

BIOGRAPHICAL SKETCH

NAME: Antonio Di Loria

eRA COMMONS USER NAME: adiloria

POSITION TITLE: Associate Professor of Veterinary Internal Medicine

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
University Federico II, Napoli	DVM	10/2000	Veterinary Medicine
University Federico II, Napoli	PHD	05/2006	Vet. Clinical and Pharmacotoxicological Sciences
University Aldo Moro, Bari	Spec.vetr epr	08/2008	Specialization Veterinary Reproduction

A. Personal Statement

I am an Associate Professor of Veterinary Internal Medicine, and my research is focused on biomarkers associated with cardiovascular pathology, internal medicine and parasitological diseases. I have a broad background in diagnostic imaging, with specific training and expertise in ultrasound of internal and cardiovascular disorders. As PI or co-Investigator on several university- and European-funded grants, recently I laid the groundwork for the proposed research by developing the application of omic technologies in cardiovascular and dermatological disorders, moreover I am also involved to explore the diagnostic and therapeutic role of animals and plants extracellular vesicles. In addition, I successfully administered the projects (e.g. staffing, research protections, budget), collaborated with other researchers, and produced several peer-reviewed publications from each project. As a result of these previous experiences, I am aware of the importance of frequent communication among project members and of constructing a realistic research plan, timeline, and budget. I am founder of ImmunoVeg s.r.l. spin-off the Federico II University a micro-enterprise operating in the Plant Biotechnology sector: from 2020-2024, CEO.

In summary, I have the expertise, leadership, training, expertise, and motivation necessary to successfully carry out the proposed research project.

Ongoing and recently completed projects that I would like to highlight include:

SE-01 101131175

HORIZON-MSCA-2022-

G. Pocsfalvi (PI) Di Loria (WPL)

1 March 2024, end date 29 February 2028.

FarmEVs project. Plant Extracellular Vesicles Farming for both plant and human health.

Amount: €1.021.000,00

R.0002983.05-11-2018

Di Loria (Project Leader) Amount: €89,040.87

Duration: 36 months: 2018-2021

"NextGeneration Sequencing on myocardial biopsies in dogs naturally affected by inflammatory myocardial diseases: identification of pathogens and development of diagnostic kits (NGS-CARDIOVET)."

European College of Veterinary Dermatology

Di Loria (PI) Amount: €20.000

Duration: 2015-2018

Evaluation of the cutaneous immunological milieu and leptin expression in dogs naturally affected by *Leishmania infantum*/chagasi before and after meglumine antimoniate treatment.

University Federico II Napoli

Di Loria (PI) Amount €40,000.00

University Research Funding Program Linea A acronym PESCAZORBA: "Study of the exposure of the staff assigned to the milking parlor of buffalo and cattle farms by characterization genomics of pathogenic bacteria ". Duration: 2020-2022

Citations (selected):

1. Di Loria A, Ferravante C, D'Agostino Y, Giurato G, Tursi M, Grego E, Perego M, Weisz A, Ciaramella P, Santilli R. Gene-expression profiling of endomyocardial biopsies from dogs with dilated cardiomyopathy phenotype. *J Vet Cardiol.* 2024 Apr; 52:78-89. doi: 10.1016/j.jvc.2024.02.008. Epub 2024 Feb 22. PubMed PMID: 38508121.
2. Mimmi S, Zimbo AM, Rotundo S, Cione E, Nisticò N, Aloisio A, Maisano D, Tolomeo AM, Dattilo V, Lionello R, Fioravanti A, Di Loria A, Quirino A, Marascio N, Russo A, Trecarichi EM, Matera G, Quinto I, Torti C, Iaccino E. SARS CoV-2 spike protein-guided exosome isolation facilitates detection of potential miRNA biomarkers in COVID-19 infections. *Clin Chem Lab Med.* 2023 Jul 26;61(8):1518-1524. doi: 10.1515/cclm-2022-1286. Print 2023 Jul 26. PubMed PMID: 36972680.
3. Ferravante C, Memoli D, Palumbo D, Ciaramella P, Di Loria A, D'Agostino Y, Nassa G, Rizzo F, Tarallo R, Weisz A, Giurato G. HOME-BIO (sHOTgun MEtagenomic analysis of BIOlogical entities): a specific and comprehensive pipeline for metagenomic shotgun sequencing data analysis. *BMC Bioinformatics.* 2021 Jul 5;22(Suppl 7):106. doi: 10.1186/s12859-021-04004-y. Review. PubMed PMID: 34225648; PubMed Central PMCID: PMC8256542.
4. Santoro D, Di Loria A, Mirante T, Oliveira DM, Laudanna C, Malanga D, Dattilo V, Iaccino E, Marsella R, Ciaramella P. Identification of differentially expressed microRNAs in the skin of experimentally sensitized naturally affected atopic beagles by next-generation sequencing. *Immunogenetics.* 2020 May;72(4):241-250. doi: 10.1007/s00251-020-01162-w. Epub 2020 Mar 26. PubMed PMID: 32219493.
5. Piantedosi D, Cortese L, Di Loria A, Brignola G, Prisco M, Persechino A, Ciaramella P. Plasma atrial natriuretic peptide (proANP 31-67), B-type natriuretic peptide (Nt-proBNP) and endothelin-1 (ET-1) concentrations in dogs with chronic degenerative valvular disease (CDVD). *Vet Res Commun.* 2009 Sep;33 Suppl 1:197-200. doi: 10.1007/s11259-009-9282-8. PubMed PMID: 19585255.

