatment of Tissue: Energy Delivery and Assessment III*, volume 5698 of *LECTURE NOTES IN COMPUTER SCIENCE*, pages 126–136, 2005. Conference on Treatment of Tissue: Energy Delivery and Assessment III, San Jose, CA, JAN 23-24, 2005.
- [15] A Johansson, MS Thompson, T Johansson, N Bendsoe, K Svanberg, S Svanberg, and S Andersson-Engels. System for integrated interstitial photodynamic therapy and dosimetric monitoring. In D Kessel, editor, *Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XIV*, volume 5689 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 130–140, 2005. Conference on Optical Methods for Tumor Treatment and Detection - Mechanisms and Techniques in Photodynamic Therapy XIV, San Jose, CA, JAN 22-23, 2005.
- [16] J Swartling, D Bengtsson, K Terike, J Svensson, and S Andersson-Engels. Estimation of depth of fluorescing lesions in tissue from changes in fluorescence spectra. In B Chance, RR Alfano, BJ Tromberg, and EM SevickMuraca, editors, *Optical Tomography and Spectroscopy of Tissue VI*, volume 5693 of *LECTURE NOTES IN COMPUTER SCIENCE*, pages 225–231, 2005. Conference on Optical Tomography and Spectroscopy of Tissue VI, San Diego, CA, JAN 23-26, 2005.

- [17] L Thrane, MH Frosz, D Levitz, TM Jorgensen, CB Andersen, PR Hansen, J Valanciunaite, J Swartling, S Andersson-Engels, A Tycho, HT Yura, and PE Andersen. Extraction of tissue optical properties from optical coherence tomography images for diagnostic purposes. In VV Tuchin, editor, *Saratov Fall Meeting 2004: Optical Technologies in Biophysics and Medicine VI*, volume 5771 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 139–150, 2005. 2004 Saratov Fall Meeting, Saratov, RUSSIA, SEP 21-24, 2004.
- [18] J Swartling, A Pifferi, E Giambattistelli, E Chikoidze, A Torricelli, P Taroni, M Andersson, A Nilsson, and S Andersson-Engels. Rigorous characterization of time-resolved diffuse spectroscopy systems for measurements of absorption and scattering properties using solid phantoms. In DA Boas, editor, *PHOTON MIGRATION AND DIFFUSE-LIGHT IMAGING*, volume 5138 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 80–87, 2003. Conference on Photon Migration and Diffuse-Light Imaging, MUNICH, GERMANY, JUN 22-23, 2003.
- [19] A Pifferi, J Swartling, E Giambattistelli, E Chikoidze, A Torricelli, P Taroni, M Andersson, A Nilsson, and S Andersson-Engels. Multi-distance optical characterization of the female breast by time-resolved diffuse spectroscopy. In DA Boas, editor, *PHOTON MIGRATION AND DIFFUSE-LIGHT IMAGING*, volume 5138 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 6–11, 2003. Conference on Photon Migration and Diffuse-Light Imaging, MUNICH, GERMANY, JUN 22-23, 2003.
- [20] S Andersson-Engels, A Johansson, T Johansson, S Palsson, M Soto Thompson, S Svanberg, N Bendsoe, U Stenram, and K Svanberg. Integrated system for interstitial photodynamic therapy. In RW Steiner, editor, *THERAPEUTIC LASER APPLICATIONS AND LASER-TISSUE INTERACTIONS*, volume 5142 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 42–49, 2003. Conference on Therapeutic Laser Applications and Lasers-Tissue Interactions, MUNICH, GERMANY, JUN 24-25, 2003.
- [21] LK Jensen, L Thrane, PE Andersen, A Tycho, F Pedersen, S Andersson-Engels, N Bendsoe, S Svanberg, and K Svanberg. Optical coherence tomography in clinical examination of non-pigmented skin malignancies. In W Drexler, editor, *OPTICAL COHERENCE TOMOGRAPHY AND COHERENCE TECHNIQUES*, volume 5140 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 160–167, 2003. Optical Coherence Tomography and Coherence Techniques Conference, MUNICH, GERMANY, JUN 22-24, 2003.
- [22] MJ DeWeert, J Oyama, E McLaughlin, E Jacobson, J Hakansson, GS Bignami, U Gustafsson, P Troy, V Poskiene, K Kriukelyte, R Ziobakiene, A Vaitkuviene, S Palsson, MS Thompson, U Stenram, S Andersson-Engels, S Svanberg, and K Svanberg. Analysis of spatial variability in hyperspectral imagery of the uterine cervix in vivo. In RM Levenson, GH Bearman, and A MahadevanJansen, editors, *SPECTRAL IMAGING: INSTRUMENTATION, APPLICATIONS, AND ANALYSIS II*, volume 4959 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 67–76, 2003. Conference on Spectral Imaging - Instrumentation, Applications and Analysis II, SAN JOSE, CA, JAN 26, 2003.
- [23] J Svensson, A Ralsgard, T Johansson, and S Andersson-Engels. Tissue temperature measurements during interstitial laser therapy using cr³⁺-doped crystals at the fiber tip. In RW Steiner, editor, *THERAPEUTIC LASER APPLICATIONS AND LASER-TISSUE INTERACTIONS*, volume 5142 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 30–41, 2003. Conference on Therapeutic Laser Applications and Lasers-Tissue Interactions, MUNICH, GERMANY, JUN 24-25, 2003.
- [24] S Andersson-Engels, N Bendsoe, T Johansson, S Palsson, MS Thompson, U Stenram, K Svanberg, and S Svanberg. Integrated system for interstitial photodynamic therapy. In J Spigulis, J Teteris, M Ozolinsh, and A Lulis, editors, *ADVANCED OPTICAL DEVICES, TECHNOLOGIES, AND MEDICAL APPLICATIONS*, volume 5123 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 293–302, 2002. Conference on Advanced Optical Devices, Technologies, and Medical Applications, RIGA, LATVIA, AUG 19-22, 2002.
- [25] PS Jensen, J Bak, PE Andersen, and S Andersson-Engels. Fourier transform infrared spectroscopy of aqueous solutions using optical subtraction. In AV Priezzhev and GL Cote, editors, *OPTICAL DIAGNOSTICS AND SENSING OF BIOLOGICAL FLUIDS AND GLUCOSE AND CHOLESTEROL*

