NATO ADVANCED STUDY INSTITUTE IN BIOPHOTONICS: FINAL PROGRAM

Biophotonics – from Fundamental Principles to Health, Environment, Security and Defence Applications

Crowne Plaza Hotel, Ottawa, Canada K2E 6Z8**,** September 29 - October 9, 2004

September 28, 2004: Arrival

1st day: Wednesday, September 29, 2004

8:30-9:00	Official Opening of the ASI: B. Wilson, Tuchin, Matthews, Vo-Dinh, Prasad
9:00-10:00	Introduction to Biophotonics – I: Prasad
10:00-10:30	**Coffee break**
10:30-11:30	Biophotonics – an Emerging Technology Paradigm – I: Colston
11:30-13:30	**Lunch and free time**
13:30-14:30	Biophotonics – an Emerging Technology Paradigm – II: Colston
14:30-15:30	Eye Optics – Fundamentals, Instrumentation and Applications – I: Munger
15:30-16:00	**Coffee break**
16:00-17:00	Optics of Blood – Methods and Applications – I: Priezzhev

2nd day: Thursday, September 30, 2004

8:30-9:30	Introduction to Biophotonics – II: Prasad
9:30-10:30	Problem based learning session: Colston
10:30-11:00	**Coffee break**
11:00-12:00	Optics of Blood – Methods and Applications – II: Priezzhev
12:00-14:00	**Lunch and free time**
14:00-15:00	Problem based learning session: Prasad
15:00-16:00	Commercialization of the Confocal MACROscope: Ted Dixon
16:00-16:30	**Coffee break**
16:30-17:30	Eye Optics – Fundamentals, Instrumentation and Applications – II: Munger
18:30	**Welcome reception**

3rd day: Friday, October 1, 2004

8:30-9:30	Problem based learning session: Munger
9:30-10:30	Problem based learning session: Priezzhev
10:30-11:00	**Coffee break**
11:00-12:00	Biochip and Nano-Technologies and Applications – I: Vo-Dinh
12:00-14:00	**Lunch and free time**
14:00-15:00	Biochip and Nano-Technologies and Applications – II: Vo-Dinh
15:00-16:00	International Science & Technology Center (ISTC) in Russia: Projects overview
16:00-16:30	**Coffee break**
16:30-18:30	Poster session – I: ASI students

4th day: Saturday, October 2, 2004

9:00-12:00	Biophotonics demonstrations at Algonquin College: B. Wilson, Matthews, Munger
14:00-17:00	Biophotonics demonstrations at Algonquin College: B. Wilson, Matthews, Munger

5th day: Sunday, October 3, 2004 - Free day, Excursion, Free time

6th day: Monday, October 4, 2004

8:30-9:30	Photonics in neurosciences - I	De Koninck
9:30-10:30	Photonics in neurosciences - II	De Koninck
10:30-11:00	**Coffee break**	
11:00-12:00	Biophotonics light delivery systems - I	Ben-David
12:00-14:00	**Lunch and free time**	
14:00-15:00	Biophotonics light delivery systems - II	Ben-David
15:00-16:00	Science and Technology Center in Ukraine (STCU): Projects overview	
16:00-16:30	**Coffee break**	
16:30-18:30	Poster session – II: ASI students	

7th day: Tuesday, October 5, 2004

8:30-9:30	Problem based learning session	De Konnick
9:30-10:30	Problem based learning session	Ben-David
10:30-11:00	**Coffee break**	
11:00-12:00	Integrated biosensors	Cartwright
12:00-14:00	**Lunch and free time**	
Evening session		
18:00-19:00	Application of Biophotonics - I	Matthews
19:00-19:30	**Refreshments**	
19:30-20:30	CBST presentations	Matthews
20:30-21:30	CBST presentations	Matthews

8th day: Wednesday, October 6, 2004

8:30-9:30	Fluorescence spectroscopy and microscopy – I	Schneckenburger
9:30-10:30	Photodynamic Therapy - I	B. Wilson
10:30-11:00	**Coffee break**	
11:00-12:00	Application of Biophotonics - II	Matthews
12:00-14:00	**Lunch and free time**	
14:00-15:00	Bioluminescence and Chemiluminescence - I	Savov
15:00-16:00	Seminars by participants: ASI Students	
16:00-16:30	**Coffee break**	
16:30-17:00	Seminars by participants: ASI Students	
17:00-18:00	Roundtable discussion: Biophotonics education programs: ASI Lecturers	

9th day: Thursday, October 7, 2004

8:30-9:30	Fluorescence spectroscopy and microscopy – II	Schneckenburger
9:30-10:30	Photodynamic Therapy - II	B. Wilson
10:30-11:00	**Coffee break**	
11:00-12:00	Bioluminescence and Chemiluminescence - II	Savov
12:00-14:00	**Lunch and free time**	
14:00-15:00	Problem based learning session	B. Wilson
15:00-16:00	Problem based learning session	Schneckenburger
16:00-16:30	**Coffee break**	
16:30-18:00	Seminars by participants: ASI Students	
18:30	**Reception**	

10th day: Friday, October 8, 2004

8:30-9:30	Tissue and blood optical properties control - I	Tuchin
9:30-10:30	Biophotonics simulations: Light Scattering from Bio-Cells - I	Tanev
10:30-11:00	**Coffee break**	
11:00-12:00	CBST presentations	Matthews
12:00-14:00	**Lunch and free time**	
Evening session		
18:00-19:00	Problem based learning session	Savov
19:00-19:30	**Refreshments**	
19:30-21:00	Seminars by participants: ASI Students	

11th day: Saturday, October 9, 2004

8:30-9:30	Tissue and blood optical properties control - II	Tuchin
9:30-10:30	Biophotonics simulations: Light Scattering from Bio-Cells - II	Tanev
10:30-11:00	**Coffee break**	
11:00-12:00	Problem based learning session	Tuchin
12:00	**Closing and lunch**	
Departure		