

OncoProTools Summer School 2023

Faculty of Pharmacy, University of Lisbon (FFUL)



9-13 SEPTEMBER 2023

Avenue Prof. Gama Pinto, 1649-003 Lisboa, Portugal
Room Salão Nobre (C.2.2), Main Building, Floor 0

[MAP WITH LOCATIONS](#)

Contact: info.oncoprotools@uantwerpen.be | +32 486 76 74 08

U

LISBOA

UNIVERSIDADE
DE LISBOA



FACULDADE DE
FARMÁCIA
Universidade de Lisboa



Funded by
the European Union

CONTENT

1. SCHEDULE	3
2. LECTURERS	8
3. ASSIGNMENTS	10
4. SOCIAL PROGRAMME	11
5. VENUE	12
6. GET TO THE VENUE	13
7. ACCOMMODATION	14

SCHEDULE



ROOM SALÃO NOBRE (C.2.2), MAIN BUILDING, GROUND FLOOR

SAT 09	SUN 10	MON 11	TUE 12	WED 13
<p>09:00 - 09:10</p> <p>WELCOME</p> <p>09:10 - 12:30</p> <p>INTERCULTURAL COMPETENCE & COMMUNICATION SKILLS</p> <p>IAK Institute for Applied Creativity</p>	<p>10:00 - 12:00</p> <p>ONCOPROTOOLS COMMUNICATION PLAN</p>	<p>09:00 - 12:30</p> <p>WORKSHOP "SCIENCE FOR POLICY"</p> <p>PlanAPP</p>	<p>09:00 - 10:30</p> <p>RADIOMETALS FOR CANCER THERANOSTICS: RECENT DEVELOPMENTS AND FUTURE PROSPECTS</p> <p>ULISBON</p> <p>11:00 - 12:30</p> <p>SMALL MOLECULE P53 ACTIVATORS FOR ANTICANCER THERAPY</p> <p>FFUL</p>	<p>09:00 - 10:30</p> <p>FROM HIT TO LEAD IN PROTEASE LIGAND DISCOVERY</p> <p>UANTWERP</p> <p>11:00 - 12:30</p> <p>MOLECULAR TARGETING USING RADIOLABELLED ONCOLOGICAL VECTORS...</p> <p>SCV</p>
Group Lunch Time - FFUL				
<p>13:30 - 17:30</p> <p>INTERCULTURAL COMPETENCE & COMMUNICATION SKILLS</p> <p>IAK Institute for Applied Creativity</p>	<p>FREE AFTERNOON</p>	<p>13:30 - 17:30</p> <p>WORKSHOP "SCIENCE FOR POLICY"</p> <p>PlanAPP</p>	<p>13:30 - 15:30</p> <p>GENDER DIMENSION IN SCIENCE AND SOCIETY</p> <p>AMONET</p>	<p>14:00 - 16:00</p> <p>AI IN LIFE SCIENCE</p> <p>CELLPLY</p>
<p>Group Dinner 19:30</p>			<p>Group Activity 17:00</p>	



WELCOME

09:00 - 09:10 | Rui Moreira, Full Professor of Medicinal and Pharmaceutical Chemistry at the Faculty of Pharmacy of the University of Lisbon (FFUL) and Paz Yanez, OncoProTools Project Manager

Opening and Welcome Words
Few practical aspects



INTERCULTURAL COMPETENCE & COMMUNICATION SKILLS

09:10 - 17:30 | Matthias Dehne, IAK Institute for Applied Creativity

This workshop has the following goals:

- (1) Provide insights how culture is created, how it evolves and what impact it has on the way we are perceiving and interacting with our environment.
- (2) Deepen awareness for the own and other cultures; provide guidance for cultural differences, how to categorize/systemize them; share key characteristics of the cultures represented in the project.
- (3) Support the DC fellows in their capabilities to manage cultural differences - incl. elaborating practical recommendations for dealing with people of different cultures - and to benefit from cultural diversity.
- (4) Train the DC fellows in enhancing their professional communication and presentation skills, taking into consideration intercultural aspects as well as different personality types in the audience.
- (5) Promote and enhance the mutual understanding amongst the PhDs nurture the interpersonal network and team spirit, foster exchange and relationships and... have some fun.