- MONITORING II*, volume 4624 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 150–159, 2002. Conference on Optical Diagnostics and Sensing of Biological Fluids and Glucose and Cholesterol Monitoring II, SAN JOSE, CA, JAN 23-24, 2002.
- [26] R Paeglis, M Ozolinsh, P Cikmacs, and S Andersson-Engels. Eye model with controllable lens scattering. In AC Boccara and AA Oraevsky, editors, *HYBRID AND NOVEL IMAGING AND NEW OPTICAL INSTRUMENTATION FOR BIOMEDICAL APPLICATIONS*, volume 4434 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 233–238, 2001. Conference on Hybrid and Novel Imaging and New Optical Instrumentation for Biomedical Applications, MUNICH, GERMANY, JUN 18-21, 2001.
- [27] E Samsøe, PM Petersen, PE Andersen, S Andersson-Engels, and K Svanberg. A novel diode laser system for photodynamic therapy. In R Birngruber and H van den Bergh, editors, *LASER-TISSUE INTERACTIONS, THERAPEUTIC APPLICATIONS, AND PHOTODYNAMIC THERAPY*, volume 4433 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 134–139, 2001. Conference on Laser-Tissue Interactions, Therapeutic Applications, and Photodynamic Therapy, MUNICH, GERMANY, JUN 18-21, 2001.
- [28] M Stenberg, MS Thompson, T Johansson, S Palsson, C af Klinteberg, S Andersson-Engels, U Stenram, S Svanberg, and K Svanberg. Interstitial photodynamic therapy - diagnostic measurements and treatment in rat malignant experimental tumours. In IJ Bigio, GJ Muller, GJ Puppels, RW Steiner, and K Svanberg, editors, *OPTICAL BIOPSY AND TISSUE OPTICS*, volume 4161 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 151–157, 2000. Conference on Optical Biopsy and Tissue Optics, AMSTERDAM, NETHERLANDS, JUL 05-06, 2000.
- [29] JS Dam, CB Pedersen, PE Fabricius, and S Andersson-Engels. Fiber optic system for in vivo real-time determination of tissue optical properties from steady-state diffuse reflectance measurements. In S Andersson-Engels and JG Fujimoto, editors, *PHOTON MIGRATION, DIFFUSE SPECTROSCOPY AND OPTICAL COHERENCE TOMOGRAPHY: IMAGING AND FUNCTIONAL ASSESSMENT*, volume 1 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 103–109, 2000. Conference on Photon Migration, Diffuse Spectroscopy, and Optical Coherence Tomography, AMSTERDAM, NETHERLANDS, JUL 06-08, 2000 SPIE Proc. 4160, p103-109 (2000).
- [30] K Svanberg, C af Klinteberg, A Nilsson, I Wang, S Andersson-Engels, and S Svanberg. Laser-based spectroscopic methods in tissue characterization. In RR Alfano, editor, *ADVANCES IN OPTICAL BIOPSY AND OPTICAL MAMMOGRAPHY*, volume 838 of *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*, pages 123–129, 1998. Conference on Advances in Optical Biopsy and Optical Mammography, NEW YORK, NEW YORK, APR 24-25, 1997.
- [31] G Filippidis, G Zacharakis, A Katsamouris, M Kouktzela, S Montan, S Andersson-Engels, and TG Papazoglou. Effect of liquid nitrogen and formalin-based conservation in the in-vitro measurement of laser-induced fluorescence of peripheral vascular tissue. In IJ Bigio, H Schneckenburger, J Slavik, L Svanberg, and PM Viallet, editors, *OPTICAL BIOPSIES AND MICROSCOPIC TECHNIQUES II*, volume 3197 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 27–31, 1997. Conference on Optical Biopsies and Microscopic Techniques II, SAN REMO, ITALY, SEP 05-08, 1997.
- [32] AMK Nilsson, GW Lucassen, W Verkruijsse, S Andersson-Engels, and MJC van Gemert. Optical properties of human whole blood - changes due to slow heating. In HJ Albrecht, GP Delacretaz, TH Meier, RW Steiner, LO Svaasand, and A Katzir, editors, *LASER-TISSUE INTERACTION AND TISSUE OPTICS II, PROCEEDINGS OF*, volume 2923 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 24–34, 1996. Conference on Laser-Tissue Interaction and Tissue Optics II, VIENNA, AUSTRIA, SEP 07-10, 1996.
- [33] C af Klinteberg, AMK Nilsson, I Wang, S Andersson-Engels, S Svanberg, and K Svanberg. Laser-induced fluorescence diagnostics of basal cell carcinomas of the skin following topical ala application. In IJ Bigio, WS Grundfest, H Schneckenburger, K Svanberg, PM Viallet, and A Katzir, editors, *OPTICAL BIOPSIES AND MICROSCOPIC TECHNIQUES, PROCEEDINGS OF*, volume 2926

- of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 32–40, 1996. Conference on Optical Biopsies and Microscopic Techniques, VIENNA, AUSTRIA, SEP 07-09, 1996.
- [34] K Svanberg, I Wang, R Rydell, A Elner, J Wennberg, LP Clemente, E Cardoso, R Pratas, MP Clemente, S Andersson-Engels, and S Svanberg. Fluorescence diagnostics of head and neck cancer utilizing oral administration of delta-amino levulinic acid. In DA Cortese, editor, *5TH INTERNATIONAL PHOTODYNAMIC ASSOCIATION BIENNIAL MEETING*, volume 2371 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 129–141, 1995. 5th International-Photodynamic-Association Biennial Meeting, AMELIA ISLAND, FL, SEP 21-24, 1994.
- [35] I Wang, K Svanberg, S Andersson-Engels, R Berg, and S Svanberg. Photodynamic therapy of non-melanoma skin malignancies with topical delta-amino levulinic acid - diagnostic measurements. In DA Cortese, editor, *5TH INTERNATIONAL PHOTODYNAMIC ASSOCIATION BIENNIAL MEETING*, volume 2371 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 243–252, 1995. 5th International-Photodynamic-Association Biennial Meeting, AMELIA ISLAND, FL, SEP 21-24, 1994.
- [36] K Svanberg, LP Clemente, MP Clemente, I Wang, T Warloe, S Andersson-Engels, R Berg, J Moan, Q Peng, and S Svanberg. Pharmacokinetic studies of delta-amino levulinic acid-induced protoporphyrin ix build-up in some malignant tumours. In RR Alfano and A Katzir, editors, *ADVANCES IN LASER AND LIGHT SPECTROSCOPY TO DIAGNOSE CANCER AND OTHER DISEASES II, PROCEEDINGS OF*, volume 2387 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 30–42, 1995. Conference on Advances in Laser and Light Spectroscopy to Diagnose Cancer and Other Diseases II, SAN JOSE, CA, FEB 07-08, 1995.
- [37] AMK Nilsson, CS von Holstein, S Andersson-Engels, R Willen, B Walther, and K Svanberg. Clinical detection studies of barrett’s metaplasia and oesophageal adenocarcinoma by means of laser-induced fluorescence. In R Cubeddu, SR Mordon, K Svanberg, and A Katzir, editors, *OPTICAL BIOPSIES, PROCEEDINGS OF*, volume 2627 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 49–56, 1995. Optical Biopsies Conference, BARCELONA, SPAIN, SEP 14-15, 1995.
- [38] C af Klinteberg, R Berg, C Lindquist, S Andersson-Engels, and S Svanberg. Diffusely scattered femtosecond white light examination of breast tissue in vitro and in vivo. In B Chance, DT Delpy, GJ Muller, and A Katzir, editors, *PHOTON PROPAGATION IN TISSUES, PROCEEDINGS OF*, volume 2626 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 149–157, 1995. Conference on Photon Propagation in Tissues, BARCELONA, SPAIN, SEP 13-14, 1995.
- [39] I Rokahr, S Andersson-Engels, S Svanberg, MA d’Hallewin, L Baert, I Wang, and K Svanberg. Optical detection of human urinary bladder carcinoma utilising tissue autofluorescence and protoporphyrin ix-induced fluorescence following low-dose ala instillation. In R Cubeddu, SR Mordon, K Svanberg, and A Katzir, editors, *OPTICAL BIOPSIES, PROCEEDINGS OF*, volume 2627 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 2–12, 1995. Optical Biopsies Conference, BARCELONA, SPAIN, SEP 14-15, 1995.
- [40] I Rokahr and S Andersson-Engels. Two-photon excited fluorescence microscopy combined with spectral and time-resolved measurements for fluorophore identification. In T Wilson and CJ Cogswell, editors, *THREE-DIMENSIONAL MICROSCOPY: IMAGE ACQUISITION AND PROCESSING II*, volume 2412 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 157–164, 1995. 3-Dimensional Microscopy - Image Acquisition and Processing II Conference, SAN JOSE, CA, FEB 09-10, 1995.
- [41] O Trepte, I Rokahr, and S Andersson-Engels. Optical spectrometer for a confocal scanning laser microscope with applications in porphyrin-containing specimens. In T Wilson and CJ Cogswell, editors, *THREE-DIMENSIONAL MICROSCOPY: IMAGE ACQUISITION AND PROCESSING II*, volume 2412 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 131–137, 1995. 3-Dimensional Microscopy - Image Acquisition and Processing II Conference, SAN JOSE, CA, FEB 09-10, 1995.

