



Universiteit
Leiden
The Netherlands

LACDR

ULLA Summer School 2024

Shaping the future of drug research:
from design to therapy

June 29 - July 6 | Leiden, The Netherlands

The European University Consortium for Pharmaceutical Sciences, ULLA, aims to enhance collaboration within education and research in Europe. The ULLA Summer School 2024, organized by the Leiden Academic Centre for Drug Research (LACDR) provides a unique opportunity to connect with the next generation of international researchers in pharmaceutical sciences. Courses are offered by all ULLA partners and cover the entire field of pharmaceutical sciences and pharmacy. Participating PhD candidates follow their preferred courses, present their research during poster sessions, and interact through social activities, building a strong international network.

Audience snapshot

200

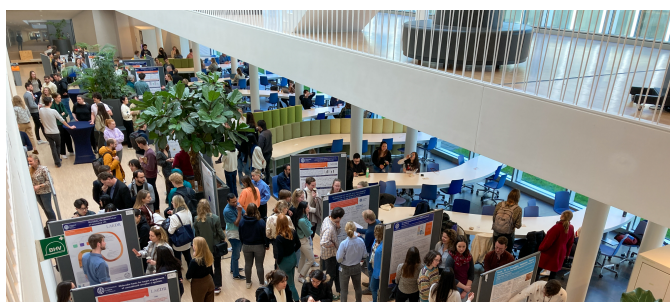
PhD candidates

50

Course leaders

10

European Universities



Area of expertise



Drug discovery, drug development, medicinal chemistry, artificial intelligence, drug usage, biologics, therapy, biomarkers



ULLA SUMMER SCHOOL LEIDEN 2024

Come join us for a week of pharmaceutical sciences, courses and social activities: Opening Saturday June 29th, departure Saturday July 6th.

WHO WILL I MEET?

The Summer School expects 200 young researchers from across Europe.

WHAT WILL I LEARN?

We will offer around 40 courses in various topics (e.g. Drug discovery, Drug development, Biomarkers and Therapy) of pharmaceutical sciences during the week. You can participate in one course every day. You will gain new knowledge, expand your network, make connections with friends and future colleagues. Below you will find a preliminary course overview (please note: This programme is subject to change).

WHICH STARTING LEVEL DO I NEED?

A background in pharmaceutical sciences is highly recommended but most of the scientific and general skill courses offered during the Summer School do not require an advanced level of knowledge on the specific topic.

FEE FOR PARTICIPATION

Fee for participation to the ULLA Summer School Leiden 2024 is € 2500. This includes participation in the entire scientific course programme, the social activity programme including two dinners, a sports event, party, museum visit and coffee/tea/lunch during the whole week. Hotel accommodation is included as well, based on a shared hotel room.

Additional costs for your own account includes travel costs and costs for dinner on free nights.

INTERESTED

You can register by sending an e-mail to ULLA_Leiden@lacdr.leidenuniv.nl.

You can find a glimpse of what's to come here:



Follow ULLA Summer School:



PRELIMINARY COURSE OVERVIEW

Drug discovery			
Nr.	Title	Teacher(s)	Duration
1	Genetic code reprogramming	Seino Jongkees Ivana Drienovksa	1 day
2	Introduction to NMR spectroscopy in drug discovery	Andrea Sartori	1 day
3	Metabolomics and Beyond	Rawi Ramautar Ahmed Ali Charlie Clark Nicolas Drouin Alida Kindt	1 day
4	Barriers of the CNS and their Impact on Brain Drug Disposition	Irena Loryan Elizabeth de Lange Frida Bällgren	1 day
5	Discovery and structural characterization of novel peptides - application of mass spectrometry, transcriptome mining, and NMR	Blazej Slazak Sunithi Gunasekera	1 day
6	Basic concepts in medicinal chemistry	Iwan de Esch	1 day
7	Modern medicinal chemistry	Daan van der Es Laura Heitman	1 day
8	Emerging concepts of GPCR structure and function	Martine Smit Chris Schafer Marco Siderius Raimond Heukers	1 day
9	Advances in the study of medicinal plants: analytical methods and pre-clinical testing for chemical complexity	Marco Biagi	1 day
10	Computational Design and Synthesis of Small-molecule Modulators for Biological Targets	Barbara Zarzycka Maikel Wijtmans	2 days
11	A hands-on introduction into computational medicinal chemistry	Oscar van Linden Albert Kooistra	1 day