The following perspectives are proposed to address the challenges and opportunities in working as global and intercultural research network:

- Individual Perspective (the ME level)
- Team Perspective (the WE level)
- Process Perspective (the IT level)

The workshop foresees a mixture of input/lecture, interactive elements (short exercises, games), discussions in sub-groups, as well as plenary exchange.

DAY 2

Sunday, 10 September



ONCOPROTOOLS COMMUNICATION PLAN

10:00 - 12:00 | *Supported by Maya Berg, OncoProTools Research Manager, and Paz Yanez, OncoProTools Project Manager, University of Antwerp*

We will brainstorm ideas for OncoProTools outreach activities to bring to reality by making an intensive use of the website and social media channels. We will also establish the most appropriate internal organisational structure within the Fellow Board to ensure the success of the outreach plan. This session will follow-up on the conclusions from the Fellow Board virtual meeting in March 2023.

DAY 3

Monday, 11 September



WORKSHOP "SCIENCE FOR POLICY"

09:00 - 17:30 | *Fronika de Wit and Alice Lourenço, Competence Centre for Planning, Policy and Foresight in Public Administration in Portugal - PlanAPP*

In an increasingly more complex and uncertain world, Evidence-Informed Policy-Making (EIPM) and collaborative configurations between science and policy, are of vital importance. [PlanAPP](#), the Portuguese Competence Centre for Planning, Public Policies and Foresight in public administration, supports EIPM by promoting a Science for Policy Agenda in Portugal. In line with the European EIPM Strategy disseminated by DG Joint Research Centre (JRC), PlanAPP promotes workshops on Science for Policy for research centers throughout Portugal.

This workshop will discuss the following topics: (1) Bridging the gap between science and policy; (2) A strategy for impact; and (3) Tips and tricks for Science communication. The overall goals are to gain insight into the interaction between the different paradigms in which scientists, policymakers and politicians operate; as well as to reinforce your skills to increase the impact of science for policy.



RADIOMETALS FOR CANCER THERANOSTICS: RECENT DEVELOPMENTS AND FUTURE PROSPECTS

09:00 - 10:30 + Q&A | António Paulo, Centro de Ciências e Tecnologias Nucleares, Instituto Superior Técnico, University of Lisbon



Therapeutic nuclear medicine makes use of radiopharmaceuticals carrying radionuclides that emit ionizing particles, such as β^- or α particles. In particular, targeted radionuclide therapy (TRT) is emerging as a promising anti-cancer modality for patient-tailored treatments, as the same targeting biomolecule recognizing a particular molecular target can be labeled either with a diagnostic or with a therapeutic radionuclide. Thus, nuclear medicine modalities offer the unique advantage of easily switching from a diagnostic radionuclide to a therapeutic one, using the same or related chemical entities, giving rise to an increasing number of clinical applications with theranostic radiopharmaceuticals. In this context, this lecture will highlight the relevance of medical radiometals for cancer theranostics while addressing the most relevant aspects involved in the design, synthesis, characterization and preclinical evaluation of metal-based radiopharmaceuticals.



SMALL MOLECULE P53 ACTIVATORS FOR ANTICANCER THERAPY

11:00 - 12:30 + Q&A | Maria M. M. Santos, Faculty of Pharmacy, University of Lisbon

The protein p53, also known as “guardian of the genome”, is a transcription factor that acts as a tumor suppressor. In almost all human cancers, the p53 tumor suppressor function is inactivated through different mechanisms, such as overexpression of p53 negative regulators (MDM2 and MDMX), or mutation or deletion of the *TP53* gene. Therefore, p53 represents an important therapeutic target for anti-cancer therapy.