- [42] C Lindquist, R Berg, and S Andersson-Engels. Numerical diffusion modelling of interfering photon density waves for optical mammography. In S Avrillier, B Chance, GJ Muller, AV Priezzhev, VV Tuchin, and A Katzir, editors, *PHOTON TRANSPORT IN HIGHLY SCATTERING TISSUE, PROCEEDINGS OF*, volume 2326 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 31–40, 1995. Conference on Photon Transport in Highly Scattering Tissue, LILLE, FRANCE, SEP 06-08, 1994.
- [43] AMK Nilsson, R Berg, and S Andersson-Engels. Integrating sphere measurements of tissue optical properties for accurate pdt dosimetry. In HJ Albrecht, GP Delacretaz, TH Meier, RW Steiner, LO Svaasand, MJC vanGemert, and A Katzir, editors, *LASER INTERACTION WITH HARD AND SOFT TISSUE II, PROCEEDINGS OF*, volume 2323 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 47–57, 1995. Conference on Laser Interaction with Hard and Soft tissue II, LILLE, FRANCE, SEP 06-09, 1994.
- [44] S Svanberg, S Andersson-Engels, R Berg, S Borgström, J Carlsson, B Erlandsson, Hertz HM, J Larsson, A Persson, W Persson, SG Pettersson, T Starczewski, C Tillman, CG Wahlström, R Zerneck, K Herrlin, C Olsson, H Pettersson, G Svahn, P Balcou, A l’Huillier, P Salieres, MHR Hutchinson, JWG Tisch, and RA Smith. Applications of terawatt lasers. In L Bloomfield, T Gallagher, and D Larson, editors, *LASER SPECTROSCOPY - XITH INTERNATIONAL CONFERENCE*, number 290 in AIP CONFERENCE PROCEEDINGS, pages 264–269, 1994. 11th International Conference on Laser Spectroscopy, HOT SPRINGS, VA, JUN, 1993.
- [45] R Berg, S Andersson-Engels, O Jarlman, and S Svanberg. Time-gated viewing studies on tissue-like phantoms. In R Cubeddu, S Svanberg, H VandenBergh, and A Katzir, editors, *PROCEEDINGS OF OPTICAL BIOPSY*, volume 2081 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 137–146, 1994. Conference on Optical Biopsy, BUDAPEST, HUNGARY, SEP 04-05, 1993.
- [46] K Svanberg, S Andersson-Engels, L Baert, E Bak Jensen, R Berg, A Brun, S Collén, I Idvall, MA d’Hallewin, C Ingvar, J Johansson, SE Karlsson, R Lundgren, LG Salford, U Stenram, LG Strömblad, S Svanberg, and I Wang. Tissue characterization in some clinical specialities utilizing laser-induced fluorescence. In RR Alfano and A Katzir, editors, *ADVANCES IN LASER AND LIGHT SPECTROSCOPY TO DIAGNOSE CANCER AND OTHER DISEASES*, volume 2135 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 2–15, 1994. Conference on Advances in Laser and Light Spectroscopy to Diagnose Cancer and Other Diseases, LOS ANGELES, CA, JAN 23-24, 1994.
- [47] I Wang, S Andersson-Engels, I Idvall, C Ingvar, and K Svanberg. In vitro laser-induced fluorescence studies of breast-tumour following low-dose injection of porphyrin. In RR Alfano and A Katzir, editors, *ADVANCES IN LASER AND LIGHT SPECTROSCOPY TO DIAGNOSE CANCER AND OTHER DISEASES*, volume 2135 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 139–146, 1994. Conference on Advances in Laser and Light Spectroscopy to Diagnose Cancer and Other Diseases, LOS ANGELES, CA, JAN 23-24, 1994.
- [48] S Andersson-Engels, R Berg, O Jarlman, and S Svanberg. Effects of optical-constants on the time-gated laser-light transillumination of tissue. In P Spinelli, M Dalfante, and R Marchesini, editors, *PHOTODYNAMIC THERAPY AND BIOMEDICAL LASERS*, volume 1011 of *INTERNATIONAL CONGRESS SERIES*, pages 913–917, 1992. INTERNATIONAL CONF ON PHOTODYNAMIC THERAPY AND MEDICAL LASER APPLICATIONS, MILAN, ITALY, JUN 24-27, 1992.
- [49] S Andersson-Engels, R Berg, S Collén, J Johansson, SE Karlsson, R Lundgren, LG Salford, LG Strömblad, K Svanberg, and S Svanberg. In vivo fluorescence-spectra of malignant lesions in various clinical specialities. In P Spinelli, M Dalfante, and R Marchesini, editors, *PHOTODYNAMIC THERAPY AND BIOMEDICAL LASERS*, volume 1011 of *INTERNATIONAL CONGRESS SERIES*, pages 871–875, 1992. INTERNATIONAL CONF ON PHOTODYNAMIC THERAPY AND MEDICAL LASER APPLICATIONS, MILAN, ITALY, JUN 24-27, 1992.
- [50] K Svanberg, T Andersson, D Killander, S Andersson-Engels, R Berg, J Johansson, S Svanberg, and YL Yang. Photodynamic therapy of human skin malignancies and laser-induced fluorescence diagnostics utilizing photofrin and delta-amino levulinic acid. In P Spinelli, M Dalfante, and R Marchesini, editors, *PHOTODYNAMIC THERAPY AND BIOMEDICAL LASERS*, volume 1011 of

INTERNATIONAL CONGRESS SERIES, pages 436–440, 1992. INTERNATIONAL CONF ON PHOTODYNAMIC THERAPY AND MEDICAL LASER APPLICATIONS, MILAN, ITALY, JUN 24-27, 1992.

