

PERSONAL INFORMATION

Nicolae Corcionivoschi



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Positions and work experience

2014 – now	Head of Food Microbiology, Agri-Food and Biosciences Institute, Belfast, NI
2016 – 2018	Head of United Kingdom Reference Lab. for Milk and Milk Products
2015 – now	Honorary Professor - USAMVB King Michael I, Timisoara, Romania
2015 – now	PhD Supervisor at Queens University Belfast and USAMV Timisoara
2012 – 2014	Senior Research Fellow – NCRC, Dublin
2005 – 2012	Senior Postdoctoral Scientist – UCD, Dublin
2004 – 2005	Scientist – National Research Council of Canada, Ottawa

Education and training

2022	Postgraduate Certificate in Higher Education Teaching, Queens University Belfast
2022	Postgraduate Certificate in Pedagogy, USAMV Cluj Napoca
2014	Habilitation Thesis – PhD Supervisor in Biological Sciences
2005	PhD – Molecular Microbiology – University of Edinburgh, Scotland, United Kingdom
1999	MSc – Animal Nutrition – USAMVB King Michael I, Timisoara, Romania
1998	BSc – Biotechnology – USAMVB King Michael I, Timisoara, Romania

Professional and research

Doctor Honoris Causa – USAMVB King Michael I of Romania, Timisoara (2018)
 MIFST – Institute of Food Science and Technology – Elected Member
 Technical Manager, UKAS, AFBI
 Head of Foodborne Zoonomics in AFBI, din 2016
 Associate Editor – BMC Microbiome
 Associate Editor – Irish Veterinary Journal
 Scientific Editor – Romanian Biotechnological Letters
 Guest Editor – Frontiers in Microbiology
 Guest Editor – Microbiology MDPI
 Member of the British Society of Animal Science
 Member of Society of Microbiology (UK).
 Member of the Society for Applied Microbiology
 Member of the Poultry Research Network <http://phm.net/members/>
 Associate Member – Research Institute of University of Bucharest

PhD Students supervision

- **Eugenia Butucel** – PhD Student. Natural antimicrobials and bacterial virulence. Funded by Auranta (2021-2024). USMAV Timisoara.
- **Callie Hughes** – PhD Student. Shaping the optimal poultry gastrointestinal tract microbiome through dietary interventions to aid in achieving net zero emissions and sustainable poultry production systems. Funded by Moy Park (2021-2024). Queens University Belfast.
- **Phillip Burrows** – PhD student. Untangling the importance of poultry associated microbiomes for food security. Funded by Moy Park (2019-2023). Second supervisor. Queens University Belfast
- **Zoe Black** – PhD Student. Identification, characterisation and fate of bacterial pathogens in a range of organic manures applied to arable soils in Northern Ireland. Funded by DAERA (2019-2023). Ulster University.
- **Igori Balta** – PhD student. The impact of natural antimicrobials in modulating the host immune system to reduce viral and bacterial pathogens in farm animals. Funded by Auranta (2020-2025) – USAMV Cluj Napoca
- **Aaron McKenna** – PhD student. Identification and prevalence of T6SS virulence factors in *Campylobacter* isolates within Moy Park farms (2016-2019). Funded by Moy Park – Second Supervisor - writing up – Queens University

- **Nompilo Sibanda** – PhD student. The effect of management practices on *Campylobacter* presence in Northern Ireland poultry farms (2016-2019). Funded by Moy Park. Second Supervisor – Queens University
- **Vlad Ungureanu** – PhD student. Prevalence of highly virulent *Campylobacter jejuni* strains from the rural area of North Romania (2018-2021). Primary Supervisor – USAMVB Timisoara.
- **Oana Trofenciu** – PhD student. Isolation and characterisation of *Campylobacter jejuni* isolates from dental cavities in humans. (2018-2021). Primary Supervisor – USAMV Cluj-Napoca.
- **Filip Sima** – PhD Student. The effect of prebiotics in preventing in vitro and ex vivo *Campylobacter* and *Cryptosporidium* infection (2016-2019). Funded by an animal feed supplement company. Principal Supervisor – University of Bucharest. Graduated December 2019.

Current research projects *"The impact of plant extracts of bacterial pathogens"*. Value of grant £94,000. Principal investigator. Funded by Auranta 2021-2024. [Director](#).

"Natural antimicrobials and bacterial virulence". Value of grant £265,000. Principal investigator. Industry funding. 2020-2025. [Director](#)

"The effect of prebiotic feed supplements in preventing pathogen infection in vitro and ex vivo". Value of grant in full: £299,415. Principal Investigator. Industry funding. 2016-2020. [Director](#)

"Identification and prevalence of T6SS virulence factors in Campylobacter isolates within Moy Park farms". Value of grant in full: £103,000. Principal Investigator. Industry funding – 2016-2019 [Director](#)

"Insects as a sustainable novel protein". Value of grant in full: £186,310. Co-PI. Agri-Food Quest funding. [Collaborator](#)

"Role of diet & gut microbiota in odor emissions from pigs and off-flavors in pork". Value of grant in full: £282,519. Co-PI. Agri-Food Quest funding. [Collaborator](#)

Ongoing and past projects as Coordinator/Collaborator

Funding agency: Food Standards Agency (UK)
 Project title: A microbiological survey of *Campylobacter* contamination in fresh whole UK produced chilled chickens at retail sale
 Year of award: 2015
 Value of grant in full: £143,554
 Value to your research team/laboratory: £143,554
 Main other partners involved: – Public Health England