The lecture will focus on different therapeutic strategies for targeting p53, including an overview of our research work in this field, as well as an overview of the drug candidates currently in clinical trials.

GENDER DIMENSION IN SCIENCE AND SOCIETY

13:30 - 15:30 | Ana Maria Costa Freitas, AMONET



[AMONET](#) is The Portuguese Association of Women in Science. It was created in 2003 by a group - now comprising representatives from all over the country-, under the awareness of an existing gap in Portugal, regarding the non-existence of a forum where Women Scientists could, in an organized way, optimize their ability to intervene in society. The vision of [AMONET](#) is to become a reference in the community of women of science in the national and international panorama. Its mission is to promote gender equality and full participation of female scientists residing in Portugal in all aspects of science, including research, teaching, industry, and administration.



FROM HIT TO LEAD IN PROTEASE LIGAND DISCOVERY

09:00 - 10:30 + Q&A | Pieter Van der Veken, University of Antwerp

Proteases play pivotal roles in signaling pathways on a cellular, organ and whole organism level. Therefore, proteases represent drug targets for a long list of diseases, ranging from cancer and infectious disease to cardiovascular, immune and metabolic afflictions. Proteases can cleave other proteins and peptides, relying on an active site that is typically highly 'drugable'. The lecture will focus on how ligands for the active site of proteases are discovered and how they can be further elaborated in drug candidates. The main emphasis will be on small molecule ligands and their applications as protease inhibitors as drugs and drug candidates. In addition, we will look at uses beyond classical inhibitor applications: 1) examples where active site ligands are used to modify Protein-Protein Interactions of the protease and 2) examples where active-site ligands of proteases are used for biomarker applications. The latter topic will later be continued in the lecture of Professor Rösch.



PART 1: GENERAL CONCEPT OF MOLECULAR TARGETING USING RADIOLABELLED ONCOLOGICAL VECTORS PART 2: DEVELOPMENT AND PRE-CLINICAL EVALUATION OF RADIOTHERAPEUTICS UTILIZING FAP INHIBITORS

11:00 - 12:30 + Q&A | Frank Rösch, Spezial-Chemikalien-Vertriebs-GmbH

The lecture will first highlight the principal approach of molecular targeting radiopharmaceuticals utilizing PSAM inhibitors as vectors for PSMA in prostate cancer, octreotide peptides targeting somatostatin receptors in Neuroendocrine Cancer, etc.). Next, we will apply this concept to the FAP inhibitor targeting FAP overexpressed in CAF, which transforms the inhibitor into a variety of radiopharmaceuticals. In this context, radiolabelling strategies and preclinical evaluation of potent diagnostic radiopharmaceuticals will be discussed. We will also look at the clinical applications of ⁶⁸Ga-labelled FAPi-based radiopharmaceuticals for the diagnosis of tumors. The last part of the lecture will be about therapeutic options and will discuss strategies to develop compounds with longer retention time in the tumor microenvironment, preclinical evaluations, and how this is being translated into clinical application.

AI IN LIFE SCIENCE

14:00 - 16:00 + Q&A | Rita Ruggiano, Cellply



Nowadays, AI is one of the most famous topics, it includes many powerful techniques that could solve different kinds of task. In this lecture, we will introduce some of them that could improve the automation of bio-image analysis, such as object detection, semantic/instance segmentation, and clustering. The focus will be to understand how to use these tools instead of how to implement them by ourselves.

LECTURERS



RUI MOREIRA

Full Professor of Medicinal and Pharmaceutical Chemistry at the Faculty of Pharmacy of the University of Lisbon (FFUL) - Host of the Summer School

Rui Moreira is Full Professor of Medicinal and Pharmaceutical Chemistry at FFUL. His research interests lie at the interface between chemistry and biology, and include the development of anti-infectious agent, the rational design of enzyme inhibitors and its translation into chemical probes for target identifications, and the development of targeted chemical drug delivery systems for oncology. He has successfully supervised more than 20 PhD students and published +160 papers. He currently is president of the European Federation for Medicinal Chemistry (EFMC).



