

BioR31 Molecular Biotechnology 20 March - 2 June, 2017

Department of Biology, <http://www.biology.lu.se/education>

Course leader: Mats Hansson, 046-2224980, 0702-789557, mats.hansson@biol.lu.se

Other Teachers: Wolfgang Knecht, Christer Löfdstedt, Carin Jari-Sunesson, Anna Rasmussen, Shahira Shakil, Olena Ichchuk (all from Department of Biology), Agnieszka Zygadlo-Nielsen (Copenhagen University), Mathias Hansson (Novo Nordisk A/S, Denmark), Stefan Lind (Lundbeck, Denmark), Anders Persson (AstraZeneca, Mölndal), Ulf Olsson (Start of Vets), Anika Rogstam, Ewa Krupinska (L.P., Lund University), Anna Yelistratova (TEM at Lund University), John EH (Luckan), Nils Sjöberg (Bramm Patent), Lovisa Nilsson (Venture Lab), Lisa Wasserman (Applied Microbiology), Shannon Lawson (Innovations)

Location: Biology building, Sölvegatan 35, 22362 Lund

Teaching activities: L (lecture), Sem (seminar), SV (site visits), G (group discussion), GD (group discussions with dugga which will give points to the final exam), Lab, Proj (Project), Ind (Independent studies). **Everything is compulsory except L.**

Literature: Your previous books in molecular biology and biochemistry

Web page: [Web page LEL](#). Students have access around 1 week before the start of the course

