



Data Sciences eXchange Initiative
From Data to Innovation

DATA SCIENCE SHORT COURSE PROGRAM (2 - 4 OCTOBER 2017)

DATE	TIME	Introduction to bioinformatics	SPEAKER
Monday, 2 October 2017	09.30am	Lecture: Introduction to Biological Databases and Bioinformatics Tools	Asst. Prof. Dr. Mohammad Asif Khan
	10.30am	Tea Break	
	11.00am	Continuation of Lecture	
	12.00am	Practical: Exploring Biological Databases and Bioinformatics Tools	
	01.00pm	Lunch Break	
	02.00pm	Continuation of Practical / Wrap-up	
	03.00pm	Tea Break/Closing	
Deep Learning			
Tuesday, 3 October 2017	09.30am	Lecture: Getting Started with Deep Learning	Muhammad Farhan Sjaugi
	10.30am	Tea Break	
	11.00am	Lecture: Deep Learning for Image Segmentation	
	12.00pm	Continuation of Lecture	
	01.00pm	Lunch Break	
	02.00pm	Practical: Use inference functionality within a deep learning framework, in this case DIGITS and Caffe / Wrap-up	
03.00pm	Tea Break/Closing		
An Introduction to R (data analysis)			
Wednesday, 4 October 2017	09.30am	Lecture: Introduction to R: General principles	Dr. Ong Hui San
	10.30am	Tea Break	
	11.00am	Data structures in R: vectors, matrices, arrays, lists, data frames. Data import/export	
	12.00pm	Practical: Functions in R: How to write your own functions and scripts	
	01.00pm	Lunch Break	
	02.00pm	Continuation of Practical / Wrap-up	
	03.00pm	Tea Break/Closing	