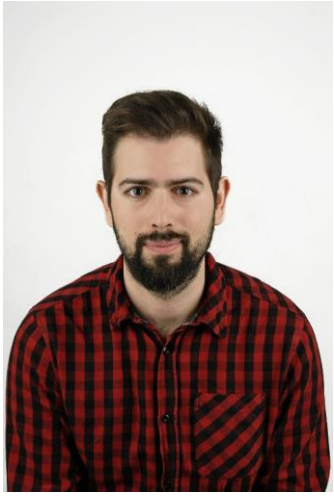
CURRICULUM VITAE

Tsamesidis Ioannis

PERSONAL INFORMATION



Name: Ioannis

Surname: Tsamesidis

Citizenship: Greek

Date of birth: 06/09/1991

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PROFESSIONAL SUMMARY

I am a Biomedical Scientist, PhD in Biomolecular Medicine (University of Verona) with 4 years of work experience in Malaria Research and with extensive knowledge in the evaluation of different antimalarial combinations. I participated in preclinical studies of new antimalarial drugs, the SYK inhibitors. Currently, I am working in the understanding of artemisinin activation in *Plasmodium* falciparum. During my work experience, I demonstrated a consistent sense of personal responsibility and capacity to work independently and in a multidisciplinary team. As a result of my work in University of Toulouse and Sassari, I developed a good adaptability and predisposition to the problem solving, even under critical conditions.

EDUCATION:

October 2014 - October 2017: **PhD in Life and Health Science**

University of Verona, Dept. of Medicine. Doctoral program in **Biomolecular Medicine** Curriculum: Clinical Proteomics and Genomics

Title of the dissertation: "Mechanism of synergic interaction of Syk inhibitors on antimalarial artemisinin activity"

Defense of PhD thesis: 18/5/2018

March 2010 - July 2014: **Bachelor degree in Medical Laboratory Technology**

Alexander Technological Educational Institute of Thessaloniki, Greece.

Title of the dissertation: "Oxidative stress in mediterranean β-thalassemic patients: Correlation of patients in Sardinia and central Macedonia"

WORK EXPERIENCE:

June 2018 - May 2019: **Post-doctoral fellow**
University of Sassari – Italy, Department of Biomedical Sciences
Advisor: Prof.ssa Antonella Pantaleo

November 2017 – May 2018: **Research assistant**
Nurex srl diagnostics
Advisor: Dott.ssa Franca Rita Mannu

Research topics:
- Study of artemisinin activation in parasitized red blood cells
- Study of antimalarial combination between Syk inhibitors and Artemisinins against P.*falciparum* strains
- Planning laboratories procedures and evaluation of primary outcomes in the Clinical Trial.

October 2014 – October 2017: **PhD student**
University of Verona –Italy. Dept. of Medicine
Advisor: Prof. Francesco Turrini

Research topics:
- Mechanism of synergic interaction of Syk inhibitors on antimalarial artemisinin activity
- *In vitro* studies to evaluate the antimalarial activity of Syk inhibitors and other antimalarial drugs
- Parasitological measurement for Clinical Trial "Imatinib's effect on the suppression of Malaria Parasites in patients with uncomplicated Plasmodium Falciparum Malaria".
- Application of molecular techniques in Malaria

April-May 2017/ October 2017: **Visiting researcher**
University of Paul Sabatier Toulouse III, France, Department of Pharmacy
Advisor: Prof. Karine Reybier, Prof. Antonella Pantaleo, Prof. Francoise Nepveu and Prof. Francesco Turrini
Research topic: Artemisinin activation, Free radical measurement with Electron paramagnetic resonance (EPR) and ROS detection with fluorescent probes in parasitized red blood cells

April 2014 – September 2014: **Trainee biomedical scientist**
University of Sassari, Italy, Department of Biomedical Sciences
Responsibilities: Application of proteomic techniques (SDS-PAGE, Western blotting, Dot blotting) genomic techniques (extraction of DNA, PCR) and other techniques (Elisa, Preparation of ghost, Mass spectrometry) in research topics (hemoglobinopathies, malaria)
Advisor: Prof. Antonella Pantaleo

September 2013 –March 2014: **Trainee biomedical scientist**
University of Sassari, Italy, Department of Medicine, Laboratory of Pharmacology
Responsibilities: Construction of sensors and biosensors to apply in electrochemical techniques
Advisor: Dr. Gaia Rocchita

January 2013 –July 2013: **Volunteer trainee biomedical scientist**

Viodiagnosi (private diagnostic laboratory), Oreokastro, Greece

Responsibilities: Blood collection, Hematology analyzer systems and live blood cell analysis