- [51] S Andersson-Engels, L Baert, R Berg, MA d'Hallawin, J Johansson, U Stenram, K Svanberg, and S Svanberg. Fluorescence characteristics of atherosclerotic plaques and malignant tumours. In TJ DOUGHERTY, editor, *PROCEEDINGS OF OPTICAL METHODS FOR TUMOR TREATMENT AND EARLY DIAGNOSIS : MECHANISMS AND TECHNIQUES*, volume 1426 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 31–43, 1991. CONF ON OPTICAL METHODS FOR TUMOR TREATMENT AND EARLY DIAGNOSIS : MECHANISMS AND TECHNIQUES, LOS ANGELES, CA, JAN 23-25, 1991.
- [52] R Berg, S Andersson-Engels, O Jarlman, and S Svanberg. Time-resolved transillumination for medical diagnostics. In B CHANCE, editor, *PROCEEDINGS OF TIME-RESOLVED SPECTROSCOPY AND IMAGING OF TISSUES*, volume 1431 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 110–119, 1991. CONF ON TIME-RESOLVED SPECTROSCOPY AND IMAGING OF TISSUES, LOS ANGELES, CA, JAN 23-24, 1991.
- [53] R Berg, S Andersson-Engels, O Jarlman, and S Svanberg. Tumor-detection using time-resolved light transillumination. In LO SVAASAND, editor, *FUTURE TRENDS IN BIOMEDICAL APPLICATIONS OF LASERS*, volume 1525 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 59–67, 1991. CONF ON FUTURE TRENDS IN BIOMEDICAL APPLICATIONS OF LASERS (SPIE/MEDTECH 91), BERLIN, GERMANY, MAY 24-25, 1991.
- [54] S Andersson-Engels, J Johansson, K Svanberg, and S Svanberg. Laser-induced fluorescence in medical diagnostics. In T DOUGHERTY, editor, *PROCEEDINGS OF PHOTODYNAMIC THERAPY : MECHANISMS II*, volume 1203 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 76–96, 1990. CONF ON PHOTODYNAMIC THERAPY : MECHANISMS 2, LOS ANGELES, CA, JAN 16-17, 1990.
- [55] S Andersson-Engels, J Johansson, and S Svanberg. Multicolor fluorescence imaging-system for tissue diagnostics. In LC SMITH, editor, *BIOIMAGING AND TWO-DIMENSIONAL SPECTROSCOPY*, volume 1205 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, pages 179–189, 1990. CONF ON BIOIMAGING AND TWO-DIMENSIONAL SPECTROSCOPY, LOS ANGELES, CA, JAN 18-19, 1990.

Contributions to Conference Organizations and Learned Societies by Stefan Andersson-Engels

- Guest Editor: Special section on Biophotonics Part 2
IEEE Journal of Selected Topics in Quantum Electronics
March/April 2012
- Guest Editor: Special section on Biophotonics Part 1
IEEE Journal of Selected Topics in Quantum Electronics
January/February 2012
- Program committee member: Optical Biopsy X
Photonics West - BIOS 2012
CONFERENCE BO207
San Fransisco, CA, USA
21-26 January 2012
- Subcommittee member: Biophotonics
IEEE Photonics 2011
Arlington, Virginia, USA
9-13 October, 2011
- Program committee member
Topical Problems in Biophotonics
St Petersburg - Nizhny Novgorod, Russia
16-22 July 2011
- Program committee member
European Conference on Biomedical Optics ECBO 2011
Medical Laser Applications and Laser-Tissue Interactions V
EB107
Munich, Germany
May 22-27, 2011
- Co-organizer and Program co-chair
Biophotonics summer school
Hven, Sweden
May 14-21, 2011
- Program committee member: Optical Biopsy IX
Photonics West - BIOS 2011
CONFERENCE BO206
San Fransisco, CA, USA
22-27 January 2011
- Member of OSA Member and Education Services Council
2011-2013
- Subcommittee member: Biophotonics
IEEE Photonics 2010
Denver, Colorado, USA
7-11 November, 2010
- Program committee member
Member of local organizing committee
Optics in Sweden
Lund, Sweden
19-20 October 2010
- Program committee member
Member of local organizing committee
Modern Trends in Basic and Applied laser Spectroscopy
Lund, Sweden
6-7 April 2010

- Guest Editor: Special section on Selected Topics in Biophotonics: Photodynamic Therapy and Optical Micromanipulation for Biophotonics
Journal of Biomedical Optics
Issue **15**(4), 2010
- Guest Editor: Special section on Biophotonics Part 2
IEEE Journal of Selected Topics in Quantum Electronics
Issue **16**(4), 2010
- Guest Editor: Special section on Biophotonics Part 1
IEEE Journal of Selected Topics in Quantum Electronics
Issue **16**(3), 2010
- Program committee member: Optical Biopsy VIII
Photonics West - BIOS 2010
San Francisco, CA, USA
January 23-28 2010
- Subcommittee co-chair Laser-tissue interactions
Laser Applications to Life Sciences LALS 2010
Oulu, Finland
June 9-11, 2010
- Subcommittee member: Biophotonics
IEEE Photonics 2009
Belek-Antalya, Turkey
4-8 October, 2009
- Subcommittee member Optical Bioimaging
Topical Problems in Biophotonics 2009
Nizhny Novgorod
July 19-24, 2009
- Subcommittee member: Therapeutic Laser Applications and Laser-Tissue Interactions IV
European Conference on Biomedical Optics ECBO 2009
June 14-18, 2009
Munich, Germany
- Co-organizer and Program co-chair
Biophotonics summer school
Hven, Sweden
June 6-13, 2009
- Editorial Board Member
Journal of Biophotonics
2008-
- Guest Editor: Special section on Selected Topics in Biophotonics: Diffuse Optics and Optical Molecular Imaging
Journal of Biomedical Optics
Issue **13**(4), 2008
- Guest Editor: Special section on Biophotonics Part 2
IEEE Journal of Selected Topics in Quantum Electronics
Issue **14**(1), 2008
- Member of OSA Member and Education Services Council
2008-2010
- Guest Editor: Special section on Biophotonics Part 1
IEEE Journal of Selected Topics in Quantum Electronics
Issue **13**(6), 2007

- Co-organizer and Program co-chair
Biophotonics summer school
Hven, Sweden
June 9-16, 2007
- General co-chair
European Conference on Biomedical Optics ECBO 2007
June 17-21, 2007
Munich, Germany
- Subcommittee member: Optics in Cancer Research
Biomedical Optics Topical Meeting
Fort Lauderdale, Florida, USA
March 19-22, 2006
- Editorial Board Member
Lasers in Medical Sciences
2006-2008
- Co-organizer and Program co-chair
Biophotonics summer school
Hven, Sweden
June 18-25, 2005
- Program co-chair
European Conference on Biomedical Optics ECBO 2005
June 12-16, 2005
Munich, Germany
- subcommittee member: Biomedical Optics Spectroscopy and Diagnostics
OSA Biomedical Topical Meeting
Miami Beach, Florida, USA
April 14-17, 2004
- Co-organizer and Program co-chair
Biophotonics summer school
Hven, Sweden
June 15-21, 2003
- Subcommittee chair: Diffuse Light Imaging
European Conference on Biomedical Optics ECBO 2003
Munich, , Germany
June 22-25, 2003
- Subcommittee co-chair: Photon Migration
Co-editor SPIE Volume 4431: Photon Migration, Optical Coherence Tomography, and Microscopy
European Conference on Biomedical Optics ECBO 2001
Munich, Germany
June 17-21, 2001
- Program co-chair
Gordon Conference on Lasers in Medicine and Biology
June 10-15, 2000
Connecticut College, New London, CT, USA
June 10-15, 2000
- Subcommittee Chair: Medical and Biological Applications
OSA CLEO/Europe
Nice, France
September 10-15, 2000
- Technical subcommittee member: New Concepts in Therapeutic Laser Applications
OSA Topical Meeting BIOMED
Miami Beach, USA
April 2-5 2000

