Program BePA proteomics summer school 2026

Day 1: Basic concepts-Sample preparation- Experimental design-Data dependent acquisition (DDA) concepts

8h15-9h00 Registration and good morning coffee
9h00-9h15 Welcome (An Staes)
9h15-9h45 Basic concepts of LC-MS driven proteomics (Simon Devos)
9h45-10h45 Sample preparation: the basics (Simon Devos)
10h45-11h15 **Coffee break**
11h15-12h15 Experimental design (Lieven Clement)
12h15-13h00 Flash presentations (1min/person)
13h00-14h00 **Lunch**
14h00-15h00 LC separation in LC-MS (An Staes)
15h00-15h30 **Coffee break**
15h30-16h30 Data dependent acquisition: the basics and instrument design (An Staes)
16h30-17h30 Visit to the ProGenTomics service core
17h30-… Social gathering

Day 2: Data dependent acquisition: identification

8h15-9h00 Registration and good morning coffee
9h00-10h00 DDA: The theory of identification (Toon Callens/Sam Van Puyenbroeck)
10h00-10h30 **Coffee break**
10h30-12h00 DDA ID: practical (Toon Callens,Sam Van Puyenbroeck, Pathmanaban Ramasamy, Enrico Massignani)
12h00-13h00 **Lunch**
13h00-14h30 DDA ID: practical II (Toon Callens,Sam Van Puyenbroeck, Pathmanaban Ramasamy, Enrico Massignani)
14h30-15h00 **Coffee break**
15h00-17h00 DDA ID: practical III (Daria Fijalkowska)

Day 3: Data independent acquisition: basic concepts & data analysis

8h15-9h00 Registration and good morning coffee
9h00-9h45 Targeted acquisition methods (An Staes)
9h45-11h00 Data Independent acquisition: the basics (Maarten Dhaenens)
11h-11h30: **Coffee break**
11h30-12h30 DIA: Data analysis (An Staes)
12h30-13h30 **Lunch**
13h30-15h00 DIA practical I: Identification & quantification (An Staes)
15h00-15h30 **Coffee break**
15h30-17h00 DIA practical II: Biological interpretation (Maarten Dhaenens)

Day 4: Quantification

8h15-9h00 Registration and good morning coffee
9h00-10h00 DDA: Quantification I - Background on preprocessing (Lieven Clement)
10h00-10h30 **Coffee break**
10h30-12h00 DDA: Hands-on quantification - preprocessing (Lieven Clement)
12h00-13h00 **Lunch**
13h00-15h00 DDA: Quantification II - Background on differential analysis and experimental design & Hands-on (Lieven Clement)
15h00-15h30 **Coffee break**
15h30-16h35 DDA: Hands-on quantification of complex designs (Lieven Clement)

Day 5: Proteomics applications

8h015-9h00 Registration and good morning coffee
9h00-9h45 N-terminal proteomics (Kris Gevaert)
9h45-10h30 Multi-omics (Gerben Menschaert)
10h30-11h00 **Coffee break**
11h00-11h45 MS-based protein complex analysis (Sven Eyckerman)
11h45-12h30 Spatial omics (Simon Devos)
12h30-13h30 **Lunch**
13h30-14h15 Single cell proteomics (Marcel Bühler)
14h15-15h00 Clinical proteomics (Jarne Pauwels)
15h00-15h30 **Coffee break**
15h30-16h15 Immunopeptidomics (Francis Impens)
16h15-16h30 Concluding remarks