



Curriculum Vitae

Personal information

First name / Surname	Pistol Gina Cecilia
Address	Soldat Croitoru Vasile Street, no. 7, Sect. 5, Bucharest, Romania, Zip Code 060301
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E-mail	gina.pistol@ibna.ro
Nationality	Romanian
Date of birth	01.05.1975, Calarasi
Gender	Female

Professional experience, former employers:

2010- present: scientist involved in immunonutrition studies concerning the effects of different dietary supplements and contaminants on immune status, with respect to inflammatory processes; cellular and animal models of human inflammatory gastrointestinal diseases - National Research Development Institute for Animal Biology and Nutrition, Balotesti, Romania, Animal Biology Laboratory;

2010-present: coordinator of the IBNA molecular biology compartment.

2005–2010: scientist involved in research studies focused on cellular and molecular defects associated with inflammation in human autoimmune diseases -Cantacuzino NIRDMI, Bucharest, Romania, Cellular Receptors Laboratory;

2002-2005: Research assistant involved in the development of monoclonal antibody technology and characterization of the monoclonal antibodies --Cantacuzino NIRDMI, Bucharest, Romania, Monoclonal Antibodies Laboratory.

Professional career:

- 2002: Biochemist, Research assistant
- 2005: Scientist researcher
- 2008: Scientist researcher IIIrd degree
- 2015: Scientist researcher IIrd degree

RESEARCH ACTIVITY: I was involved, during over 18 years of experience, in the field of **immunonutrition studies**, focused especially on the evaluation of effects of by-products rich in bioactive compounds on local and systemic immune response (inflammatory and regulatory response) and the effects of contaminants (mycotoxins) on inflammatory processes mediators and associated signaling markers. Also, I was involved in studies concerning expression of genes involved in different phases of the immune response. I have experience in coordinating both national (TE302/2015-2017: *Investigation of the role of prebiotics and probiotics as modulators of microbiota and of intestinal inflammation in pigs as animal model for IBD*; ADER6.2.1./2015-2018: *Studies on the effects of nutrients/contaminants from swine feedstuff on gastro-intestinal tract functions*) and international (Bilateral project Romania-Belgium/2016-2018: *The effects of prebiotics and probiotics on*

intestinal microbiota in IDB using pig as animal model for human intestinal inflammatory diseases; Bilateral project Romania-Vietnam/2015-2017: *Valorization of novel bioethanol plants' by products for the production of high quality animal feeding*;) projects, as well as collaboration in national (PNCDI-I: CEEX, PNCDI-II: Partnerships and Ideas) and international projects: COST actions, bilateral projects, EUREKA projects. The main scientific contributions are as follows: (i) *Research on the effects of grape pomace prebiotic and Lactobacilli mixture probiotic on intestinal inflammation using in vitro system of cultured human epithelial intestinal cells CaCO-2* (Pistol et al, *ISANH Archives*, 2017; Pistol et al, *British J of Nutrition*, 2018, Pistol et al, *Archiva Zootechnica*, 2020). (ii) *Research on the effects of grape seeds meal prebiotic on intestinal inflammation using pig as animal model for human IBD* (Pistol et al, *The Journal of Functional Foods*, 2020; Grosu I, Pistol G et al, *Frontiers* 2020). (iii) *Research on the effects of some by-products on the immune response and health in farm animals, focused on the use of by-products as new feed additives rich in bioactive compounds* (Taranu I., Gras M., Pistol G. et al, *PlosONE*, 2014, Taranu I et al, *J Anim Physiol Nutr* 2018, Taranu I et al, *WASTE valorisation*, 2018). The complete list of the publication list can be found here: <http://www.ncbi.nlm.nih.gov/pubmed/?term=pistol+g>. All these important scientific contributions described previously were achieved in context of the national and international projects in which I participated as principal investigator or as team member. These projects were based on multi-disciplinary and multi-institutional activities, leading to the generation of complex results, materialized by technologies, methodologies and publications. Also, I am the coordinator of the Molecular Biology compartment from IBNA. This involvement in most important aspects of experimental design, coordination, publication and management trained me to design, execute and coordinate research projects.

