



ΠΑΝΕΠΙΣΤΗΜΙΟ
ΠΑΤΡΩΝ
UNIVERSITY OF PATRAS

Co-funded by the
Erasmus+ Programme
of the European Union



**ERASMUS MUNDUS JOINT MASTER DEGREE (EMJMD)
NANOMEDICINES FOR DRUG DELIVERY**

NANOMED

2nd EMJMD NANOMED WORKSHOP

**INNOVATIVE NANOMEDICINES FOR TARGETED
DRUG DELIVERY AND PERSONALIZED APPROACHES**

July 8-10, 2019

WORKSHOP PROGRAM

University of Patras & ICE-HT/FORTH Institute, GR

MONDAY 8 JULY 2019 (Venue: ICEHT/FORTH)

9.30-9.45 **Registration- Distribution of Workshop Material**

9.45-10.30 **Opening session**

Greetings from University Representative, and Department of Pharmacy Head; Brief Presentation of the Department

Greetings from Head of ICE/HT- FORTH - Brief presentation of ICEHT

Greeting from the Coordinator of EMJMD, Brief presentation of NANOMED

SESSION Chairs : **Razan Hessenow and Ahmed Gamal Ali**

10.30-11.00 Shai Rahimpour (IS2) (p19) Multifunctional nanoparticles for early diagnosis of Alzheimer's disease

11.00-11.30 Dror Fixler (IS3) (p20) Biological Computing Using Fluorescence Lifetime Imaging Measurements

11.30-12.45 Coffee Break and Posters

SESSION Chairs : **Sophia G. Antimisiaris and Pavlos G. Klepetsanis**

12.45-13.15 Achilleas Gravanis (IS4) (p21) Innovative in vitro 3D models to overcome the in vitro/in vivo correlation problem

13.15-13.45 Panos Macheras (IS5) (p22) My Random Walk in the Modelling and Simulation of Biopharmaceutic Pharmacokinetic and Pharmacodynamic Processes

13.45-15.30 Lunch Break and Posters

SESSION Chairs : **Marwa Elkhatab and Beatriz Dias Barbieri**

15.30-16.00 Theodore Christopoulos (IS6) (p23) Paper-based biosensors providing genetic signatures for precision medicine

16.00-16.25	NANOMED 1 (p33)	Mansoor Al- Waeel	Development of Recombinant Endolysins conjugated with Nanoparticles for the Treatment of Topical Bacterial Infections
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16.25-17.15 Coffee Break and Posters

SESSION Chairs : **Salma Ashmawy** and **Jessica Marvela**

17.15-17.40	NANOMED 2 (p34)	Ahmad Bahlool	Engineering targeted nanomedicines for advanced prostate cancer
17.40-18.05	NANOMED 3 (p35)	Hussein Genedy	3D printing nano-resolution organic electronic drug delivery devices

WELCOME RECEPTION (all Welcome)

Park of Peace (Parko Irinis), University of Patras

19.00 -21.30

(all participants who have cars are welcome to help with transfer to the restaurant)

TUESDAY 9 JULY 2019 (Venue: ICEHT/FORTH)

SESSION Chairs : **Haneen Nakhleh Moslih and Sofia Miron Barroso**

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| 9.30-10.00 | Karine Andrieux (IS7) (p24) | Evaluation of liposomes as antisense therapy vectors for the treatment of preeclampsia |
| 10.00-10.30 | Marherita Morpurgo (IS8) (p25) | Environment sensitive Nanoparticles Where do we stand? |

10.30-11.15 Coffee Break and Posters

SESSION Chairs : **Jasnoor and Anshika Maheshwari**

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|-------------|------------------------------|---|
| 11.15-11.45 | Paola Luciani (IS9) (p26) | A phospholipid-based perspective for the diagnosis and treatment of liver fibrosis |
| 11.45-12.15 | Enrica Chiesa (IS10) (p27) | Microfluidic: a new technological approach for the synthesis of CD44 targeted hyaluronic acid/chitosan nanoparticles loaded with Everolimus |
| 12.15-12.45 | Christos Reppas (IS11) (p28) | Drug Absorption from the Lower Intestine? |
| 12.45-13.15 | Maria Verzttoni (IS12) (p29) | Drug exposure after oral administration to paediatric populations |

13.15-14.30 Lunch Break and Posters

SESSION Chairs : **Patricia Isabel Bravo and Ana Claudia Siqueira**

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|-------------|--------------------------------|---|
| 14.30-14.45 | Marie Morille (SO 1) (p30) | Exploring the potential of mesenchymal stem cells small extracellular vesicles as bio-inspired delivery systems |
| 14.45-15.00 | Spyridon Mourtas (SO 2) (p31) | Benzothiazolyl-decorated liposomes effectively inhibit A β 1-42 aggregation and exhibit high uptake by hCMEC/D3 cells |
| 15.00-15.15 | Antonia Marazioti (SO 3) (p32) | The pleural cavity retains liposomal drugs providing extended topical drug bioavailability |

