

FCT PhD
PROGRAMMES

**FCT PhD Programme
Medicines and Pharmaceutical Innovation (i3DU)**

Course

ADVANCED DRUG DELIVERY

September 17-21, 2018

Faculty of Pharmacy

Amphitheatre B

Universidade de Lisboa, Portugal

Coordinator: António Almeida

The course on Advanced Drug Delivery is part of the PhD Programme in Medicines and Pharmaceutical Innovation (i3DU), trains students in the development of advanced medicinal products, covering crucial aspects that determine the fate of drugs in the human or animal body, from their fundamentals to the advanced strategies to overcome the physiological barriers, including innovative technological and therapeutic applications.

The course will be held at the Research Institute for Medicines (iMed.Ulisboa), Faculdade de Farmácia, Universidade de Lisboa, in Lisbon, 17-21 September 2018. The training program is aimed at PhD students, but welcomes the participation of external academic and scientific community members. Registration is free but mandatory.

PROGRAMME

Monday – 17/09/2018

1. Drug Delivery – Fundamentals

09:30h *Liposomes: Present and future of the first nanopharmaceutical dosage form*

Eugénia Cruz, Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa

10:20h Discussion

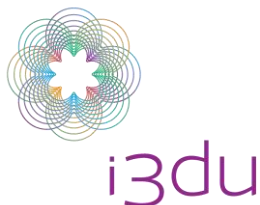
10:40h Coffee break

11:00h *Pharmacokinetics in advanced drug delivery*

Rosário Lobato, Faculty of Pharmacy, Universidade de Lisboa

11:50h Discussion

12:10h Lunch Break



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2. Overcoming Biological Barriers

14:00h *Drug delivery using the nose-to-brain pathway*
Adriana Oliveira Santos, Universidade da Beira Interior

14:50h Discussion

15:10h *Overcoming the skin barrier*
Sandra Simões, Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa

16:00h Discussion

Tuesday - 18/09/2018

3. Nanoparticulate Delivery Systems

10:00h *Nanotoxicology: implications for advanced drug delivery systems development*
Ana Francisca Bettencourt, Research Institute for Medicines (iMed.U.Lisboa), Faculty of Pharmacy, Universidade de Lisboa

10:50h Discussion

11:10h *Polymer conjugates as cancer vaccines*
Liane Moura, Research Institute for Medicines (iMed.U.Lisboa), Faculty of Pharmacy, Universidade de Lisboa

12:00h Discussion

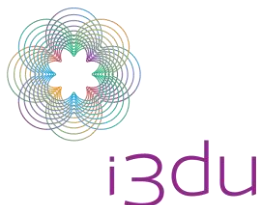
12:20h Lunch Break

14:00h *Targeting Drug Conjugates: An emerging strategy for drug delivery*
Pedro Góis, Research Institute for Medicines (iMed.U.Lisboa), Faculty of Pharmacy, Universidade de Lisboa

14:50h Discussion

15:10h *Taking the most from nanotechnology-based drug delivery in anticancer therapy.*
João Nuno Moreira, Faculty of Pharmacy and Center for Neurosciences and Cell Biology (CNC), Universidade de Coimbra

16:00h Discussion



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Wednesday - 19/09/2018

4. Delivery Systems in Theranostics

09:30h *Biodistribution of nanoparticulate drug delivery systems*

António Rocha Paulo, Instituto Superior Técnico, Campus Tecnológico e Nuclear, Universidade de Lisboa

10:10h Discussion

10:25h Coffee break

10h45h *In-vivo molecular imaging using PET-MRI*

Pedro Almeida, Instituto de Biofísica e Engenharia Biomédica (IBEB), Faculty of Sciences, Universidade de Lisboa

11h25h Discussion

11h35h *Molecular interactions probed by AFM-based force microscopy*

Nuno Santos, Instituto de Medicina Molecular (IMM), Faculty of Medicine, Universidade de Lisboa

12h15h Discussion

12:30h Lunch Break

5. Innovative Applications I

14:30h *Viral and non-viral gene therapy approaches for neurodegenerative disease treatment*

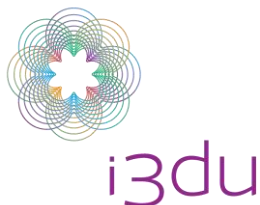
Luís Almeida, Center for Neurosciences and Cell Biology (CNC) and Faculty of Pharmacy, Universidade de Coimbra

15:10h Discussion

15:25h *Biotherapeutics below the freezing temperature, unveiling thermo-stability and accelerating formulation by cold*

Miguel Ângelo Rodrigues, Centro de Química Estrutural, Instituto Superior Técnico, Universidade de Lisboa

16:15h Discussion



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Thursday - 20/09/2018

6. Innovative Applications II

09:30h *PAT tools towards translational advanced drug delivery*

João Almeida Lopes, Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa

10:20h Discussion

10:40h Coffee break

11:00h *From in silico identification of proteasome inhibitors to in vivo application*

Rita Guedes, Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa

11:50h Discussion

12:10h Lunch Break

14:00h *Drug release models*

Paulo Costa, Faculty of Pharmacy, Universidade do Porto.

14:50h Discussion

15:10h *Chitosan-based platforms for drug and gene delivery*

Carmen Remuñan-López, Faculty of Pharmacy, University of Santiago de Compostela, Santiago de Compostela, Spain.

16:00h Discussion

Friday – 21/09/2018

7. Drug Delivery – Regulatory issues

9:00h *Regulatory approach of advanced drug therapies*

Fátima Ventura, National Authority of Medicines and Health Products (INFARMED).

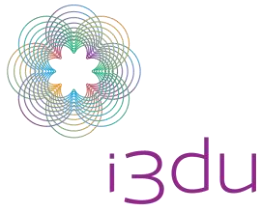
9:40h Discussion

10:00h *Round table*

Ana Matos, Laboratório Edol, Produtos Farmacêuticos SA

Diana Gaspar, SAPEC Agro Portugal

Gonçalo Oliveira, Labor Qualitas – Estudos e Controlo da Qualidade, SA



Inês Ferreira, Alcion Consulting, Portugal

João Conriot, Faculdade de Farmácia, Universidade de Lisboa

Liliana Caetano, Instituto Politécnico de Lisboa

Sara Raposo, Laboratório Edol, Produtos Farmacêuticos SA

12:00h **End of Course**