- Subcommittee chair: Photon Migration
Co-editor SPIE Volume 4160: Photon Migration, Diffuse Spectroscopy, and Optical Coherence Tomography: Imaging and Functional Assessment
EBiOS 2000
Amsterdam, , Netherlands
July 4-8 2000
- Subcommittee Chair: Novel Biomedical Optical Spectroscopy, Imaging and Diagnostics
OSA CLEO/Europe
Munich, Germany
June 14-16 1999
- Subcommittee chair: Medical Applications of Lasers in Cardiology
Co-editor SPIE Volume 3564: Medical Applications of Lasers in Dermatology, Cardiology, Gynecology, Ophthalmology, and Dentistry II
BiOS'98
Stockholm, , Sweden
September 8-12 1998
- Subcommittee Chair: Medical and Biological Applications of Lasers
OSA CLEO/Europe
Glasgow, Scotland, United Kingdom
September 14-18, 1998
- Subcommittee member: Optical Biopsy
BiOS'97
San Remo, Italy
September 12-16 1997
- Subcommittee chair: Biomedical Optoelectronics in Clinical Chemistry and Biotechnology
Editor: Biomedical Optoelectronics in Clinical Chemistry and Biotechnology, Proceedings of SPIE Volume 2629
BiOS'95
Barcelona, Spain
September 12-16 1995

Recent presentations at Conferences by Stefan Andersson-Engels

2011

- **Meeting:** OSA 2011 Winter Leadership Meeting (Washington, DC, USA) **Date:** 2-4 February
- **Seminar:** Advances in Biomedical Optics Seminar Series (University of Pennsylvania, Philadelphia, USA) **Title:** Optical spectroscopy for tissue diagnostics and treatment control **Role:** Invited Speaker **Date:** 1 February 2011

2010

- **Conference:** Linneus Centre Meeting (Lund Laser Centre, Lund, Sweden) **Title:** Upconverting Nanoparticles for Bioimaging **Role:** Invited speaker **Date:** 3 December 2010
- **Meeting:** Neuro-engineering for navigation, intervention and implementation (Linköping, Sweden) **Title:** Fluorescence diagnostics during brain surgery **Role:** Participant **Date:** 29 October 2010
- **Conference:** Optics in Sweden (Lund, Sweden) **Role:** Organizing Committee **Date:** 19-20 October 2010
- **Conference:** Autumn School Biophysics & Bioelectrochemistry for Medicine: Basic Concepts, New Techniques and Application Perspective” (Vulcan, Romania) **Title:** Optical Imaging and Spectroscopy **Role:** Invited Speaker **Date:** 1-6 October 2010
- **Conference:** Biophotonics and Imaging Graduate Summer School (BIGSS, Burren, Ireland) **Title:** Fluorescence Imaging and Spectroscopy **Role:** Invited Speaker **Date:** 28 August to 1 September 2010
- **Conference:** Gordon Conference on Lasers in Medicine and Biology (Holderness, NH, USA) **Title:** Upconverting Nanoparticles for Bioimaging **Role:** Participants and poster presentation **Date:** 25-30 July 2010
- **Conference:** ESP Photobiology School (Brixen/Bressanone, Italy) **Title:** Biomedical Optics **Role:** Invited Speaker **Date:** 21-26 June 2010
- **Conference:** Laser Applications in Life Sciences (LALS2010, Oulo, Finland) **Title:** Optical spectroscopy for Biomedical Diagnostics and Treatment Control **Role:** Invited Speaker **Date:** 9-11 June 2010
- **Conference:** Neuro-engineering for navigation, intervention and implementation (Linköping, Sweden) **Title:** Fluorescence diagnostics during brain surgery **Role:** Participants **Date:** 3 June 2010
- **Conference:** Bioimaging Applications (Lund, Sweden) **Title:** Optical spectroscopy for Biomedical Diagnostics and Treatment Control **Role:** Invited Speaker **Date:** 25 May 2010
- **Conference:** Photonics Europe (Brussels, Belgium) **Title:** Optical spectroscopy for Biomedical Diagnostics and Treatment Control **Role:** Invited Speaker **Date:** 12-16 April 2010
- **Conference:** Modern Trends in Basic and Applied laser Spectroscopy (Lund, Sweden) **Role:** Session Chair **Date:** 6-7 April 2010
- **Conference:** OSA 2010 Winter Leadership Conference (Washington, DC, USA) **Role:** Participant **Date:** 10-13 February 2010

2009

- **Conference:** Optics Day 2009 (Kista, Sweden) **Title:** Optical Spectroscopy for Medical Diagnostics and Treatment Guidance **Role:** Plenary Presentation **Date:** 12 November 2009
- **Conference:** Annual Workshop of the Joint Research Center of Photonics (Hangzhou, China) **Title:** New Applications of Gold Nanorods in Medicine **Role:** Invited presentation **Date:** 7 November 2009
- **Conference:** Asia Communication and Photonics Conference and Exhibition ACP2009 (Shanghai, China) **Title:** Upconverting Luminescence Nanocrystals for Biomedical Applications **Role:** Invited Presenting **Date:** 5 November 2009

- **Conference:** Swedish Biomedical Engineering Workshop (Västerås, Sweden) **Title:** Optical Spectroscopy for Medical Diagnostics and Treatment Control **Role:** Invited Presentation **Date:** 28 September 2009
- **Conference:** International Symposium - Topical Problems of Biophotonics 2009 (Nizhny Novgorod - Samara - Nizhny Novgorod, Russia) **Title:** Laser Spectroscopy for Medical Treatment Control **Role:** Invited presentation **Date:** 22 June 2009
- **Conference:** Workshop at BRIGHTER European project meeting (Berlin, Germany) **Title:** Medical Fluorescence Imaging - Tutorial **Role:** Plenary Presentation **Date:** 26 June 2009
- **Conference:** European Conference on Biomedical Optics (Munich, Germany) **Title:** CUDA - GPU accelerated Monte Carlo simulations of photon migration in layered media **Role:** Poster Presentation **Date:** 15 June 2009
- **Conference:** International graduate summer school Biophotonics'09 (Hven, Sweden) **Title:** Biophotonics at Lund University Medical Laser Centre **Role:** Invited presentation **Date:** 6 June 2009
- **Conference:** Workshop NeuroTech 2009 (Linköping; Sweden) **Role:** Participant **Date:** 28-29 May 2009
- **Conference:** International symposium Bioelectrochemistry and Bioenergetics (Sibiu, Romania) **Title:** Upconverting Luminescence Nanocrystals for Biomedical Applications **Role:** Invited presentation **Date:** 11 May 2009
- **Conference:** International Spring School Biophysics & Bioelectrochemistry for Medicine (Cisnidoara, Romania) **Title:** Imaging of deep tissue structures using fluorescence dyes and upconverting nanocrystals **Role:** Invited presentation **Date:** 8 May 2009
- **Conference:** Seminars at Zhejiang University (Hangzhou, China) **Title:** Diode laser-based biophotonic spectroscopy **Role:** INvited presentation **Date:** 18 April 2009
- **Conference:** Seminars at Harbin Institute of Technology (Harbin, China) **Title:** Diode laser-based biophotonic spectroscopy **Role:** Invited presentation **Date:** 13 April 2009
- **Conference:** Seminars at Ferdinand Braun Gesellschaft (Berlin, Germany) **Title:** Diode-laser-based biophotonic spectroscopy **Role:** Invited presentation **Date:** 3 April 2009
- **Conference:** Lund Laser Centre Research and Strategy Workshop (Lund, Sweden) **Title:** Photobiophysics **Role:**Invited presentation **Date:** 5 March 2009
- **Conference:** European Conference on Biomedical Optics planning meeting (Munich, Germany) **Role:** Participant **Date:** 21 February 2009
- **Conference:** OSA Winter Leadership Conference (Washington DC, USA) **Role:** Participant **Date:** 5-6 February 2009