Education and training

Dates	2011-2013
Title of qualification awarded	Post-Doctoral diploma
Principal subjects/occupational skills covered:	POSDRU/81/3.2/S/55362 " <i>Human resources training program in biomedical and biotechnological field</i> "
Name and type of organisation providing education and training:	Faculty of Biology, University of Bucharest, Romania
Dates	2010
Title of qualification awarded	Ph. D. Degree in Medical Sciences
Principal subjects/occupational skills covered:	Thesis Title: " <i>Cellular and Molecular Defects in Connective Tissue Autoimmune Diseases</i> "
Name and type of organisation providing education and training:	Romanian Academy, St S Nicolau Institute of Virology, Center of Immunology, Bucharest
Dates	2002 - 2004
Title of qualification awarded	Master Degree
Principal subjects/occupational skills covered	Molecular Biology and Biochemistry Thesis Title: " <i>Epitope mapping of bacterial Uridin Monophosphate Kinase</i> "
Name and type of organisation providing education and training:	Faculty of Biology, The University of Bucharest
Dates	1998 - 2002
Title of qualification awarded	Bachelor of Science in Biochemistry
Principal subjects/occupational skills covered	Biochemistry Thesis Title: " <i>Alcohol Dehydrogenase</i> "
Name and type of organisation providing education and training:	Faculty of Biology, The University of Bucharest

Dates 1993-1996
Title of qualification awarded Certificate of generalist nurse
Name and type of organisation providing education and training: "Christiana" Sanitary College - Slobozia, Ialomita

Dates Oct 2005
Principal subjects/occupational skills covered Fundamental Immunology Course
Name and type of organisation providing education and training: Cantacuzino NIRDMI, Bucharest

Dates April 2009
Principal subjects/occupational skills covered Cell Culture Seminar
Name and type of organisation providing education and training: LGC Standards, Bucharest

Post-doctoral stages:

2012: STSM (Short term scientific mission)–COST Action FA0802 (Feed for Health): *Study of mycotoxins effects on mechanisms of IgG transfer around parturition in dairy cattle, with direct implications on feed safety* - Vetsuisse Faculty, Veterinary Physiology, University of Bern, Switzerland.

2013: Researchers Exchange Programme, targeted to Early Stage Researchers (ESR), funded by European Project FP7 266061 (FOODSEG): *"Porcine intestinal epithelial cell line IPEC as in vitro model for studying the effects of dietary nutrients on the gut"* - Institute of Animal Nutrition, Berlin, Germany.

2015: STSM (Short term scientific mission)–COST Action FA1401 (PigGutNet): *Mycotoxin effects on gastrointestinal health in pigs, using in vivo and in vitro systems* - Institute of Animal Nutrition, Braunschweig, Germany.

ACHIEVEMENTS

- *Marie Curie grant* for Translational Research in Paediatric Rheumatology (TRIPR) – Genoa, Italy, September 24 - 27, 2009
- *MYRACE fellowship* for 3th Meeting of Young Rheumatologists Across Europe – January 18 – 21 2007 – Reichenau, Austria
- *MYRACE fellowship* for 2nd Meeting of Young Rheumatologists Across Europe – January 20– 24 2006– Reichenau, Austria
- International symposium Iasi – prize of Fundamental sciences in animal breeding section -2015
- International symposium Iasi – prize of Fundamental sciences in animal breeding section -2016

Personal skills and competences

Mother tongue	Romanian		Speaking		Writing
Self-assessment	Understanding				
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
English	B1 Independent user	C1 Independent user	B1 Independent user	B1 Independent user	B1 Independent user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences: Team works: I have worked in various research programs with national and international teams.

