

# DAILY SCHEDULE

Week of: **August 26**

	8/26 MONDAY	8/27 TUESDAY	8/28 WEDNESDAY	8/29 THURSDAY	8/30 FRIDAY	8/31 SATURDAY	9/1 SUNDAY
9:00 AM	<b>Opening Introduction to School</b> (Francisco F. de Miguel, Dilia Aguirre Olivas, IFC-UNAM)	<b>Daily work review</b> (Dilia Aguirre Olivas, IFC-UNAM)	<b>Daily work review</b> (Naser Qureshi, ICAT-UNAM)	<b>Analysis of results</b> (León Islas Suárez, FACMED-UNAM)	<b>Daily work review</b> (Pablo Loza Álvarez, ICFO)	Cultural Tour through Mexico City	Day Off
9:30 AM		<b>Introduction</b> (Carlos Treviño Palacios, ICAT-UNAM)	<b>Introduction</b> (León Islas Suárez, FACMED-UNAM)	<b>Introduction</b> (Pablo Loza Álvarez, ICFO)	<b>Introduction</b> (Yazmín Ramiro Cortés, IFC-UNAM)		
10:00 AM	<b>How to build scientific career in Neuroscience</b> (Diane Lipscombe, President of SfN)	<b>Lasers and terahertz</b> (Naser Qureshi, Jesús Garduño Mejía, ICAT-UNAM)	<b>Experiment on molecular energy transfer</b> (León Islas Suárez, FACMED-UNAM), <b>Transfection of animals for optogenetic experiments I</b> (Fatuel Tecuapetla, IFC-UNAM)	<b>Home-made light sheet microscope</b> (Pablo Loza Álvarez, ICFO)	<b>Confocal Microscopy: from the light to the images</b> (Ruth Rincón Heredia, IFC-UNAM)		
10:30 AM					<b>Comparative work on electron-confocal and multiphoton microscopy</b> (Yazmín Ramiro Cortés, Ruth Rincón Heredia y Abraham Rosas Arellano, IFC-UNAM)		
11:00 AM	<b>Introduction to light and its properties</b> (Dilia Aguirre Olivas, IFC-UNAM)	<b>Estimating distances and interactions using energy transfer (FRET)</b> (León Islas Suárez, FACMED-UNAM)	<b>Light sheet fluorescence microscopy for fast volumetric, in-vivo imaging</b> (Pablo Loza Álvarez, ICFO)	<b>Application of OFDR in optical fibres for high precision catheter tracking in minimally invasive surgery</b> (Raman Kashyap, Montreal Polytechnic)	<b>From resolution to superresolution: STED nanoscopy</b> (Dilia Aguirre Olivas, IFC-UNAM)		
11:30 AM							
12:00 PM	<b>Microscopy with terahertz and millimeter waves</b> (Naser Qureshi, ICAT-UNAM)						
1:00 PM	Lunch Break						
1:30 PM							
2:00 PM							
2:30 PM	<b>How to build a microscope Part I</b> (Carlos Treviño Palacios, INAOE)	<b>How to build a microscope Part II</b> (Carlos Treviño Palacios, INAOE)	<b>Experiment on molecular energy transfer</b> (León Islas Suárez), <b>Transfection of animals for optogenetic experiments</b> (Fatuel Tecuapetla, IFC-UNAM)	<b>Home-made light sheet microscope</b> (Pablo Loza Álvarez, ICFO)	<b>Comparative work on electron-confocal and multiphoton microscopy</b> (Yazmín Ramiro Cortés, Ruth Rincón Heredia y Abraham Rosas Arellano, IFC-UNAM)		
3:00 PM							
3:30 PM							
4:00 PM							
4:30 PM							
5:00 PM	<b>Discussion with Students</b> (Diane Lipscombe, President of SfN)						
5:30 PM							

