

SHORT CURRICULUM VITAE of Roberta CENSI

Prof Roberta Censi, MPharm, PhD (Area 03/D2; SSD CHIM/09)

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Scientific profile and activity: Roberta Censi is Associate Professor at the School of Pharmacy of the University of Camerino and Vice-President and Co-founder of Recusol Srl, a spin-off company of the same University. Her research interests cover various aspects of the formulation area, with a primary focus on the design and the synthesis of novel polymeric biomaterials and smart hydrogels for pharmaceutical and biomedical applications. With her research, Roberta gave innovative contribution to the fields of formulation technology, authoring 75+ highly cited refereed papers, the majority of which as a first author and many as a corresponding or senior author. She authored two patents, currently under revision. She also participated as an invited speaker/chair/organizer to several international conferences and symposia. Roberta Censi supervised 40+ master students, 3 postdocs, 2 Research fellows and is co-promoter of 8 PhD students. She is member of the Doctorate Board of the University of Camerino, curriculum in Chemical and Pharmaceutical Sciences and Biotechnology and participated as invited board member to international PhD defences.

She acquired major funding for the completion of her competitive research projects, securing eight granted EU projects, as described below. **Among these grants, she is the Unit PI of a recently granted EU Life Project entitled “Complex Awareness Raising and Behaviour Change for the Mercury-Free City Environment”, dealing with the amelioration of the environmental issue of mercury contamination. This project is strictly related to the topic of the present FAR project, the implementation of which could be fully supported and endorsed by the EU Life project.**

PREVIOUS POSITIONS

- Senior Assistant Professor at the University of Camerino (2016 -2020)
- Junior Assistant Professor at the University of Camerino (2015-2016)
- Adjunct Professor at the University Carlo Bo of Urbino (2013-2016)

EDUCATION

- PhD in Pharmaceutical and Life Sciences, Utrecht University and University of Camerino (2010)
- Master of Sciences in Pharmacy (MPharm), University of Camerino (2006)

FELLOWSHIPS

- Post-doctoral Fellowship L’Oreal – Unesco ‘For Women in Science’ 2011 – Italian national grant, awarded by Prof. Umberto Veronesi to excellent womenscientists. Research project: Advanced polymeric systems for protein release and tissue engineering
- Post-doctoral Fellowship granted by University of Camerino. Research project: In situ gelling hydrogels for biomedical and pharmaceutical applications (Jan-Jul 2011)
- Post-doctoral fellowship in Molecular Medicine, Fondazione Marche 2012. Post-doctoral Specialization program at the Houston Methodist Hospital (US). Supervisor: Prof. Mauro Ferrari
- SIB (Italian Society for Biomaterials) Travel Grant 2015
- Italian PhD fellowship XXII cycle, University of Camerino (2007)
- IMPAT Valorization Grant: PROGETTO IMPRESA 2010. Italian national valorization grant funded by ENEA and Ministry of Economy. Project title: GennexDS: Next Generation Delivery Systems - Improving therapeutic responses

PRIZES AND HONORS (selected)

- Best Poster. Congresso Nazionale Biomateriali 2018, Rende. Development of a locally administered Daptomycin-loaded thermosensitive hydrogel to fight implant-associated infections.

- Third Houwink prize: National Dutch biennial Award for the best PhD thesis (2008-2010)
- Prize L'Oreal – Unesco 'For Women in Science' 2011
- First Prize "Research Ideas for Business". Project: Unigel. Camerino (2009)
- Third prize "Research Ideas for Business", Project: Gennex Delivery, Camerino (2011)
- Third prize Start Cup Umbria-Marche 2011
- Runner-up ITWIIN 2011 - best italian innovator
- Best Poster. SIB Conference 2015, Portonovo. Functionalized nanoparticles for brain targeting.
- Runner-up PNI-Working Capital 2011

FUNDING ID (selected)