Funding agency: Food Standards Agency
 Project title: UK National Reference Laboratory for Milk and Milk Products.
 Year of award 2013
 Value of grant in full: £386,190
 Value to your research team/laboratory: £386,190
 Main other partners involved. – no other partners involved

Funding agency: Auranta
 Project title: The effect of prebiotic feed supplements in preventing pathogen infection in vitro and ex vivo.
 Year of award: 2017
 Value of grant in full: £299,415.34
 Value to your research team/laboratory: £299,415.34
 Main other partners involved. – no other partners involved

Funding agency: Agri-Food Quest
 Project title: Sustainable novel proteins (collaborator Prof N. Corcionivoschi)
 Year of award: 2017
 Value of grant in full: £186,311
 Value to your research team/laboratory: £83,325
 Main other partners involved: – Queens University Belfast

Funding agency: Agri-Food Quest
Project title: Role of diet & gut microbiota in odour emissions from pigs and off-flavours in pork (collaborator Prof N. Corcionivoschi)
Year of award: 2017
Value of grant in full: £282,519
Value to your research team/laboratory: £56,200
Main other partners involved: – Queens University Belfast

Funding agency: Alltech
Project title: The role of mananoligosaccharides (MOS) in preventing *Campylobacter* colonization of poultry.(Dr N. Corcionivoschi)
Year of award: 2015
Value of grant in full: £60,000
Value to your research team/laboratory: £60,000
Main other partners involved: – no other partners involved

Funding agency: Moy Park
Project title: Identification and prevalence of T6SS virulence factors in *Campylobacter* isolates within Moy Park farms. Prof N. Corcionivoschi
Year of award: 2017
Value of grant in full: £103,000
Value to your research team/laboratory: £103,000
Main other partners involved: – no other partners involved

Funding agency: Children Research Medical Foundation, Dublin – co-applicant
Project title: The role of capsular polysaccharides in virulence of *Campylobacter jejuni*
Year of award: 2009
Value of grant in full: €275,000
Value to your research team/laboratory: €275,000
Main other partners involved: – no other partners involved

CNCSIS
Project title: The role of probiotic bacteria in preventing *Campylobacter jejuni* colonization of poultry
Year of award: 2012
Value of grant in full: €250,000
Value to your research team/laboratory: €250,000
Main other partners involved: – no other partners involved

Funding agency: Children Research Medical Foundation, Dublin
Project title: The role of cytochrome P450s in the pathogenesis of *Pseudomonas aeruginosa*
Year of award: 2013
Value of grant in full: €10,115
Value to your research team/laboratory: €10,115
Main other partners involved: – no other partners involved

Funding agency: Children Research Medical Foundation, Dublin
Project title: The role of cytochrome P450s in the pathogenesis of *Campylobacter jejuni*.
Year of award: 2012
Value of grant in full: €15,000
Value to your research team/laboratory: €15,000
Main other partners involved: – no other partners involved

Funding agency: Safefood
Project title: Risk profiling *Listeria* in ready-to-eat foods (RTE) and determination of control strategies and practical interventions
Year of award: 2014
Value of grant in full: £187,000
Value to your research team/laboratory: £150,000

Main other partners involved: – Teagasc, London School of Hygiene and Tropical Medicine

Funding agency: Agri-Food and Biosciences Institute

Project title: Vaccine Development for *Campylobacter* spp.