2008

- **Conference:** Lund University - AstraZeneca Meeting (Lund, Sweden) **Title:** Optical in situ Spectroscopy - in Tissue and Tablets **Role:**Invited presentation **Date:** 25 November 2008
- **Conference:** Photonics for Life (Brussels, Belgium) **Title:** Tutorial: Tissue Optics - Basic Principles and Practical Applications **Role:**Invited presentation **Date:** 17 November 2008
- **Conference:** EuPAT (Gothenburg, Sweden) **Title:** Diode laser-based process sensors **Role:**Invited presentation **Date:** 7 October 2008
- **Conference:** XV ISQE 2008 (Burgas, Bulgaria) **Title:** Biomedical Optical Spectroscopy in Photodynamic Therapy Dosimetry **Role:**Invited presentation **Date:** 15-18 September 2008
- **Conference:** International Seminar Series withing Lund Laser Centre (Lund, Sweden) **Title:** Optical Spectroscopy to Control Medical Therapy - Interstitial Photodynamic Therapy of Prostate Cancer **Role:**Invited presentation **Date:** 19 May 2008

- **Conference:** Photonics Europe (Strasbourg, France) **Title:** Optical Spectroscopy for Diagnostics and Interstitial Photodynamic Treatment Control **Role:**Invited presentation **Date:** 7-11 April 2008
- **Conference:** Per scientam ad saltuem aegroti (Växjö, Sweden) **Title:** Laserljus i Medicinens Tjänst (Popular science presentation) **Role:**Invited presentation **Date:** 27 March 2008
- **Conference:** Per scientam ad saltuem aegroti (Lund, Sweden) **Title:** Laserljus i Medicinens Tjänst (Popular science presentation) **Role:**Invited presentation **Date:** 26 March 2008
- **Conference:** Per scientam ad saltuem aegroti (Halmstad, Sweden) **Title:** Laserljus i Medicinens Tjänst (Popular science presentation) **Role:**Invited presentation **Date:** 25 March 2008
- **Conference:** Photonics West (San Jose, CA, USA) **Title:** Spectroscopy for Diagnostics and Interstitial Photodynamic Treatment Control **Role:**Invited presentation Hot Topic Session **Date:** 19-24 January 2008

National and International Collaborations Stefan Andersson-Engels (past 10 years)

- **Type of partner:** Academic group
 - **Country:** China
 - **University or Company:** Harbin Institute of Technology, Physics Department
 - **Main Contact Person:** Zhi-Guo Zhang
 - **Objective:** Development of upconverting nanoparticles for fluorescence imaging and tomography
 - **Documented Output:** One paper in Appl. Phys. Lett.
 - **Financial Contribution from Partner:** None
- **Type of partner:** Academic group
 - **Country:** China
 - **University or Company:** Zhejiang University, Joint Research Centre for Electrooptics and Photonics (JORCEP)
 - **Main Contact Person:** Sailing He
 - **Objective:** Evaluation of nanoparticles for biomedical applications
 - **Documented Output:** Three manuscripts in preparation, SAE is proposed to participate in the scientific managing group.
 - **Financial Contribution from Partner:** Two PhD students from ZJU have spent 6 months each in Lund
- **Type of partner:** Academic group
 - **Country:** USA
 - **University or Company:** University of California at Irvine, Beckman Laser Institute
 - **Main Contact Person:** Bruce Tromberg
 - **Objective:** Biomedical optical spectroscopy
 - **Documented Output:** Several joint publications, SAE has been invited to act as a guest editor twice in Journal of Biomedical Optics when Bruce Tromberg was editor-in-chief. Two short period stay of a PhD student from Lund at Beckman. One postdoc from Beckman staying a year in Lund.
 - **Financial Contribution from Partner:** None
- **Type of partner:** Academic group
 - **Country:** Norway
 - **University or Company:** The Radium Hospital, Department of Radiation Biology
 - **Main Contact Person:** Johan Moan, Asta Juzeniene, and Alina Porojnicu
 - **Objective:** Photodynamic therapy, photochemical internalization, and photobiological effects of solar radiation
 - **Documented Output:** Several joint publications, the last in Reports in Progress in Physics 2011.
 - **Financial Contribution from Partner:** None
- **Type of partner:** Company
 - **Country:** Norway
 - **University or Company:** PCI Biotech

- **Main Contact Person:** Anders Høyseth
 - **Objective:** Photochemical internalization
 - **Documented Output:** One Master student working on dosimetry for PCI
 - **Financial Contribution from Partner:** Part of the same network with a Eurostar grant (Grant Holders: PCI Biotech, sRNASense, and SpectraCure)
- 6.
- **Type of partner:** Academic Group
 - **Country:** USA
 - **University or Company:** Boston University, Department of Biomedical Engineering
 - **Main Contact Person:** Irving Bigio
 - **Objective:** Develop and evaluate reflectance spectroscopy tools for measurement of concentration of photosensitizer used in PDT
 - **Documented Output:** Joint publications.
 - **Financial Contribution from Partner:** The group was for several years acting as a subcontractor to a large NIH programme coordinated by BU.
- 7.
- **Type of partner:** Academic group
 - **Country:** United Kingdom
 - **University or Company:** University College London, National Medical Laser Centre
 - **Main Contact Person:** Steven Bown, Sandy Mosse
 - **Objective:** Evaluate mechanisms in PDT by optical spectroscopy, Develop interstitial photodynamic therapy
 - **Documented Output:** UCL and Lund is part of the same NIH programme, coordinated by Boston University. One of our PhD student have been in London, to take a course animal handling. Planning joint activities within interstitial photodynamic therapy.
 - **Financial Contribution from Partner:** None
- 8.
- **Type of partner:** Academic group
 - **Country:** Germany
 - **University or Company:** University of Ulm, Institute for Laser Technologies
 - **Main Contact Person:** Rudolf Steiner, Alwin Kienle
 - **Objective:** Collaborate on development on tissue phantoms and models for light propagation in tissue
 - **Documented Output:** Collaborated in an EC network under the 5th framework, coordinated by prof. Steiner. Postdoc from Ulm has just finished a year stay in our group.
 - **Financial Contribution from Partner:** Joint EU project
- 9.
- **Type of partner:** Academic group
 - **Country:** Greece
 - **University or Company:** Foundation of Research and Technology Hellas, Institute for Electronic Structure and Laser
 - **Main Contact Person:** Jorge Ripoll, Eleftherios Economou
 - **Objective:** Develop fluorescence techniques for Molecular Imaging
 - **Documented Output:** Collaborated with FORTH within 4 EC projects under 5th and 6th framework. Presently FORTH is coordinating an IP on Molecular Imaging, where our group jointly with FORTH develop Fluorescence Mediated Tomography (FMT). Several joint publications.

