# NIKOLAOS ANDRITSOS'S CURRICULUM VITAE & SCIENTIFIC ACHIEVEMENTS

## 1 PI'S CURRICULUM VITAE

PERSONAL INFORMATION			
SURNAME	Andritsos		
NAME	Nikolaos		
DATE OF BIRTH	30 March 1981		
AFFILIATION	University of Patras, School of Agricultural Sciences, Department of Food Science and Technology		
ADDRESS	2 G. Seferi Str., GR-30 100 Agrinio, Greece		
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CURRENT POSITION(S)			
01.2022 – today	Assistant Professor of Food Safety  Department of Food Science and Technology, School of Agricultural Sciences, University of Patras, Agrinio Campus, Greece		

PREVIOUS POSITION(S)						
09.2021 – 05.2023	Head of Quality Control in Research Infrastructure  "MilkQuality" Research Infrastructure, Department of Dairy Research, Institution of Technology of Agricultural Products, Hellenic Agricultural Organization "DIMITRA", Ioannina, Greece					
05.2014 - 01.2022	Head of Laboratory (Lab. Manager) Food Microbiology Laboratory, Eurofins Athens Analysis Laboratories, Metamorfosi, Greece					
04.2020 – 11.2021	Post-Doc Researcher  Department of Food Science and Nutrition, School of the Environment, University of the Aegean, Lemnos, Greece					
02.2017 - 09.2021	Adjunct Lecturer (University Fellow)  Department of Food Science and Nutrition, School of the Environment, University of the Aegean, Lemnos, Greece					
06.2013 - 04.2014	Laboratory Research Associate Food Microbiology Laboratory, Athens Analysis Laboratories SA, Athens, Greece					
06.2012 - 01.2013	Laboratory Research Assistant Food Microbiology Laboratory, Hellenic Army Biological Research Center, P. Penteli, Greece					
01.2011 – 06.2011	Laboratory Research Assistant (Visiting Scholar) Pathogen Reduction Laboratory, Department of Animal Sciences, Center for Meat Safety and Quality, Colorado State University, Fort Collins, USA					
07.2007 – 10.2007	Internship as MSc student DIANIK Sausages SA, Piraeus, Greece					
07.2004 – 08.2004	Internship as BSc student Olympus Dairy Industry SA, Larissa, Greece					

EDUCATION	
04.2020 – 11.2021	Post-Doc Research in Food Microbiology and Epidemiology of Foodborne Diseases  Department of Food Science and Nutrition, School of the Environment, University of the Aegean, Lemnos, Greece; "Transcriptional determination of combined resistance induction

	(stress adaptation) and virulence in <i>Listeria monocytogenes</i> cells exposed in antimicrobial compounds"
10.2013 – 10.2015	Post-Doc Research in Food Microbiology and Hygiene Food Microbiology Laboratory, Hellenic Army Biological Research Center, P. Penteli, Greece; "Quantification of Campylobacter jejuni and Campylobacter coli in poultry meat"
09.2008 – 05.2012	PhD in Food Microbiology and Hygiene Laboratory of Food Quality Control and Hygiene, Department of Food Science and Technology, Agricultural University of Athens, Athens, Greece; PhD thesis title: "Biodiversity and quantification of Listeria monocytogenes in fresh meat and products thereof"
10.2006 – 05.2008	MSc in Food Science and Technology & Human Nutrition Laboratory of Food Quality Control and Hygiene, Department of Food Science and Technology, Agricultural University of Athens, Athens, Greece; MSc thesis title: "Effect of acid and cold stress adaptation on the proteome and acid tolerance response of the foodborne pathogen Listeria monocytogenes Scott A."
10.2000 – 07.2006	BSc in Food Science and Technology Laboratory of Food Quality Control and Hygiene, Department of Food Science and Technology, Agricultural University of Athens, Athens, Greece; BSc thesis title: "Meat species identification in animal foodstuffs using poylyacrylamide gel electrophoresis (SDS-PAGE)."

