Francesca Giulimondi

Gender: Do not indicate | (+39) 0

WORK EXPERIENCE

04/2020 – CURRENT – Rome
POST DOCTORAL RESEARCHER – PROF. GIULIO CARACCIOLO, DEPARTMENT OF MOLECULAR MEDICINE, SAPIENZA UNIVERSITY OF ROME

10/2017 – 04/2020
PHD STUDENT – PROF. GIULIO CARACCIOLO, DEPARTMENT OF MOLECULAR MEDICINE, SAPIENZA UNIVERSITY OF ROME

Research project: Exploiting the biomolecular corona of non-viral nanocarriers for the development of new personalized gene and cancer therapies

06/2019 – 08/2019
PHD INTERNSHIP – PROF. HANS CLEVERS, HUBRECHT INSTITUTE, UTRECTH, THE NETHERLANDS

Research project: Exploiting the biomolecular corona to boost the anticancer activity of doxorubicin-loaded liposomes in pancreatic organoids

10/2015 – 09/2017
STUDENT – PROF. ISABELLA SCREPANTI, DEPARTMENT OF MOLECULAR MEDICINE, SAPIENZA UNIVERSITY OF ROME

Research project: Study of the epigenetic mechanisms regulating Notch3 gene expression in T-cell acute lymphoblast leukemia

06/2015 – 09/2015
STUDENT – PROF. ROBERTO CONTESTABILE, DEPARTMENT OF BIOCHEMICAL SCIENCES, SAPIENZA UNIVERSITY OF ROME

EDUCATION AND TRAINING

10/2017 – 04/2021
PHD IN MOLECULAR MEDICINE – Sapienza University of Rome

10/2015 – 10/2017
MASTER'S DEGREE GENETICS AND MOLECULAR BIOLOGY IN BASIC AND BIOMEDICAL RESEARCH [LM(DM 270/04) – ORDIN.2013] – Sapienza University of Rome

Thesis: Study of the transcriptional regulation of the Notch3 gene in acute T-cell lymphoblastic leukemia

10/2011 – 10/2015
BACHELOR'S DEGREE BIOLOGICAL SCIENCES [L-13] – Sapienza University of Rome

Thesis: Study on the molecular mechanism of GabR, a transcriptional regulator dependent on the pyidoxal 5'-

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Word | Microsoft Excel | Microsoft Powerpoint

PUBLICATIONS

Giulimondi F., Vulpis E., Digiacomo L., Giuli M.V., Mancusi A., Capriotti A.L.,Lagana A., Cerrato A., Zenezini Chiozzi R., Nicoletti C.,̀ Amenitsch H., Cardarelli F., Masuelli L. ,Bei R., Screpanti I., Pozzi D., Zingoni A. , Checquolo S., & Caracciolo G. (2022). Opsonin-Deficient Nucleoproteic Corona Endows UnPEGylated Liposomes with Stealth Properties in Vivo. ACS nano, 16, 2, 2088–2100

2022

Quagliarini E., Renzi S., Digiacomo L., Giulimondi F., Sartori B., Amenitsch H., Tassinari V., Masuelli L., Bei R., Cui L., Wang J., Amici A., Marchini C., Pozzi D., Caracciolo G. (2021). Microfluidic formulation of dna-loaded multicomponent lipid nanoparticles for gene delivery. Pharmaceutics 13.8 : 1292.

2021

Digiacomo L., Giulimondi F., Pozzi D., Coppola A., La Vaccara V., Caputo D., & Caracciolo G. (2021). A Proteomic Study on the Personalized Protein Corona of Liposomes. Relevance for Early Diagnosis of Pancreatic DUCTAL Adenocarcinoma and Biomarker Detection. Journal of Nanotheranostics, 2(2), 82-93.

2021

Digiacomo L., Giulimondi F., Capriotti A. L., Piovesana S., Montone C. M., Chiozzi R. Z., Laganà A., Mahmoudi M., Pozzi D. & Caracciolo G. (2021). Optimal centrifugal isolating of liposome–protein complexes from human plasma. Nanoscale Advances, 3(13), 3824-3834.

2021

Vulpis E., Giulimondi F., Digiacomo L., Zingoni A., Safavi-Sohi R., Sharifi S., Caracciolo G. & Mahmoudi M. (2021). The Possible Role of Sex As an Important Factor in Development and Administration of Lipid Nanomedicine-Based COVID-19 Vaccine. Molecular Pharmaceutics, 18.6: 2448-2453.