B. Positions, Scientific Appointments, and Honors

Positions and Scientific Appointments

2021– Present A.P., Napoli-Italy	Associate Professor, Department of Veterinary Medicine and
2018 – Present A.P., Napoli-Italy	Head Emergency care unit, Department of Veterinary Medicine and
2011 – 2017	Assistant Professor, University of Magna Græcia, Catanzaro, Italy
2020 – Present A.P. Napoli-Italy	Scientific coordinator agreement University Florida/Dep Vet. Medicine
2025 – Present Medicine A.P. Napoli-Italy	Scientific coordinator agreement University Colorado/Dep Vet.
2021 – Present Napoli-Italy	Lecturer Vet legal Medicine, Department of Vet. Medicine and A.P.,
2020 – Present	Editorial board member ONE-HEALTH (ISSN ISSN: 2352-7714)
2019 – present	Editorial board member ANIMALS (ISSN 2076-2615)
2020 – Present	Member, Italian Society of Veterinary Clinical Medicine (SICLINVET)

2018 – 2020 Napoli-Italy	Lecturer Behavior Medicine, Department of Vet. Medicine and A.P.,
2013 – 2017 Catanzaro -Italy	Lecturer Vet. Semiology Medicine, University Magna Græcia
2013 – 2017 Catanzaro -Italy	Coordinator internship Erasmus Vet. University Magna Græcia
2013 – 2016 Italy	Member, PhD Teacher Council University Magna Græcia Catanzaro -
2012 – 2017 Græcia Catanzaro -Italy	Coordinator internship Course Vet. Medicine University Magna

Honors

2009 Award for young ultrasonography society SIUMB - Italy

C. Contributions to Science

I have significantly contributed to the advancement of veterinary medicine through a translational and multidisciplinary approach. In the field of cardiovascular research, I have characterized feline and canine cardiomyopathies using advanced echocardiographic techniques and molecular markers, such as natriuretic peptides and endothelin-1. More recently, I have applied Next-Generation Sequencing (NGS) to investigate genetic variants associated with dilated cardiomyopathy (DCM) in dogs.

A strong focus on biomarker discovery has resulted in novel findings in systemic and infectious diseases, particularly canine leishmaniosis, where thrombomodulin, leptin, and exosomal miRNAs have been proposed as indicators for early diagnosis and therapeutic monitoring. These findings bridge molecular diagnostics with clinical practice for both human and veterinary patients.

Notably, I have also start to explored the use of plant cell cultures (*Malus domestica*) for their anti-inflammatory and regenerative properties, offering innovative therapeutic potential in both human and veterinary applications.

In bovine and buffalo medicine, research has addressed udder health, and hematuria, with applications in herd management and welfare assessment. The team has pioneered the use of wearable and diagnostic technologies in Mediterranean buffaloes for monitoring productivity and health.

In the field of parasitology, I have focused on evaluating the efficacy of antiparasitic protocols—such as eprinomectin and alphacypermethrin—particularly in underrepresented species like donkeys, contributing to improved parasite management strategies. Building on my experience with biomarkers and protozoal infections, including leishmaniosis, I have also contributed to veterinary immunology. This work has supported the development and dissemination of international ACVIM consensus guidelines on immune-mediated diseases, advancing diagnostic and therapeutic approaches in companion animals.

Together, these multidisciplinary efforts reflect the group's commitment to innovation, animal welfare, and the advancement of evidence-based veterinary science through over 60 peer-reviewed publications.

Complete List of Published Work (60 peer-reviewed publications) in MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/antonio.di%20loria.1/bibliography/public/>

May 29 2025

Antonio Di Loria