MATTHIAS DEHNE

CEO IAK Nederland - Institute for Applied Creativity

Matthias is a highly prolific executive coach, trainer and consultant with global experience in almost all industry sectors. He works with his clients to clarify their objectives, support them to identify potential challenges and opportunities related to their goals. In the 25 years that he worked in various functions, industries and countries, Matthias gained deep insights in the nature of organizational and personal development, transformation and change.



ALICE LOURENÇO

Expert in Knowledge Management at Competence Centre for Planning, Policy and Foresight in Public Administration - PlanAPP

Alice Lourenço is MSc in Psychology, with more than 20 years of experience as a Certified Trainer in facilitating groups and training-of-trainer for public and private entities. She is also specialist in work, social and organizational Psychology, expert evaluator, graphic facilitator and photographer.



FRONIKA DE WIT

Advisor Knowledge for Policy, Competence Centre for Planning, Policy and Foresight in Public Administration - PlanAPP

Fronika de Wit, PhD in Climate Change and Sustainable Development Policies, with over 15 years of experience in scientific research, has worked for the Dutch, Brazilian and Portuguese local and national governments in making political decision-making more evidence-informed.



ANTÓNIO PAULO

Department of Engineering and Nuclear Sciences, University of Lisbon

António Paulo, PhD, is Principal Researcher and Group Coordinator of the Radiopharmaceutical Sciences Group in the Center for Nuclear Sciences and Technologies (C2TN). C2TN belongs to the Department of Nuclear Sciences and Engineering (DECN) at the Instituto Superior Técnico, University of Lisbon.



MARIA M. M. SANTOS

Leader of the Medicinal Organic Chemistry group, Faculty of Pharmacy, University of Lisbon - Host of the Summer School

M. M. M. Santos graduated in Applied Chemistry (Organic Chemistry) and is doctor in Chemistry (Organic Synthesis) by the New University of Lisbon. She was post-doc at the Faculty of Pharmacy - University of Barcelona (2004-2006) and at the Faculty of Pharmacy - University of Lisbon (FFUL, 2006-2008). Currently, she leads the Medicinal Organic Chemistry Group (<https://medorgchemlab.wixsite.com/medorgchemgroup>) at the Research Institute for Medicines (iMed.Ulisboa) and is professor at the Pharmaceutical Sciences and Medicines Department of FFUL. Her research is focused on medicinal chemistry, and methodology development for drug discovery. Maria Santos is recognized by her work on the development of small molecule p53 activators.



ANA COSTA FREITAS

President of AMONET and former rector of the University of Évora

Ana Costa Freitas is a Portuguese academic, who was rector of the University of Évora, Portugal, between 2014 and 2022. She graduated in Agronomy from the Instituto Superior de Agronomia and holds a PhD in Food Biotechnology from the University of Évora, where she became a Full Professor at the Department of Plant Science - School of Science and Technology.



PIETER VAN DER VEKEN

Full Professor of Medicinal Chemistry at the Department of Pharmaceutical Sciences of the University of Antwerp

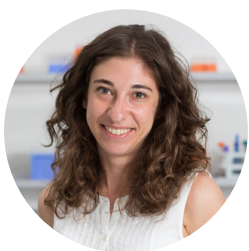
Pieter Van der Veken is Full Professor at the Department of Pharmaceutical Sciences of the University of Antwerp and Principal Investigator at the Medicinal Chemistry Research Group (UAMC). His work contributes to the research areas of infectious diseases (parasitic, TB, viral), cancer, and diseases of the immune system. Pieter is internationally recognized for his pioneering work in the field of proline-selective proteases.



