

Maria Gazouli, a biologist, is a Professor of Biology - Genetics- Nanomedicine at the Department of Biology, National & Kapodistrian University of Athens (NKUA), School of Medicine.



She completed her first PhD training at the Department of Biology, School of Science, NKUA, in collaboration with the Hellenic Pasteur Institute. She then pursued a second PhD at the Department of Microbiology, School of Medicine, NKUA, followed by postdoctoral research in the USA at the Cell Biology and Pharmacology Department, Georgetown University Medical Center, Washington, DC.

From 2000 to 2001, Dr. Gazouli was a Research Fellow at NCSR Demokritos, Institute of Biology. Between 2001 and 2003, she was a Research Fellow at the Department of Histology – Embryology, School of Medicine, NKUA. From 2004 to 2006, she served as Technical Scientific Staff at the Laboratory of Biology, School of Medicine, NKUA. In 2007, she joined the NKUA Medical School as a Lecturer of Biology. She was promoted to Assistant Professor of Molecular Biology in 2012, Associate Professor in 2016, and Professor of Biology – Nanomedicine in 2020.

Dr. Gazouli's research focuses primarily on the molecular basis of diseases, particularly autoimmune diseases and cancer, as well as the molecular detection of pathogens and their role in disease pathogenesis. More recently, she has contributed to the integration of nanotechnology in targeted cancer detection, imaging, and drug delivery. She was awarded a Fulbright Scholarship for the development of nanotechnology-based biosensor arrays for detecting circulating colorectal cancer cells at the University of Maryland, College Park, USA.

Her work is documented in over 240 publications, which have received more than 11,000 citations, with an h-index of 55 (Google Scholar, 1/1/2021). She holds one granted international patent and three European patents. Dr. Gazouli has delivered over 50 invited lectures at international and national conferences and universities and has mentored numerous junior scientists.

She has served as an ad hoc reviewer for various scientific journals, including *Inflammatory Bowel Disease*, *Oncology*, *Molecular Medicine*, *BMC Cancer*, *Gene*, *Journal of Crohn's and Colitis*, *Scientific Reports*, *Current Stem Cell Research & Therapy*, and *International Journal of Nanomedicine*. Additionally, she has been an expert evaluator for several national and international research funding agencies, including the National Research Grant Funding Agencies of Greece, the Broad Medical Research Program (Inflammatory Bowel Disease Grants), the National Science Centre (Poland), the PISCOPIA Fellowship Programme (University of Padova, Italy), the Czech-Norwegian Research Programme, the Qatar National Research Fund, the Danish Council for Independent Research (DFF – YDUN Research Project), the Italian Ministry of Education (MIUR), and various research product evaluation committees.

Dr. Gazouli has been the scientific coordinator of two European Commission-funded collaborative research programs and one European Joint Action on Rare Cancers, involving more than 20 research teams across Europe.

She teaches Biology and Genetics to undergraduate medical students and has contributed to translating biology textbooks into Greek. Additionally, she teaches Molecular Biology in master's programs at NKUA, the University of Thessaly, and

Democritus University of Thrace. She also serves as the coordinator of national and international research grants (e.g., Joint Actions, Horizon 2020). Currently, she is the National Representative at the Committee of Advanced Therapies (CAT) of the European Medicines Agency.

### **Representative Publications**

1. Andreou NP, Legaki E, Dovrolis N, Boyanov N, Georgiou K, Gkouskou K, Gazouli M. B-cell activating factor (BAFF) expression is associated with Crohn's disease and can serve as a potential prognostic indicator of disease response to Infliximab treatment. *Dig Liver Dis.* 2020 Dec 15:S1590-8658(20)31051-3.
2. Katifelis H, Mukha I, Bouziotis P, Vityuk N, Tsoukalas C, Lazaris AC, Lyberopoulou A, Theodoropoulos GE, Efsthopoulos EP, Gazouli M. Ag/Au Bimetallic Nanoparticles Inhibit Tumor Growth and Prevent Metastasis in a Mouse Model. *Int J Nanomedicine.* 2020 Aug 12;15:6019- 6032.
3. Mavragani CP, Nezos A, Dovrolis N, Andreou NP, Legaki E, Sechi LA, Bamias G, Gazouli M. Type I and II Interferon Signatures Can Predict the Response to Anti-TNF Agents in Inflammatory Bowel Disease Patients: Involvement of the Microbiota. *Inflamm Bowel Dis.* 2020 Sep 18;26(10):1543- 1553
4. Dovrolis N, Michalopoulos G, Theodoropoulos GE, Arvanitidis K, Kolios G, Sechi LA, Eliopoulos AG, Gazouli M. The Interplay between Mucosal Microbiota Composition and Host GeneExpression is Linked with Infliximab Response in Inflammatory Bowel Diseases. *Microorganisms.* 2020 Mar 20;8(3):438.
5. Katifelis H, Lyberopoulou A, Mukha I, Vityuk N, Grodzyuk G, Theodoropoulos GE, Efsthopoulos EP, Gazouli M: Ag/Au bimetallic nanoparticles induce apoptosis in human cancer cell lines via P53, CASPASE-3 and BAX/BCL-2 pathways. *Artif Cells Nanomed Biotechnol.* 2018;46(sup3):S389-S398
6. Tsigaridas A, Anagnostopoulos AK, Papadopoulou A, Ioakeim S, Vaiopoulou A, Papanikolaou IS, Viazis N, Karamanolis G, Mantzaris GJ, Tsangaris GT, Gazouli M: Identification of serum proteome signature of irritable bowel syndrome: Potential utility of the tool for early diagnosis and patient's stratification. *J Proteomics.* 188:167-172, 2018.
7. Legaki E, Roubelakis MG, Theodoropoulos GE, Lazaris A, Kollia A, Karamanolis G, Marinos E, Gazouli M: Therapeutic Potential of Secreted Molecules Derived from Human Amniotic Fluid Mesenchymal Stem/Stroma Cells in a Mice Model of Colitis. *Stem Cell Rev.* 12(5):604-612,2016.
8. Gazouli M, Wouters MM, Kapur-Pojskić L, Bengtson MB, Friedman E, Nikčević G, Demetriou CA, Mulak A, Santos J, Niesler B: Lessons learned--resolving the enigma of genetic factors in IBS. *Nat Rev Gastroenterol Hepatol,* 13(2):77-87, 2016.
9. Gazouli M, Anagnostopoulos AK, Papadopoulou A, Vaiopoulou A, Papamichael K, Mantzaris G, Theodoropoulos GE, Anagnou NP, Tsangaris GT: Serum protein profile of Crohn's disease treated with infliximab. *J Crohns Colitis,* 7(10):e461-70, 2013.
10. Gazouli M, Zacharatos P, Gorgoulis V, Mantzaris G, Papalambros E, Ikonopoulos J. The C3435T MDR1 gene polymorphism is not associated with susceptibility for ulcerative colitis in Greek population. *Gastroenterology* 126(1):367-9, 2004.