Date	Time	Activity	Description	Teacher	Location
Mo, 20 March	09:00-10:00	Introduction and presentation of the course	Theme: Entrepreneurship	Mats Hansson	Lecture room, A261
	10:00-12:00	Sem	Naturlaboratoriet	Carin Jari-Sunesson	
Tu, 21 March	09:00-12:00	SV	VentureLab	Sten K. Johnson	Center for Entrepreneurship, Scheelevägen 15
	18:00	Deadline	Go through the TED session on page 1 in the lab instruction associated with the protein production lab (starts March 28th)		
We, 22 March	10:00-12:00	Sem	Capra Science	Anna Rasmussen	
	13:00-16:00	Lab	Injection of plant project (filling pots and planting)	Mats Hansson	Greenhouse G, Sölvegatan 29
Th, 23 March	13:00-15:00	Sem	Truly Translational	Christer Löfdstedt	
Fr, 24 March	18:00	Deadline	Hand in preliminary ideas of "Your Biotech Company"	Mats Hansson	
Mo, 27 March	08:00	Deadline	Hand in Reflection on external presentations concerning entrepreneurship	Mats Hansson	
	09:00-10:00	G	Reflection on external presentations concerning entrepreneurship	Mats Hansson	
	10:00-12:00	GD	Group discussion followed by dugga concerning the Theme: Entrepreneurship	Mats Hansson	
	13:00-14:00	L	Theme: Production of proteins and molecules	Mats Hansson	
	14:00-16:00	Sem	Lund Protein Purification Platform (LP3)	Anika Rogstam, Ewa Krupinska	
Tu, 29 March	09:00-11:00	Lab	Groups A-D: Start up cultures	Ewa Krupinska, Anna Rasmussen	A330 + A336
	11:30-13:30	Lab	Groups E-H: Start up cultures	Ewa Krupinska, Anna Rasmussen	A330 + A336
	14:00-16:00	Lab	Groups I-L: Start up cultures	Ewa Krupinska, Anna Rasmussen	A330 + A336
	18:00-18:00		Venture Cafe	Idean Agora, Scheelevägen 15	
We, 29 March	13:00-15:00	Sem	Biological production of insect pheromones in plants and cell factories	Christer Löfdstedt	
Th, 30 March	08:00-18:30	SV	Future of Swedish and Danish Life Science (sign up at http://www.sveedshdanishlifescience.se - 0303 930 5241 (use if you don't sum up))	Lotta, Tina	Medicon Village reception, Scheelevägen 2
Fr, 31 March	09:00-11:00	Lab	Groups A-D: Passaging and upscale	Ewa Krupinska, Anna Rasmussen	A330 + A336
	09:00-11:00	Lab	Groups E-H: Phenotyping and collection of leaf material	David Stuart, Shahira Zakhrebekova	Greenhouse G, Sölvegatan 29
	11:30-13:30	Lab	Groups E-H: Passaging and upscale	Ewa Krupinska, Anna Rasmussen	A330 + A336
	11:30-13:30	Lab	Groups I-L: Phenotyping and collection of leaf material	David Stuart, Shahira Zakhrebekova	Greenhouse G, Sölvegatan 29
	14:00-16:00	Lab	Groups I-L: Passaging and upscale	Ewa Krupinska, Anna Rasmussen	A330 + A336
Mo, 3 April	10:00-12:00	L	Post-translational modifications	Pier Höglund	
	13:30-16:30	Sem	CMB: Biotech AIS	Christer Löfdstedt	
Tu, 4 April	09:00-11:00	Lab	Groups A-D: Start of expression	Ewa Krupinska, Anna Rasmussen	A330 + A336
	11:00-13:00	Lab	Groups A-D: Phenotyping and collection of leaf material	David Stuart, Shahira Zakhrebekova	Greenhouse G, Sölvegatan 29
	11:30-13:30	Lab	Groups E-H: Start of expression	Ewa Krupinska, Anna Rasmussen	A330 + A336
	14:00-16:00	Lab	Groups I-L: Start of expression	Ewa Krupinska, Anna Rasmussen	A330 + A336
We, 5 April	13:00-15:00	Sem	CSR	Anna Yelistratova, TEM at Lund University	
	18:00	Deadline	Exchange of report of "Your Biotech Company" with student fellow		
Th, 6 April	12:30-14:30	Sem	Patent	Nils Sjöberg, Bramm AB	
	15:00-19:00		Designs at the University		The main University building
Fr, 7 April	09:00-11:00	Lab	Groups A-D: Harvest	Ewa Krupinska, Anna Rasmussen	A330 + A336
	11:30-13:30	Lab	Groups E-H: Harvest	Ewa Krupinska, Anna Rasmussen	A330 + A336
	14:00-16:00	Lab	Groups I-L: Harvest	Ewa Krupinska, Anna Rasmussen	A330 + A336
	18:00	Deadline	Hand in progress report of "Your Biotech Company"	Mats Hansson	
Mo, 10 April		Ind	Your Biotech company, lab report writing, etc.		
Tu, 11 April		Ind	Your Biotech company, lab report writing, etc.		
We, 12 April		Ind	Your Biotech company, lab report writing, etc.		
Th, 13 April			Easter holiday		
Fr, 14 April			Easter holiday		
Mo, 17 April			Easter holiday		
Tu, 18 April	09:00-16:00	Lab	All groups: Purification of protein	Ewa Krupinska, Anna Rasmussen	
We, 19 April	09:00-12:00	Lab	All groups: SDS-PAGE analysis	Ewa Krupinska, Anna Rasmussen	
	13:00-14:00	Lab	All groups: Introduction to design of PCR primers	David Stuart, Shahira Zakhrebekova	
	14:00-15:00	Lab	All groups: SDS-PAGE analysis	Ewa Krupinska, Anna Rasmussen	
	15:30-17:00	Sem	Handing drug discovery and large medical enterprises	Stefan Lind	
Th, 20 April	09:00-14:00	Lab	Design: Design of PCR primers	David Stuart, Shahira Zakhrebekova	
Fr, 21 April	10:00-12:00	L	Asita Zaneva	Anders Persson	
	18:00	Deadline	Hand in PCR primers to be ordered	David Stuart, Shahira Zakhrebekova	
	18:00	Deadline	Hand in lab report concerning protein production	Ewa Krupinska, Anna Rasmussen	
Mo, 24 April	09:00-12:00	L	Drug discovery	Wolfgang Knecht	
Tu, 25 April	09:00-12:00	L	Drug discovery	Wolfgang Knecht	
	13:00	Deadline	Hand in Reflection of external presentations from the Theme: Drug discovery and large medical enterprises	Mats Hansson	
	14:30-15:30	G	Reflection on external presentations	Mats Hansson	
We, 26 April	18:00-18:00		Venture Cafe	Idean Agora, Scheelevägen 15	
Th, 27 April	09:00-12:00	L	Drug discovery	Wolfgang Knecht	
Fr, 28 April	09:00-12:00	L	Theme: Plants	Mats Hansson	
Mo, 1 May			No scheduled classes		
Tu, 2 May	10:00-12:00	L	Plant biotechnology	Carin Jari-Sunesson	
	13:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
We, 3 May	09:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
Th, 4 May	09:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
Fr, 5 May	09:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
Mo, 8 May	09:00-12:00	L	CRISPR/Cas	David Stuart, Shahira Zakhrebekova, Mats Hansson	
	13:15-15:00	Sem	CRISPR/Cas	Monette Anderson	
	15:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
Tu, 9 May	09:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
We, 10 May	09:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
	17:00-18:30		Regering utbildning och aktivitet. Anomal basilar cell lig. (i) aktivitet (2) aktivitet, dugga, seminar 18.30, CRIS activation	Ellen Hellme, Björkquist	
Th, 11 May	09:00-15:15		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
	15:15-16:15	Sem		Oliver van Aken	The Biology house lecture hall
Fr, 12 May	09:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
Mo, 15 May			Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
Tu, 16 May	09:00-17:00		Plant lab	David Stuart, Shahira Zakhrebekova, Mats Hansson	
	18:00		Exchange of lab report with student fellow	Mats Hansson	
We, 17 May	14:00-16:00	Sem	Spirit of Hvern	Ulf Olsson	
Th, 18 May	18:00	Deadline	Hand in lab report	David Stuart, Shahira Zakhrebekova, Mats Hansson	
Fr, 19 May		Ind	Preparation for exam		
Mo, 22 May	09:00-12:00	Exam	Examination (Exam)	Mats Hansson	
Tu, 23 May	09:45-10:00	Sem	Plagiarism	Mats Hansson	
	09:00-12:00	Sem	ImmuneBiotech	Shahira Zakhrebekova	
We, 24 May		Ind	"Your Biotech Company"		
Th, 25 May		Ind	Holiday, Ascension Day		
Fr, 26 May		Ind	Holiday		
Mo, 29 May	13:00	Deadline	Exchange of "Your Biotech Company"	Mats Hansson	
Tu, 30 May		Ind	Prog of presentations and exposition		
We, 31 May	09:00-17:00	Sem	Oral presentations of "Your Biotech Company"	Mats Hansson, Carin Jari-Sunesson	
Th, 1 June	09:00-12:00	Sem	Oral presentations of "Your Biotech Company"	Mats Hansson, Carin Jari-Sunesson	
Fr, 2 June	09:00-16:00	Sem	Oral presentations of "Your Biotech Company"	Mats Hansson, Carin Jari-Sunesson	
	18:00-19:00		Barbecue for Master's students, Exchange students and teachers at the Dept. of Biology		Ecology building
Sa, 3 June			Extra day if needed for exam!		
Su, 4 June			Graduation Ceremony http://www.science.lu.se/education/graduation-ceremony		
Ti, 25 Aug			Re-it exams, http://www.biology.lu.se/re-it-exams		