FRANK RÖSCH

*Executive Manager, Spezial-Chemikalien-Vertriebs-GmbH (SCV)
Technology Transfer and Patients Licenses*

Prof. Dr. Frank Rösch is an international expert of Radiopharmaceutical Chemistry executive with operational and commercial management experience in PET and radiotherapy products. He is emeritus of the Institute of Nuclear Chemistry, Johannes Gutenberg-University Mainz, Germany. His scientific focus is on physico-chemistry, radiochemistry and radiopharmaceutical chemistry of metallic radionuclides and their compounds in diagnostic and therapeutic application.



RITA RUGGIANO

Project Leader Analytical Software, Cellply

Rita Ruggiano is an Electronic Engineer with expertise in bioimage and data analysis and software development. Since 2017, she is member of the Cellply Team where she contributes to the design of the Analytical Software, an application that provides deep learning models and data analysis methods applied to images acquired by a bio-medical imaging machine.

ASSIGNMENTS



1) PERSONAL CAREER DEVELOPMENT PLAN

Delivery date: 30 June 2023

Please complete your Personal Career Development Plan (PCDP) in the OncoProTools template available on MS Teams. Note that the content shall be discussed with your supervisor(s) during a face-to-face meeting and a signed copy must be sent to info.oncoprotools@uantwerpen.be before the deadline.

2) RESEARCH PRESENTATION MID-TERM REVIEW

Delivery date: 7 September 2023

Prepare a brief presentation introducing yourself, your background and your individual research (including the main goals). Please also provide a brief update on your research progress. The presentation should last around 10 min approx. You can choose between using the OncoProTools slides template ([HERE](#)) or a free format meeting all the EU funding visibility regulations. Please submit your slides to info.oncoprotools@uantwerpen.be no later than 7 September.

3) READING "SCIENCE FOR POLICY"

Delivery date: 11 September 2023

The following pre-reading is proposed before the workshop "Science for Policy":

1. JRC's Science for Policy Handbook Science for Policy Handbook:
[Knowledge for policy \(europa.eu\)](https://knowledge4policy.europa.eu) If your Elsevier subscription does not allow you to download the chapters, please ask Paz to provide them.
2. Blog by Roger Pielke on Science engagement in policy-making:
[Five Modes of Science Engagement](#)

4) EVALUATION QUESTIONNAIRE OF THE SUMMER SCHOOL 2023

Delivery date: 22 September 2023

Please respond to the following anonymous evaluation questionnaire before the deadline. It is highly recommended that you fill out this questionnaire as early as possible after the end of the Summer School to ensure more precise answers before you forget some aspects.

Questionnaire: https://uantwerpen.eu.qualtrics.com/jfe/form/SV_bgAnjfWHQqevxmS

SOCIAL PROGRAMME



DINNER AT RESTAURANTE MARCO

-  **9th September 2023**
-  **Evening at 19:30**
-  **Largo Santos 14D, 1200-808 Lisboa**

You are invited to a group dinner at the Restaurant Marco to enjoy traditional Portuguese dishes in good company. The meeting point will be outside the restaurant and we will convene at 19:30 CET.

SCAVENGER HUNT "WELCOME TO LISBON"

-  **12th September 2023**
-  **Afternoon at 17:00**
-  **Between 2:30 and 3:00 hours**
-  **Miradouro São Pedro de Alcântara (next to the fountain)**
Metro station Rato (Yellow Line)
Metro station Baixa-Chiado (Blue or Green Lines)



To take with you brilliant memories of Lisbon, the DC fellows are invited to join a "Scavenger Hunt" on Tuesday afternoon. This activity is expected to provide all the group with a plethora of experiences to gain a personal and authentic vision of the city in a relaxed and fun way.

The hunt will be organised in two teams. It is intended that both teams are able to finish by dedicating themselves to succeed in all steps, tasks and challenges. The route itself is challenging but accessible. Information about the route will be given in the form of clues, riddles, coordinates, etc. Among the tasks to perform, you can expect the following: actions related to local themes, observation tasks, general knowledge questions, gastronomy exercises, contact with the inhabitants, orientation tasks, and team building actions.



