

PERSONAL INFORMATION

FAUSTA ROSSO

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italian

EDUCATION AND TRAINING

1996-Degree in Veterinary Medicine, University of Milan

1996-qualifying examination to practice veterinary profession

1997- Centre for Alpine Ecology. Five days course in “Ecology of wildlife diseases” provided by SIEF (Società Italiana di Ecopatologia della Fauna)

2002-Trento. “Access and relational database design”. Course provided by Informatica Trentina

2005- Milan. “Urban hygiene and pharmacological control of pigeons reproduction”. Course provided by SIMeVeP (Società Italiana Veterinari di Medicina Preventiva)

2012-Utrecht. “Molecular recognition of tick-borne pathogens”. Two weeks Summer School. Utrecht Centre for Tick borne Diseases (UCTD)

2015-Varese. “Basic Next Generation Sequencing procedures”. Three days course provided by Università degli Studi dell’Insubria

2019- Legnaro. University of Padua (Faculty of Veterinary Medicine) and Istituto Zooprofilattico delle Venezie. Five days course on entomological surveillance for Public Health Agency operators

PROFESSIONAL EXPERIENCE

1993-1996 attending student at Institute for General Pathology and Parasitology, University of Veterinary Medicine in Milan. Main activities: parasitological research on European eels and freshwater fish

1996-2007 research collaborator at Centre for Alpine Ecology in Trento. Main activities: analysis of gastrointestinal helminths of alpine wild birds and small mammals with the dual purpose of characterizing the taxonomy of the found species and analyzing the host-parasite interaction. Collaboration in the sanitary management of reared birds of endangered species (rock partridge, black grouse).

2007- rescue operator at Avian Wildlife Rescue Centre in Trento (CRAS)

2008-now permanent position as technologist in Fondazione Edmund Mach. Main activities: molecular recognition of pathogens and vector-borne diseases, especially those transmitted by ticks and mosquitoes, characterization of physiological features of vectors, serological tests like immunofluorescence assays or ELISA to detect antibodies against zoonotic virus in blood of domestic or wild animals.

SKILLS

Technical skills: parasitological analysis of faeces (standard floatation procedure), identification of parasitic nematodes, identification of tapeworms after carmine stain, preparation and stain of blood smears (May Grunwald-Giemsa), necropsies of birds and small mammals

Lab skills: Nucleic acid extraction and quantification, DNA/RNA amplification through PCR based techniques and qPCR, multiple sequence alignment (BLAST), Sanger reads handling, cloning procedure, Elisa test, IFA.

Computer skills: Microsoft Office, Sequencer software

Languages Italian (mother tongue)

English

ISI PUBLICATIONS

2002 **Rosso F.**, Manfredi M.T., Ferrari N., Scalet G. e Rizzoli A. Nematode infections in *Apodemus* spp and *Clethrionomys glareolus* (Schreber, 1780) from Trentino (Italian Alps). *Parassitologia* 44 supp.1: 163

2007 Rizzoli A., Rosà R., **Rosso F.**, Buckley A. and Gould E.A. West Nile virus circulation detected in northern Italy in sentinel chickens. *Vector-Borne and Zoonotic Diseases* 7, 411-417

2011 Rosà R., Bolzoni L., **Rosso F.**, Pugliese A., Hudson P.J. and Rizzoli AP: Effect of *Ascaridia compar* infection on rock partridge population dynamics: empirical and theoretical investigation. *Oikos* 000:001- 011

2012 Roiz, D., Vazquez, A., Rosà R., Muñoz J., Arnoldi D., **Rosso F.**, Figuerola, J., Tenorio A., Rizzoli A. Blood meal analysis, flavivirus screening, and influence of meteorological variables on the dynamics of potential mosquito vectors of West Nile virus in northern Italy *Journal of the Society for Vector Ecology*, 37(1), 20-28.

2012 Roiz D., Vazquez A., **Rosso F.**, Arnoldi D., Girardi M., Cuevas L., Perez-Pastrana E., Sanchez-Seco M.P., Tenorio A., Rizzoli A. Detection of a new insect flavivirus and isolation of *Aedes* flavivirus in Northern Italy *Parasites & Vectors*, 5(223).