Organisational / managerial skills Organise and coordinate the scientific activity in the Molecular Biology department (part of the Laboratory of Animal Biology)

Job-related skills Methods of cellular and molecular biology related with the domain of feed safety and security

Computer skills and competences

Knowledge in:

- Text editors (WORD, OPEN OFFICE)
- all Microsoft Office Programs
- statistical and analysis programs (BioEdit, STATS, WinMDI, PerlPrimer and others)

Other skills:

- ✓ **Reviewer** for ISI-indexed journals: PlosONE; Ecotoxicology and Environmental Safety; Food Bioscience; The Journal of Nutrition; The Journal of Functional Foods; Nutrition, Metabolism & Cardiovascular Diseases; Toxicon; Food and Chemical Toxicology; Livestock Science;
- ✓ **Editorial board member** : Journal of Veterinary Medicine and Health ; Archiva Zootechnica.
- ✓ **Member** of the Scientific Commission of the National Council for the confirmation of Titles, Diplomas and Academic Certificates (2018-2020)
- ✓ **National evaluator** for: PNIII-P1-1.1-TE/PD-2016; PN-III-P1-1.2-PCCDI-2017; PN-III-P1-1.1-MC-2018; PN-III-P1-1.1-MC-2019; PN-III-P1-1.1-MCD-2019; PN-III-CERC-CO-PTE-2-2019

ADDITIONAL INFORMATION

HIRSCH INDEX: 15 (Google Scholar); 10 (Web of Science)

Citations of published papers: 628 (Google Scholar); 419 (Web of Science)

Books:

Marin D.E., Taranu I., Pistol G.C. Metode de decontaminare a micotoxinelor. 2014. ISBN 978-973-0-17830-2.

LIST OF PUBLICATIONS (ISI – indexed journals) (selected)

1. **Pistol GC**, Marin DE, Rotar MC, Ropota M, Taranu I. Bioactive compounds from dietary whole grape seed meal improved colonic inflammation via inhibition of MAPKs and NF-κB signaling in pigs with DSS induced colitis. *Journal of Functional Foods*, Volume 66, 2020, <https://doi.org/10.1016/j.jff.2019.103708>.
2. Grosu IA, **Pistol GC**, Marin DE, Cișmileanu A, Palade LM and Țăranu I (2020) Effects of Dietary Grape Seed Meal Bioactive Compounds on the Colonic Microbiota of Weaned Piglets With Dextran Sodium Sulfate-Induced Colitis Used as an Inflammatory Model. *Front. Vet. Sci.* 7:31. doi: 10.3389/fvets.2020.00031
3. Kessler EC, **Pistol GC**, Bruckmaier RM, Gross JJ., Pattern of milk yield and immunoglobulin concentration and factors associated with colostrum quality at the quarter level in dairy cows after parturition. *Dairy Sci.* 2020 Jan;103(1):965-971. doi: 10.3168/jds.2019-17283. Epub 2019 Oct 24.
4. Marin DE, Braicu C, Dumitrescu G, **Pistol GC**, Cojocneanu R, Neagoe IB, Taranu I., MicroRNA profiling in kidney in pigs fed ochratoxin A contaminated diet. *Ecotoxicol Environ Saf.* 2019 Nov 30;184:109637. doi: 10.1016/j.ecoenv.2019.109637.