# DAILY SCHEDULE

Week of: **September 2**

	9/2 MONDAY	9/3 TUESDAY	9/4 WEDNESDAY	9/5 THURSDAY	9/6 FRIDAY	9/7 SATURDAY	9/8 SUNDAY
9:00 AM	Daily Work Review (Ruth Rincón Heredia, IFC-UNAM)	Daily Work Review (Abraham Rosas Arellano, IFC-UNAM)	Daily Work Review (Yazmín Ramiro Cortés, IFC-UNAM)	Daily Work Review (Samuel Montero, INAOE)	Daily Work Review (Maria Angela Franceschini, MGH/HST)	Excursion to Archeological Zone of Teotihuacan	Day Off
9:30 AM			Introduction to Infrared Optical Methods on Brain Activity (Samuel Montero-INAOE, Felipe Orihuela-Espina- INAOE, Javier-BUAP)	Infrared Optical Methods on Brain Activity (Maria Angela Franceschini-MGH/HST, Samuel Montero-INAOE, Felipe Orihuela-Espina- INAOE, Javier-BUAP)	Pulse detection by using infrared light (Bruno Méndez Ambrosio, IFC-UNAM)		
10:00 AM	Electron Microscopy (Abraham Rosas Arellano, IFC-UNAM)	Two-photon Imagin (Yazmín Ramiro Cortés, IFC-UNAM)	Infrared Optical Methods on Brain Activity (Samuel Montero-INAOE, Felipe Orihuela-Espina- INAOE, Javier-BUAP)	Infrared Optical Methods on Brain Activity (Maria Angela Franceschini-MGH/HST, Samuel Montero-INAOE, Felipe Orihuela-Espina- INAOE, Javier-BUAP)	Building a pulse detection device by using infrared light (Bruno Méndez Ambrosio, IFC-UNAM)		
10:30 AM					to be announce		
11:00 AM							
11:30 AM							
12:00 PM	From spines to behavior using two-photon microscopy: an approach to study autism (Yazmín Ramiro Cortés, IFC-UNAM)	Optical Oximetri (Carlos Gerardo Treviño Palacios, INAOE)	All-optical interrogation of al activity in vivo (Weijian Yang, UC Davis)	Shedding light on the cell: Label-free microscopy and optical tweezers (Braulio Gutiérrez Medina, IPICYT)	Imaging brain activity with diffuse optics: opportunities and ture directions (Maria Angela Franceschini, MGH/HST)		
1:00 PM	Lunch Break						
1:30 PM							
2:00 PM							
2:30 PM	Comparative work on electron-confocal and multiphoton microscopy (Yazmín Ramiro Cortés, Ruth Rincón Heredia y Abraham Rosas Arellano, IFC-UNAM)	Comparative work on electron-confocal and multiphoton microscopy (Yazmín Ramiro Cortés, Ruth Rincón Heredia y Abraham Rosas Arellano, IFC-UNAM)	Infrared Optical Methods on Brain Activity (Samuel Montero-INAOE, Felipe Orihuela-Espina- INAOE, Javier-BUAP)	Infrared Optical Methods on Brain Activity (Maria Angela Franceschini-MGH/HST, Samuel Montero-INAOE, Felipe Orihuela-Espina- INAOE, Javier-BUAP)	Building a pulse detection device by using infrared light (Bruno Méndez Ambrosio, IFC-UNAM)		
3:00 PM							
3:30 PM							
4:00 PM							
4:30 PM							
5:00 PM							
5:30 PM							