Year of award: 2014

Value of grant in full: £43,000

Value to your research team/laboratory: £43,000

Main other partners involved: – no other partners involved

Publications

1. Butucel, E.; Balta, I.; McCleery, D.; Morariu, F.; Pet, I.; Popescu, C.A.; Stef, L.; Corcionivoschi, N. Farm Biosecurity Measures and Interventions with an Impact on Bacterial Biofilms. *Agriculture* 2022, 12, 1251. <https://doi.org/10.3390/agriculture12081251>.
2. Chifiriuc MC, Filip R, Constantin M, Pircalabioru GG, Bleotu C, Burlibasa L, Ionica E, Corcionivoschi N and Mihaescu G (2022) Common themes in antimicrobial and anticancer drug resistance. *Front. Microbiol.* 13:960693. doi: 10.3389/fmicb.2022.960693
3. Igori Balta, Eugenia Butucel, Lavinia Stef, Ioan Pet, Gratiela Gradisteanu-Pircalabioru, Carmen Chifiriuc, Ozan Gundogdu, David McCleery, and Nicolae Corcionivoschi. Anti-Campylobacter Probiotics: Latest Mechanistic Insights. *Foodborne Pathogens and Disease*. Ahead of print. <http://doi.org/10.1089/fpd.2022.0039>
4. Gradisteanu Pircalabioru G, Liaw J, Gundogdu O, Corcionivoschi N, Ilie I, Oprea L, Musat M, Chifiriuc M-C. Effects of the Lipid Profile, Type 2 Diabetes and Medication on the Metabolic Syndrome — Associated Gut Microbiome. *International Journal of Molecular Sciences*. 2022; 23(14):7509. <https://doi.org/10.3390/ijms23147509>
5. Balta Igori, Lavinia Stef, Eugenia Butucel, Gratiela Gradisteanu Pircalabioru, Adelina Venig, Patrick Ward, Myriam Deshaies, Ioan Pet, Ducu Stef, Osman Y. Koyun, Todd R. Callaway, Ozan Gundogdu, and Nicolae Corcionivoschi. 2022. "The Antioxidant Effect of Natural Antimicrobials in Shrimp Primary Intestinal Cells Infected with *Nematopsis messor*" *Antioxidants* 11, no. 5: 974. <https://doi.org/10.3390/antiox11050974>. Corresponding author.
6. McMurray, R.L.; Ball, M.E.E.; Linton, M.; Pinkerton, L.; Kelly, C.; Lester, J.; Donaldson, C.; Balta, I.; Tunney, M.M.; Corcionivoschi, N.; Situ, C. The Effects of *Agrimonia pilosa* Ledeb, *Anemone chinensis* Bunge, and *Smilax glabra* Roxb on Broiler Performance, Nutrient Digestibility, and Gastrointestinal Tract Microorganisms. *Animals* 2022, 12, 1110. <https://doi.org/10.3390/ani12091110>
7. Price CL, Warrilow AGS, Rolley NJ, Parker JE, Thoss V, Kelly DE, Corcionivoschi N, Kelly SL. (2022) Cytochrome P450 168A1 from *Pseudomonas aeruginosa* is involved in the hydroxylation of biologically relevant fatty acids. *PLoS ONE* 17(3): e0265227. <https://doi.org/10.1371/journal.pone.0265227>
8. Butucel, Eugenia, Igori Balta, Mirela Ahmadi, Gabi Dumitrescu, Florica Morariu, Ioan Pet, Lavinia Stef, and Nicolae Corcionivoschi. 2022. "Biocides as Biomedicines against Foodborne Pathogenic Bacteria" *Biomedicines* 10, no. 2: 379. <https://doi.org/10.3390/biomedicines10020379>. Corresponding author.
9. Black Z, Balta I, Black L, Naughton PJ, Dooley JSG and Corcionivoschi N (2021) The Fate of Foodborne Pathogens in Manure Treated Soil. *Front. Microbiol.* 12:781357. doi: 10.3389/fmicb.2021.781357. Corresponding author.
10. Balta, Igori, Lavinia Stef, Ioan Pet, Tiberiu Iancu, Ducu Stef, and Nicolae Corcionivoschi. 2021. "Essential Fatty Acids as Biomedicines in Cardiac Health" *Biomedicines* 9, no. 10: 1466. Corresponding author.
11. Balta, I.; Butucel, E.; Mohylyuk, V.; Criste, A.; Dezmirean, D.S.; Stef, L.; Pet, I.; Corcionivoschi, N. Novel Insights into the Role of Probiotics in Respiratory Infections, Allergies, Cancer, and Neurological Abnormalities. *Diseases* 2021, 9, 60. Corresponding author.
12. Balta I, Marcu A, Linton M, Kelly C, Stef L, Pet I, Ward P, Pircalabioru GG, Chifiriuc C, Gundogdu O, Callaway T, Corcionivoschi N. The in vitro and in vivo anti-virulent effect of organic acid mixtures against *Eimeria tenella* and *Eimeria bovis*. *Scientific Rep.* 2021 Aug 10;11(1):16202. Corresponding author.
13. Robinson L, Liaw J, Omole Z, Xia D, van Vliet AHM, Corcionivoschi N, Hachani A, Gundogdu O. Bioinformatic Analysis of the *Campylobacter jejuni* Type VI Secretion System and Effector Prediction. *Front Microbiol.* 2021 Jun 29;12:694824.

14. Corcionivoschi, N.; Gundogdu, O. Editorial: Foodborne Pathogen *Campylobacter*. *Microorganisms* **2021**, *9*, 1241. <https://doi.org/10.3390/microorganisms9061241>
15. Balta, I., Marcu, A., Linton, M., Kelly, C., Gundogdu, O., Stef, L., Pet, I., Ward, P., Deshaies, M., Callaway, T., Sopharat, P., Gradisteanu-Pircalabioru, G., & Corcionivoschi, N. (2021). Mixtures of natural antimicrobials can reduce *Campylobacter jejuni*, *Salmonella enterica* and *Clostridium perfringens* infections and cellular inflammatory response in MDCK cells. *Gut Pathogens*, *13*(1), 37. Corresponding author.
16. Jeni RE, Dittoe DK, Olson EG, Lourenco J, Corcionivoschi N, Ricke SC, et al. Probiotics and potential applications for alternative poultry production systems. *Poultry Science*. 2021;100(7):101156.
17. Gradisteanu Pircalabioru, G.; Corcionivoschi, N.; Gundogdu, O.; Chifiriuc, M.-C.; Marutescu, L.G.; Ispas, B.; Savu, O. Dysbiosis in the Development of Type I Diabetes and Associated Complications: From Mechanisms to Targeted Gut Microbes Manipulation Therapies. *Int. J. Mol. Sci.* **2021**, *22*, 2763. <https://doi.org/10.3390/ijms22052763>
18. Corcionivoschi, N., Thompson, S. A., & Gundogdu, O. (2021). Editorial: Developments in *Campylobacter*, *Helicobacter* & Related Organisms Research - CHRO 2019. *Frontiers in microbiology*, *11*, 622582. <https://doi.org/10.3389/fmicb.2020.622582>
19. Igori Balta, Mark Linton, Laurette Pinkerton, Carmel Kelly, Patrick Ward, Lavinia Stef, Ioan Pet, Adina Horablaga, Ozan Gundogdu, Nicolae Corcionivoschi. The effect of natural antimicrobials on the *Campylobacter coli* T6SS+/- during in vitro infection assays and on their ability to adhere to chicken skin and carcasses. *International Journal of Food Microbiology*, **2021**, 108998, ISSN 0168-1605. Corresponding author.

