

2009		<b>Multi Modal Short Course</b>							<b>Athinoula A. Martinos</b> <b>Center for Biomedical Imaging</b>						
		Week 1 : June 1 - 5, 2009					Weekend				Week 2 : June 8 - 12, 2009				
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Time	Monday	Tuesday	Wednesday	Thursday	Friday		
8:00 AM - 8:30	WELCOME	breakfast	breakfast	breakfast	breakfast			8:00 AM - 8:30	breakfast	breakfast	breakfast	breakfast	breakfast		
8:30 AM - 9:00								8:30 AM - 9:00							
9:00 AM - 9:30	Program Overview {Savoy}	breakfast	breakfast	breakfast	breakfast			9:00 AM - 9:30	breakfast	breakfast	breakfast	breakfast	breakfast		
9:30 AM - 10:00								9:30 AM - 9:30							
10:00 AM - 10:30	Tools Overview	NMR/MRI Signal and Contrasts {Wald}	Event Related Designs {Doug Greve}	MultiVariate Analysis {Alard Roebroek}	Part 2 of FreeSurfer / FSFast Tutorial and Workshop			9:30 AM - 10:00	NIRS/DOT Technology Applications, Tour, Demo, Experimental Design and Data Analysis {Maria Angela Franceschini; David Boas}	DTI/DSI Clinical Applications {Buchbinder, Dickerson}	PET {Brownell}	Optical Microscopy {Lichtman}	SYMPOSIUM Translational and Other Clinical Issues {Sorenson, Rosen, Other?}		
10:30 AM - 11:00								10:00 AM - 10:30							
11:00 AM - 11:30	Bruce Rosen Director of Athinoula A. Martinos Center	fMRI Technology (Imaging) (Safety) {Wald}	Basic fMRI Data Analysis (Savoy)	DSI: Diffusion Spectrum Imaging {Van Wedeen}	Statistics and Group Studies of Structural Data			10:30 AM - 11:00	3 Hours Running MEG Experiments	Clinical Uses of MEG {Stufflebeam}	phMRI, PET {Jenkins}	Cortical Electrodes in Diagnosis and Surgery {Syndey Cash}	Diplomas and Farewell Savoy		
11:30 AM - 12:00								11:00 AM - 11:30							
12:00 PM - 12:30	Overview of Functional MRI and Intro to Basic Design {Savoy}	fMRI Design and Analysis Principles {Zeffiro}	fMRI: Speculations on its Future					11:30 AM - 12:00	3 Hours Running fMRI Experiments	MRS, MRSI & Clinical Apps. {Ratai}	Multimodal Integration: Why Bother? {Tom Zeffiro}	Cortical Electrodes in Diagnosis and Surgery {Syndey Cash}	Diplomas and Farewell Savoy		
12:30 PM - 1:00								12:00 PM - 12:30							
1:00 PM - 1:30	lunch	lunch	lunch	lunch	lunch			12:30 PM - 1:00	3 Hours Running fMRI Experiments	lunch	lunch	lunch	lunch		
1:30 PM - 2:00								1:00 PM - 1:30							
2:00 PM - 2:30	Experimental Design in fMRI {Savoy}	EEG/MEG Key Concepts for Functional Brain Mapping Laboratory Tours and Demonstrations maybe 7T+EEG {Hämäläinen, Bonmassar}	DTI: Diffusion Tensor Imaging {Alard Roebroek}	Part 1 of FreeSurfer / FSFast Tutorial and Workshop	Part 3 of FreeSurfer / FSFast			1:30 PM - 2:00	10am - 4pm	TMS {Alvaro Pascual-Leone; Alex Sack; or Joan Camprodon}	Biomarkers in fMRI {Michael Devous}	Class Selected Discussion Topics: e.g., Neuroscience of Moral Decision Making; NeuroEconomics	Alzheimer's Disease and MultiModal Approaches		
2:30 PM - 3:00								2:00 PM - 2:30							