MEMBERSHIPS & REVIEWING ACTIVITIES				
2006 – today	Member, Geotechnical Chamber of Greece (GCG), Greece			
2011 – today	Member, Institute of Food Technologists (IFT), USA			
2016 – today	Member, International Association for Food Protection (IAFP), USA			
2018 – today	Editorial Consultant, <i>Current Topics in Nutraceutical Research</i> peer-reviewed scientific journal (SCI), New Century Health Publishers, USA			
2020 – today	Guest Editor, Special Issue "Detection and control of Foodborne and waterborne pathogenic bacteria" in <i>Applied Sciences</i> (MDPI) peer-reviewed scientific journal (SCI)			
2022 – today	Associate Editor, Food Safety and Quality Control Section in <i>Frontiers in Food Science and Technology</i> peer-reviewed scientific journal (SCI)			
2022 – today	Review Editor, Food Microbiology Section in <i>Frontiers in Food Microbiology</i> peer-reviewed scientific journal (SCI)			
2011 – today	Reviewer for the peer-reviewed scientific journals (SCI) Food Control, Foodborne Pathogens and Disease, Journal of Applied Microbiology, Journal of Food Science, Journal of Food Quality, Food Research International, Heliyon, BMC Genomics, Biology (MDPI), Pathogens (MDPI), Current Topics in Nutraceutical Research, Journal of Pure and Applied Microbiology (more than 65 reviews until today)			

TEACHING ACTIVITIES			
2022 – today	Assistant Professor – Undergraduate (BSc) courses (Lectures & Labs); "Food Safety", "Hygiene and Safety in Food Industries", "Technology and Quality Control of Animal-Originated Food – Part I: Meat and Meat Products", "Technology and Quality Control of Animal-Originated Food – Part II: Milk and Milk Products", "Food Law", "Epidemiology of Foodborne Diseases"  Department of Food Science and Technology, School of Agricultural Sciences, University of Patras, Greece		
2022 – 2023	Assistant Professor – Undergraduate (BSc) course (Lectures) in "Food Hygiene and Quality Assurance Systems"  Department of Food Science and Technology, School of Agricultural Sciences, University of Patras, Greece		
2017 – 2021	Adjunct Lecture (University Fellow) – Undergraduate (BSc) courses (Lectures); "Epidemiology of Foodborne Diseases", "Food Hygiene and Consumer Behavior", "Food Safety and Quality" Department of Food Science and Nutrition, School of the Environment, University the Aegean, Lemnos, Greece		
2008 – 2012	PhD Candidate – Assisting in undergraduate (BSc) Lab. courses; "Technology of Animal-Originated Food Products", "Livestock Product Technology"  Department of Food Science and Technology, Agricultural University of Athens, Athens, Greece		

### **PUBLICATIONS**

Dr. Andritsos has authored **53 scientific publications**; 16 international peer-reviewed articles in journals of the Science Citation Index (SCI), 1 book chapter, 13 international and 23 national conference proceedings. Some indicative publications are listed below (relevant publications to the scope of the project are highlighted in yellow):