- **Financial Contribution from Partner:** Joint EU project
- 10.
- **Type of partner:** Academic group
 - **Country:** Latvia
 - **University or Company:** University of Latvia, Department of Physics
 - **Main Contact Person:** Janis Spigulis
 - **Objective:** Develop tools for photodynamic therapy and tissue diagnostics using reflectance spectroscopy
 - **Documented Output:** Three long term visits to the group. Developed a joint course for laser safety for medical staff at hospitals. A joint publication.
 - **Financial Contribution from Partner:** None
- 11.
- **Type of partner:** Academic group
 - **Country:** Sweden
 - **University or Company:** Karolinska Institutet, Department of Internal Medicine
 - **Main Contact Person:** Premecyl Slezak
 - **Objective:** Develop diagnostic tools to classify polyps in the colon based on fluorescence spectroscopy
 - **Documented Output:** Joint publication.
 - **Financial Contribution from Partner:** None
- 12.
- **Type of partner:** Academic group
 - **Country:** Norway
 - **University or Company:** University of Bergen, Department of Physics
 - **Main Contact Person:** Ladislav Kochbach
 - **Objective:** Develop novel tools for measurement of optical properties in turbid samples
 - **Documented Output:** Guest PhD student from Bergen, Nazila Yavari, has spent her entire time in Lund, resulting in resulting in several publications, a Licenciate and PhD thesis.
 - **Financial Contribution from Partner:** None
- 13.
- **Type of partner:** Academic group
 - **Country:** Norway
 - **University or Company:** University of Bergen, Department of Ophthalmology
 - **Main Contact Person:** Jørgen Krohn
 - **Objective:** Develop methods for optical spectroscopy for eye tumour diagnostics
 - **Documented Output:** Several research campaigns leading to joint publications.
 - **Financial Contribution from Partner:** None
- 14.
- **Type of partner:** Academic group
 - **Country:** The Netherlands
 - **University or Company:** Erasmus MC-Daniel den Hoed Cancer Center, Department of Radiation Oncology
 - **Main Contact Person:** Dick Sterenborg
 - **Objective:** Develop tools for measurements of optical properties for tissue diagnostics

- **Documented Output:** Collaborated in three EC and one NIH project, six month visit by one of their group member in Lund
 - **Financial Contribution from Partner:** EU projects
- 15.
- **Type of partner:** Academic group
 - **Country:** Germany
 - **University or Company:** PTB, Berlin
 - **Main Contact Person:** Herbert Rinneberg
 - **Objective:** Develop Optical Mammography
 - **Documented Output:** EU RTD project *Optical Mammography* coordinated by PTB under the 5th framework programme including eight closely collaborating partners
 - **Financial Contribution from Partner:** EU project
- 16.
- **Type of partner:** Academic group
 - **Country:** Italy
 - **University or Company:** Politecnico di Milano, Department of Physics
 - **Main Contact Person:** Rinaldo Cubeddu, Antonio Pifferi
 - **Objective:** Develop optical spectroscopy/imaging tools for tissue diagnostics and characterization of other highly scattering media.
 - **Documented Output:** Many joint scientific papers. Collaborating within three different EU projects, and one bi-national funded project.
 - **Financial Contribution from Partner:** EU projects and joint funding from the Science Foundations in the two countries, respectively.
- 17.
- **Type of partner:** Academic group
 - **Country:** Sweden
 - **University or Company:** Linköping University, Department of Biomedical Engineering
 - **Main Contact Person:** Karin Wårdell
 - **Objective:** Develop diagnostic tools for brain tumours using fluorescence.
 - **Documented Output:** Many joint scientific papers. Collaborating within VINNOVA sponsored NIMED projects, a strategic centre for brain research, and an industrially sponsored project.
 - **Financial Contribution from Partner:** Joint national funding in several projects, and also an industrial joint project.
- 18.
- **Type of partner:** Academic group
 - **Country:** Denmark
 - **University or Company:** Risoe National Laboratory, Roskilde, and Danish Technical University, Copenhagen, Denmark
 - **Main Contact Person:** Peter Andersen
 - **Objective:** Develop light sources for fluorescence diagnostics, evaluate optical coherence tomography for certain clinical indications, biannually arrange an international graduate summer school in Biophotonics.
 - **Documented Output:** Peter Andersen was appointed guest professor in our group. Many joint publications and four joint PhD students processed. One joint patent. Five summer schools arranged.

- **Financial Contribution from Partner:** Participated in two joint EU projects.
- 19.
- **Type of partner:** Academic group
 - **Country:** Sweden
 - **University or Company:** Lund University Medical Laser Centre
 - **Main Contact Person:** Katarina Svanberg
 - **Objective:** Very interdisciplinary forum for cross fertilisation between many medical disciplines and medical laser physics
 - **Documented Output:** SAE has been appointed the head of the board of the Centre by the Vice Chancellor of Lund University. Many of the publications from the group are co-authored by other members of the Medical Laser Centre, among them: Prof. Katarina Svanberg, oncology; Dr. Niels Bendsoe, dermatology; Prof. em. Unne Stenram, pathology; Dr. Roland Rydell, ENT; Dr. Sven-Erik Karlsson, lung medicine; Prof. Dick Killander, oncology; Dr. Elisabeth Kjellén, oncology; Dr. Birgitta Bauer, ophthalmology; Dr. Christer Stael von Holstein, surgery; Dr. Christian Ingvar, surgery; Prof. Karl-Göran Tranberg, surgery; Dr. Christian Stureson, surgery; Prof. Bertil Olsson, cardiology; Dr. Zoltan Bekassy, gynecology, Dr. Stig Collén, urology
 - **Financial Contribution from Partner:** Participated in three joint EU projects.
- 20.
- **Type of partner:** Academic group
 - **Country:** Sweden
 - **University or Company:** Lund University, Lund Laser Centre
 - **Main Contact Person:** Sune Svanberg, Villy Sundström, Claes-Göran Wahlström
 - **Objective:** Spectroscopy for tissue diagnostics, characterization of upconverting nanoparticles for tissue imaging and tomography
 - **Documented Output:** Several 2-3 week exchange campaigns with other international groups have been established through LLC, resulting in scientific papers.
 - **Financial Contribution from Partner:** EU funding through LLC
- 21.
- **Type of partner:** Academic group
 - **Country:** Sweden
 - **University or Company:** Lund University, Lund Alliance for Biomedical Imaging and Bioengineering (LABIB) spectroscopy
 - **Main Contact Persons:** Tomas Jansson, ultrasound imaging; Thomas Laurell, microfluidics; Kalle Åström, mathematics; Sven-Erik Strand, PET and SPECT imaging; Freddy Ståhlberg, Magnetic Resonance Imaging; Ingrid Svensson, biomechanics
 - **Objective:** Very interdisciplinary forum for cross fertilisation between many disciplines within biomedical engineering
 - **Documented Output:** Several joint publications and several PhD and master students working between groups.
 - **Financial Contribution from Partner:** Several joint research proposals, none yet funded.
- 22.
- **Type of partner:** Academic group
 - **Country:** Sweden
 - **University or Company:** Lund University, Linneus Centre for Laser spectroscopy
 - **Main Contact Person:** Sune Svanberg, Claes-Göran Wahlström, Villy Sundström