2014 Baráková I., Derdáková M., Carpi G., **Rosso F.**, Collini M., Tagliapietra V., Ramponi C., Hauffe H.C., Rizzoli A. Genetic and ecologic variability among *Anaplasma phagocytophilum* strains, Northern Italy. *Emerging infectious diseases* Vol 20,n 6 1082-1083

2017 **Rosso, F.**; Tagliapietra, V.; Barakova, I.; Derdakova, M.; Konecny, A.; Hauffe, H.C.; Rizzoli, A. Prevalence and genetic variability of *Anaplasma phagocytophilum* in wild rodents from the Italian alps. *Parasites & Vectors*, 10: 293.

2018 Rosà, R., Andreo V., Tagliapietra V., Baráková I., Arnoldi D., Hauffe H.C., Manica M.; **Rosso F.**, Blaňarová L., Bona M., Derdáková M., Hamšíková Z., Kazimírová M., Kraljik J., Kocianová E.,

Mahríková L., Minichová L., Mošanský L., Slovák M., Stanko M., Špitalská E., Ducheyne E., Neteler M., Hubálek Z., Rudolf I., Venclíkova K., Silaghi C., Overzier E., Farkas R., Földvári G., Hornok S., Takács, N., Rizzoli A. Effect of climate and habitat type on the spatio-temporal variability of tick-borne bacteria in Europe. *International Journal of Environmental Research and Public Health*, 15. doi: 10.3390/ijerph15040732

2018 Tagliapietra, V., Rosà R., Rossi C., **Rosso F.**, Hauffe H.C., Tommasini M., Versini W., Cristallo A.F., Rizzoli A. Emerging rodent-borne viral zoonoses in Trento, Italy. *ECOHEALTH*. doi: 10.1007/s10393-018-1335-4

2018 Barakova, I., Derdakova, M., Selyemova, D., Chvostac, M., Spitalska E., **Rosso F.**, Collini, M., Rosa', R., Tagliapietra, V., Girardi, M., Ramponi, C., Hauffe, H.C., Rizzoli, A. Tick-borne pathogens and their reservoir hosts in northern Italy. *Ticks and Ticks Borne Diseases*, 9 (2): 164-170. doi: 10.1016/j

2018 **Rosso F.**, Tagliapietra V., Albanese D., Pindo M., Baldacchino F., Arnoldi D., Donati C., Rizzoli A. Reduced diversity of gut microbiota in two *Aedes* mosquitoes species in areas of recent invasion. *Scientific Reports* 8:16091 doi:10.1038/s41598-018-34640-z

2019 Alfano, N.; Tagliapietra, V.; **Rosso, F.**; Manica, M.; Arnoldi, D.; Pindo, M.; Rizzoli, A. Changes in Microbiota Across Developmental Stages of *Aedes koreicus*, an Invasive Mosquito Vector in Europe: Indications for Microbiota-Based Control Strategies. *FRONTIERS IN MICROBIOLOGY*, 10. doi: 10.3389/fmicb.

2019 Rosà, R.; Tagliapietra, V.; Manica, M.; Arnoldi, D.; Hauffe, H.C.; Rossi, C.; **Rosso, F.**; Henttonen, H.; Rizzoli, A. Changes in host densities and co-feeding pattern efficiently predict tick-borne encephalitis hazard in an endemic focus in northern Italy. *INTERNATIONAL JOURNAL FOR PARASITOLOGY*, 49 (10): 779-787. doi: 10.1016/j.ijpara.

2019 Rizzoli, A.; Tagliapietra, V.; Cagnacci, F.; Marini, G.; Arnoldi, D.; Rosso, F.; Rosà, R. Parasites and wildlife in a changing world: the vector-host- pathogen interaction as a learning case. *INTERNATIONAL JOURNAL FOR PARASITOLOGY. PARASITES AND WILDLIFE*, 9: 394-401. doi: 10.1016/j.ijppaw.