- (EU) LIFE-MERCURY FREE: Complex Awareness Raising and Behaviour Change for the Mercury-Free City Environment (PROJECT ID: 101074412) LIFE-2021-SAP-ENV
- (EU) CANCER: Personalised Postoperative Immunotherapy To Improving Cancer Outcome and improving quality of life (Project ID:777682) H2020-MSCA- RISE-2017
- (EU) CAST: Active Monitoring of Cancer As An Alternative To Surgery (Project ID: 857894). H2020-MSCA-ITN-2019
- (EU) NOVA-MRI: Novel Applications in 19F Magnetic Resonance Imaging (Project ID: 859908). H2020-MSCA-ITN-2019
- (EU) ISPIC - Image-Guided Surgery (IGS) and Personalised Postoperative Immunotherapy To ImprovingCancer Outcome. Project no. 734684, MSCA-ITN-2015-ETN
- (EU) CHARMED- Characterisation Of A Green Microenvironment And To Study Its Impact Upon Health andWell-Being in The Elderly. Project no.: 734684, MSCA-RISE-2016
- (EU) PIANO. NanoPartIcle-BASed ImagiNg and Therapy Of Chronic Pain in the Dorsal Root Ganglia(DRG). Project no.: 956477. H2020-MSCA-ITN-2020
- (EU) PRISAR2– Proactive monitoring of cancer as an alternative to surgery. Project no.: 872860, H2020-MSCA-RISE-2019
- Regional funding 2019. POR MARCHE FESR 2014-2020 - Asse 1 – OS 2 – Azione 2.1 - Project title: Marche Biobank. APPROVED ON 22/11/2019
- (Co)-Funding for 5 research/PhD fellowships by private companies (Tenute Collesi, Percuros (NL), Viraschutz Europe, ICA) or international Research Institutes (Utrecht Institute for Pharmaceutical Sciences (NL))

OTHER PROFESSIONAL ACTIVITIES

- Remote Evaluator and Vice-Chair for several calls of HORIZON 2020
- Editorial Member of EC Orthopaedics (since 2017), Frontiers in Bioengineering and Biotechnology (since 2019), Pharmaceutics (since 2020)
- Guest Editor for Journal of Controlled Release, Pharmaceutics and Frontiers in Bioengineering and Biotechnology

PUBLICATION LIST (restricted to 18 in the last 5 years)

1. Zerrillo, L., Gigliobianco, M.R., D'atri, D., Garcia, J.P., Baldazzi, F., Ridwan, Y., Fuentes, G., Chan, A., Creemers, L.B., Censi, R., Martino, P.D., Cruz, L.J. PLGA Nanoparticles Grafted with Hyaluronic Acid to Improve Site-Specificity and Drug Dose Delivery in Osteoarthritis Nanotherapy. (2022) Nanomaterials, 12 (13).

2. Joseph, J.M., Gigliobianco, M.R., Firouzabadi, B.M., Censi, R., Di Martino, P. Nanotechnology as a Versatile Tool for ¹⁹F-MRI Agent's Formulation: A Glimpse into the Use of Perfluorinated and Fluorinated Compounds in Nanoparticles (2022) *Pharmaceutics*, 14 (2).
1. Deng, S., Gigliobianco, M.R., Mijiti, Y., Minicucci, M., Cortese, M., Campisi, B., Voinovich, D., Battistelli, M., Salucci, S., Gobbi, P., Lupidi, G., Zambito, G., Mezzanotte, L., Censi, R., Di Martino, P. Dually cross-linked core-shell structure nanohydrogel with redox-responsive degradability for intracellular delivery (2021) *Pharmaceutics*, 13 (12).
2. Zambito, G., Deng, S., Haeck, J., Gaspar, N., Himmelreich, U., Censi, R., Löwik, C., Di Martino, P., Mezzanotte, L. Fluorinated PLGA-PEG-Mannose Nanoparticles for Tumor-Associated Macrophage Detection by Optical Imaging and MRI (2021) *Frontiers in Medicine*, 8.
3. Zerrillo, L., Gupta, K.B.S.S., Lefeber, F.A.W.M., Da Silva, C.G., Galli, F., Chan, A., Veltien, A., Dou, W., Censi, R., Di Martino, P., Srinivas, M., Cruz, L. Novel fluorinated poly (Lactic-co-glycolic acid) (plga) and polyethylene glycol (peg) nanoparticles for monitoring and imaging in osteoarthritis (2021) *Pharmaceutics*, 13 (2).
4. Deng, S., Iscaro, A., Zambito, G., Mijiti, Y., Minicucci, M., Essand, M., Lowik, C., Muthana, M., Censi, R., Mezzanotte, L., Martino, P.D. Article development of a new hyaluronic acid based redox-responsive nanohydrogel for the encapsulation of oncolytic viruses for cancer immunotherapy (2021) *Nanomaterials*, 11 (1)
5. Deng, S., Gigliobianco, M.R., Censi, R., Di Martino, P. Polymeric nanocapsules as nanotechnological alternative for drug delivery system: Current status, challenges and opportunities (2020) *Nanomaterials*, 10 (5)
6. Censi, R., Casadidio, C., Deng, S., Gigliobianco, M.R., Sabbieti, M.G., Agas, D., Laus, F., Di Martino, P. Interpenetrating hydrogel networks enhance mechanical stability, rheological properties, release behavior and adhesiveness of platelet-rich plasma (2020) *International Journal of Molecular Sciences*, 21 (4)
7. Agas, D., Laus, F., Lacava, G., Marchegiani, A., Deng, S., Magnoni, F., Silva, G.G., Di Martino, P., Sabbieti, M.G., Censi, R. Thermosensitive hybrid hyaluronan/p(HPMAm-lac)-PEG hydrogels enhance cartilage regeneration in a mouse model of osteoarthritis (2019) *Journal of Cellular Physiology*, 234 (11)
8. Zerrillo, L., Que, I., Vepris, O., Morgado, L.N., Chan, A., Bierau, K., Li, Y., Galli, F., Bos, E., Censi, R., Di Martino, P., van Osch, G.J.V.M., Cruz, L.J. pH-responsive poly(lactide-co-glycolide) nanoparticles containing near-infrared dye for visualization and hyaluronic acid for treatment of osteoarthritis (2019) *Journal of Controlled Release*, 309, pp. 265-276
9. Censi, R., Casadidio, C., Dubbini, A., Cortese, M., Scuri, S., Grappasonni, I., Golob, S., Vojnovic, D., Sabbieti, M.G., Agas, D., Di Martino, P. Thermosensitive hybrid hydrogels for the controlled release of bioactive vancomycin in the treatment of orthopaedic implant infections (2019) *European Journal of Pharmaceutics and Biopharmaceutics*, 142, pp. 322-333

