

PERSONAL INFORMATION

Francesca Barone



📍 via Stanzano 2900, 40024 Castel S Pietro Terme (BO) (Italia)

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✉ francesca.barone7@unibo.it

💬 Skype vet4fun

Sex Female | Date of birth 11/03/1984 | Nationality Italian

WORK EXPERIENCE

01/09/2017–31/08/2018

Veterinarian consultant

Ospedale Sacro Cuore Don Calabria, Negrar (VR)

Consultant for the in vivo section of the project: RF-2013-02358313-"Development and implant of the photovoltaic artificial retina in the pig with photoreceptor degeneration: towards the human phase 1 experimentation."

11/2016–Present

research assistant

Prof. Maria Laura Bacci, DIMEVET

Development of in-vitro techniques for the evaluation of effects of the essential oils and the use of swine spermatozoa as screening cells for toxicity.

01/09/2015–31/08/2017

Collaborator acting as Post Doc

Prof. Fabio Benfenati NBT-iit, Genova (Italy)

www.iit.it

Project

Artificial retina: development and implant of the photovoltaic artificial retina in experimental models of photoreceptor degeneration

Experimental design, coordination and execution on the pig model

2015–2017

research assistant

Prof. Maria Laura Bacci, DIMEVET

Development and application of novel ex-vivo techniques for commercial purposes in the swine species committed by Alfa Wassermann Spa and GVS Spa.

21/06/2016–Present

Lab Animal Veterinarian

STAL - Laboratory animal facility, University of Bologna, Bologna (Italy)

- animal care, breeding and husbandry
- medication and treatments administration
- performing euthanasia as necessary

26/01/2015–30/01/2015

teaching tutor

Scuola di Farmacia, Biotecnologie e Scienze Motorie. University of Bologna, Bologna (Italy)

Knowledge and skills:

- female and male gametes biology
- reproductive biotechnologies

- SMGT: Sperm Mediated Gene Transfer
- Sperm morpho-functional analysis

28/01/2014–31/01/2014

teaching tutor

Scuola di Farmacia, Biotecnologie e Scienze Motorie, University of Bologna, Bologna (Italy)

Knowledge and skills:

- female and male gametes biology
- reproductive biotechnologies
- SMGT: Sperm Mediated Gene Transfer
- Sperm morpho-functional analysis

04/2012–06/2012

Veterinarian

Dr. Giovanni Diquattro
via Idice, 54 Monterenzio (BO), 40050 Bologna (Italy)
www.myvetonline.it/ambuvetdiquattro

Business or sector veterinary clinic

09/2003–09/2010

hostess and PR

People srl, Milano (Italy)

- hostess for exhibitions and congress
- event planning and management

EDUCATION AND TRAINING

03/2018–12/2020

Master in Laboratory Animal Science & Welfare

EQF level 8

Faculty of Veterinary Science, Univesitat Autònoma de Barcelona, Barcelona (Spain)

The course comprises 6 modules, a practical placement and a project. It is designed to be completed in three years and to be fully compatible with a full time job. The modules are intensive and two are run each year lasting between 1-2 weeks.

Completion of the whole course enables students to carry out functions described in EU Directive EU63/2010 and DR 53/2013.

The program is accredited by FELASA and recognized by ECLAM and VETCEE.

<http://pagines.uab.cat/anilab/en/content/master-laboratory-animal-science-welfare-0>

01/09/2016–Present

ECLAM Resident

Tutor: Ana Belen Criado Gonzales

European College of Laboratory Animal Medicine training program.

01/01/2013–31/12/2016

PhD "Philosophiæ Doctor"

EQF level 8

PhD School of Veterinary Science, University of Bologna, Bologna (Italy)
www.scienzemedicheveterinarie.unibo.it/it

XXVIII cycle Tutor *Prof. Maria Laura Bacci, DVM PhD.*

- reproductive physiology (Female and male's gametes morpho-functional analyses, biotechnologies applied to reproduction, Artificial Insemination)
- management and welfare of the pig as experimental model
- experimental anesthesia and surgery in swine
- translational Medicine
- Samples collection for molecular biology, diagnostic laboratory, metabolomic and histology

-Functional evaluation of the vision in the pig model (ffERGs, VEPs, behavior)

PhD project: The pig in translational medicine: Visual and gastro-intestinal systems applications