2020 Alfano, N.; Tagliapietra, V.; **Rosso, F.**; Ziegler, U.; Arnoldi, D.; Rizzoli, A. Tick-borne encephalitis foci in northeast Italy revealed by combined virus detection in ticks, serosurvey on goats and human cases. *EMERGING MICROBES & INFECTIONS*, 9 (1): 474-484-484. doi: 10.1080/22221751.2020.

2020 Fevola, C.; Rossi, C.; **Rosso, F.**; Girardi, M.; Rosa, R.; Manica, M.; Delucchi, L.; Rocchini, D.; Garzon Lopez, C.; Arnoldi, D.; Bianchi, A.; Buzan, E.; Charbonnel, N.; Collini, M.; Ďureje, L.; Ecke, F.; Ferrari, N.; Fischer, S.; Gillingham, E.; Hörnfeldt, B.; Kazimírová, M.; Konecny, A.; Maas, M.; Magnusson, M.; Miller, A.; Niemimaa, J.; Nordström, Å.; Obiegala, A.; Olsson, G.; Pedrini, P.; Piálek, J.; Reusken, C.B.; Rizzolli, F.; Romeo, C.; Silaghi, C.; Sironen, T.; Stanko, M.; Tagliapietra, V.; Ulrich, R.G.; Vapalahti, O.; Voutilainen, L.; Wauters, L.; Rizzoli, A.; Vaheri, A.; Jääskeläinen, A.J.; Henttonen, H.; Hauffe, H. (2020). Geographical distribution of Ljungan virus in small mammals

in Europe. VECTOR BORNE AND ZOONOTIC DISEASES. doi: 10.1089/vbz.

2020 Albonico F, Barelli C, Albanese D, Manica M, Partel E, **Rosso F**, Ripellino S., Pindo M., Donati c., Zecconi A., Mortarino M., Hauffe H.C. Raw milk and fecal microbiota of commercial Alpine dairy cows varies with herd, fat content and diet. PLoS ONE 15(8): e0237262. <https://doi.org/10.1371/journal.pone.0237262>

2022 Montarsi, F., **Rosso, F.**, Arnoldi, D. Ravagnan S., Marini M., Delucchi C., Rosà R., Rizzoli A. First report of the blood-feeding pattern in *Aedes koreicus*, a new invasive species in Europe. SCIENTIFIC REPORTS 12, 15751 (2022). <https://doi.org/10.1038/s41598-022-19734-z>

BOOK CHAPTER

Tompkins D.M., Dobson A.P., Arneberg P., Begon M.E., Cattadori I.M., Greenman J.V., Heesterbeek J.A.P., Hudson P.J., Newborn D., Pugliese A., Rizzoli A., Rosà R., **Rosso F.** and Wilson K. (2002). Parasites and host population dynamics. In Ecology of Wildlife Diseases (Hudson, P.J., A. Rizzoli, B.T. Grenfell, H. Hesterbeek, and A.P. Dobson, eds.) Oxford University Press, pp. 45-62.

PEER REVIEWED PUBLICATIONS

1997 **Rosso F.**, Gandini G., Manfredi M.T. Rilievi parassitologici in pesce spada (*Xiphias gladius*) d'importazione. Boll. Soc. It. Patol. Ittica 21, 39-44

1997 Manfredi M.T., **Rosso F.**, Barbarini A. Presenza di larve di *Anguillicola crassus* nei tessuti di *Anguilla anguilla* d'allevamento. Boll. Soc. It. Patol. Ittica 21, 32-38

1997 Rizzoli A. P., Manfredi M.T., **Rosso F.**, Rosà R., Cattadori I., Hudson P. A survey to identify the important macroparasites of rock partridge (*Alectoris graeca saxatilis*) in Trentino, Italy. Parassitologia 39, 331-334

1998 Manfredi M. T., **Rosso F.**, Zaffaroni E., Rosà R., Arlati G. Diffusion of *Anguillicola crassus* in wild and cultured eels from north Italy . Atti del Congresso Soipa, Roma, 17-20 giugno 1998

1999 Rizzoli A. P., Manfredi M.T., **Rosso F.**, Rosà R., Cattadori I., Hudson P. Intensity of nematode infections in cyclic and non cyclic rock partridge (*Alectoris graeca saxatilis*) populations. Parassitologia 41, 561-565

