



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 5695

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze Farmaceutiche**

Scientist- in - charge : Prof.ssa Maria Luisa Gelmi

Kaliroi Peqini

CURRICULUM VITAE

PERSONAL INFORMATION

| | |
|---------|---------|
| Surname | PEQINI |
| Name | KALIROI |

PRESENT OCCUPATION

| Appointment | Structure |
|------------------------|---|
| PhD Student XXXV cycle | Joint Doctorate : 1)Università degli Studenti di Milano Dipartimento di Scienze Farmaceutiche 2) Université-Paris-Saclay, Faculty of Pharmacy Supervisor : Prof. Sara Pellegrino Co-supervisor: Prof. Sandrine Onger |

EDUCATION AND TRAINING

| Degree | Course of studies | University | year of achievement of the degree |
|-------------------|-----------------------------------|------------------------|-----------------------------------|
| Master (300 ECTS) | Materials Science and Engineering | University of Ioannina | 2019 |

FOREIGN LANGUAGES

| Languages | level of knowledge |
|-----------|--------------------|
| Greek | Mother tongue |
| Albanian | Mother tongue |
| English | C1 |



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| Italian | C1 |
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AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

| Year | Description of award |
|-----------|--|
| 2020-2023 | PhD student enrolled in the The TubInTrain Joint Doctoral H2020 programme. |
| 2018-2019 | Internship in the terms of Erasmus+ Programme, under the supervision of Prof. A. Contini (UNIMI) |

TEACHING ACTIVITY IN THE UNIVERSITY

| Position and academic year | Description of activity |
|----------------------------|---|
| | Teaching assistant at the Laboratory of Organic Chemistry II (Course: CTF_-UNIMI) -AY 2020-2021, under the supervision of Dr. Erba -AY 2022-2023, under the supervision of Dr. Pirovano |

TRAINING OR RESEARCH ACTIVITY

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| <p>description of activity</p> <p>PhD student 01/03/2020- present</p> <p>Enrolled by the University of Milano (https://www.unimi.it/) under the supervision of Prof. Sara Pellegrino, in co-tutelle with the University of Paris Sud (https://www.upsud.fr/en/index.html), under the supervision of Prof. Sandrine Ongerì. Currently working on the development of peptide based molecular probes able to modulate the Tubulin and α-Synuclein protein network.</p> <p>Internship 01/09/2018-30/36/2019</p> <p>At the Università degli studi di Milano, Dipartimento di Scienze Farmaceutiche, Milano, Italy in the terms of Erasmus+ Programme, under the supervision of Prof. A. Contini. - Project title " Design and synthesis of peptides modulators of Rac1 activity." Able to: 1) Use the M.O.E. (Molecular Operating Environment) molecular modeling technique 2) Prepare peptides by MW-SPPS 3) Purify peptides by HPLC 4) Analyze peptides by analytical HPLC 5) Characterize peptides by ESI-MS 6) Perform Circular Dichroism (CD) experiments.</p> <p>Internship 01/07/2017-31/08/2017</p> <p>In Microbiological Laboratory, Lambros Lolas, Ioannina, Greece in the terms of NSRF 2014-2020 - Lab assistant in charge of : 1) Processing urine and other cultures for susceptibility of pathogen. 2) Preparing sample for analysis by recording, weighing, and blending. 3) Pushing samples into the right incubator. 4) Processing blood specimens and run the equivalent tests. 5) Performing standard serological tests for identifying antibodies/ antigen, using rapid microbiological tests</p> |
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CO-TUTOR MASTER'S AND BACHELOR'S DEGREES

'Solid-Phase peptide synthesis of alpha-Synuclein's protein domains'

- C.d.L.: Corso di Laurea in Biotecnologie
- Tutor: Prof. Dr. Sara Pellegrino
- Candidate: Araya Montemurro
- A.Y.: 2019/2020
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'Ultra-short non aromatic peptides: Synthesis and Self-assembly'

- C.d.L.: Biotecnologie del Farmaco
- Tutor: Prof. Dr. Sara Pellegrino
- Candidate: Gabriella Zanforlin
- A.Y.: 2020/2021

'Development of peptidomimetics inhibiting the amyloidosis mediated by Gelsolin'

- C.d.L.: Biotecnologie del Farmaco
- Tutor: Prof. Dr. Sara Pellegrino
- Candidate: Luigi Barone
- A.Y.: 2020/2021

'Synthesis of KRT18 domains and analysis of their interaction with pneumococcal serine-rich repeat protein (PsrP)'

- C.d.L.: Chimica e Tecnologia Farmaceutiche
- Tutor: Prof. Dr. Sara Pellegrino
- Candidate: Benedetta Zeloni
- A.Y.: 2020/2021

'Sintesi chimica di una libreria di peptidi derivati da α -sinucleina per studi di affinità con tubulina'

- C.d.L.: Corso di Laurea in Biotecnologie
- Tutor: Prof. Dr. Sara Pellegrino
- Candidate: Davide Pellicani
- A.Y.: 2021/2022

'Sintesi di una libreria di peptide, quali promotori dell'assorbimento attraverso mucose'