3:00 PM - 3:30	Experimental Design Theory and Practice for	The Design Workshop {Salmelin}	Computational Neuroanatomy {Bruce Fischl}	Reconstructing a single subject's brain	FS/Fast: The Functional Analysis Stream			3:00 PM - 3:30	Clean Up	Analysis of Sunday's Experiments with Doug Greve (4-5) & Class (5-6)	Quality Control in fMRI Data Analysis {Whitfield-Gabrieli}	MRI/fMRI: Advanced Issues and Review of Basics {Wald, Savoy}	Student Presentations; Post-Workshop Discussion		
3:30 PM - 4:00								3:00 PM - 3:30							
4:00 PM - 4:30	EEG/MEG {Riitta Salmelin}	The Design Workshop {Salmelin}	Tour of MR Facilities Collect Structural Data {Savoy, Foley}	Reconstructing a single subject's brain	FS/Fast: The Functional Analysis Stream			4:00 PM - 4:30	Clean Up	Analysis of Sunday's Experiments with Doug Greve (4-5) & Class (5-6)	Quality Control in fMRI Data Analysis {Whitfield-Gabrieli}	MRI/fMRI: Advanced Issues and Review of Basics {Wald, Savoy}	Student Presentations; Post-Workshop Discussion		
4:30 PM - 5:00								4:30 PM - 5:00							
5:00 PM - 5:30	The Design Workshop Savoy	Dinner in Atrium Cafe	Tour of MR Facilities Collect Structural Data {Savoy, Foley}	Reconstructing a single subject's brain	FS/Fast: The Functional Analysis Stream			5:00 PM - 5:30	Clean Up	Analysis of Sunday's Experiments with Doug Greve (4-5) & Class (5-6)	Quality Control in fMRI Data Analysis {Whitfield-Gabrieli}	MRI/fMRI: Advanced Issues and Review of Basics {Wald, Savoy}	Student Presentations; Post-Workshop Discussion		
5:30 PM - 6:00								5:30 PM - 6:00							
6:00 PM - 6:30	walk to restaurant	Dinner in Atrium Cafe	Tour of MR Facilities Collect Structural Data {Savoy, Foley}	Reconstructing a single subject's brain	FS/Fast: The Functional Analysis Stream			6:00 PM - 6:30	Clean Up	Analysis of Sunday's Experiments with Doug Greve (4-5) & Class (5-6)	Quality Control in fMRI Data Analysis {Whitfield-Gabrieli}	MRI/fMRI: Advanced Issues and Review of Basics {Wald, Savoy}	Student Presentations; Post-Workshop Discussion		
6:30 PM - 7:00								6:30 PM - 7:00							
7:00 PM - 7:30	Class Dinner At Figs in Charlestown	Design of EEG/MEG Experiments Riitta Salmelin and others	Tour of MR Facilities Collect Structural Data {Savoy, Foley}	Reconstructing a single subject's brain	FS/Fast: The Functional Analysis Stream			7:00 PM - 7:30	Clean Up	Analysis of Sunday's Experiments with Doug Greve (4-5) & Class (5-6)	Quality Control in fMRI Data Analysis {Whitfield-Gabrieli}	MRI/fMRI: Advanced Issues and Review of Basics {Wald, Savoy}	Student Presentations; Post-Workshop Discussion		
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	Social		EEG/MEG		Cortical Electrodes		GuestLecture
	fMRI (and MRI and Statistics)		NIRS/DOT		phMRI/PET		Lab/Hands-on
	Clinical; DTI/DSI, MRS/MRSI		Future Resolution		TMS		Administrative

LOCATIONS: All lectures will be in Research Affairs A conference room, unless otherwise announced during the program.

"TENTATIVENESS": Last minute changes in scheduling or speakers is rare, but does sometimes happen.

AUDITORS: Martinos members may audit the lectures, but not tours, dinners, laboratories, evening design workshops. Auditing of FreeSurfer workshop will be determined as the course gets closer.