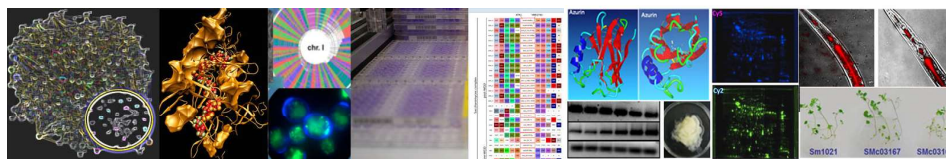


## 2<sup>nd</sup> JOINT BIOTECnico AND AEM PhD PROGRAMS WORKSHOP



[DP-AEM]  
DOCTORAL PROGRAM IN  
APPLIED AND ENVIRONMENTAL  
MICROBIOLOGY



Instituto Superior Técnico, Campus Alameda  
15-16 February 2017  
-South Tower, QA02.1-

### Wednesday, 15th of February

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14:30 – *Welcome Session* - Directors of the BIOTECnico (Prof. **Isabel Sá-Correia**), and the AEM (Prof. **Margarida Casal**) PhD programs

15:00 – 1st year talks (students - 8) – 5+2min

"Functional characterization of virulence-associated Trimeric Autotransporter Adhesins from the human pathogen *Burkholderia cenocepacia*" - **Andreia Pimenta** (BIOTECnico PhD student)

"CRISPR/Cas9-based engineering of *Escherichia coli* for biobrick-based minicircles" - **Cláudia Alves** (BIOTECnico PhD student)

"Biotechnological applications of carbon-dots: shine bright like a diamond" - **Rui Silva** (BIOTECnico PhD student)

In the crossroad between drug resistance and virulence in *C. glabrata*" - **Mafalda Cavalheiro** (BIOTECnico PhD student)

"Improvement of yeast robustness to multiple inhibitors and galacturonic acid uptake for efficient pectin-rich-residues-based biorefinery" – **Luís Martins** (AEM PhD student)

"EXTRACTION Exploring natural remediation processes as a tool for wastewater recovery and freshwater conservation" - **Nuno Martins** (AEM PhD student)

"Water biofilm modulation by fungi" - **Tiago Afonso** (AEM PhD student)

"Characterization of novel membrane transporters with biotechnological applications" - **Maria Silva** (AEM PhD student)

### 16:00 – Coffee break & Poster Session

16:30 – 1st year talks (students - 8) – 5+2min

"Antimicrobial peptides: mechanisms of action and applications" - **Maryam Bagheri** (AEM PhD student)

"Noncoding RNAs as tools to modulate gene expression in synthetic biology" - **Patrícia Apura** (AEM PhD student)

"Adaptation of bacterial vaginosis associated bacteria to the vaginal epithelium" - **Aliona Rosca** (AEM PhD student)

"The 3B's of syngas fermentation - bioreactors, biocatalysts and biofuels" - **Ana Luisa Arantes** (AEM PhD student)

"Yeast as a tool to elucidate the anticancer activity of lactoferrin and its bioactive peptide lactoferricin" - **Cátia Pereira** (AEM PhD student)

"Systems epidemiology to devise new interventions for multi-host tuberculosis" – **Ana Reis** (AEM PhD student)

"Systems epidemiology to devise new interventions for multi-host tuberculosis" - **Ziva Vipotnik** (AEM PhD student)

"Mapping *Pseudomonas aeruginosa* - *Staphylococcus aureus* interactions in polymicrobial co-infections" - **Andreia Magalhães** (AEM PhD student)

## Thursday, 16th of February

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9:00 - *PhD program overview* - Directors of the BIOTECnico (Prof. **Isabel Sá-Correia**), and the AEM (Prof. **Margarida Casal**) PhD programs; President of the Scientific Council of IST (Prof. **Luís Oliveira e Silva**)

9:30 – Plenary talk: *Creating new scale down routes to help speed translation of bioprocessing research to full scale application* - **Michael Hoare**, Biochemical Engineering, University College London, London, United Kingdom.

10:00 – 2nd year talks (3 students) – 8+2min

“*Burkholderia cepacia* complex bacteria variation during long-term infection of the cystic fibrosis lung: focus on the LPS O-antigen” - **Amir Hassan** (BIOTECnico PhD student)

“Plasmonic biosensing using biotin functionalized gold nanorods” - **David Botequim** (BIOTECnico PhD student)

“Transcription regulatory networks controlling antifungal drug resistance in *Candida glabrata*” - **Pedro Pais** (BIOTECnico PhD student)

### 10:30 – Coffee break & Poster Session

11:00 - 2nd year talks (3 students) – 8+2min

“Insights into the mechanism of antimicrobial activity and its exploitation for developing new therapies against clinically relevant bacteria” - **Ana Margarida Pereira** (AEM PhD student)

“Enhancement of the biotechnological value of a commercial cold-adapted xylanase” - **Mário Barroca** (AEM PhD student)

“Bio-control of phytopathogenic fungi relevant for cacao- and olive-derived economy” - **Pedro Ferraz** (AEM PhD student)

11:30 - Plenary talk: *The influence of interspecies interactions on antibiotic susceptibility of polymicrobial biofilms* - **Tom Coenye**, Laboratory of Pharmaceutical Microbiology, Ghent University, United Kingdom.

### 12:00 – Lunch

13:30 – Plenary talk: *Engineering of carbon and redox metabolism in yeast for bioethanol production* - **Jack Pronk**, TUDelft, The Netherlands.

14:00 – 2nd year talks (3 students) – 8+2min

“Function and regulation of *Candida glabrata* and *C. albicans* carboxylic acid transporters and their role in biofilm formation, antifungal drug resistance and phagocytosis” - **Rosana Alves** (AEM PhD student)

“Designing synthetic terpenoid-producing fungal cell factories” - **Rui Silva** (AEM PhD student)

“Evaluating conventional preparation methods of antibody fragments and rapid screening of alternative binding conditions using a microfluidic-based approach” - **André Nascimento** (BIOTECnico PhD student)

14:30 - Plenary talk: *Lessons from Lactobacilli* - **Willem M. De Vos**, Wageningen University, The Netherlands, and Helsinki University, Finland.

15:00 - *Closing remarks* - Directors of the BIOTECnico (Prof. Isabel Sá-Correia), and the AEM (Prof. Margarida Casal) PhD programs

### 15:15 – Coffee break

16:00 – Lab Tour

16:30 - External supervisory committee meeting

17:00 - External and internal committees meetings