- Andritsos, N. D., Tzimotoudis, N., & Mataragas, M (2023). Prevalence and distribution of thermotolerant Campylobacter species in poultry: A comprehensive review with a focus on the factors affecting the detection and enumeration of Campylobacter jejuni and Campylobacter coli in chicken meat. Applied Sciences, 13(14), 8079. https://doi.org/10.3390/app13148079
- Andritsos, N. D., & Mataragas, M. (2023). Characterization and antibiotic resistance of Listeria monocytogenes strains isolated from Greek Myzithra soft whey cheese and related food processing surfaces over two-and-a-half years of safety monitoring in a cheese processing facility. Foods, 12(6), 1200. https://doi.org/10.3390/foods12061200
- Kokkoni, E.-A., Andritsos, N., Sakarikou, C., Michailidou, S., Argiriou, A., & Giaouris, E. (2021). Investigating for possible induction of resistance and/or virulence in stationary phase Listeria monocytogenes cells surviving sublethal antimicrobial exposure through targeted gene expression analysis. Foods, 10(10), 2382. <a href="https://doi.org/10.3390/foods10102382">https://doi.org/10.3390/foods10102382</a>
- Andritsos, N. D., Stasinou, V., Tserolas, D., & Giaouris, E. (2021). Temperature distribution and hygienic status of domestic refrigerators in Lemnos island, Greece. Food Control, 127, 108121. <a href="https://doi.org/10.1016/j.foodcont.2021.108121">https://doi.org/10.1016/j.foodcont.2021.108121</a>
- Andritsos, N. D., Paramithiotis, S., Mataragas, M., & Drosinos, E. H. (2021). Listeria monocytogenes serogroup 1/2 strains have a competitive growth advantage over serotype 4b during refrigerated storage of an artificially contaminated ready-to-eat pork meat product. Applied Sciences, 11 (13), 6096. <a href="https://doi.org/10.3390/app11136096">https://doi.org/10.3390/app11136096</a>
- Andritsos, N. D., Tzimotoudis, N., & Mataragas, M. (2020). Estimating the performance of four culture media used for enumeration and detection of Campylobacter species in chicken meat. LWT-Food Science and Technology, 118, 108808. <a href="https://doi.org/10.1016/j.lwt.2019.108808">https://doi.org/10.1016/j.lwt.2019.108808</a>
- Andritsos, N. D., Kallitsis, T., & Roukas, D. (2019). Growth potential of Listeria monocytogenes in ready-to-eat Feta cheese-based sauce stored at 4°C. *Journal of Food Safety*, 39(2), e12599. https://doi.org/10.1111/jfs.12599
- Koutelidakis, A. E., Andritsos, N. D., Kabolis, D., Kapsokefalou, M., Drosinos, E. H., & Komaitis, M. (2016). Antioxidant and antimicrobial properties of tea and aromatic plant extracts against bacterial foodborne pathogens: A comparative evaluation. Current Topics in Nutraceutical Research, 14 (2), 133-142.
- Hadjilouka, A., Andritsos, N. D., Paramithiotis, S., Mataragas, M., & Drosinos, E. H. (2014). Listeria monocytogenes serotype prevalence and biodiversity in diverse food products. *Journal of Food Protection*, 77(12), 2115-2120. <a href="https://doi.org/10.4315/0362-028X.JFP-14-072">https://doi.org/10.4315/0362-028X.JFP-14-072</a>
- Andritsos, N. D., Mataragas, M., Paramithiotis, S., & Drosinos, E. H. (2013). Quantifying Listeria monocytogenes prevalence and concentration in minced pork meat and estimating performance of three culture media from presence/absence microbiological testing using a deterministic and stochastic approach. Food Microbiology, 36 (2), 396-405. <a href="https://doi.org/10.1016/j.fm.2013.06.020">https://doi.org/10.1016/j.fm.2013.06.020</a>
- Geornaras, I. Yang, H., Manios, S., Andritsos, N., Belk, K. E., Nightingale, K. K., Woerner, D. R., Smith, G. C., & Sofos, J. N. (2012). Comparison of decontamination efficacy of antimicrobial treatments for beef trimmings against Escherichia coli O157:H7 and 6 non-O157 Shiga toxin-producing E. coli serogroups. *Journal of Food Science*, 77(9), 539-544. https://doi.org/10.1111/j.1750-3841.2012.02878.x
- Andritsos, N. D., Mataragas M., Mavrou, E., Stamatiou, A., & Drosinos, E. H. (2012). The microbiological condition of minced pork prepared at retail stores in Athens, Greece. *Meat Science*, 91(4), 486-489. <a href="https://doi.org/10.1016/j.meatsci.2012.02.036">https://doi.org/10.1016/j.meatsci.2012.02.036</a>