- C.d.L.: Corso di Laurea in Biotecnologie
- Tutor: Prof. Dr. Sara Pellegrino
- Candidate: Nicolò Pizzochero
- A.Y.: 2021/2022

CONGRESSES AND SEMINARS

| Date | Title | Place |
|---------|--|--------|
| 03/2020 | TubInTrain E-Meeting ESRs presentations with the project manager | ONLINE |
| 04/2020 | TubInTrain E-Meeting ESRs presentations with all the network | ONLINE |
| 06/2020 | TubInTrain Workshop by Prof. Dr. Michel O. Steinmetz, Prof. Dr. Karl-Heinz Altmann, Prof. Dr. med. habil. Thomas | ONLINE |



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| | Arendt - Workshop 1 | |
| 03-06/06/2020 | Virtual EMBO - EMBL Symposium - Microtubules: From atoms to complex systems | ONLINE |
| 07/2020 | A series of webinars "Marine Drugs. An Approach on Viruses by the International Summer School on Natural Products 2020" | ONLINE |
| 09/2020 | TubInTrain E-Meeting ESRs presentation - state of art | ONLINE |
| 09/2020 | TubInTrain Write About Science (WAS) workshop | ONLINE |
| 12/2020 | TubInTrain workshop Storytelling and Stagecraft for Researchers | ONLINE |
| 03/2021 | TubInTrain workshop with prof. Nogales de La Morena | ONLINE |
| 03/2021 | TubInTrain Live Cell Imaging Training school | ONLINE |
| 04/2021 | TubInTrain MID-TERM Meeting with project officer | ONLINE |
| 10/2021 | TubInTrain Protein aggregation in neuronal diseases - Workshop 3 | ONLINE |
| 02/2022 | TubInTrain Computational Chemistry Workshop 5 | Strasbourg, France |
| 04/2022 | Synuclein Meeting | Leuven, Belgium |
| 06/2022 | IOPC 2022 | Milan, Italy |
| 02/2023 | EPSC 2023 | Leeds, England |

PUBLICATIONS

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| <p>Articles</p> <ul style="list-style-type: none">□ "α-Synuclein: An All-Inclusive Trip Around its Structure, Influencing Factors and Applied Techniques", Nicolò Bisi, Lucia Feni, Kalirroi Peqini, Helena Pérez-Peña, Sandrine Onger, Stefano Pieraccini and Sara Pellegrino, <i>Frontiers in Chemistry</i> (2021) doi: 10.3389/fchem.2021.666585□ " Tuning antiviral CD8 T-cell response via proline-altered peptide ligand vaccination" , Adil Doganay Duru ,Renhua Sun ,Eva B. Allerbring ,Jesseka Chadderton, Nadir Kadri, Xiao Han, Kalirroi Peqini, Hannes Uchtenhagen, Chaithanya Madhurantakam, Sara Pellegrino, Tatyana Sandalova, Per-Åke Nygren, Stephen J. Turner, Adnane Achour, <i>PLOS Pathogens</i> (2020) https://doi.org/10.1371/journal.ppat.1008244□ " Rational Design of a Peptidomimetic Inhibitor of Gelsolin Amyloid Aggregation", Michela Bollati, Kalirroi Peqini, Luigi Barone, Carmina Natale, Marten Beeg, Marco Gobbi, Luisa Diomede , Michelangelo Trucchi, Matteo de Rosa and Sara Pellegrino, <i>Int. J. Mol. Sci.</i> 2022, 23, 13973. https://doi.org/10.3390/ijms232213973□ " L- to D Amino Acid Substitution in the Immunodominant LCMV-Derived Epitope gp33 Highlights the Sensitivity of the TCR Recognition Mechanism for the MHC/Peptide Structure and Dynamics", Federico Ballabio, Luca Broggin, Cristina Paissoni, Xiao Han, Kalirroi Peqini, Benedetta Maria Sala, Renhua Sun, Tatyana Sandalova, Alberto Barbiroli, Adnane Achour, Sara Pellegrino, Stefano Ricagno , Carlo Camilloni, <i>ACS Omega</i> 2022, 7, 11, 9622-9635, https://doi.org/10.1021/acsomega.1c06964□ " Multi-eGO: an in-silico lens to look into protein aggregation kinetics at atomic |
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resolution”, Emanuele Scalone, Luca Broggin, Cristina Visentin, Davide Erba, Fran Bačić Toplek, Kaliroi Peqini, Sara Pellegrino, Stefano Ricagno, Paissoni, Carlo Camilloni, PNAS June 23, 2022, 119 (26) e2203181119

Congress proceedings

Participation at the Synuclein Meeting 2022 from Tuesday 12 April until Friday 15 April 2022 in Leuven, Belgium

Poster Communication : *Alpha-Synuclein and Tubulin: An obscure interplay*

Participation at the EPSC 2023 from Tuesday 29 February 2023 until Thursday 2 March 2023 in Leeds, England

Poster Communication : *Breaking down and building up alpha-Synuclein: an insight on its binding to tubulin*

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: Milano, 08/03/2023