Biologics			
Nr.	Title	Teacher	Duration
12	Formulation of therapeutic proteins	Marco van de Weert Vito Foderà	1 day
13	Extracellular Vesicles (EVs) in health and disease	Marjo Yliperttula Riina Harjumäki	1 day
14	Advanced DNA manipulation: 101 ways to skin that (cloning) cat.	Vitor Pinheiro	1 day
15	An Introduction to Nanomedicine: From Concepts to Therapies	Matthias Barz	1 day

Biomarkers and Therapy			
Nr.	Title	Teacher	Duration
16	How to reduce the incidence of cancer in kidney transplant patients?	Teun van Gelder	1 day
17	Gene Therapy: the biotech and viral point of view in 2023	Dorine Bonte Eric Morel	2 days
18	Inhalation route for local and systemic delivery of biological drugs	Annalisa Bianchera Ruggero Bettini	1 day
19	Viral vectors and gene therapy: turning infectious viruses into efficient vehicles to halt and cure genetic disorders	Rik Gijsbers	1 day
20	Therapeutic antibodies : From the Concept to the Clinic	Isabelle Turbica Philippe Billiald	1 day

Drug development			
Nr.	Title	Teacher	Duration
21	New pharmacological strategies in cardiovascular prevention: small molecules and biotechnological approaches	Francesca Zimetti Bianca Papotti	1 day
22	Size matters: Advanced characterisation and concepts in colloidal drug delivery	Ben Boyd Anette Mullertz	1 day
23	Ex vivo ocular models for drug delivery studies	Sara Nicoli	1 day
24	Light-responsive nanosystems: design and applications	Ali Makky	0,5-1 day
25	Quality by Design (QbD) in Drug Development	Jukka Rantanen Clare Strachan	1 day
26	Improved solubility by drug nanocrystals, cocrystals and coamorphous systems	Leena Peltonen	1 day
27	Development, characterisation and regulation of information medicines	Gerrit Borchard Ines Nikolic	1 day
28	Prefomulation: pharmaceutical and biopharmaceutical profiling	Guy van den Mooter	1 day
29	Post-marketing research into the safety of drugs using big data and target trial emulation	Li Wei Ruth Brauer	1 day
30	Model-informed clinical drug development (MIDD): from big data to digital twins	Oscar Della Pasqua Alessandro di Deo Umberto Villani	1 day
31	Modern tools for pharmaceutical analysis – sample preparation and separation formats	Jörg Kutter Deirdre Cabooter	1 day

Artificial Intelligence			
Nr.	Title	Teacher	Duration
32	Fundamentals of drug utilization research using real-world data	Maurizio Sessa Björn Wettermark	2 days
33	Global Mental Health	Ruth Brauer Oksane Pyzik	1 day
34	Structural modelling of proteins, peptides, and their complexes: Computational biophysics and artificial intelligence approaches	Tâp Ha-Duong Liuba Mazzanti	1 day

General skills

Nr.	Title	Teacher	Duration
35	Getting off to a flying start for a great finish to your PhD	Ben Boyd Thomas Rades	1 day
36	From Idea to Innovation: Design Your Own Startup	Willem Jespers	1 day
37	Intro Science Teaching	Jacqueline van Muijlwijk-Koezen Isabel Braadbaart	1 day
38	Programming with R	Laura Zwep	1 day