## CONFERENCES/WORKSHOPS/etc.

- Oral and poster presentations (36 in total) in international and national scientific conferences (2004 today)
- Participation in 1 training session for Uncertainty Calculation: Methods and Tools organized by the Hellenic Association for Laboratories (21 September 2019, Athens, Greece)
- Participation in 1 workshop for Salmonella detection, serotyping and antimicrobial resistance (AMR) organized by the National Reference Laboratory for Salmonella & AMR (20 May 2016, Chalkida, Greece)
- Participation in 2 seminars for Internal Auditors of Food Safety Management Systems (4-7 May 2006, Elefsina, Greece) and Basic Principles of Food Hygiene & Safety (15 October 2008, Athens, Greece)

SUPERVISION OF UNDERGRADUATE & GRADUATE STUDENTS				
2023 – today	Assistant Professor (Dept. of Food Science and Technology, School of Agricultural Sciences, University of Patras, Greece) Supervising 5 undergraduate students elaborating BSc thesis and 1 doctoral student elaborating PhD thesis			
2014 – 2022	Head of Laboratory (Food Microbiology Laboratory, Athens Analysis Laboratories SA, Greece) Supervising 51 undergraduate (BSc) students and 1 graduate (MSc) student as interns			
2018 – 2020	University Fellow (Department of Food Science and Nutrition, School of the Environment, University of the Aegean, Greece) Assisting in the supervision of 3 undergraduate students elaborating BSc thesis			
2009 – 2010	PhD Candidate (Department of Food Science and Nutrition, School of the Environment, University of the Aegean, Greece) Assisting in the supervision of 2 undergraduate students elaborating BSc thesis and 1 graduate student elaborating MSc thesis			

FELLOWSHIPS, AWARDS, PRODUCT DEVELOPMENT			
2023	For God's shake (13 <sup>th</sup> National Student Contest <i>Ecotrophelia</i> 2023) Supervising 6 undergraduate students from the Dept. of Food Science and Technology		
2023	(University of Patras) in the research and development of an innovative protein vegan drink  Dip into health (13 <sup>th</sup> National Student Contest Ecotrophelia 2023)  Assisting 7 undergraduate students from the Dept. of Food Science and Technology (University		
	of Patras) in the research and development of an innovative spreadable cheese product		

2022	Eλ-yum (12 <sup>th</sup> National Student Contest <i>Ecotrophelia</i> 2022) Supervising 7 undergraduate students from the Dept. of Food Science and Technology (University of Patras) and 3 undergraduate students from the Dept. of Food Science and Nutrition (University of the Aegean) in the research and development of an innovative plant-based bread spread				
2019	1st Prize Award for Poster Presentation (12th Panhellenic Conference of the Hellenic Society of Infection Control)  Title of best poster presentation; "Microbiological air control in indoor hospital environments"				
2008 – 2011	Alexander S. Onassis Public Benefit Foundation Fellowship for doctoral studies in Greece PhD scholarship (Scholarship Code No.: G ZC 003-2/2008-2009)/Dept. of Food Science and Technology, Agricultural University of Athens, Greece				
2006 – 2008	Alexander S. Onassis Public Benefit Foundation Fellowship for graduate studies in Greece MSc scholarship (Scholarship Code Bo.: G ZC 003/2006-2007)/Dept. of Food Science and Technology, Agricultural University of Athens, Greece				

## **RESEARCH GRANTS**

The PI has participated in 13 national and international competitive research and private initiative programs, which have received a total funding of more than 3.500.000 € in grants