Advisor: Dr. Vivi Nikolou

TECHNICAL SKILLS:

Cell Biology: Expertise in *Plasmodium* falciparum

- Cultivation of *Plasmodium* falciparum culture (strains: Palo alto, It-G, FCB1, Artemisinin resistant strain (ARS1) and G6PD-deficient strain
- IC_{50} measurement of antimalarial drugs, antimalarial combinations, isobologram preparation
- Fix of parasitized/red blood cells for confocal and SEM microscopy also for FACs analysis
- Use of confocal microscope (Confocal course, Leica, May 2017, Milan)
- Standard malaria microbiological diagnostic techniques: Cultural and Microscopically methods (Light and fluorescent microscopy)

Proteomics: Mono-dimensional electrophoresis, 2-D electrophoresis, Western Blot analysis, dot-blot analysis, solubilization of RBCs, ghost, serum, plasma for proteomic techniques

Oxidative stress: Estimation of oxidative stress under different pathological conditions

- Electron paramagnetic resonance with different spin trappers to detect free radicals
- ROS detection with fluorescent probe CM-H_2DCFDA in different samples
- Total antioxidant capacity measurement with Trolox method

Genetics: DNA/RNA isolation, qPCR, RT-PCR.

Clinical diagnostic: Hematology analyzer systems and live blood cell analysis; Automated analyzer system for urine analysis and microscopic examination of urinary sediment

Software: ECDL (Proficiency with Microsoft Office), CFX Manager™ Software, EndNote, EPR software

LANGUAGES:
Greek: mother language
Italian: C1 level, 2018, CELLI 4, Università di Perugia
English: C1 level, 2017, University of Cambridge
German: B1 level, 2013, Goethe Institute

AWARDS
Award of the best poster presentation with the title: ‘’ **New antimalarial drugs on the horizon?**’’ for significant scientific contribution in the 90^0 Congress SIBS, Trapani-Italy, 27-28 October 2017

PUBLICATIONS:

De Lucia S., Tsamesidis I, Pau M.C., Kesely K.R., Pantaleo A., Turrini F.M. **"Induction of high tolerance to Artemisinin by sub-lethal administration of drug: a new in vitro model of P. falciparum"**.
PLoS ONE, 2018 13(1): e0191084. https:// doi.org/10.1371/journal.pone.0191084

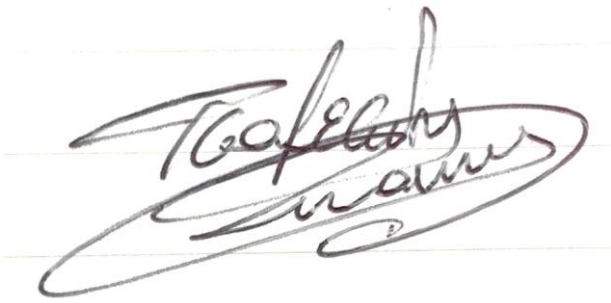
Pantaleo A., Kesely K.R., Pau M.C., Tsamesidis I., Schwarzer E., Skorokhod O.A., Chien H.D., Ponzi M., Bertuccini L., Low P.S., Turrini F.M. "**Syk inhibitors interfere with erythrocyte membrane modification during P falciparum growth and suppress parasite egress**".
Blood. 2017 Aug 24;130(8):1031-1040. doi: 10.1182/blood-2016-11-748053

Tsamesidis I., Fozza C., Vagdatli E., Kalpaka A., Cirotto C., Pantaleo A., Pau M.C., Turrini F.M. Grigoriou E. and Lymperaki E. "**Total antioxidant capacity in Mediterranean β- Thalassemic patients**". *Advances in Clinical and Experimental Medicine* ,2017, vol. 26, nr 5, August, p. 789–793 doi: 10.17219/acem/63746

Pau M.C., Pantaleo A., Tsamesidis I., Phan H.G, Marchetti G., Fiori P.L., Turrini F.M and Chien H.D. **"Evaluation of the impact of artemisinin resistance markers on the clinical efficacy of the antimalarial dihydroartemisinin-piperaquine therapy in Vietnam"**. (Under revision)

Tsamesidis I., Reybier K., Marchetti G., Pau MC, De Lucia S., Virdis P., Fozza C., Nepveu F., Pantaleo A., Turrini FM "**Syk inhibitors cause hemichrome accumulation in the Plasmodium falciparum parasitized erythrocytes determining a synergic activation of artemisinins''** (Under preparation)

Tsamesidis Ioannis / Τσαμεσίδης Ιωάννης



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