20. Criste, A., Copolovici, L., Copolovici, D., Kovacs, M., Madden, R. H., Corcionivoschi, N., Gundogdu, O., Berchez, M., & Urcan, A. C. (2020). Determination of changes in the microbial and chemical composition of Țaga cheese during maturation. *PLoS One*, *15*(12), e0242824.
21. Igori Balta, Mark Linton, Laurette Pinkerton, Carmel Kelly, Lavinia Stef, Ioan Pet, Ducu Stef, Adriana Criste, Ozan Gundogdu, Nicolae Corcionivoschi. The effect of natural antimicrobials against *Campylobacter* spp. and its similarities to *Salmonella* spp, *Listeria* spp., *Escherichia coli*, *Vibrio* spp., *Clostridium* spp. and *Staphylococcus* spp, *Food Control*, **2020**, 107745, ISSN 0956-7135. Corresponding author.
22. Balta, L. Stef, I. Pet, P. Ward, T. Callaway, S.C. Ricke, O. Gundogdu, and N. Corcionivoschi, Antiviral activity of a novel mixture of natural antimicrobials, in vitro, and in a chicken infection model in vivo. *Scientific Reports* **10** (2020) 16631. <https://doi.org/10.1038/s41598-020-73916-1>. Corresponding author.
23. A. McKenna, U.Z. Ijaz, C. Kelly, M. Linton, W.T. Sloan, B.D. Green, U. Lavery, N. Dorrell, B.W. Wren, A. Richmond, N. Corcionivoschi, and O. Gundogdu, Impact of industrial production system parameters on chicken microbiomes: mechanisms to improve performance and reduce *Campylobacter*. *Microbiome* **8** (2020) 128. Corresponding author.
24. McMurray, R.; Ball, M.; Tunney, M.; Corcionivoschi, N.; Situ, C. Antibacterial Activity of Four Plant Extracts Extracted from Traditional Chinese Medicinal Plants against *Listeria monocytogenes*, *Escherichia coli*, and *Salmonella enterica* subsp. *Enterica* serovar Enteritidis. *Microorganisms* **2020**, *8*, 962.
25. Lauren Ford, Alexandros Ch. Stratakis, Katerina Theodoridou, Jaimie T. A. Dick, Gary N. Sheldrake, Mark Linton, Nicolae Corcionivoschi, Pamela J. Walsh. *ACS Omega* **2020**, April 10, 2020 <https://doi.org/10.1021/acsomega.9b03687>.
26. Campbell, M.; Ortuño, J.; Stratakis, A.C.; Linton, M.; Corcionivoschi, N.; Elliot, T.; Koidis, A.; Theodoridou, K. Impact of Thermal and High-Pressure Treatments on the Microbiological Quality and *In Vitro* Digestibility of Black Soldier Fly (*Hermetia illucens*) Larvae. *Animals* **2020**, *10*, 682.
27. Criste, A.; Urcan, A.; Bunea, A.; Pripon Furtuna, F.; Olah, N.; Madden, R.; Corcionivoschi, N. Phytochemical Composition and Biological Activity of Berries and Leaves from Four Romanian Sea Buckthorn (*Hippophae Rhamnoides* L.) Varieties. *Molecules* **2020**, *25*(5), 1170; <https://doi.org/10.3390/molecules25051170>.
28. Alexandros Ch Stratakis, Umer Zeeshan Ijaz, Patrick Ward, Mark Linton, Carmel Kelly, Laurette Pinkerton, Pam Scates, Jane McBride, Ioan Pet, Adriana Criste, Ducu Stef, Jillian M. Couto, William T. Sloan, Nick Dorrell, Brendan W. Wren, Lavinia Stef, Ozan Gundogdu, Nicolae Corcionivoschi, *In vitro* and *in vivo* characterisation of *Listeria monocytogenes* outbreak isolates, *Food Control*, Volume 107, **2020**, 106784, ISSN 0956-7135. Corresponding author.

29. Pinkerton, L.; Linton, M.; Kelly, C.; Ward, P.; Gradisteanu Pircalabioru, G.; Pet, I.; Stef, L.; Sima, F.; Adamov, T.; Gundogdu, O.; Corcionivoschi, N. Attenuation of *Vibrio parahaemolyticus* Virulence Factors by a Mixture of Natural Antimicrobials. *Microorganisms* **2019**, *7*, 679. Corresponding author.