5. Marin DE, **Pistol GC**, Bulgaru CV, Taranu I. Cytotoxic and inflammatory effects of individual and combined exposure of HepG2 cells to zearalenone and its metabolites. *Naunyn Schmiedebergs Arch Pharmacol.* 2019 Aug;392(8):937-947. doi: 10.1007/s00210-019-01644-z. Epub 2019 Mar 27.,
6. Palade LM, Habeanu M, Marin DE, Chedea VS, **Pistol GC**, Grosu IA, Gheorghe A, Ropota M, Taranu I., Effect of Dietary Hemp Seed on Oxidative Status in Sows during Late Gestation and Lactation and Their Offspring. *Animals (Basel).* 2019 Apr 25;9(4). pii: E194. doi: 10.3390/ani9040194
7. Taranu I, Marin DE, Palade M, **Pistol GC**, Chedea VS, Gras MA, Rotar C., Assessment of the efficacy of a grape seed waste in counteracting the changes induced by aflatoxin B1 contaminated diet on performance, plasma, liver and intestinal tissues of pigs after weaning. *Toxicon.* 2019 Apr 15;162:24-31. doi: 10.1016/j.toxicon.2019.02.020. Epub 2019 Mar 5.
8. Grosu IA, **Pistol GC**, Taranu I, Marin DE., The Impact of Dietary Grape Seed Meal on Healthy and Aflatoxin B1 Afflicted Microbiota of Pigs after Weaning. *Toxins (Basel).* 2019 Jan 8;11(1). pii: E25. doi: 10.3390/toxins11010025.
9. **Pistol GC**, Marin DE, Dragomir C, Taranu I., Synbiotic combination of prebiotic grape pomace extract and probiotic *Lactobacillus* sp. reduced important intestinal inflammatory markers and in-depth signalling mediators in lipopolysaccharide-treated Caco-2 cells. *Br J Nutr.* Volume 121, Issue 314 February 2019, pp. 291-305, doi: <https://doi.org/10.1017/S0007114518003410>
10. Marin DE, **Pistol GC**, Gras M, Palade M, Taranu I. A comparison between the effects of ochratoxin A and aristolochic acid on the inflammation and oxidative stress in the liver and kidney of weanling piglets. *Naunyn Schmiedebergs Arch Pharmacol.* 2018 Oct;391(10):1147-1156. doi: 10.1007/s00210-018-1538-9. Epub 2018 Jul 22
11. Taranu I, Marin DE, Braicu C, **Pistol GC**, Sorescu I, Pruteanu LL, Berindan Neagoe I, Vodnar DC., In Vitro Transcriptome Response to a Mixture of Lactobacilli Strains in Intestinal Porcine Epithelial Cell Line. *Int J Mol Sci.* 2018 Jun 30;19(7). pii: E1923. doi: 10.3390/ijms19071923.
12. Chedea VS, Palade LM, Marin DE, Pelmus RS, Habeanu M, Rotar MC, Gras MA, **Pistol GC**, Taranu I. Intestinal Absorption and Antioxidant Activity of Grape Pomace Polyphenols. *Nutrients.* 2018 May 9;10(5). pii: E588. doi: 10.3390/nu10050588.
13. Taranu I, Nguyen T-T, Pham KD, Gras MA; **Pistol GC**, Marin DE, Rotar C, Habeanu M, Ho PH, Le TM, Bui TT-H, Mai DH, Chu-Ky S. Rice and Cassava Distillers Dried Grains in Vietnam: Nutritional Values and Effects of Their