- 13/04/2015–24/04/2015 **Laboratory Animal Science, FELASA category C course**
 EMBL MONTEROTONDO, Monterotondo, Roma (Italy)
 Felasa accreditation number 043/13
- 01/10/2014–31/07/2015 **Scholarship: swine as laboratory animal model training program**
 DIMEVET Dipartment of Veterinary Medical Science, bologna (Italy)
 Tutor *Prof. Maria Laura Bacci, DVM PhD*
 Second renewal of Scholarship established by announcement Rep. n. 81/2013 Prot. n. 1655 20/6/2013 conferred with Decree of Rep. n. 91/2013 Prot. n. 1885 17/7/2013
- 01/03/2014–30/09/2014 **Scholarship: swine as laboratory animal model training program**
 DIMEVET Dipartement of Veterinary Medical Sciences, Bologna (Italy)
 Tutor: *Prof. Maria Laura Bacci, DVM PhD*
 First renewal of Scholarship established by announcement Rep. n. 81/2013 Prot. n. 1655 20/6/2013 conferred with Decree of Rep. n. 91/2013 Prot. n. 1885 17/7/2013
- 01/08/2013–31/03/2014 **Scholarship: swine as laboratory animal model training program**
 DIMEVET Dipartment of Veterinary Medical Sciences
 Tutor: *Prof. Maria Laura Bacci, DVM PhD*
 Scholarship established by announcement Rep. n. 81/2013 Prot. n. 1655 20/6/2013 conferred with Decree of Rep. n. 91/2013 Prot. n. 1885 17/7/2013
 "Training in the skills required for transational medicine in the pig model"
- 06/2012 **Veterinary National Professional Qualification**
 Alma Mater Studiorum, University of Bologna
 18.12.2012 Afiliation to Local Veterinarian Board of Bologna
 membership number 1748
- 2003–2011 **DVM Doctor in Veterinary Medicine** EQF level 7
 DIMEVET Departement of Veterinary Medical Sciences, University of Bologna
 via Tolara di Sopra, 50, 40064 Bologna (Italy)
<http://www.agrariaveterinaria.unibo.it/it/index.html>
 Graduation: 30/03/2012
 degree mark: 106/110
 Project: Retinal function evaluation by electroretinogram (ERG) in the pig as a preclinical model for human hereditary degenerative diseases.
 Tutor: Prof M.L. Bacci Co-Tutor: Prof E.M. Surace (TIGEM, Napoli)
 From 1/2008 to 6/2012 Internship by Physiology Department of DIMEVET, Tutor Prof. M L. Bacci
- 09/1998–07/2003 **High School diploma, Scientific studies** EQF level 4
 Liceo Scientifico Galileo Galilei, Trieste (Italy)
 Degree mark: 80/100

Exchange student program 2001/2002 in South Africa

- Reasoma High School
2001 Ntloko St, 1818 Soweto, South Africa
- Afrikaanse Hoër Meisieskool
Bondstraat, 0002 Pretoria, South Africa

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
German	A2	A2	A2	A2	A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills Excellent written and verbal communication skills acquired during my PhD experience
 Confident and professional speaking abilities (oral presentations, journal clubs and conferences)
 Writing creative or factual
 Speaking in public, to groups, or via electronic media gained during PhD and others jobs
 Excellent presentation and negotiation skills

Organisational / managerial skills Group facilitating, managing group interactions
 Planning, budgeting, goal setting, or scheduling
 Strongly committed to team-building and staff development
 Supervising people or processes
 Interpreting data
 Skilled in negotiations and people management
 Skilled staff trainer and motivator

Job-related skills In-depth understanding of UNI EN ISO 9001:2008 and daily application of the quality process
 In-depth understanding of the EU directive 2010/63/EU and the Italian D.lgs n. 26/2014 on the protection of animals used for scientific purposes
 Animal management and refinement (swine, rodent)
 Experimental surgery and anesthesia (swine, rodent)
 Post-operative management (swine, rodent)
 Biological Samples collection, handling and processing
 Laboratory skills (semen/oocytes morpho-functional analyses)

ERG Electroretinogram in experimental medicine

PERG Pattern Electroretinogram

VEP Visual Evoked Potential

OCT Optical Coherent Tomography

Digital skills Great knowledge of Office package (Windows, Mac)
 Good knowledge of statistical programs (R, Medcalc, OriginPro)
 Great capability of internet surfing