2003 Rizzoli A.P., **Rosso F.**, Ferrari N., Rosà R., Farrè L., Manfredi M.T., Hudson P.J. Infestazione da *Ascaridia compar* (Shrank, 1790) nella coturnice alpina: effetti sull'ovodeposizione e su alcuni valori ematochimici. Journal of mountain ecology (IBEX) 7(Suppl): 291-294

2005 Carpi G., Cagnacci F., **Rosso F.**, Rizzoli A. Pattern of tick infestation on roe-deer in the province of Trento, Italy. In Proceeding of 5th International Conference on Ticks and Tick- Borne Pathogens. Neuchatel (CH). 29 August-2 September 2005, p. 26.

NON PEER REVIEWED PUBLICATIONS AND TECHNICAL REPORT

1998 Rizzoli A. P., **Rosso F.**, Rosà R., Hudson P. J., Manfredi M.T., Cattadori I., Genchi C. “Studi sulla fauna macroparassitaria intestinale della coturnice (*Alectoris graeca saxatilis*) in provincia di Trento”. Report del Centro di Ecologia Alpina 15, 91-110

1999 Rizzoli A. P., **Rosso F.**, Rosà R. “I parassiti intestinali della coturnice, gallo forcello e pernice bianca: distribuzione sul territorio e possibili conseguenze dell’infestazione sulla dinamica delle popolazioni”. Il cacciatore trentino 39, 67-71

2001 Rizzoli A.P., Rosà R., **Rosso F.**, Ferrari N., Cattadori I., Merler S., Manfredi M.T. e Zorzi S. “Diffusione di parassiti nei galliformi del Trentino”. Il cacciatore Trentino 46, 9-17

2002 Rizzoli A.P., **Rosso F.**, Farrè L., Merz S., Nespereira J., Sebastiani D., Manfredi M.T., Rosà R. e Maffei S. “Il recupero degli uccelli rapaci in Trentino: l’esperienza del Centro di Ecologia Alpina”. Report n° 26, 45 pp

2004 Pavanelli D., Rizzoli A.P., De Marco A., **Rosso F.** Sieropositività a Paramixovirus aviari nei galliformi alpini. Il cacciatore trentino 57: 22-24

2012 Rizzoli A., **Rosso F.**, Rosà R. Ricerche sui parassiti dei galliformi. In “Galliformi alpini e Lepre bianca”.pg 71-79 UNCZA.

2015 Rizzoli A., Arnoldi D., Baldacchino F., Cagnacci F., Hauffe H.C., Neteler M., Rossi C., **Rosso F.**, Tagliapietra V., Rosà R. health and global change: an integrated approach. In “Research and Innovation Centre-Report 2013-2014”. 30-31

2017 Anfora G., Arnoldi D., Baldacchino F., Corradini S., Crava M.C., Giovannini O., Grassi A., Ioriatti C., Mazzoni V., Pertot I., Rizzoli A., Rosà R., Rossi Stacconi V., **Rosso F.**, Rota-Stabelli O. Una task force per affrontare il problema delle specie aliene invasive: le prospettive per un controllo sostenibile tramite un approccio integrato. In “Centro Ricerca e Innovazione-Report 2015-2016”. 48-49

2017 Tagliapietra V., Arnoldi D., Hauffe H.C., Rocchini D., Rosà R., Rossi C., **Rosso F.**, Rizzoli A. Nuovi rischi per la salute causati dai cambiamenti globali negli ecosistemi montani. In “Centro Ricerca e Innovazione-Report 2015-2016” 53-54

2018 Tagliapietra V., **Rosso F.** LB e TBE si evitano controllando il nostro corpo dopo un’escursione. Terra Trentina 2:10-11

2021 Rosà R., Crestanello B., **Rosso F.**, Rizzoli A., Hauffe H.C. Analisi spazio temporale delle infestazioni macroparassitarie del fagiano di monte in provincia di Trento" in "l'impegno dei cacciatori trentini nella gestione dei galliformi alpini".