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CV PROF. Dr. ANTONIO DI STEFANO
FULL PROFESSOR IN PHARMACEUTICAL TECHNOLOGY, SOCIOECONOMICS and
LEGISLATION-DEPARTMENT OF PHARMACY, CHIETI-PESCARA UNIVERSITY.

Antonio Di Stefano graduated in Chemistry and Pharmaceutical Technology (CTF) at the University of Camerino, Italy, in April 1989; in the same year was supervisor of the analytical laboratories of a food Company and in April 1995, he graduated in Pharmacy at University of Camerino. He gained his Ph.D. on "Medicinal Chemistry" in June 1994. From February 1994 to January 1995 he worked as C.N.R. (Research National Council-Rome, Italy) project researcher, working on synthesis of new Dopaminergic ligands. From March 1995 to March 1996 he was appointed as Post-Doc researcher on the "Synthesis of new dopaminergic ligands".

In April 1996 he got a position as Assistant Professor at the Faculty of Pharmacy, University of Chieti-Pescara, Italy. In December 2003 he got a permanent position as Associate Professor of Pharmaceutical Technology at the Faculty of Pharmacy of the University of Chieti-Pescara, Italy. Since 2011 he has been holding the position of Full Professor on Pharmaceutical Technology, Socioeconomics and Legislation (03/D2) in the same University.

The scientific interest of Prof. Antonio Di Stefano is mainly centered on antiparkinson prodrugs - focusing on chemical structures mainly related to L-Dopa, dopamine and dopaminergic agonists- the study of nano-carrier formulations of codrugs able to cross the BBB as useful tools for Alzheimer's and Parkinson's diseases, the synthesis of new serotonergic ligands and the formulation of Solid Lipid Nanoparticles and polymeric nanoparticles loaded with natural agents able to disrupt the bacterial biofilms and to prevent the antibiotic resistance in bacterial infection. The research activity is well documented in more than 140 papers published in peer-reviewed International Journals, Patents, Book Chapters, Proceedings, National and international oral Communications.

Prof. Antonio Di Stefano is C.E.O. of spin-off "Algo Biotechnologies" ("G. d'Annunzio" Chieti-Pescara University) to select and develop the most attractive ideas in pharmaceutical field based on the proprietary algorithm probability factor.

Selected Papers:

1. Eusepi, P., Marinelli, L., Borrego-Sánchez, A., García-Villén, F., Rayhane, B.K., Cacciatore, I., Viseras, C., Di Stefano, A. Nano-delivery systems based on carvacrol prodrugs and fibrous clays (2020) *Journal of Drug Delivery Science and Technology*, 58, art. no. 101815.
2. Marinelli, L., Cacciatore, I., Eusepi, P., Di Biase, G., Morroni, G., Cirioni, O., Giacometti, A., Di Stefano, A. Viscoelastic behaviour of hyaluronic acid formulations containing carvacrol prodrugs with antibacterial properties (2020) *International Journal of Pharmaceutics*, 582, art. no. 119306.
3. Eusepi, P., Marinelli, L., García-Villén, F., Borrego-Sánchez, A., Cacciatore, I., Di Stefano, A., Viseras, C. Carvacrol prodrugs with antimicrobial activity loaded on clay nanocomposites (2020) *Materials*, 13 (7), art. no. 1793.
4. Edson, A.J., Hushagen, H.A., Frøyset, A.K., Elda, I., Khan, E.A., Di Stefano, A., Fladmark, K.E. Dysregulation in the Brain Protein Profile of Zebrafish Lacking the Parkinson's Disease-Related Protein DJ-1(2019) *Molecular Neurobiology*, 56 (12), pp. 8306-8322. DOI: 10.1007/s12035-019-01667-w
5. Bernabò, N., Machado-Simoes, J., Valbonetti, L., Ramal-Sanchez, M., Capacchietti, G., Fontana, A., Zappacosta, R., Palestini, P., Botto, L., Marchisio, M., Lanuti, P., Ciulla, M., Di Stefano, A., Fioroni, E., Spina, M., Barboni, B. Graphene Oxide increases mammalian spermatozoa fertilizing ability by extracting cholesterol from their membranes and promoting capacitation(2019) *Scientific Reports*, 9 (1), art. no. 8155,
6. Cacciatore, I., Ciulla, M., Marinelli, L., Eusepi, P., Di Stefano, A. Advances in prodrug design for Parkinson's disease (2018) *Expert Opinion on Drug Discovery*, 13 (4), pp. 295-305.

7. Cacciatore, I., Fornasari, E., Marinelli, L., Eusepi, P., Ciulla, M., Ozdemir, O., Tatar, A., Turkez, H., Di Stefano, A. Memantine-derived drugs as potential antitumor agents for the treatment of glioblastoma (2017) *European Journal of Pharmaceutical Sciences*, 109, pp. 402-411.
8. 26. Carbone, C., Arena, E., Pepe, V., Prezzavento, O., Cacciatore, I., Turkez, H., Marrazzo, A., Di Stefano, A., Puglisi, G. Nanoencapsulation strategies for the delivery of novel bifunctional antioxidant/ σ 1 selective ligands (2017) *Colloids and Surfaces B: Biointerfaces*, 155, pp. 238-247.
9. Cortesi, R., Esposito, E., Drechsler, M., Pavoni, G., Cacciatore, I., Sguizzato, M., Di Stefano, A. L-dopa co-drugs in nanostructured lipid carriers: A comparative study (2017) *Materials Science and Engineering C*, 72, pp. 168-176.
10. Di Crescenzo, A., Cacciatore, I., Petrini, M., D'Alessandro, M., Petraghani, N., Del Boccio, P., Di Profio, P., Boncompagni, S., Spoto, G., Turkez, H., Ballerini, P., Di Stefano, A., Fontana, A. Gold nanoparticles as scaffolds for poor water soluble and difficult to vehiculate antiparkinson codrugs (2017) *Nanotechnology*, 28 (2), art. no. 025102.
11. Samadi, N., Abbadessa, A., Di Stefano, A., Van Nostrum, C.F., Vermonden, T., Rahimian, S., Teunissen, E.A., Van Steenbergen, M.J., Amidi, M., Hennink, W.E. The effect of lauryl capping group on protein release and degradation of poly(d,l-lactic-co-glycolic acid) particles (2013) *Journal of Controlled Release*, 172 (2), pp. 436-443.
12. Sozio, P., Cerasa, L.S., Laserra, S., Cacciatore, I., Cornacchia, C., Di Filippo, E.S., Fulle, S., Fontana, A., Di Crescenzo, A., Grilli, M., Marchi, M., Di Stefano, A. Memantine-sulfur containing antioxidant conjugates as potential prodrugs to improve the treatment of Alzheimer's disease (2013) *European Journal of Pharmaceutical Sciences*, 49 (2), pp. 187-198.
13. D'Aurizio, E., Sozio, P., Cerasa, L.S., Vacca, M., Brunetti, L., Orlando, G., Chiavaroli, A., Kok, R.J., Hennink, W.E., Di Stefano, A. Biodegradable microspheres loaded with an anti-Parkinson prodrug: An in vivo pharmacokinetic study (2011) *Molecular Pharmaceutics*, 8 (6), pp. 2408-2415.
14. D'Aurizio, E., Van Nostrum, C.F., Van Steenbergen, M.J., Sozio, P., Siepmann, F., Siepmann, J., Hennink, W.E., Di Stefano, A. Preparation and characterization of poly(lactic-co-glycolic acid) microspheres loaded with a labile antiparkinson prodrug (2011) *International Journal of Pharmaceutics*, 409 (1-2), pp. 289-296.