Project Title	Funding source	Period	Role of the PI
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"Consultancy – Analysis and certification of a chocolate manufacturing company"	University of Patras Research Committee	20.01.2023 - 20.01.2025	Research associate participating as consultant and in WPs of the project
"Microbiological control of the safety of foods of animal origin"	University of Patras Research Committee	15.02.2022 - 15.02.2024	PI responsible for the supervision and implementation of the project
"MilkQuality Research Infrastructure in Agrinutrition: Mastitis control in small dairy ruminants and improving the quality of fresh milk and cheese products using advanced molecular and statistical methods"	OPCE & ERDF (EPAnEK-ETPA)	01.09.2021 — 19.05.2023	Head of Quality Control in Research Infrastructure participating in the ISO 17025 design and implementation
"Legionella spp. diagnosis in 2 hours: A Lab-on-a-chip for rapid, colorimetric detection in water – LEGEND"	MIA-RTDI (EYDE- ETAK)	29.09.2020 - 31.12.2021	Research coordinator for microbiological testing
"Transcriptional determination of combined resistance induction (stress adaptation) and virulence in Listeria monocytogenes cells exposed in antimicrobial compounds"	European Regional Development Fund (ERDF)	16.04.2020 - 15.11.2021	Post-Doc researcher responsible for the implementation of the project
"Testing and evaluation of a Lab-On-Chip kit for ultrafast and highly accurate detection of Legionella pneumophila bacteria in water"	UniFund	07.01.2019 - 06.09.2021	Research coordinator for microbiological testing
"Quantification of Campylobacter jejuni and Campylobacter coli in poultry meat"	Self-funded	01.10.2013 - 01.10.2015	Post-Doc researcher and PI responsible for supervision and implementation of the project
"Evaluation of chemical decontamination treatments for beef trimmings against Escherichia coli O157:H7, non-O157 Shiga toxin-producing E. coli and antibiotic and susceptible Salmonella Typhimurium and Salmonella Newport"	American Meat Institute Foundation (AMIF)	15.01.2011 — 15.06.2011	Research associate (Visiting researcher/scholar) participating in the project
"SYMBIOSIS-EU"	EU (7 <sup>th</sup> Framework Programme)	01.03.2009 – 01.09.2009 & 11.11.2009 – 11.02.2010	Research associate participating in WPs of the project
"Advancing beef safety and quality through research and innovation – ProSafeBeef"	EU (7 <sup>th</sup> Framework Programme)	01.03.2009 – 30.09.2009 & 15.11.2009 – 31.12.2010	Research associate participating in WPs of the project
"Control and prevention of emerging and future pathogens at cellular and molecular level throughout the food chain – Pathogen Combat"	EU (6 <sup>th</sup> Framework Programme)	01.11.2008 - 30.06.2009	Research associate participating in WPs of the project
"Study of heptazyme bread"	Puratos Hellas	01.01.2008 - 31.01.2008	Research associate participating in WPs of the project

"Study of methods for optimizing safety and shelf-	EU & General	01.10.2007	Research associate
life of ready-to-eat animal-originated products"	Secretariat of	_	participating in WPs of the
	Research and	31.11.2007	project
	innovation (GSRI)		

### SHORT CV INFO

**Nikolaos D. Andritsos** graduated in 2006 (BSc) from the Department of Food Science and Technology of the Agricultural University of Athens (DFST/AUA), Greece, with an integrated master (MSc) in Agricultural Science (5-year undergraduate studies program). He was awarded two merit-based full-time scholarships from the Alexander S. Onassis Public Benefit Foundation for postgraduate and doctoral studies in Greece, which he completed at the Laboratory of Food Quality Control and Hygiene of the DFST/AUA under the supervision of Professor Eleftherios H. Drosinos. Thence, he obtained an MSc in Food Science and Technology and Human Nutrition (2008) in the scientific field of Food Quality Management and Hygiene Assurance Systems (HACCP), while he also received his PhD in Agricultural Sciences (2012) in the scientific field of Food Hygiene and Safety.

Dr. Andritsos has already participated from 2007 as research associate (DFST/AUA, Eurofins Athens Analysis Laboratories S.A., Dept. of Dairy Research/ELGO-DIMITRA), visiting researcher (Center for Meat Safety and Quality/Dept. of Animal Sciences/Colorado State University/USA), research coordinator (Eurofins Athens Analysis Laboratories S.A.), research fellow (Dept. of Food Science and Nutrition/University of the Aegean) and principal investigator (Hellenic Army Biological Research Center, DFST/University of Patras) in 13 national and international competitive research and private initiative programs, which have received a total funding of more than 3.500.000 € in grants.