2021

Perini G., Giulimondi F., Palmieri V., Augello A., Digiacomo L., Quagliarini E., Pozzi D., Papi M. & Caracciolo G. (2021). Inhibiting the Growth of 3D Brain Cancer Models with Bio-Coronated Liposomal Temozolomide. Pharmaceutics, 13(3), 378.

2021

Digiacomo L., Caputo D., Coppola R., Cascone C., Giulimondi F., Palchetti S., Pozzi D. & Caracciolo G. (2021). Efficient pancreatic cancer detection through personalized protein corona of gold nanoparticles. Biointerphases, 16(1), 011010.

2021

Palchetti S., Digiacomo L., Giulimondi F., Pozzi D., Peruzzi G., Ferri G., Amenitsch H., Cardarelli F., Mahmoudi M. & Caracciolo G. (2020). A mechanistic explanation of the inhibitory role of the protein corona on liposomal gene expression. Biochimica et Biophysica Acta (BBA)-Biomembranes, 1862(3), 183159.

2020

Giulimondi F., Digiacomo L., Pozzi D., Palchetti S., Vulpis E., Capriotti A.L., Zenezini Chiozzi R., Laganà A., Amenitsch H., Masuelli L., Peruzzi G., Mahmoudi M., Screpanti I., Zingoni S. & Caracciolo G. (2019). Interplay of protein corona and immune cells controls blood residency of liposomes. Nature communications, 10(1), 1-11.

2019

Papi M., Palmieri V., Digiacomo L., Giulimondi F., Palchetti S., Ciasca G., Perini G., Caputo D., Cartillone M.C., Cascone C., Coppola R., Capriotti A.L., Laganà A., Pozzi D. & Caracciolo G. (2019). Converting the personalized biomolecular corona of graphene oxide nanoflakes into a high-throughput diagnostic test for early cancer detection. Nanoscale, 11(32), 15339-15346.

2019

Digiacomo L., Palchetti S., Giulimondi F., Pozzi D., Chiozzi R. Z., Capriotti A. L., Laganà A. & Caracciolo G. (2019). The biomolecular corona of gold nanoparticles in a controlled microfluidic environment. Lab on a Chip, 19(15), 2557-2567.

2019

Digiacomo L., Giulimondi F., Mahmoudi M., & Caracciolo G. (2019). Effect of molecular crowding on the biological identity of liposomes: an overlooked factor at the bio-nano interface. Nanoscale Advances, 1(7), 2518-2522.

2019

Mori M., Tottone L., Quaglio D., Zhdanovskaya N., Ingallina C, Fusto M, Ghirga F, Peruzzi G, Grestoni ME, Simeoni F, Giulimondi F, Talora C, Botta B, Screpanti I, Palermo R (2017). Identification of a novel chalcone derivative that inhibits Notch signaling in T-cell acute lymphoblast leukemia. Scientific Reports, vol. 7.1: 1-13.

2017

CONFERENCES AND SEMINARS

27/11/2018 – 28/11/2018 – Istituto Ortopedico Rizzoli, Centro di Ricerca Codivilla Putti, Bologna
Cell communication and signaling. How to turn bad language into positive one.

Title: The biomolecular corona of cationic, neutral and anionic liposomes and its implication in drug and gene delivery
Author/s Name/s: Francesca Giulimondi,[1,2] Luca Digiacomo,[1] Sara Palchetti,[1] Daniela Pozzi,[1] Giovanna Peruzzi,[2] Anna Laura Capriotti,[3] Aldo Laganà,[3] Isabella Screpanti,[1] Giulio Caracciolo[1]
Institution/Hospital:
[1] Department of Molecular Medicine, Sapienza University of Rome, Viale Regina Elena 291, 00161 Rome, Italy
2 Center for Life Nano Science@Sapienza, Istituto Italiano di Tecnologia, Rome, Italy
3 Department of Chemistry, University of Rome "La Sapienza", Piazzale Aldo Moro 5, 00185 Rome, Italy

18/10/2018 – Roma Tre University of Rome
Work shop: "Discovering Organoids: The Journey Of 3D Cultures Systems"

PATENT APPLICATIONS

2016
Palermo R,Mori M,Tottone L,Ghirga F,Zhdanovskaya N,Ingallina C,Giulimondi F,Quaglio D,Botta B,Screpanti I. Inibitori di Notch per uso nel trattamento della leucemia linfoblastica acuta a cellule T. Italian Patent application number:102016000132360

Roma, 21/03/2022