# DAILY SCHEDULE

Week of: **September 9**

	9/9 MONDAY	9/10 TUESDAY	9/11 WEDNESDAY	9/12 THURSDAY	9/13 FRIDAY	9/14 SATURDAY	
9:00 AM	<b>Daily Work Review</b> (Bruno Méndez Ambrosio, IFC-UNAM)	<b>Introduction</b> (Jesús Garduño Mejía, ICAT-UNAM)	<b>Daily Work Review</b> (Jesús Garduño Mejía, ICAT-UNAM)	<b>Conductual Tracking</b> (Fatuel Tecuapetla, IFC-UNAM)	<b>Daily Work Review</b> (Francisco Barrantes)	<b>Back Home</b>	
9:30 AM	<b>Introduction</b> (Jesús Garduño Mejía, ICAT-UNAM)		<b>Introduction</b> (Fatuel Tecuapetla, IFC-UNAM)		<b>Introduction to Second Harmonic Generation</b> (Francisco F. de Miguel, IFC-UNAM)		<b>Introduction</b> (Francisco F. de Miguel, IFC-UNAM)
10:00 AM	<b>Z-scan and ultrashort pulse measurement</b> (Jesús Garduño Mejía, ICAT-UNAM)	<b>Z-scan and ultrashort pulse measurement</b> (Jesús Garduño Mejía, ICAT-UNAM)	<b>Optogenetics Induction of Selective Behavior</b> (Fatuel Tecuapetla, IFC-UNAM)				<b>Analysis of Structural Dynamics using Second Harmonic Generation</b> (Francisco F. de Miguel, IFC-UNAM)
10:30 AM							
11:00 AM							
11:30 AM	<b>Fluorescence-lifetime imaging microscopy (FLIM)</b> (Jorge Peón, IQ-UNAM)	<b>Optogenetic control of behaviors mediated by basal ganglia</b> (Fatuel Tecuapetla, IFC-UNAM)	<b>Somatic Release of Serotonin</b> (Francisco F. de Miguel, IFC-UNAM)	<b>Evaluation of tissue microstructure using diffusion-weighted MRI</b> (Luis Concha Loyola, UNAM Campus Juriquilla)	<b>Exploring the brain at the Nanoscale, in health and Disease</b> (Francisco Barrantes, UCA)		
12:00 PM							
12:30 PM	Lunch Break						
1:00 PM	Lunch Break						
1:30 PM	Lunch Break						
2:00 PM	Lunch Break						
2:30 PM	<b>Spectroscopy and Structured Light</b> (Dilia Aguirre Olivas, IFC-UNAM)	<b>Spectroscopy and Structured Light</b> (Dilia Aguirre Olivas, IFC-UNAM)	<b>Optogenetics Induction of Selective Behavior</b> (Fatuel Tecuapetla, IFC-UNAM)	<b>Science Education for Society</b> (Francisco F. de Miguel, IFC-UNAM)	<b>Demonstration of STED nanoscopy</b> (Dilia Aguirre Olivas y Francisco F de Miguel, IFC-UNAM)		
3:00 PM							
3:30 PM	<b>Fluorescence Lifetime and FLIM Microscopy</b> (Mario González Gutiérrez, IQ-UNAM)			<b>Introduction to Nanoscopies</b> (Francisco Barrantes, UCA)	<b>General Discussion</b>		
4:00 PM							
4:30 PM							
5:00 PM	Dinner						
5:30 PM	Dinner						
	<p><b>IFC-UNAM</b>, Institute of Cellular Physiology-National Autonomous University of Mexico. <b>UNAM Campus Juriquilla</b></p> <p><b>SfN</b>, Society of Neuroscience, EUA</p> <p><b>ICAT-UNAM</b>, Institute of Applied Sciences and Technology- National Autonomous University of Mexico</p>	<p><b>INAOE</b>, National Institute of Astrophysics, Optics and Electronics</p> <p><b>BUAP</b>, Benemérita Universidad Autónoma de Puebla</p> <p><b>FACMED-UNAM</b>, School of Medicine, Cellular and Molecular Biophysics, National Autonomous University of Mexico</p>	<p><b>Montreal Polytechnic</b>, Department of Electrical Engineering and Department of Engineering Physics. Montreal, Canada</p> <p><b>ICFO</b>, The Institute of Photonics Sciences. Barcelona, Spain.</p> <p><b>MGH/HST</b>, Harvard Medical School, Massachusetts General Hospital Athinoula A. Martinos Center for Biomedical Imaging</p>	<p><b>UC Davis</b>, University of California, Electrical and Computer Engineering</p> <p><b>IPICYT</b>, Instituto Potosino de Investigación Científica y Tecnológica A.C.</p> <p><b>IQ-UNAM</b>, Chemistry Institute- National Autonomous University of Mexico. <b>UCA</b>, Pontifical Catholic University of Argentina</p>			