

Program International Week on Molecular Gene Technology 14-18 of March 2022

1-11 of March 2021

Elaboration and submission of a bibliographic revision by students

Monday 14 March 2021

Identification of organisms (KU Leuven – Catholic University of Leuven, Leuven, Belgium)

Plant genetic engineering (Universidad Politécnica de Cartagena, Spain)

9 am -9.30 am	Welcome
9.30 am - 11.00 am	Ms Kristel Sniegowski, KU Leuven (BE), on <i>'Basic molecular techniques to identify wild yeast isolates and the search for POF genes'</i>
11:00 am- 12:30	Mr Marcos Egea Gutiérrez-Cortines, UPCT (ES), on <i>'CRISPR/CAS vectors, principles and cloning strategies'</i>
12.30 am - 1.30 pm	Setting up of student groups & getting to know each other
1:30 pm – 2:30pm	Break
2:30 pm – 5:30 pm	Workshop option I: Ms Kristel Sniegowski, KU Leuven (BE), on <i>'Hands-on use of basic software tools (Genebank, Bioedit) for the identification of yeasts and primer development for specific genes or organisms'</i>
	Workshop option II: Mr Marcos Egea Gutiérrez-Cortines UPCT (ES), on <i>'Usage of publicly available tools: sequence data bases and construct design for CRISP/Cas' –</i>
5:30 pm – 7:00 pm	Break
7:00 pm	Social activity

Tuesday 15 March 2022

Plant genetic engineering; genomics in aquaculture (Universidad Politécnica de Cartagena, Spain)

Identification of organisms (KU Leuven – Catholic University of Leuven, Leuven, Belgium)

9 am – 11:00 am	Ms Julia Weiss, UPCT (ES), on <i>'Reverse genetics, genome engineering and post-transcriptional gene silencing'</i>
11:00 am – 12:30pm	Ms Eva Armero Ibáñez (UPCT (ES) on <i>' Genomic, genetics and breeding in aquaculture '</i>
12:30 pm – 2.00 pm	Break
2.00 pm – 5.00 pm	Workshop option I: Ms Kristel Sniegowski, KU Leuven (BE), on <i>'Basic molecular techniques for the detection of POF genes in yeast isolates'</i>
	Workshop option II: Ms Julia Weiss, UPCT (ES), on <i>'Identification of transgenic plant material by molecular techniques '</i>

Wednesday 16 March 2022

Protein engineering (Hochschule Merseburg -Merseburg University of Applied Sciences, Merseburg, Germany)

Molecular techniques applied in sex determination in birds (Haute Ecole Louvain en Hainaut (HELHa), Belgium)

9 am -11:00 am	Mr Željko Simić, Hochschule Merseburg (DE), on <i>'Directed evolution and rational design as powerful tools in protein engineering'</i>
10:30 am - 11.30 am	Break
11.30 am – 1:30 pm	Ms Alexa Genco, Haute Ecole Louvain (BE) on <i>'Establishment an optimization of a molecular sexing method in birds'</i> .
1:30 pm - :30 pm	Break
2:30 pm – 5:30 pm	Workshop option I: Mr Željko Simić, Hochschule Merseburg (DE), on <i>'Searching for the most efficient enzyme variant (known so far) for a particular biochemical transformation'</i>
	Workshop option II: Ms Charlotte Saussez, Ms Vesna Jerkovic, Haute Ecole Louvain (BE) on <i>'PCR amplification of pGLO gene and bacterial transfection'</i> .
5:30 pm – 6:00 pm	Break
6:00 pm – 8:00 pm	Social activity

Thursday 17 March 2022

Gene expression analysis (UCLL, Belgium)

Molecular pharming (Universidad Politécnica de Cartagena, Spain)

9 am – 11:00 am	Ms Sofie Pieraet, UCLL (BE), <i>'Gene expression analysis of E-cadherin in tumor tissues using immunohistochemistry and reverse transcription qPCR'</i>
11:00 – 13:00	Mr Marcos Egea Gutiérrez-Cortines and Ms Julia Weiss, UPCT (ES), on <i>'Molecular pharming strategies'</i>
1 pm - 2 pm	Break
2 pm –5 pm	Time for group work on presentation/tutorial with responsible professors

Friday 18 March 2022

9 am – 12 am Visit to company "BIONET"

12 pm – 2 pm

Break

2 pm – 5 pm

Group work/tutorials by professors from the different universities

5pm – 6 pm

Closing ceremony

Friday 25 March 2022

9 am – 12 am

Online presentation of group works