This activity will be organised by Lisboa Autêntica, an entity that opened its doors in 2011. Its founders Paulo, Mafalda, and a small team, with a common vision, began a journey through sharing their knowledge and passion about the capital, Lisbon. Over time, the team expanded and it now offers a wide range of activities, including e-Bike tours, scavenger hunts, van tours, and thematic/tailored-made tours to ensure memorable authentic experience. By being versatile, sincere, fun, and enthusiasts, they promise to deliver "Real walks"!

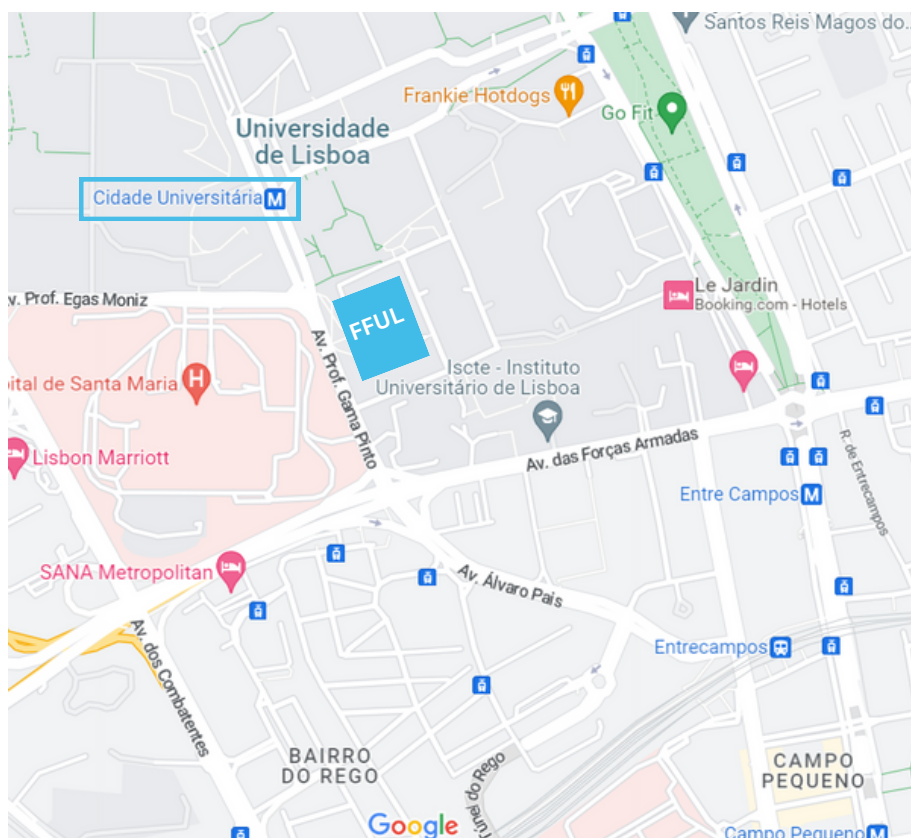
FACULTY OF PHARMACY OF THE UNIVERSITY OF LISBON (FFUL) ADDRESS: AVENIDA PROFESSOR GAMA PINTO - 1649-003 LISBOA, PORTUGAL

The Faculty of Pharmacy of the Universidade de Lisboa (FFUL) is a Portuguese public institution of higher education dedicated to education, research, knowledge transfer and continuing education in the fields of pharmacy, medicine, and pharmaceutical sciences.

The FFUL is a recognized institution at the national and international level. The courses that grant an academic degree are accredited by the Agency for Assessment and Accreditation of Higher Education (A3ES) and the Integrated Master in Pharmaceutical Sciences is also accredited by the Portuguese Pharmaceutical Society (Ordem dos Farmacêuticos) for professional practice.



