

## "Professional Certificate in Bioinformatics"

*\*\*for postgraduate students\*\**

### Timetable

Day	Time	Details
<b>Monday</b> <b>23<sup>rd</sup> May</b>	09:00 – 12:00	LINUX/UNIX <b>Prof Mark Crowe</b> , Coordinator GplusE grant. Welcome (10 Min) <b>Prof. Gavin Conant</b> , University of Missouri Introduction, initial setup (please bring your own laptop)
	13:30 – 16:30	Next-generation sequencing  Perl exercise : Quality filtering Illumina data
<b>Tuesday</b> <b>24<sup>th</sup> May</b>	09:00 – 12:00	Homology and BLAST exercises <b>Prof. Gavin Conant</b> , University of Missouri
	13:30 – 16:30	Population genetics/drift/selection
<b>Wednesday</b> <b>25<sup>th</sup> May</b>	09:00 – 12:00	Alignment, phylogenetics exercise <b>Prof. Gavin Conant</b> , University of Missouri
	13:30 – 16:30	Network biology—Theory & Cytoscape
<b>Thursday</b> <b>26<sup>th</sup> May</b>	09:00 – 12:00	ULgFVM SNP discovery or population genomics <b>Prof Michel Georges</b> , ULg-FVM or others from
	13:30 – 16:30	TBA
<b>Friday</b> <b>27<sup>th</sup> May</b>	09:00 – 12:00	Genome Wide Association Studies (GWAS) <b>Prof Denis Shields</b> , University College Dublin
	13:30 – 16:30	Introduction to Machine Learning <b>Willem Waegemn</b> , UGent
<b>Monday</b> <b>30<sup>th</sup> May</b>	09:00 – 12:00	High throughput sequencing <b>Prof. Jan Fostier</b> , UGent
	13:30 – 16:30	Metabolic modeling/FBA <b>Prof. Gavin Conant</b> , University of Missouri
<b>Tuesday</b> <b>31<sup>st</sup> May</b>	09:00 – 12:00	Genome structure <b>Prof. Chris Elsik</b> , University of Missouri
	13:30 – 16:30	Sequencing/assembly,
<b>Wednesday</b> <b>1 June</b>	09:00 – 12:00	Annotation <b>Prof. Chris Elsik</b> , University of Missouri
	13:30 – 16:30	Annotation, cont.
<b>Thursday</b> <b>2 June</b>	09:00 – 12:00	RNA-Seq: Theory and practice <b>Prof. Chris Elsik</b> , University of Missouri
	13:30 – 16:30	Databases
<b>Friday</b> <b>3 June</b>	09:00 – 12:00	TBA
	13:30 – 16:30	Assessment (or a series of assessments based on exercises)