2019

30. Liaw Janie, Hong Geunhye, Davies Cadi, Elmi Abdi, Sima Filip, Stratakos Alexandros, Stef Lavinia, Pet Ioan, Hachani Abderrahman, Corcionivoschi Nicolae, Wren Brendan W., Gundogdu Ozan, Dorrell Nick. The Campylobacter jejuni Type VI Secretion System Enhances the Oxidative Stress Response and Host Colonization. *Frontiers in Microbiology*. Dec. **2019**, Vol 10, p2864.
31. Stratakos, A. C., Inguglia, E. S., Linton, M., Tollerton, J., Murphy, L., Corcionivoschi, N., Tiwari, B. K. (2019). Effect of high pressure processing on the safety, shelf life and quality of raw milk. *Innovative Food Science and Emerging Technologies*, 52, 325-333. <https://doi.org/10.1016/j.ifset.2019.01.009>.
32. Berchez, Mihaela, Adriana Cristina Urcan, Nicolae Corcionivoschi, and Adriana Criste. "In vitro effects of phenolic acids and IgY immunoglobulins on aspects of rumen fermentation." *Romanian Biotechnological Letters* 24, no. 3 (2019): 513-521.
33. Ungureanu, V., Corcionivoschi, N., Gndogdu, O., Pacala, N., Stef, L., Madden, B, (2019). The emergence of B lactamase producing Escherichia coli and the problems in assessing their potential contribution to foodborne illness - a review. *Agrolife Scientific Journal*. Corresponding author.
34. Sima, F., Stratakos, A., Stef, L., Gundogdu, O., Pet, I., Pacala, N., Pet, E., Lazar, V., Ward, P., Corcionivoschi, N. (2019). *Agrolife Scientific Journal*; The effect of an antimicrobial mixture on *Cryptosporidium*. Corresponding author.
35. Ungureanu VA, Stratakos AC, Gundogdu O, Stef L, Pet I, Pet E, Pacala N, Corcionivoschi N. Virulence of a T6SS Campylobacter jejuni chicken isolate from North Romania. *BMC Res Notes*. **2019** Mar 28;12(1):180. doi: 10.1186/s13104-019-4201-8. PubMed PMID: 30922352; PubMed Central PMCID: PMC6437841. Corresponding author.

2018

36. Gosemann JH, Friedmacher F, Hofmann A, Zimmer J, Kuebler JF, Rittinghausen S, Suttikus A, Lacher M, Alvarez L, Corcionivoschi N, Puri P. Prenatal treatment with rosiglitazone attenuates vascular remodeling and pulmonary monocyte influx in experimental congenital diaphragmatic hernia. *PLoS One*. 2018 Nov 12;13(11):e0206975. doi: 10.1371/journal.pone.0206975.
37. Ijaz UZ, Sivaloganathan L, McKenna A, Richmond A, Kelly C, Linton M, Stratakos AC, Lavery U, Elmi A, Wren BW, Dorrell N, Corcionivoschi N, Gundogdu O. Comprehensive Longitudinal Microbiome Analysis of the Chicken Cecum Reveals a Shift From Competitive to Environmental Drivers and a Window of Opportunity for Campylobacter. *Front Microbiol*. 2018 Oct 15;9:2452. doi: 10.3389/fmicb.2018.02452. Corresponding author.
38. Stratakos AC, Linton M, Ward P, Campbell M, Kelly C, Pinkerton L, Stef L, Pet I, Stef D, Iancu T, Theodoridou K, Gundogdu O, Corcionivoschi N. The Antimicrobial Effect of a Commercial Mixture of Natural Antimicrobials Against Escherichia coli O157:H7. *Foodborne Pathog Dis*. 2018 Oct 2. doi: 10.1089/fpd.2018.2465. [Epub ahead of print] PubMed PMID: 30277811. Corresponding author.
39. Sima F, Stratakos AC, Ward P, Linton M, Kelly C, Pinkerton L, Stef L, Gundogdu O, Lazar V, Corcionivoschi N. A Novel Natural Antimicrobial Can Reduce the in vitro and in vivo Pathogenicity of T6SS Positive Campylobacter jejuni and Campylobacter coli Chicken Isolates. *Front Microbiol*. 2018 Sep 7;9:2139. doi: 10.3389/fmicb.2018.02139. Corresponding author.
40. Sibanda N, McKenna A, Richmond A, Ricke SC, Callaway T, Stratakos AC, Gundogdu O, Corcionivoschi N. A Review of the Effect of Management Practices on Campylobacter Prevalence in Poultry Farms. *Front Microbiol*. 2018 Aug 24;9:2002. doi: 10.3389/fmicb.2018.02002. Review. Corresponding author.
41. Ugarte-Ruiz M, Domínguez L, Corcionivoschi N, Wren BW, Dorrell N, Gundogdu O. Exploring the oxidative, antimicrobial and genomic properties of Campylobacter jejuni strains isolated from poultry. *Res Vet Sci*. 2018 Aug;119:170-175. doi: 10.1016/j.rvsc.2018.06.016. Epub 2018 Jun 19.
42. Igori Balta, Lucian Brinzan, Alexandros Ch. Stratakos, Mark Linton, Carmel Kelly, Laurette Pinkerton, N. Corcionivoschi (2018). Geraniol and linalool loaded nanoemulsions and their antimicrobial activity. Bulletin of university of agricultural sciences and veterinary medicine Cluj-Napoca Animal Science and Biotechnologies. Vol. 74(2).DOI:10.15835/buasvmcn-asb:0025. Corresponding author.
43. Robert H. Madden, Mike Hutchison, Kieran Jordan, Vincenzo Pennone, Ozan Gundogdu, Nicolae Corcionivoschi. Prevalence and persistence of Listeria monocytogenes in premises and products of small food business operators in Northern Ireland, *Food Control*, Volume 87, 2018, Pages 70-78, ISSN 0956-7135. Corresponding author.
44. Alexandros Ch Stratakos, Filip Sima, Patrick Ward, Mark Linton, Carmel Kelly, Laurette Pinkerton, Lavinia Stef, Ioan Pet, Nicolae Corcionivoschi. The in vitro effect of carvacrol, a food additive, on the pathogenicity of O157 and non-O157 Shiga-toxin producing *Escherichia coli*. *Food Control*, Volume 84, 2018, Pages 290-296, ISSN 0956-7135, <https://doi.org/10.1016/j.foodcont.2017.08.014>. Corresponding author.