15.15-16.00 Coffee Break and Posters

SESSION Chairs : Arlen Euan Martinez and Ching-Ting Yu

16.00-16.25	NANOMED 4	Pinar Cakilkaya (p36)	Investigation of novel multifunctional polydimethylsiloxane nanoparticles as cancer targeting and siRNA polyplex formulation
16.25-16.50	NANOMED 5	Farooq Umer (p37)	New generation of drug-loaded lipid nanocapsule hydrogel: a sustained and specific drug delivery system against glioblastoma

SESSION Chairs : Daria Siediuko and Ahmed Gamal Ali

16.50-17.15	NANOMED 6	Sareema Javaid (p38)	Nanoformulated probes for Electron Paramagnetic Resonance detection of oxidative stress
17.15-17.40	NANOMED 7	Ayah Burhan (p39)	The Development of Mucosal Vaccinations for Oral Transmucosal Delivery using Nanofabrication Processes
17.40 -18.05	NANOMED 8	Noraseth Kaeokhamloed (p40)	New in vitro models to evaluate intestinal absorption of nanomedicines

20.30-22.30

Dinner for NANOMED consortium and Invited Speakers (by invitation)

Close to the center of Patras (see information about Venues)

WEDNESDAY 10 JULY 2019 (Venue: Department of Pharmacy, University of Patras)

SESSION Chairs : **Haneen Nakhleh Moslih** and **Marwa Elkhashab**

9.00-9.25	NANOMED 9	Dang Tri Le (p41)	Nanotechnological Approaches for Treating Fibrotic Scars in Deep Partial Thickness Burns
9.25-9.50	NANOMED 10	Mohamed Khaled (p42)	Evaluating and optimizing loading methods of single-chain variable fragment protein into extracellular vesicles
9.50-10.15	NANOMED 11	Hien Phan Thi Dieu (p43)	Tuning nanoparticle size and drug encapsulation through chemistry and formulation strategies of A-B amphiphilic block copolymers

SESSION Chairs : **Razan Hessenow** and **Daria Siediuko**

10.15-10.40	NANOMED 12	Refaya Rezwan (p45)	Microfluidic-assisted manufacture of chemically-modified silk nanoparticles
10.40-11.05	NANOMED 13	Johanna Gabriela Rodriguez Cabezas (p46)	Design, formulation and characterization in vitro for theranostic nanobubbles
11.05-11.30	NANOMED 14	Gözde Tezcan (p47)	Liposomal antibiotic delivery system towards Gram-negative bacteria

11.35-12.35 **Coffee, Refreshments and Light snacks for NANOMED Students**

	Working Lunch -Strategic board opened to"
12.35-14.10	-Student representatives -Invited speakers -Traineeship supervisors
14.10-15.20	Pedagogic Committee (Consortium Members only)

END OF WORKSHOP

Workshop Venues

1] Department of Pharmacy, University of Patras

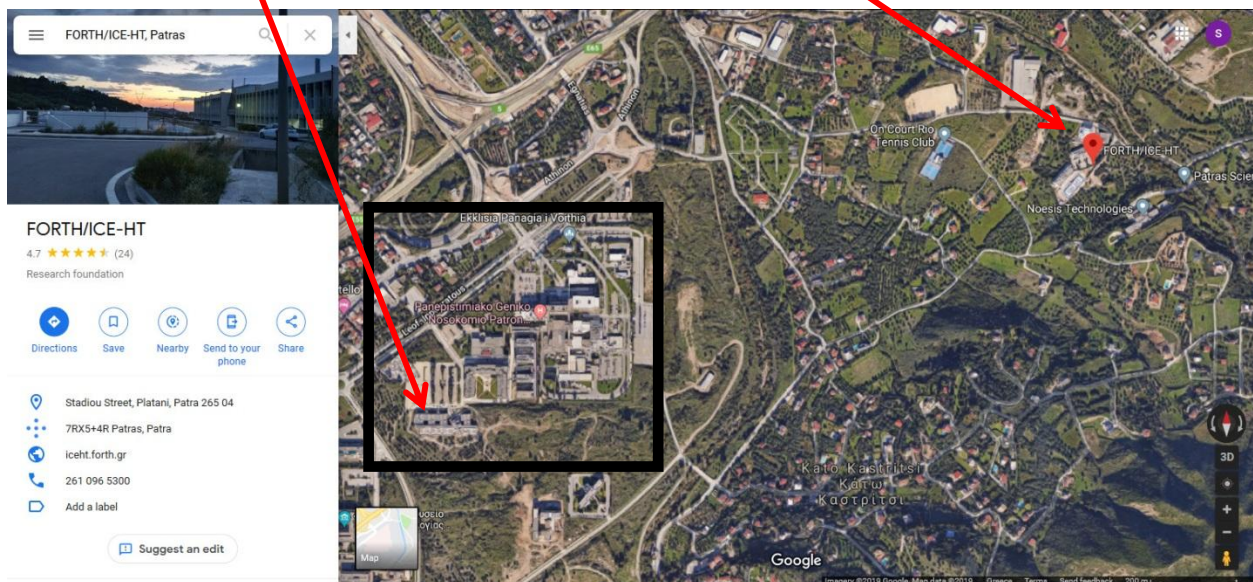
<https://www.google.com/maps/place/University+Of+Patras/@38.28923,21.7831803,665m/data=!3m2!1e3!4b1!4m5!3m4!1s0x135e4c793099940b:0x40a1f27b1f8908f3!8m2!3d38.28923!4d21.785369?hl=en>