FFUL is located in the City Campus of the University of Lisbon. **The Summer School will be held in the Room Salão Nobre (C.2.2), located on the ground floor of the Main Building of FFUL.**



GET TO THE VENUE



BY PLANE/TRAIN/CAR

FFUL is located in the Universidade de Lisboa's University City Campus, and it is easy to reach it in a number of different ways.

BY PLANE

From the airport, take the metro "Red line" (Linha Vermelha) direction S. SEBASTIÃO and change at SALDANHA for the "Yellow line" (Linha Amarela) direction ODIVELAS. Get off at CIDADE UNIVERSITÁRIA metro station (~25 min to the venue). Taxi is also a good option and will take ~20 min.

BY TRAIN

If you arrive by train from a European country, you will get off at GARE DO ORIENTE station. Take the metro "Red line" (Linha Vermelha) direction S. SEBASTIÃO and change at SALDANHA for the "Yellow line" (Linha Amarela) direction ODIVELAS. Get off at CIDADE UNIVERSITÁRIA metro station (~30 min to the venue).

BY CAR

Take the 2ª Circular to "Campo Grande" exit
Eixo Norte-Sul: "Sete Rios/ Praça de Espanha" exit.
GPS coordinates: +38° 44' 58.61", -9° 9' 26.51"
Parking: FFUL Parking D or parking under EMEL management (Cidade Universitária area).

ARRIVING FROM OTHER PARTS OF LISBON

From other parts of Lisbon, we particularly recommend the use of public transportation. Buses stopping at FFUL are 701, 731, 735, 738, 755, 764, 768. The nearest metro station is Cidade Universitária (Yellow line). Buses: www.carris.pt | Metro: www.metrolisboa.pt/eng

TAXI

Rádio Taxis: +351 218 119 000
Autocoope: +351 217 932 756

ACCOMMODATION



We provide a non-exhaustive list of accommodations not far from the venue. You are strongly advised to prepare your travel arrangements as soon as possible to avoid overrated fees.

The DC fellows are supposed to discuss the accommodation budget limit with their supervisors, since these expenses are to be covered by each beneficiaries' EU budget and not by the consortium budget.

Good tip! The following locations have direct connections to the university campus by the "Yellow line" of the metro. **The exit for FFUL is CIDADE UNIVERSITÁRIA.**

- Campo Pequeno
- Saldanha
- Avenida da Republica
- Marques de Pombal
- Largo do Rato

ACCOMMODATION OPTIONS SORTED BY RATE

- 1. Airbnb accommodations** (<https://www.airbnb.com/>)
- 2. VIP Inn Berna Hotel** (<http://www.hotelvipinnbernalisboa.com/>) - within walking distance
Price: ~€90/night, breakfast included (+351 21 781 4300)
- 3. Hotel 3K Barcelona** (<https://www.hotel3kbarcelona.pt/>) - within walking distance
Price: ~€112/night, breakfast included (+351 21 795 4273)
- 4. VIP Executive Zurich** (<https://www.vipzuriquehotel.com/en/>) - within walking distance
Price: ~€116 EUR/night, breakfast included (+351 21 781 4000)
- 5. TURIM Iberia Hotel** (<https://turim-hotels.com/>) - within walking distance
Price: ~€ 126 EUR / night, breakfast included (+351 21 790 6110)
- 6. VIP Executive Entrecampos Hotel** (<https://www.vipentrecamposhotel.com/en/>)
Price: ~€128/night, breakfast included (+351 210 043 000)
- 7. Luzeiros Suites** (<https://suites.luzeiroshoteis.com/>) - **Very good! - walking distance**
Price: ~€130 /night (+351 210 912 110)
- 8. Zenit Lisboa** (<https://lisboa.zenithoteles.com/en/>) - within walking distance
Price: ~€132 / night

WE WISH YOU ALL A PLEASANT,
ENRICHING, INTERACTIVE, AND FUN
SUMMER SCHOOL IN LISBON!

