

# TENTATIVE PROGRAMME

## Day 1: 25 July (Thu)

Time	Activity/Event	Venue
0830	Registration	Foyer
0900	<b>Welcome and Introduction</b>	Bioinformatics lab/ Seminar hall
0910	<b>Synthetic biotechnology talk session I</b> 1. Introduction to synthetic biology and metabolic engineering 2. Use of CRISPR technology for metabolic pathway engineering 3. CRISPR-dCas mediated gene activation and RNA knockdown for pathway engineering in model and industrial microbes ( <i>Escherichia coli</i> , PHA-producing strains etc.)	Bioinformatics lab/ Seminar hall
1030	Coffee break	Foyer
1100	<b>Hands-on session 1: Plasmid design for recombinant protein (dCas13a) expression</b>	Bioinformatics lab/ Seminar hall
1230	Lunch	Foyer
1400	<b>Demonstration session 1: One-step plasmid assembly for microbial RNA knockdown</b> - RNA knockdown in engineered <i>E. coli</i>	Genomics Lab
1700	End of session/Tea break	Foyer
1730	End of Day 1	

## Day 2: 26 July (Fri)

Time	Activity/Event	Venue
0830	<b>Introduction</b> - View results of RNA knockdown in engineered <i>E. coli</i>	Foyer
0900	<b>Synthetic biotechnology talk session</b> 1. Microbial production of PHA and bio-monomers using industrial strains	Bioinformatics lab/ Seminar hall
1000	<b>Hands-on session 2: <i>In silico</i> analysis of dCas13a guide RNA</b>	Bioinformatics lab/ Seminar hall
1030	Coffee break	Foyer
1045	<b>Hands-on session 3: Pick and design your own guide RNA for precise RNA knockdown</b>	Bioinformatics lab/ Seminar hall
1215	Lunch	Foyer
1430	<b>Demonstration session 2: Bioassay for PHA biopolymer analysis</b>	Genomics Lab
1700	Summary, discussions and wrap-up	Foyer
1715	Closing speech and certificate presentation by INBIOSIS Director	
1730	End of session/Tea break	Foyer