Pharmacy

2] Institute of Chemical Engineering Sciences, Foundation of Research and Technology Hellas (ICEHT/FORTH)

<http://www.iceht.forth.gr/contact/contact-info.html>



How to reach Patras from AIA "Eleftherios Venizelos"

Patras is connected by air mainly through the [Athens International Airport "Eleftherios Venizelos"](#) (AIA "Eleftherios Venizelos") and the [Araxos National Airport](#). Patras is, also, connected to Europe through Italy by sea.

The AIA "Eleftherios Venizelos" is located in Spata, 33 km southeast of Athens, and at a distance of approximately 240 kms from Patras. Patras is connected to AIA "Eleftherios Venizelos" by bus, car or train. You have the following options concerning your transportation from Athens Airport to Patras:

By Bus

Right outside the baggage claim area at the arrivals level (exits 4 & 5) take the [Express Line X93](#) to the Kifisos Intercity Bus Station (KTEL). The route duration from the AIA "Eleftherios Venizelos" to the Kifisos Intercity Bus Station (KTEL) is about 1 hour, depending on the traffic load.

Alternatively, you can take a taxi from AIA "Eleftherios Venizelos" to the Kifisos Intercity Bus Station (KTEL). Taxis serve on a 24-hour basis. The route duration is approximately 30 minutes, and the cost is ~ 50 €.

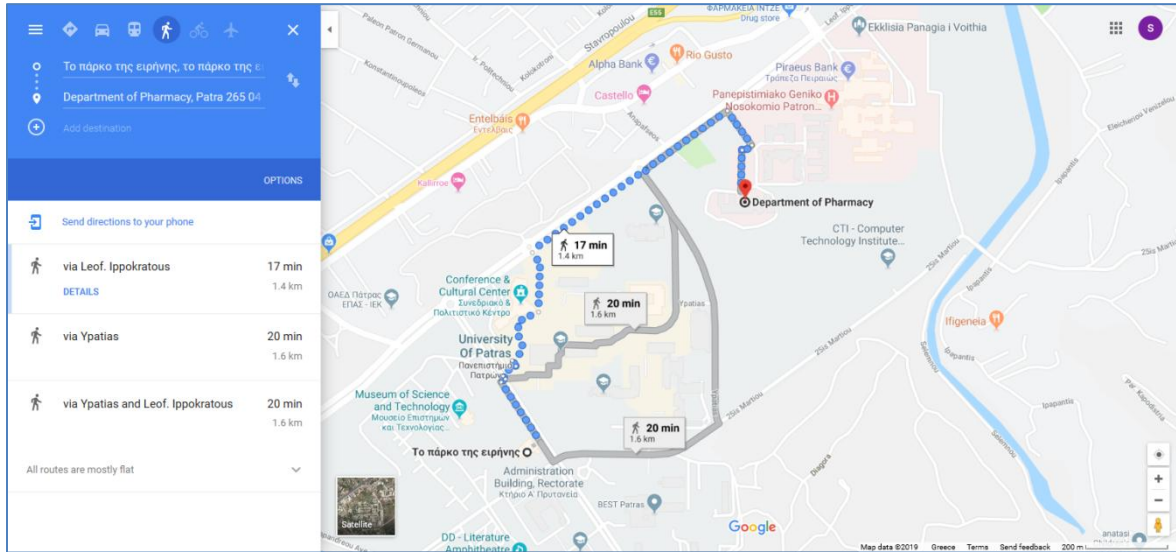
From the Kifisos Intercity Bus Station (central station for busses that run domestic routes all over the country) take the bus to Patras. Buses depart every 30 minutes, from 5:30h till 22:00h. The trip duration, taking the Express Bus to Patras, is about 2.5 h (the Express Bus itinerary does not include intermediate stops).

By Train

There are no trains connecting directly Athens International Airport (AIA) "Eleftherios Venizelos" with Patras, but a combination of train and bus can be used.

Use the Suburban Railway System (Proastiakos) from AIA "Eleftherios Venizelos" to Kiato terminal station (Kiato). Trains run approximately every one hour and the route duration is 1.5 h. At Kiato terminal station take the OSE bus to Patras. The route duration is approximately 1.5 h. The exact timetables of trains (Airport-Kiato-Airport timetable) and buses (Kiato-Patras-Kiato Buses timetable) and all relevant information are given at the [Athens Suburban Railway webpage](#).

Welcome reception: Parko tis Irinis (in University Campus)



Dinner for Nanomed Consortium and Invited Speakers: Istioploikiokos Omilos (Sailing Club Of Patras, Marina Terpsitheas, Patra 264 41) walking distance from MOXY hotel (cross road, and go right 12 min)