- **Objective:** Spectroscopy for tissue diagnostics, characterization of upconverting nanoparticles for tissue imaging and tomography
 - **Documented Output:** Several publications due to the projects within this Centre.
 - **Financial Contribution from Partner:** Linne funding
- 23.
- **Type of partner:** Academic group
 - **Country:** Lithuania
 - **University or Company:** University of Lithuania, Department of Obstetrics and Gynecology
 - **Main Contact Person:** Aurelija Vaitkuviene
 - **Objective:** Evaluate the potential of fluorescence spectroscopy/imaging for diagnostics of premalignant lesions in the female genital tract
 - **Documented Output:** Several joint publications
 - **Financial Contribution from Partner:** None
- 24.
- **Type of partner:** Academic group
 - **Country:** Latvia
 - **University or Company:** Latvian Oncology Centre
 - **Main Contact Person:** Gunnars Lasmanis
 - **Objective:** Initiating photodynamic therapy in human malignancies in Latvia. Performed first multi-fibre contact photodynamic therapy in the clinical setting.
 - **Documented Output:** One joint publication
 - **Financial Contribution from Partner:** None
- 25.
- **Type of partner:** Industrial Company
 - **Country:** Sweden
 - **University or Company:** AstraZeneca R&D Mölndal
 - **Main Contact Person:** Jonas Johansson, Staffan Folestad
 - **Objective:** Develop spectroscopy tools for pharmaceutical and medical applications
 - **Documented Output:** Jonas Johansson has been appointed adjoint professor in the group. Two PhD students have completed their studies within this collaboration. Many joint scientific papers. Two patents.
 - **Financial Contribution from Partner:** Astrazeneca has funded much research within the group since more than ten years.
- 26.
- **Type of partner:** Venture Capital Organization
 - **Country:** Sweden
 - **University or Company:** Karolinska Innovation AB
 - **Main Contact Person:** Tomas Andersson
 - **Objective:** To enable commercialization of interstitial photodynamic therapy
 - **Documented Output:** Jointly founded the spin-off company SpectraCure AB.
 - **Financial Contribution from Partner:** None to the research group.
- 27.
- **Type of partner:** Organization to promote Entrepreneurship at Lund University
 - **Country:** Sweden
 - **University or Company:** LU Innovation

- **Main Contact Person:** Helena Ljusberg, Myriam Olsson
 - **Objective:** To enable commercialization of imaging based on upconverting nanoparticle contrast agent
 - **Documented Output:** One patent
 - **Financial Contribution from Partner:** Helped to get funding for first steps towards commercialization.
- 28.
- **Type of partner:** Organization to promote Entrepreneurship at Lund University
 - **Country:** Sweden
 - **University or Company:** Lund University Holding AB
 - **Main Contact Person:** Christine Widstrand
 - **Objective:** To enable commercialization of imaging based on upconverting nanoparticle contrast agent
 - **Documented Output:** One joint company started, licence-agreement finalized
 - **Financial Contribution from Partner:** None
- 29.
- **Type of partner:** Commercial Company
 - **Country:** Sweden
 - **University or Company:** Genovis AB
 - **Main Contact Person:** Sarah Fredriksson
 - **Objective:** To develop imaging based on upconverting nanoparticle contrast agent
 - **Documented Output:** Research agreement, one manuscript in preparation
 - **Financial Contribution from Partner:** Several joint research proposals, none yet funded.
- 30.
- **Type of partner:** Academic group
 - **Country:** Sweden
 - **University or Company:** Lund University, Department of Electrical Measurements
 - **Main Contact Person:** Thomas Laurell
 - **Objective:** To develop methods to produce upconverting nanoparticles
 - **Documented Output:** One joint publication, one joint master student working towards his degree.
 - **Financial Contribution from Partner:** Several joint research proposals, none yet funded.
- 31.
- **Type of partner:** Startup Company
 - **Country:** Sweden
 - **University or Company:** GasPorox
 - **Main Contact Person:** Maria Göth, Masoud Khayyami
 - **Objective:** Future commercialization of technology for gas concentration measurements for medical diagnostics
 - **Documented Output:** Prototype developed
 - **Financial Contribution from Partner:** None
- 32.
- **Type of partner:** Startup Company
 - **Country:** Sweden

- **University or Company:** SpectraCure
 - **Main Contact Person:** Masoud Khayyami, Jens Nilsen
 - **Objective:** Future commercialization of technology for interstitial photodynamic therapy
 - **Documented Output:** Prototypes developed, clinical study conducted, several papers published
 - **Financial Contribution from Partner:** SpectraCure funded some one PhD student in the group for several years.
- 33.
- **Type of partner:** Small and medium sized enterprize
 - **Country:** Germany
 - **University or Company:** Biolitec AS, Bonn
 - **Main Contact Person:** Tilmann Trebst, Susanna Gräfe
 - **Objective:** Develop light sources and photosensitizers for PDT and fluorescence diagnostics therapy
 - **Documented Output:** New PDT laser under delivery (free of charge) at 652 nm for evaluation for PDT, several joint publications
 - **Financial Contribution from Partner:** Have participated in several Eu projects together
- 34.
- **Type of partner:** Small and medium sized enterprize
 - **Country:** USA
 - **University or Company:** Science and Technology International, Honolulu, San Diego
 - **Main Contact Person:** Nick Susner, Ulf Gustafsson
 - **Objective:** Develop multispectral fluorescence imaging for diagnostic of gynecological diseases
 - **Documented Output:** Joint one-month scientific campaign at Vilnius University, resulting in several joint publications Four persons from Lund with affiliation to the group have been or are now working at STI. Donation of a complete clinical fluorescence imaging system to the Lund group.
 - **Financial Contribution from Partner:** Donation of a complete clinical fluorescence imaging system to the Lund group.
- 35.
- **Type of partner:** Academic Group
 - **Country:** Greece
 - **University or Company:** National Technical University of Athens
 - **Main Contact Person:** Dido Yova, Eleni Alexandratou, Dimitris Gorpas
 - **Objective:** Develop fluorescence imaging for tissue diagnostics
 - **Documented Output:** Several joint publications
 - **Financial Contribution from Partner:** Participated in several joint EU projects
- 36.
- **Type of partner:** Academic Group
 - **Country:** United Kingdom
 - **University or Company:** University College London
 - **Main Contact Person:** Simon Arridge
 - **Objective:** Develop multispectral fluorescence tomography algorithms

- **Documented Output:** Participated in several joint EU projects, several joint publications
 - **Financial Contribution from Partner:** Participated in several joint EU projects
- 37.
- **Type of partner:** Academic Group
 - **Country:** Sweden
 - **University or Company:** Uppsala University, Department of Urology
 - **Main Contact Person:** Per-Uno Malmström
 - **Objective:** Develop fluorescence imaging modalities for tumours in the urinary bladder
 - **Documented Output:** One joint publication
 - **Financial Contribution from Partner:** None