The **research interests** of Dr. Andritsos are focused on the detection and control of foodborne pathogenic bacteria, along with their pheno- and genotypic microbial responses by using molecular and culture-dependent methods and techniques. He is also interested in the microbial ecology and the microbiological safety of animal-originated products (i.e., meat, milk and products thereof) and the corresponding epidemiological associations that arise, in the antimicrobial susceptibility testing of bacterial pathogens isolated from foods, as well as in meat decontamination treatments and natural antimicrobial compounds used for food preservation purposes. Besides, his research interests are also extended to the study of the hygienic conditions prevailing in the food consumer's domestic environment.

Dr Andritsos has been an Adjunct Professor (University Fellow) of Food Hygiene and Safety in the Department of Food Science and Nutrition of the University of the Aegean, Lemnos, Greece (2017 – 2021). Besides, he was the Head of Microbiology Laboratory and microbiological research coordinator in Eurofins Athens Analysis Laboratories S.A. for 8 years (2014 – 2021). He is also the curator of a microbial culture collection counting more than 2200 strains of bacterial pathogens (e.g., Salmonella, Listeria monocytogenes, Staphylococcus aureus) Nikolaos currently serves as a faculty member (Assistant Professor) in the research field of Food Safety at the Department of Food Science and Technology of the University of Patras in Agrinio, Greece.

### 2 SCIENTIFIC ACHIEVEMENTS

The scientific achievements of the PI in the last 5 years are presented below:

- 1. **10 peer-reviewed articles**, 5 of which are relevant to the scope of the project, while being the first author in 6 of those publications (see Table "Publications", p.3)
- 2. **2 university textbooks** (in Greek); "Epidemiology of Foodborne Diseases" published in 2020 and "Food Safety and Quality" published in 2021
- 3. **3 new products developed** (Ελ-yum, Dip into health, For God's shake; see Table "Fellowships, Awards, Product Development", p.4) with their final technical files submitted to the respective collaborating production companies
- 4. **8 invited presentations** to international and national conferences, workshops or other scientific events on food safety and food security

- 5. **Proposal and drafting an interdepartmental Master's program**; "Research and development of innovative products of human nutrition for the food industry"
- 6. **Supervisor of 1 PhD** (Elhamolsadat Ghorbi)/Dept. of Food Science and Technology, University of Patras, Greece; Ms Ghorbi thesis title (defined on 06.02.2023): "Innovative methods and techniques for enhancing food safety combined with nanotechnology for the control of foodborne pathogenic bacteria"
- 7. Participation in the three-member advisory committee of 2 PhD (Ioanna Karageorgou, Christos Andrikopoulos)/Dept. of Food Science and Technology, University of Patras, Greece; Ms Karageorgou thesis title (defined on 09.01.2023): "Sustainable biomass management technologies for isolation of bioactive components and their application in food technology"; Mr Andrikopoulos thesis title (defined on 18.01.2023): "Use of new and natural flour improvers for the production of authentic bread products with stable physicochemical composition, high nutritional value and shelf life"
- 8. Participation in the three-member advisory committee of 2 MSc (Maria-Aikaterini Iliadi, Maria Chaini)/Dept. of Chemistry, University of Patras, Greece; Ms Iliadi thesis title (defined on 01.08.2023): "Isolation and identification of new non-Saccharomyces yeasts from Corinthian raisin (Mavrodaphni) of the Achaean vineyard Study of their oenological characteristics and volatile aromatic profile"; Ms Chaini thesis title (defined on 01.08.2023): "Production and study of quality characteristics of sparkling wines from white Achaean grape variety and a new strain of saccharomyces isolated from the local vineyard"