- 2017
45. Stratakos Ch. A, Sima F, Ward P, Linton M, Kelly C, Pinkerton L, Stef L, P, Iancu T, Pircalabioru G, Corcionivoschi N. The in vitro and ex vivo effect of Auranta 3001 in preventing *Cryptosporidium hominis* and *Cryptosporidium parvum* infection. *Gut Pathog.* 2017 Aug 31;9:49. doi: 10.1186/s13099-017-0192-y. eCollection 2017. Corresponding author.
46. C. Kelly, O. Gundogdu, G. Pircalabioru, A. Cean, P. Scates, M. Linton, L. Pinkerton, E. Magowan, L. Stef, E. Simiz, I. Pet, S. Stewart, R. Stabler, B. Wren, N. Dorrell, and N. Corcionivoschi, The *In Vitro* and *In Vivo* Effect of Carvacrol in Preventing *Campylobacter* Infection, Colonization and in Improving Productivity of Chicken Broilers. *Foodborne Pathog Dis* 14 (2017) 341-349. Corresponding author.
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- 2015
47. David Colyle, Annemarie O'Donnell, Nicolae Corcionivoschi, John Gillick, Prem Puri. Rho-kinase expression in Hirschsprung's disease. 2015. *Paediatric Surgery International*. Aug. 2015.
48. Nicolae Corcionivoschi, Ozan Gundogdu, Lynn Moran, Carmel Kelly, Pam Scates, Lavinia Stef, Ada Cean, Brendan Wren, Nick Dorrell, and Robert H. Madden. Virulence characteristics of hcp+ *Campylobacter jejuni* and *Campylobacter coli* isolates from retail chicken. 2015. *Gut Pathogens*. July 7:20. Corresponding author.
49. Ada Cean, Lavinia Stef, Aida Vasile, Calin Julean, Simiz Eliza, Dan Drinceanu, Nicolae Corcionivoschi. The role of human isolated probiotic bacteria in preventing *Campylobacter jejuni* colonization of poultry. 2015. *Foodborne Pathogens and Disease*. Feb;12(2):122-30. doi: 10.1089/fpd.2014.1849. Corresponding author.
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- 2013
50. Lavinia Stef, Ada Telea, Aida Vasile, Calin Julean, Dan Drinceanu, Nicolae Corcionivoschi. Virulence characteristics of five new *Campylobacter jejuni* chicken isolates. 2013. *Gut Pathogens*. 5:41 (13 December). Corresponding author.
51. Luis Alvarez, Billy Bourke, Gratiela Pircalabioru, Atanas Georgiev, Ulla G. Knaus, Simon Daff and Nicolae Corcionivoschi. Cj1411c encodes for a cytochrome P450 involved in *Campylobacter jejuni* 81-176 pathogenicity. 2013. *Plos One*. Corresponding author.
52. Jan-H. Gosemann, Florian Friedmacher, Naho Fujiwara, Luis AJ Alvarez, Nicolae Corcionivoschi, Prem Puri (2013). Disruption of the bone morphogenetic protein receptor 2 pathway in nitrofen-induced congenital diaphragmatic hernia. June 18 Birth Defects Res B Dev Reprod Toxicol. 2013 Jun 18. Corresponding author.
53. J.W. Duess, N. Fujiwara, N. Corcionivoschi, P. Puri, and J. Thompson, ROCK inhibitor (Y-27632) disrupts somitogenesis in chick embryos. *Pediatr Surg Int* 29 (2013) 13-8.
54. F. Friedmacher, J.H. Gosemann, H. Takahashi, N. Corcionivoschi, and P. Puri, Decreased pulmonary c-Cbl expression and tyrosine phosphorylation in the nitrofen-induced rat model of congenital diaphragmatic hernia. *Pediatr Surg Int* 29 (2013) 19-24.
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- 2012
55. Corcionivoschi N, Alvarez LA, Sharp TH, Strengert M, Alemka A, Mantell J, Verkade P, Knaus UG, Bourke B. Mucosal reactive oxygen species decrease virulence by disrupting *Campylobacter jejuni* phosphotyrosine signaling. *Cell Host & Microbe*. 2012 Jul 19;12(1):47-59. PubMed PMID: 22817987.
56. Alemka A, Corcionivoschi N, Bourke B. Defense and Adaptation: The Complex Inter-Relationship between *Campylobacter jejuni* and Mucus. *Front Cell Infect Microbiol*. 2012;2:15. Epub 2012 Feb 20.
57. Gosemann JH, Friedmacher F, Hunziker M, Alvarez L, Corcionivoschi N, Puri P. Increased activation of NADPH oxidase 4 in the pulmonary vasculature in experimental diaphragmatic hernia. *Pediatr Surg Int*. 2012 Nov 17. PubMed PMID: 23160901.
-
- 2011
58. Pelinescu, D.; Chifiriuc, M. C.; Ditu, L. M.; Sarbu, I.; Bleotu, C.; Vassu, T.; Stoica, I.; Lazar, V.; Corcionivoschi, N.; Sasarman, E. (2011); Selection and characterization of the probiotic potential of some lactic acid bacteria isolated from infant feces. *Rom Biotech Lett*. 2011, 16, 3, 6178-6189, 30.
-
- 2010
59. Alemka A, Clyne M, Shanahan F, Tompkins T, Corcionivoschi N, Bourke B. Probiotic colonization of the adherent mucus layer of HT29MTXE12 cells attenuates *Campylobacter jejuni* virulence properties. *Infection and Immunity*. 2010 Jun;78(6):2812-22. Epub 2010 Mar 22.
60. Corcionivoschi, N.; Drinceanu, D.; Stef, L.; Luca, I.; Julean, C.; Mingyart, O.; Probiotics - identification and ways of action. (2010). *Inn. Rom. Food Biot.*, 6, 1-11.
61. Corcionivoschi, N. (2010). Characterisation of *Campylobacter jejuni* outer surface polysaccharides using high performance liquid chromatography (HPLC) and nuclear magnetic resonance (NMR). *Rom Biotech Lett* 15, 5293-5302. Corresponding author.
-
62. Corcionivoschi N, Clyne M, Lyons A, Elmi undogdu O, Wren BW, Dorrell N, Karlyshev AV, Bourke B. *Campylobacter jejuni* cocultured with epithelial cells reduces surface capsular polysaccharide expression. *Infection and Immunity*. 2009. May;77(5):1959-67. Epub 2009 Mar 9. PubMed PMID: 19273563; PubMed Central PMCID: PMC2681765.

