CURRICULUM VITAE

PERSONAL INFORMATION

Family name	Karavasili
First name	Christina
Nationality	Greek
Date of birth	12/08/1988
e-mail	karavasc@pharm.auth.gr

EDUCATION

04/2014-04/2019 PhD, Department of Pharmaceutical Technology, School of Pharmacy, Aristotle University of Thessaloniki.

02/2018-09/2018 Visiting student, Koch Institute for Integrative Cancer Research, Langer Lab, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA.

09/2017-02/2018 Fulbright Grantee, Harvard Medical School, Brigham and Women's Hospital, Khademhosseini Lab, Cambridge, Massachusetts, USA.

10/2016-01/2017 Erasmus + Studies, Faculty of Chemistry and Pharmacy, Chair for drug formulation and delivery, University of Wurzburg, Wurzburg, Germany.

2011-2013 Master studies, School of Pharmacy, Department of Pharmaceutical Technology, A.U.TH., Greece. **2006-2011** Bachelor studies, School of Pharmacy, A.U.TH., Greece.

WORK/RESEARCH EXPERIENCE

Faculty

Researcher

11/2024-today Assistant Professor of Pharmaceutical Technology, School of Pharmacy, Aristotle University of Thessaloniki, Greece

09/2023-08/2024 Research Scientist. Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, Cambridge, Massachusetts, United States.

- 09/2021-08/2024 Collaborator, Brigham and Women's Hospital-Harvard Medical School, Cambridge, Massachusetts, United States.
- 12/2022-08/2023 Senior Postdoctoral Associate. Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, Cambridge, Massachusetts, United States.
- 09/2021-11/2022 Postdoctoral Associate. Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, Massachusetts, United States.
- 09/2019-12/2019 Postdoctoral Research Fellow (French Government scholar). Faculte De Pharmacie, Institut Galien UMR CNRS 8612, Paris Sud, Paris, France.
- **05/2019-08/2021** Postdoctoral Researcher-Department of Pharmaceutical Technology, School of Pharmacy, Aristotle University of Thessaloniki, Greece.

SHORT BIBLIOGRAPHIC OVERVIEW

Number of peer-reviewed articles and reviews: 59 Web of Science Scopus Google Scholar

PATENT

1. Greek Patent

Dimitrios G. Fatouros, Christina Karavasili, Konstantina Chachlioutaki. Chewable semi-solid milk-based drug delivery platform and method for the preparation of said milk-based drug compositions and its use. GR patent 1010467. Filed November 15, 2021 and issued May 31, 2023.

PATENT APPLICATIONS

1. International patent application

Robert S. Langer, Carlo Giovanni Traverso, Ameya R. Kirtane, Aniket Wahane, Christina Karavasili. Oleogel and oleopaste compositions and uses thereof. PCT/US2021/032428. Filed May 14, 2021.

2. US Patent Application

Robert S. Langer, Carlo Giovanni Traverso, Ameya R. Kirtane, Aniket Wahane, Christina Karavasili. Oleogel and oleopaste compositions and uses thereof. US 2023/0181463 A1. Publication Date: June 15, 2023.

3. UK Patent Application

Dimitrios G. Fatouros, Christina Karavasili, Konstantina Chachlioutaki. Chewable semi-solid milk-based drug delivery platform and method for the preparation of said milk-based drug compositions and its use. BOB/126405GB1. Filed November 14, 2022.

4. International patent application

Dimitrios G. Fatouros, Christina Karavasili, Konstantina Chachlioutaki. Chewable semi-solid dairy-based, particularly milk-based drug delivery platform and method for the preparation of dairy-, particularly of milk-based drug compositions and its use. PCT/GR2022/000063. Filed November 16, 2022.

GRANTS

- 3rd Call for H.F.R.I. Research Projects to Support Post-Doctoral Researchers, 2022-2024. EL.I.D.E.K. Engineering the pill: 4D printed gastroretentive dosage forms for personalized drug delivery (4DIGEST). Role: Principal Investigator.
- Cost action NETSKINMODELS: European Network for Skin Engineering and Modeling. Role: Secondary proposer-MC member. <u>https://www.netskinmodels.com/</u>

AWARDS AND HONORS

- 1. Postdoctoral fellowship by the French Government at Universite Paris Sud Faculte De Pharmacie-Institut Galien (September to December 2019).
- 2. Fulbright Doctoral Dissertation Visiting Research Student at Harvard Medical School and Massachusetts Institute of Technology (September 2017 to September 2018).
- 3. PhD scholarship recipient by the Onassis Foundation (2014 2017).

RESEARCH INTERESTS AND SCIENTIFIC FOCUS AREAS:

My research focuses on the development of systems, materials and devices that address unmet clinical needs and have translational potential using biocompatible materials and scalable fabrication methods. I am particularly interested in materials and formulation approaches that enhance the pharmacokinetics and pharmacodynamics of small and macromolecular therapeutics to a range of anatomic sites. To achieve this goal, I am adopting non-invasive approaches that (i) control drug release kinetics through stimuli-responsive ^[1,2,3,4] or biodegradable systems ^[5,6,7], (ii) enhance drug solubility in body fluids ^[8,9,10,11,12] and/or drug absorption across mucosal surfaces ^[13,14,15,16,17], (iii) prolong drug retention at the site of action ^[18,19,20,21,22] and (iv) facilitate improved patient adherence by developing easy-to-administer dosage forms for sensitive patient groups (pediatric, geriatric) ^[23,24,25,26] and devising drug consolidation approaches.^[27,28] My research includes extensive use of *ex vivo* tissue models (animal/human) to better simulate the biological environment and predict the *in vivo* performance of the developed drug delivery systems and devices. I am also interested in knowledge-sourcing from nature-inspired materials and processes for a wide range of biomedical applications.