10. Censi, R., Gigliobianco, M.R., Casadidio, C., Di Martino, P. Changes in the Solid State of Nicergoline, a Poorly Soluble Drug, Under Different Grinding and Environmental Conditions: Effect on Polymorphism and Dissolution (2019) *Journal of Pharmaceutical Sciences*, 108 (2), pp. 929-948
11. Gigliobianco, M.R., Di Martino, P., Deng, S., Casadidio, C., Censi, R. New advanced strategies for the treatment of lysosomal diseases affecting the central nervous system (2019) *Current Pharmaceutical Design*, 25 (17), pp. 1933-1950
12. Casadidio, C., Peregrina, D.V., Gigliobianco, M.R., Deng, S., Censi, R., Di Martino, P. Chitin and chitosans: Characteristics, eco-friendly processes, and applications in cosmetic science (2019) *Marine Drugs*, 17 (6)
13. Casadidio, C., Butini, M.E., Trampuz, A., Di Luca, M., Censi, R., Di Martino, P. Daptomycin-loaded biodegradable thermosensitive hydrogels enhance drug stability and foster bactericidal activity against *Staphylococcus aureus* (2018) *European Journal of Pharmaceutics and Biopharmaceutics*, 130, pp. 260-271
14. Censi, R., Gigliobianco, M.R., Casadidio, C., Di Martino, P. Hot melt extrusion: Highlighting physicochemical factors to be investigated while designing and optimizing a hot melt extrusion process (2018) *Pharmaceutics*, 10 (3)
15. Gigliobianco, M.R., Casadidio, C., Censi, R., Di Martino, P. Nanocrystals of poorly soluble drugs: Drug bioavailability and physicochemical stability (2018) *Pharmaceutics*, 10 (3)
16. Sabbieti, M.G., Dubbini, A., Laus, F., Paggi, E., Marchegiani, A., Capitani, M., Marchetti, L., Dini, F., Vermonden, T., Di Martino, P., Agas, D., Censi, R. In vivo biocompatibility of p(HPMAm-lac)-PEG hydrogels hybridized with hyaluronan (2017) *Journal of Tissue Engineering and Regenerative Medicine*, 11 (11), pp. 3056-3067
17. Magnoni, F., Gigliobianco, M.R., Vargas Peregrina, D., Censi, R., Di Martino, P. Effect of Grinding on the Solid-State Stability and Particle Dissolution of Acyclovir Polymorphs (2017) *Journal of Pharmaceutical Sciences*, 106 (10), pp. 3084-3094
18. Martino, P.D., Censi, R., Gigliobianco, M.R., Zerrillo, L., Magnoni, F., Agas, D., Quaglia, W., Lupidi, G. Nano-medicine improving the bioavailability of small molecules for the prevention of neurodegenerative diseases (2017) *Current Pharmaceutical Design*, 23 (13), pp. 1897-1908