Driving licence A, B

ADDITIONAL INFORMATION

- Publications**
- Thymbra capitata (L.) Cav. and Rosmarinus officinalis (L.) Essential Oils: In Vitro Effects and Toxicity on Swine Spermatozoa.**
 Elmi A, Ventrella D, **Barone F**, Filippini G, Benvenuti S, Pisi A, Scozzoli M, Bacci ML.
 Molecules. 2017 Dec 6;22(12). pii: E2162.
 doi: 10.3390/molecules22122162.
- Ultrasound guided spinal catheter insertion in piglet: preliminary results**
 N. Romagnoli; C. Lambertini, D. Ventrella, **F. Barone**, A. Elmi; ML. Bacci
 Vet Anaesth Analg. 2017 Nov;44(6):1391-1396.
 doi: 10.1016/j.vaa.2017.05.005
- Bioavailability of microencapsulated iron from fortified bread assessed using piglet model (Article)**
 Bryszewska, M.A., Laghi, L., Zannoni, A., Gianotti, A.b., **Barone, F.**, Taneyo Saa, D.L., Bacci, M.L., Ventrella, D., Forni, M.
 DOI: 10.3390/nu9030272
- The biomedical piglet: Establishing reference intervals for haematology and clinical chemistry parameters of two age groups with and without iron supplementation (Article)**
 Ventrella, D., Dondi, F., **Barone, F.**, Serafini, F., Elmi, A., Giunti, M., Romagnoli, N., Forni, M., Bacci, M.L.
 DOI: 10.1186/s12917-017-0946-2
- Effects of different enrichment devices on some welfare indicators of post-weaned undocked piglets (Article)**
 Nannoni E, Sardi L, Vitali M, Trevisi E, Ferrari A, **Barone F**, Bacci ML, Barbieri S, Martelli G
 Applied Animal Behaviour Science Volume 184, November 2016, Pages 25–34
 DOI: 10.1016/j.applanim.2016.08.004
- Age-related 1H NMR characterization of Cerebrospinal Fluid in Newborn and Young Healthy Piglets (Article)**
 Ventrella D, Laghi L, **Barone F**, Elmi A, Romagnoli N, Bacci ML
 PLoS One. 2016 Jul 8;11(7):e0157623. doi: 10.1371/journal.pone.0157623. eCollection 2016.
 PMID: 27391145
- Can microfiltered seminal plasma preserve the morphofunctional characteristics of porcine spermatozoa in the absence of antibiotics? A preliminary study**
Barone F, Ventrella D, Zannoni A, Forni M, Bacci ML.
 Reprod Domest Anim. 2016 May 13. doi: 10.1111/rda.12699. [Epub ahead of print]
 PMID: 27174664
- A comprehensive map of CNS transduction by eight adeno-associated virus serotypes upon cerebrospinal fluid administration in pigs (Article)**

Sorrentino NC, Maffia V, Strollo S, Cacace V, Romagnoli N, Manfredi A, Ventrella D, Dondi F, **Barone F**, Giunti M, Graham AR, Huang Y, Kalled SL, Auricchio A, Bacci ML, Surace EM, Fraldi A.

Mol Ther. 2016 Feb;24(2):276-86. doi: 10.1038/mt.2015.212. Epub 2015 Dec 7.

PMID: 26639405

Transdermal spinal catheter placement in piglets: Description and validation of the technique. (Article)

Lambertini C, Ventrella D, **Barone F**, Sorrentino NC, Dondi F, Fraldi A, Giunti M, Surace EM, Bacci ML, Romagnoli N.

J Neurosci Methods. 2015 Jul 31;255:17-21. doi: 10.1016/j.jneumeth.2015.07.021. [Epub ahead of print]

PMID: 26238729

Presentations XXIV AISAL annual meeting 2017, 26-27 October, Milan ITALY

- Urine proteome and Fe and Zn excretion in a porcine model of Fe-deficiency: effect of Fe-fortified breads

Enea Ferlizza, Giulia Andreani, Domenico Ventrella, **Francesca Barone**, Maria Laura Bacci, Augusta Zannoni, Monica Forni, Gloria Isani

LXXI SISVET Conference 28 June - 01 July 2017, Napoli ITALY

contributes:

- The piglet as spontaneous model of Iron Deficiency: a functional trial on fortified breads.

Ventrella D., Zannoni A., **Barone F.**, Gianotti A., Forni M., Bacci M.L.

- Dose-effect studies of *Coridothymus capitatus* and *Rosmarinus officinalis* essential oils on swine spermatozoa.

Elmi A., Ventrella D., **Barone F.**, Filippini G., Benvenuti S., Pisi A., Scozzoli M., Bacci M.L.

- Behavioral vision assessment in pigs.

Barone F., Nannoni E., Ventrella D., Elmi A., Martelli G., Bacci M.L.