Dietary Inclusion on Blood Chemical Parameters and Immune Responses Growing Pigs. Waste and Biomass Valorization <https://doi.org/10.1007/s12649-018-0341-7>

14. Marin DE, **Pistol GC**, Gras MA, Palade ML, Taranu I. Comparative effect of ochratoxin A on inflammation and oxidative stress parameters in gut and kidney of piglets. *Regul Toxicol Pharmacol*. 2017 Oct;89:224-231. doi: 10.1016/j.yrtph.2017.07.031. Epub 2017 Jul 29.
15. Marin DE, Braicu C, Gras MA, **Pistol GC**, Petric RC, Berindan Neagoe I, Palade M, Taranu I. Low level of ochratoxin A affects genome-wide expression in kidney of pig. *Toxicon*. 2017 Sep 15;136:67-77. doi: 10.1016/j.toxicon.2017.07.004. Epub 2017 Jul 6.
16. Taranu I, Habeanu M, Gras MA, **Pistol GC**, Lefter N, Palade M, Ropota M, Sanda Chedea V, Marin DE. Assessment of the effect of grape seed cake inclusion in the diet of healthy fattening-finishing pigs. *J Anim Physiol Anim Nutr (Berl)*. 2017 Mar 1. doi: 10.1111/jpn.12697.
17. Chedea VS, Pelmus RS, Lazar C, **Pistol GC**, Calin LG, Toma SM, Dragomir C, Taranu I. Effects of a diet containing dried grape pomace on blood metabolites and milk composition of dairy cows. *J Sci Food Agric*. 2017 Jun;97(8):2516-2523. doi: 10.1002/jsfa.8068. Epub 2016 Nov 1.
18. **Pistol GC**, Braicu C, Motiu M, Gras M A, Marin D E, Stancu M, Calin L, Israel-Roming F, Berindan-Neagoe I, Taranu I. Zearalenone mycotoxin affects immune mediators, MAPK signaling molecules, nuclear receptors and genome-wide gene expression in pig spleen. *PLoS One*. 2015 May 26;10(5):e0127503. doi: 10.1371/journal.pone.0127503. eCollection 2015.
19. Taranu I, Marin DE, **Pistol GC**, Motiu M, Pelinescu D. Induction of pro-inflammatory gene expression by *Escherichia coli* and mycotoxin zearalenone contamination and protection by a *Lactobacillus* mixture in porcine IPEC-1 cells. *Toxicon*. 2015 Apr;97:53-63. doi: 10.1016/j.toxicon.2015.01.016. Epub 2015 Jan 29.
20. Taranu I, Braicu C, Marin DE, **Pistol GC**, Motiu M, Balacescu L, Beridan Neagoe I, Burlacu R. Exposure to zearalenone mycotoxin alters in vitro porcine intestinal epithelial cells by differential gene expression. *Toxicol Lett*. 2014 Oct 23;232(1):310-325. doi: 10.1016/j.toxlet.2014.10.022.
21. Banica LM, Besliu AN, **Pistol GC**, Stavaru C, Vlad V, Predeteanu D, Ionescu R, Stefanescu M, Matache C. Dysregulation of anergy-related factors involved in regulatory T cells defects in Systemic Lupus Erythematosus patients: Rapamycin and Vitamin D efficacy in restoring regulatory T cells. *Int J Rheum Dis*. 2014 Oct 28. doi: 10.1111/1756-185X.12509.
22. Taranu I, Gras M, **Pistol GC**, Motiu M, Marin DE, Lefter N, Ropota M, Habeanu M. ω -3 PUFA rich camelina oil by-products improve the systemic metabolism and spleen cell functions in fattening pigs. *PLoS One*. 2014 Oct 10;9(10):e110186. doi: 10.1371/journal.pone.0110186. eCollection 2014.
23. **Pistol GC**, Gras MA, Marin DE, Israel-Roming F, Stancu M, Taranu I. Natural feed contaminant zearalenone decreases the expressions of important pro- and anti-inflammatory mediators and mitogen-activated protein kinase/NF- κ B signalling molecules in pigs. *Br J Nutr*. 2014 Feb;111(3):452-64. doi: 10.1017/S0007114513002675. Epub 2013 Aug 20.

LIST OF PUBLICATIONS (BDI – indexed journals) (selected)

1. Marin DE, Pistol GC, Dumitrescu G, Gras MA, Taranu I. Study of the role of aristolochic acid in triggering the porcine nephropathy. *Archiva Zootechnica*, 22 :1, 5-14, 2019.
2. Daniela Marin, **Gina Pistol**, M. Gras, C. Rotar, Ionelia Taranu ROLE OF PROBIOTICS IN COUNTERACTING THE EFFECT OF USUAL FEED CONTAMINANTS IN SWINE *Lucrări Științifice-Seria Zootehnie*, 2019, vol 72, pag 422-426
3. **Gina Cecilia Pistol**, L.M. Palade, Daniela Eliza Marin, Mariana Stancu, Ionelia Taranu THE EFFECT OF GRAPE WASTES, WINE INDUSTRY BYPRODUCTS, ON INFLAMMATORY AND ANTIOXIDANT BIOMARKERS IN POST-WEANING PIGLETS *Lucrări Științifice-Seria Zootehnie*, 2018, vol 71, pag 422-426
4. **Pistol GC** Improving the Animal Health Using Alternative Approaches in Farm Animals Feeding *J Vet Med Health* 2018, 2:2, e1
5. **Pistol G C**, Marin D E, Taranu I Polyphenol - enriched grape pomace extract and lactobacilli combination restores epithelial integrity in LPS-induced inflammation in intestinal Caco-2 cells *AISANH* (2017), Vol. 5, Issue n°1, pages 41-44; doi: 10.18143/AISANH_v5i2_12
6. **Pistol GC** Natural Therapy for Treating Intestinal Inflammation in Farm Animals: Promises and Pitfalls *J Vet Med Health* 2017, 1: e004.