2009

63. Lavinia, S., Gabi, D., Drinceanu, D., Stef, D., Daniela, M., Julean, C., Ramona, T. & Corcionivoschi, N. (2009). The effect of medicinal plants and plant extracted oils on broiler duodenum morphology and immunological profile. *Rom Biotech Lett* 14, 4606-4614.
64. The evaluation of NSP content and viscosity of extract from material used in combined feed from the west part of the country. Stef, L.; Drinceanu, D.; Ștef, D.; Fota, D.; Corcionivoschi, N.; Tulcan, C.; University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania, Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj- Napoca. *Animal Science and Biotechnologies* , 2009, 66, 1/2, 469, 3 ref. <http://www.cabdirect.org/abstracts/20093349485.html>.
65. Corcionivoschi, N., Telea, A., Pacala, N. & Alemka, A. (2009). A new Strategy for Gene Deletion in *Campylobacter jejuni*. *Rom Biotech Lett* 14, 4383-4391. Corresponding author.

2007

66. Corcionivoschi N. Using electron microscopy to detect bacterial morphological changes of *Campylobacter jejuni* 11168 as result of a cytochrome P450 gene knockout. *Bacteriol Virusol Parazitol Epidemiol*. 2007 Jan-Jun;52(1-2):51-7. PubMed PMID: 18441959. Corresponding author.

Participation at scientific meetings as speaker/organiser

- 2019 – Organiser of CHRO 2019 Belfast, Northern Ireland (Chair of LOC and member of the scientific committee)
- 2019 – 70th annual EAAP meeting. Ghent (Belgium). Ortuño, J., Campbell, M., Stratakos, A., Linton, M., Corcionivoschi, N., Theodoridou, K. (2019) Effect of heating and high-pressure processing on the potential of Black Soldier Fly larvae as feed.
- 2019 – Nicolae Corcionivoschi – FSAI 2019 – Food safety, Dublin,
- 2019 - McMurray, R., Ball, M.E.E., Tunney, M.M., Corcionivoschi, N. and Situ, C. (2019). *World Poultry Science Association Programme and Summaries*, 34.
- 2018 – University of Agricultural Sciences and Veterinary Medicine Annual Meeting (Invited Plenary Speaker)
- 2017 - N. Corcionivoschi, – The in vitro and in vivo effect of Carvacrol in preventing *Campylobacter* infection, colonisation and improve chicken broilers productivity. 19th International Workshop on *Campylobacter*, *Helicobacter* and Related Organisms. Nantes, France.
- 2016 – Royal Society of Chemistry – Invited speaker. Science at Stormont, meeting organised by the RSC and the Northern Ireland Assembly on Antimicrobial Resistance. How to reduce the use of antibiotics and improve gut health in poultry.
- 2016 - Carmel Kelly, Pam Scates, Mark Linton, Laurette Pinkerton, Lavinia Stef, Eliza Simiz, Robert H. Madden and Nicolae Corcionivoschi – INRA-ROWETT Gut Microbiology – 20 years and continuing. 20-23/06/2016 – oral presentation.
- 2015 - Nicolae Corcionivoschi – World Poultry Science Association, UK Branch, Annual Meeting, Chester, England, Oral presentation. Virulence characteristics of hcp+ *Campylobacter jejuni* and *Campylobacter coli* isolates from retail chicken.
- 2015 – Nicolae Corcionivoschi – British Society of Animal Science, Annual Meeting, Chester, England, Oral presentation. The role of human isolated probiotics in preventing *C. jejuni* colonisation of poultry.
- 2013 – L. Alvarez, M. Strengert, N. Corcionivoschi, B. Bourke, U.G. Knaus. ROS signaling in mucosal immunity. SFRR – Europe 2013 Meeting “The new era of –omics in Free Radicals in Biology and Medicine”. Athens, Greece.
- 2013 - Hunziker M, O'Donnell AM, Gosemann J, Hofmann A, Alvarez L, Corcionivoschi N and Puri P: Increased Desmin Tyrosine Phosphorylation in Congenital Pelviureteric Junction Obstruction. 14th European Congress of Paediatric Surgery, Leipzig, Germany, June 2013.[Oral Presentation].
- 2012 - Hunziker M, Gosemann J, O'Donnell AM, Alvarez L, Corcionivoschi N and Puri P: Altered Anocatmin-1 (ANO1) Tyrosine Phosphorylation in Congenital Ureteropelvic Junction Obstruction. American Academy of Pediatrics, New Orleans, USA, October, 2012. [Poster Presentation]
- 2012 - Hunziker M, Gosemann J.H., O'Donnell AM, Corcionivoschi N, McDermott M and Puri P: Platelet-Derived Growth Factor Receptor Alpha Cells: A Novel Cell Type In The Human Ureter. 25th International Symposium, London, UK
- 2012 - N. Corcionivoschi, L Alvarez, U. Knaus and B. Bourke (2012) – Mucosal reactive oxygen species decrease virulence by disrupting *Campylobacter jejuni* phosphotyrosine signaling. American Society for General Microbiology. General Meeting. San Francisco, USA

