

Winter School at IBG-2: 2-6th of November 2015

Monday 2. November 2015 Introduction		
11:00 a.m.	REGISTRATION – IBG-2 Seminar room	Rm. 406
12:00 a.m.	Lunch	
1:30 p.m.	Opening: Fabio Fiorani: Research targets for improving root efficiency	Rm. 406
2:00 p.m.	Key Lecture Hendrik Poorter: The growth rate and C-budget of plants and the specific role of roots therein.	Rm. 406
3:00 p.m.	Coffee break	
3:30 p.m.	Introduction of the lecturers	Rm. 406
4:00 p.m.	Introduction of the participants - short presentations of all participants (max. 2 slides)	Rm. 406
5:00 p.m.	Forming of working groups Definition of different tasks	Rm. 406
5:30 p.m.	Practical Visit of IBG-2 facilities	
7:00 p.m.	Dinner	

Tuesday 3. November 2015 2D and 3D root imaging		
9:00 a.m.	Lectures Dagmar van Duschoten: MRI Daniel Pflugfelder: MRI data processing Ralf Metzner: PET Jonas Bühler: PET data processing	Rm. 406
	Group 1	Group 2
10:30 a.m.	MRI Lab tour	PET Lab tour
11:15 a.m.	PET Lab tour	MRI Lab tour
12:00 a.m.	Lunch	
1:00 p.m.	Lecture Kerstin Nagel: Root phenotyping - analysing hidden traits using 2D approaches	Rm. 406
1:45 p.m.	Hands on 2D Root imaging	Hands on MRI/PET Data processing
3:15 p.m.	Coffee break	
3:30 p.m.	Hands on MRI/PET Data processing	Hands on 2D Root imaging
5:00 p.m.	Key Lecture Richard Richards: Opportunities to improve cereal root systems for greater productivity.	Rm. 406
7:00 p.m.	Dinner	

Wednesday 4. November 2015 Root phenotyping in the field		
10:00 a.m.	Introduction to Campus Klein Altendorf Thorsten Kraska	Forum
10:30 a.m.	Practical tour through the Campus Klein Altendorf	
12:00 a.m.	Lunch	
1:15 p.m.	Lecture Frank Hochholdinger: Molecular mechanisms of maize root development	Forum
2:00 p.m.	Lecture Tobias Wojciechowski: Root phenotyping methods for field experiment	Forum
2:45 p.m.	Group picture	
3:00 p.m.	Coffee break	Forum
3:30 p.m.	Practical Tobias Wojciechowski: Shovelomics	
5:30 p.m.	Dinner	

Thursday 5. November 2015 Root modelling		
09:00 a.m.	Lecture Johannes Postma: Introduction Simulation models: why bother?	Rm. 406
09:45 a.m.	Lecture Guillem Lobet: From phenotyping to a structural root model	Rm. 406
10:45	Break	
11:00 a.m.	Practical Andrea Schnepf: Hands on experience with RootBox	
12:00 a.m.	Lunch	
1:00 p.m.	Lecture Andrea Schnepf: Functional root modeling: nutrient uptake	Rm. 406
2:00 p.m.	Practical Johannes Postma: Hands on with the Barber-Cushman model	
2:45 p.m.	Coffee break	
3:00 p.m.	Finale: Putting it all together, a conceptional model of your research Guillem Lobet: Putting it all together, a conceptional model of your research	
4:00 p.m.	Key Lecture Björn Usadel: Bioinformatics	Rm. 406
5:00 p.m.	Transfer Aachen	
6:00 p.m.	City Tour	
7:30 p.m.	Dinner	

Friday 6. November 2015 Conclusion		
9:00 a.m.	Group work: Preparation of presentations	Rm. 406
10:30 a.m.	Presentation of the results defined on day 1 (15-20 minutes per group) Discussion with PIs	
12:30 a.m.	Conclusion	Rm. 406
1:00 p.m.	Evaluation of the course	Rm. 406
1:30 p.m.	Lunch / Departure	

Useful information

How to get here: http://www.fz-juelich.de/portal/EN/Service/Howtoreachus/_node.html