

Biophotonics Congress: Optics in the Life Sciences

21-24 April 2025

An in-person only event with on-demand content
Pacific Daylight Time (PDT)

Agenda of Sessions — Sunday, 20 April

14:00–17:00	Registration, Constellation Foyer
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Monday, 21 April

Pacific Time (UTC -08:00)	Constellation Ballroom A	Constellation Ballroom B	Aurora	Sovereign	Cambria	Britannia
	BODA	Brain	NTM	OMA	OMP	Translational
07:00–18:30	Registration, Constellation Foyer					
08:00–10:00	DM1A • Machine Learning for Image Reconstruction, Interpretation, and Optical Design I	BM1B • Analyzing Circuitry, Network Function, and Information Processing I	NM1C • Superresolution	AM1D • Opto-thermophoretic Tweezers	OM1E • Applications of Endogenous Probes	TM1F • Applications of Raman Spectroscopy
10:00–10:30	Coffee Break with Exhibitors, Avalon & Constellation Foyer Sponsored by American Elements					
10:00–17:00	Exhibit Hours, Avalon & Constellation Foyer					
10:30–12:00	JM2A • Joint Plenary Session I, Constellation Ballroom					
12:00–13:30	Lunch Break <i>On Your Own</i>					
13:30–15:30	DM3A • Novel Biomedical Optical Technology I	BM3B • Analyzing Circuitry, Network Function, and Information Processing II	NM3C • Nonlinear	AM3D • Environmental Applications	OM3E • Molecular Vibration Spectroscopy	TM3F • Advances in Spectroscopic Diagnosis and Monitoring
15:30–17:00	JM4A • Joint Poster Session I in Exhibit Hall and Coffee Break with Exhibitors, Avalon & Constellation Foyer					
17:00–18:30	DM5A • Novel Biomedical Optical Technology II	BM5B • Analyzing Circuitry, Network Function, and Information Processing III	NM5C • Light Sheet	AM5D • Optofluidic and Optical Cavities	OM5E • In Vivo and in Vitro Imaging	

Schedule subject to change. Please check the congress app for the most current schedule.

Key to Conference Abbreviations

Brain	Optics and the Brain	OMA	Optical Manipulation and Its Applications
BODA	Bio-Optics: Design and Applications	OMP	Optical Molecular Probes, Imaging and Drug Delivery
NTM	Novel Techniques in Microscopy	Translational	Clinical and Translational Biophotonics

Agenda of Sessions — Tuesday, 22 April

Pacific Time (UTC -08:00)	Constellation Ballroom A	Constellation Ballroom B	Aurora	Sovereign	Cambria	Britannia
	BODA	Brain	NTM	OMA	OMP	Translational
07:00–19:00	Registration, Constellation Foyer					
08:00–10:00	DTu1A • Design and Fabrication of Biomedical Optical Devices I	BTu1B • Brain Physiology and Disease I - Clinical Translation	NTu1C • Computational Methods	ATu1D • Biological Applications I	OTu1E • Multimodal Imaging and Drug Delivery	TTu1F • Preclinical Disease Research: Techniques and Applications
10:00–10:30	Coffee Break with Exhibitors, Avalon & Constellation Foyer <i>Sponsored by American Elements</i>					
10:00–16:00	Exhibit Hours, Avalon & Constellation Foyer					
10:30–12:00	JTu2A • Joint Plenary Session II, Constellation Ballroom					
12:00–13:30	Lunch Break On Your Own					
13:30–15:30	DTu3A • Machine Learning for Image Reconstruction, Interpretation, and Optical Design II	BTu3B • Brain Physiology and Disease II - Animal Models	NTu3C • Structured Illumination	ATu3D • Trapping with Structured Light	OTu3E • Reporters and Contrast Agents	TTu3F • Biophotonics in the Clinic and Beyond I
15:30–16:00	Coffee Break with Exhibitors, Avalon & Constellation Foyer <i>Sponsored by American Elements</i>					
16:00–17:30	DTu4A • Design and Fabrication of Biomedical Optical Devices II	BTu4B • Brain Physiology and Disease III	NTu4C • AO and Wavefront Control	ATu4E • Nanoscale Applications	OTu4E • Novel Imaging Tools and Approaches	TTu4F • Roundtable Discussion: Advancing Optical Techniques for Bias-Free and Accessible Clinical Care
17:30–19:00	Conference Reception					

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Agenda of Sessions — Wednesday, 23 April

Pacific Time (UTC -08:00)	Constellation Ballroom A	Constellation Ballroom B	Aurora	Sovereign	Cambria	Britannia
	BODA	Brain	NTM	OMA	OMP	Translational
07:30–19:30	Registration, Constellation Foyer					
08:00–10:00	DW1A • Ophthalmic Imaging and Sensing I	BW1B • Multimodal Probing of the Brain	NW1C • Novel Developments	AW1D • Plasmonic Tweezers and Nanoscale Applications	OW1E • Optical Phantoms and Image Processing I	TW1F • Biophotonics in the Clinic and Beyond II
10:00–10:30	Coffee Break with Exhibitors, Avalon & Constellation Foyer <i>Sponsored by American Elements</i>					
10:00–17:00	Exhibit Hours, Avalon & Constellation Foyer					
10:30–12:30	DW2A • Ophthalmic Imaging and Sensing II	BW2B • Brain Physiology and Disease IV	NW2C • Spectroscopy and FLIM	AW2D • Biological Applications II	OW2E • Image Guided Surgery with Molecular Probes I	TW2F • Biophotonics in the Clinic and Beyond III
12:30–14:00	Lunch Break <i>On Your Own</i>					
14:00–15:30	JW3A • Postdeadline Session					
15:30–17:00	JM4A • Joint Poster Session II in Exhibit Hall and Coffee Break with Exhibitors, Avalon & Constellation Foyer <i>Sponsored by American Elements</i>					
17:00–18:30	Industry Panel: Paths to New Technology: Application-focused Collaboration, Constellation Ballroom					
18:30–19:30	Industry Engagement Networking Event, Constellation Foyer					

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Agenda of Sessions — Thursday, 24 April

Pacific Time (UTC -08:00)	Constellation Ballroom A	Constellation Ballroom B	Aurora	Sovereign	Cambria	Britannia
	BODA	Brain	NTM	OMA	OMP	Translational
07:30–17:00	Registration, <i>Constellation Foyer</i>					
08:00–10:00	DTh1A • Novel Biomedical Optical Technology III	BTh1B • Shaping Light for Multiscale Optical Imaging	NTh1C • Phase Microscopy and Tomography I		OTh1D • Image Guided Surgery with Molecular Probes II	TTh1E • Non-invasive Optical Imaging for Disease Applications I
10:00–10:30	Coffee Break with Exhibitors, <i>Avalon & Constellation Foyer</i>					
10:30–12:00	Industry Panel: Validation of New Technology: The Role of Key Opinion Leaders (KOLs), Voice of Customer (VOC), and Human Factors, <i>Constellation Ballroom</i>					
12:00–13:30	Lunch Break <i>On Your Own</i>					
13:30–15:00		BTh2B • Optics in the Human CNS and Peripheral Nerves	NTh2C • Phase Microscopy and Tomography II		OTh2D • Novel Tools and Approaches for Data Analysis and Image Reconstruction	TTh2E • Non-invasive Optical Imaging for Disease Applications II
15:00–15:15	Coffee Break, <i>Avalon & Constellation Foyer</i>					
15:15–17:15		BTh3A • Optogenetics and Mesoscale Imaging	NTh3B • Intravital			

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