- 2012 – Rome, Italy - 59th BAPS Annual International Congress/ 13th EUPSA Congress.
- 2012 – Villars-sur-Ollon, Switzerland - Subversion of Host Cellular Organization and Functions by Pathogens. EMBO Meeting.
- 2012 – Kilkenny, Ireland - Irish Society of Gastroenterology, Spring Meeting.
- 2011 - N. Corcionivoschi, L. Alvarez, U. Knaus and B. Bourke. The role of ROS in mediating *Campylobacter jejuni* pathogenicity – Dublin, Ireland, Dublin Academy of Pathogenomics and Infection Biology, Annual Meeting – speaker
- 2011 - N. Corcionivoschi, L. Alvarez, U. Knaus and B. Bourke (2011) – Mucosal reactive oxygen species decrease virulence by disrupting *Campylobacter jejuni* phosphotyrosine signaling. 15th International Workshop on *Campylobacter*, *Helicobacter* and Related Organisms. Vancouver, Canada – speaker.
- 2009 – Philadelphia, USA – American Society for General Microbiology, General Meeting.
- 2008 – Montreal, Canada – Canadian *Campylobacter* Conference
- 2007 - N. Corcionivoschi, M. Clyne, B. Bourke – Alteration in bacterial capsular polysaccharide following co-culture with human epithelial cells. 14th International Workshop on *Campylobacter*, *Helicobacter* and Related Organisms. Rotterdam, Netherlands
- 2007 – Toronto, Canada - American Society for General Microbiology, General Meeting.
- 2007 - N. Corcionivoschi, M. Clyne, B. Bourke – Alteration in bacterial capsular polysaccharide following co-culture with human epithelial cells. Irish Society of Gastroenterology. Winter Meeting. Dublin, Ireland
- 2005 - N. Corcionivoschi – A novel cytochrome P450 from *Campylobacter jejuni* 11168. Brisbane, Gold Coast, Australia - 13th International Workshop on *Campylobacter*, *Helicobacter* and Related Organisms.
- 2003 – St. Andrews, UK – Enzyme Mechanism: A Structural Perspective, Society of Biochemistry.

Books

1. Probiotics – current status - Nicolae Corcionivoschi and Dan Drinceanu, Editura Mirton Timisoara, 2009.
2. Cytochromes P450 in bacterial pathogens – Nicolae Corcionivoschi, Editura Ars Docendi, Bucharest.
3. Manipulation of human and animal microbiome – Romanian Academy of Science, 2015.
4. Food and Feed Safety Systems and Analysis – Chapters 7 and 8. Elsevier. 2017
5. E-book. Developments in *Campylobacter*, *Helicobacter* & Related Organisms Research – CHRO 2019, Gundogdu, O., Corcionivoschi, N., Thompson, S. A., eds. (2021). Developments in *Campylobacter*, *Helicobacter* & Related Organisms Research – CHRO 2019. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88966-480-1

Invited for Departmental seminars at:

London School of Hygiene and Tropical Medicine, London UK
National Children Research Centre, Dublin Ireland
Royal Society of Chemistry
Queens University Belfast
Ulster University
European Food safety Authority, Irish Branch
Food Safety Authority, NI Branch
Teagasc, Morepark, Ireland
University of British Columbia, Vancouver, Canada
AFBI, Fall Forum, University of Wisconsin, USA
DAERA, NI – Seminar Series, Ballykelly Northern Ireland, January 2020

Computer skills

Microsoft Office™ tools
Graph Prism
Microscope image processing tools

Awards

The Irish Time Innovation Award - 2020
Belfast Ambassador Recognition Award (2018) for the CHRO 2019 International Conference
Second Prize (2012) – Irish Society of Gastroenterology Winter Meeting
Young Investigator Travel Award (2007) – European Society of Clinical Microbiology and Infectious Disease.
Young Investigator Travel Award (2005) – Society of General Microbiology
First Prize (2007) – Banat's University of Agricultural Sciences and Veterinary Medicine Timisoara.

Curriculum Vitae

Darwin Trust of Edinburgh (2001-2003) – Doctoral fellowship

Driving licence B

Prof. dr. ing. HC Nicolae Corcionivoschi PhD, MIFST