7. **Pistol GC**, Chedea V, Palade M.L, Marin D.E., Calin L., Stancu M., Taranu I. Use of high polyphenols grape seeds cakes to modulate the inflammatory status and piglet health during the post-weaning period. *Scientific Papers-Animal Science Series: Lucrări Științifice - Seria Zootehnie*, vol. 68, 2017
8. Taranu Ionelia, Mihaela Habeanu, M.A. Gras, **Gina Cecilia Pistol**, Nicoleta Lefter, M. Palade, Mariana Ropota, Veronica Sanda Chedea and Daniela E. Marin. Effect of xenobiotic compounds from grape waste on liver function and oxidative status in pigs. *Archiva Zootechnica* 2017, 20:2, 5-24
9. Marin Daniela Eliza, **Gina C. Pistol**, Ionelia Taranu. Effect of Ochratoxin A and Aristolochic Acid on a Porcine Kidney Cell Line. *Scientific Papers: Animal Science and Biotechnologies*, 2017, Vol 50, No 2, 11-15.
10. Chedea V. S., Pelmus R. S., Cismileanu A. E., **Pistol G. C.**, Palade L. M., Taranu Total polyphenols content, antioxidant activity and stability of a grape pomace incorporated in animal feed *Scientific Papers: Animal Science and Biotechnologies*, 2016, 49
11. Marin D. E., **Pistol G.C.**, Gras M., Motiu M., Taranu I. Effect of a diet contaminated with ochratoxin a at the highest level allowed by eu on the inflammation and the oxidative stress in the spleen of weaned piglets *Scientific Papers: Animal Science and Biotechnologies*, Timisoara, 2016, 49 (1)
12. **Gina Cecilia Pistol**, Daniela Eliza Marin, Ionelia Taranu. Effect of grape pomace extract enriched in polyphenols in counteracting intestinal inflammation by using an in vitro intestinal cellular model *Scientific Papers-Animal Science Series: Lucrări Științifice - Seria Zootehnie*, 2016, vol. 66.
13. Cristina Lazar, Al.M. Gras, M.C. Rotar, **Gina Cecilia Pistol**, Rodica Stefania Pelmus, Elena Ghiță Identification of Myostatin gene polymorphism using PCR-RFLP for improving carcass meat evaluation of Teleorman Black Head lambs *Animal Science and Biotechnologies letters*, 2016, 49, (1), 1-5.
14. Taranu Ionelia, **Pistol Gina**, Gras M.A., Motiu Monica, Marin Daniela, Stancu Mariana Investigation of zearalenone tolerance limit in the feedstuffs for weaned pigs *Lucrări Științifice - Seria Zootehnie*, Iasi 2015, pg. 1-5
15. D. E. Marin, **G.C. Pistol**, M.A. Gras, M. Motiu, I. Taranu Studies concerning the nephrotoxic effects of ochratoxin a using pig as a model. *Lucrări Științifice - Seria Zootehnie*, Iasi 2015 pg 333-337
16. Cristina Lazar, Al. M. Gras, M.C. Rotar, **Gina Cecilia Pistol**, Rodica Stefania Pelmus, Elena Ghiță Evaluation of meat quality in Teleorman Black head by ecographic method and Identification of calpastatin (cast) gene Polymorphism correlated with carcass Quality *Lucrări Științifice - Seria Zootehnie*, 2015, p. 141-146
17. Ionelia Taranu, Aurora Arghir, **Gina Pistol**, Daniela Marin, Ana-Maria Niculescu Effect of fusarium mycotoxin zearalenone on gut epithelium. *Buletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca.*, 2014, Vol 71, No 2, 315-316.