

Programme 12-16 Oct 2015

Course: **Biomolecular NMR (up to 4 ECTS)**

Address: Swedish NMR Centre, University of Gothenburg
Medicinaregatan 5C, 41390 Gothenburg, Sweden

Info: <http://www.nmr.gu.se/english/courses/>

Course teachers

MB	– Martin Billeter,	Prof.,	University of Gothenburg, Sweden
WB	– Wolfgang Bermel,	Dr.,	Bruker BioSpin GmbH, Germany
AB	– Alexandre Bonvin,	Prof.,	Utrecht University, the Netherlands
AG	– Alexander Grishaev,	Dr.,	Nat. Inst. of Standards & Technol, USA
GK	– Göran Karlsson,	Prof.,	University of Gothenburg, Sweden
MM	– Maxim Mayzel,	Dr.	University of Gothenburg, Sweden
VO	– Vladislav Orekhov,	Prof.,	University of Gothenburg, Sweden

Time	Title	Type	Place	Teachers
Monday Oct 12				
8.50 – 9.15	Registration and Coffee			
9.15 – 9.35	Welcome, information		Lect. room	
9.35– 10.35	Student presentations	~5min/student	Lect. room	
10.35– 10.50	Coffee Break			
10.50– 12.20	Concepts of NMR spectroscopy	Lecture	Lect. room	GK
12.20 – 13.50	Lunch			
13.50 – 17.30	NMR signal processing	Lecture & Lab	Instr. room	VO, MM, MB
17.30 – 19.00		Get-together	Entry hall	
Tuesday Oct 13				
8.30 – 10.00	Pulse programming and shaped pulses	Lecture	Lect. room	WB
10.00 – 10.20	Coffee Break			
10.20 – 12.00	spectrometer & signal processing	Lab	Lect. room	WB,MM,VO
12.00 – 13.30	Lunch			
13.30 – 14.30		Lab	Instr. room	WB,MM,VO
14.30 – 15.30	spectrometer & signal processing	Lab	Instr. room	WB,MM,VO
15.30 – 15.50	Coffee Break			
15.50 – 17.30	spectrometer & signal processing	Lab	Instr. room	WB,MM,VO
Wednesday Oct 14				
9.00 – 10.00	CS-Rosetta and other tools at WeNMR	Lecture	Lect. Room	AB
10.00 – 10.30	Break			
10.30 – 12.30	HADDOCK	Lecture	Lect. Room	AB
12.30 – 14.00	Lunch			

14.00 – 16.30	HADDOCK & WeNMR	Lab	Lect. Room	AB
16.30 – 16.50	Coffee Break			
16.50 – 17.30	Discussions and report wrap-up for days 1-3	Lect. Room	AB, WB, VO, MM	

Thursday Oct 15

9.00 – 10.00	Current state of automated NMR structure calculations	Lecture	Lect. Room	MB
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10.30 – 14.00 Mini-symposium: NMR and SAXS in Structural Biology

Place: Lecture hall 2118, Hus 2, Hälsovetarbacken

10.00 – 10.20	coffe			
10.20 – 10.30	<i>The Swedish NMR Centre in national structural biology programs</i> Göran Karlsson, Swedish NMR Centre, University of Gothenburg, Sweden			
10.30 – 11.00	Advances in fast NMR methods Vladislav Orekhov, Swedish NMR Centre, University of Gothenburg, Sweden			
11.00 – 11.30	Homonuclear Decoupling Wolfgang Bermel, Bruker BioSpin GmbH, Germany Germany			
11.30 – 12.00	Structure, affinity and specificity riddles in biomolecular interactions Alexandre Bonvin, Utrecht University, the Netherlands			
12.00 – 11.30	Accurate interpretation of protein SAXS data: influence of solvent treatment Alexander Grishaev, Nat. Inst. of Standards & Technol, USA			
12.50 – 14.00	Lunch (<i>Wallenberg conference centre, Medicinaregatan 20 A</i>)			

The course continues at the Swedish NMR Centre

14.10 – 17.30	NMR structure calculation (With coffee 20 mins)	Lab	Lect. Room	MB
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Friday Oct 16

9.00 – 10.30	NMR/SAXS structure determination	Lecture	Lect. Room	AG
10.30 – 10.50	Break			
10.50 – 12.20	NMR/SAXS	Lab	Lect. Room	AG
12.30 – 13.30	Lunch			
13.30 – 16.00	NMR/SAXS	Lab	Lect. Room	AG
16.00 – 17.00	Discussions and report wrap-ups	Lect. Room	AG, MB, AB ...	