IV Congresso Nazionale SIROE, 25-26 Novembre 2016, Roma

Contributes:

- Valutazione di effetti comparati di alcuni oli essenziali sulla funzionalità e integrità di spermatozoi suini (oral communication)

Elmi A, Ventrella D, **Barone F**, Scozzoli M, Bacci ML

- Prove preliminari per l'utilizzo di oli essenziali nel seme suino come alternativa agli antibiotici (oral communication)

Ventrella D, Elmi A, **Barone F**, Scozzoli M, Bacci ML

ESLAV-ECLAM Annual Meeting on Animal Welfare 2016, 15-18 November, Lyon France

Contributes:

- The challenge in establishing HEP in the laboratory swine (oral communication)

Barone F, Elmi A, Ventrella D, Bacci ML

- Retrospective evaluation of the refinement of the spinal catheter placement techniques in piglets: preliminary results. (poster)

Lambertini C, Elmi A, Romagnoli N, Ventrella D, **Barone F**, Bacci ML

AISAL XXIII Annual meeting 2016, 10-11 October, Rome Italy

Contributes:

- The challenge in establishing HEP in laboratory swine (poster)

Barone F, Elmi A, Ventrella D, Bacci ML

- Phenotype study in a mouse model of progeria (transgenic G609G Lmna) to evaluate drugs able to reduce the progerin (poster)

Squarzoni S, Barboni C, Sanapo M, Loi M, Rambaldi J, D'Apice MR, Mecca R, López-Otín C, **Barone F** & Zaghini A**FELASA Congress 2016, 13-16 June, Brussels Belgium**

Contributes:

- Objective and subjective vision assessment in iodoacetic acid model of swine retinal degeneration (poster)

Barone F, Ventrella D, Elmi A, Nannoni E, Vitali M, Maya-Vetencourt JF, Martelli G, Sannita W, Benfenati F, Bacci ML

- Evaluation of environmental pollution by recombinant adeno-associated virus upon intrathecal administration in swine: A Pilot Study. (poster)

Elmi A, Stollo S, **Barone F**, Ventrella D, Sorrentino NC, Fraldi A, Bacci ML**XXII SYMPOSIUM AISAL, 22-23 ottobre 2015 Napoli, Italy**

Contributes:

Newborn piglets as experimental model for human neonates: blood and cerebrospinal fluid analyses towards the standardization of the model (poster)

Barone F, Laghi L, Ventrella D, Elmi A, Forni M., Dondi F., Bacci M.L.**AAALAC, ESLAV and ECLAM Congress Hannover, 12-14 September 2015**

Contributes:

- Hematologic and Biochemical Reference Intervals for newborn and young European breed pigs (poster)

Ventrella D., Dondi F., **Barone F.**, Serafini F., Giunti M., Romagnoli N., Forni M., Bacci M.L.

- TRANSDERMAL SPINAL CATHETER PLACEMENT IN PIGLETS

Description And Validation Of The Technique (poster)

Lambertini C., Ventrella D., **Barone F.**, Sorrentino N.C., Dondi F., Fraldi A., Giunti M., Surace E.M., Bacci M.L., Romagnoli N.

- The 1H NMR Profile of Cerebrospinal Fluid in piglets (poster)

Ventrella D., Laghi L., **Barone F.**, Elmi A., Romagnoli N., Bacci M.L.**LXIX SISVETCongress, XI So.Fi.Vet. 15-17/06/2015 Perugia, Italy**

Contributes:

- Evaluation of the impact of novel ancient flour bakery products on the intestinal microbiota, oxidative and inflammatory status and on the glycemic index (oral communication)

Barone F, Ventrella D, Zannoni A, Sardi L, Bacci ML, Forni M

- Microfiltered seminal plasma preserves the morphofunctional characteristics of porcine spermatozoa in the absence of antibiotics for a long time in liquid storage (oral communication)

Barone F, Ventrella D, Zannoni A, Forni M, Bacci ML

- Hematologic and biochemical reference intervals for newborn and young European breed pigs (oral communication)

Ventrella D., Dondi F., **Barone F.**, Serafini F., Giunti M., Romagnoli N., Forni M. and Bacci M.L.

Projects BAKE4FUN (Innovative biotechnological solution for the production of new bakery functional food)
BAKE4FUN project is co-funded by the Seventh Framework Programme (FP7/2007- 2013) Capacities, Research for the Benefit of SMEs of the European Union, under grant agreement n° 606476.

- Memberships**
- **Enpav** (ente nazionale previdenza e assistenza veterinari) affiliate from 2012
 - **Aisal** (associazione italiana scienze degli animali da laboratorio) member from 2014
 - **Sisvet** (società italiana delle scienze veterinarie) from 2015
 - **EsLav** (european society for laboratory animals veterinarians) member from 2015
 - **Siroe** (società italiana ricerca olii essenziali) from 2016

Honours and awards **Best poster AISAL XXIII Annual Meeting**
The challenge in establishing HEP in laboratory swine

Sisvet Awards 2015

For publishing the communication:

Can microfiltered seminal plasma preserve the morphofunctional characteristic of porcine spermatozoa in the absence of antibiotics? A preliminary study

Best Poster AAALAC, ESLAV and ECLAM Congress 2015

TRANSDERMAL SPINAL CATHETER PLACEMENT IN PIGLETS, Description And Validation Of The Technique

9/03/2017 