

## Curriculum Vitae – Olivier GAUTHIER

Full professor, ONIRIS Nantes-Atlantic College of Veterinary Medicine, Food Science and Engineering, Nantes, France

Date of birth: 04/23/1969

### Position and title:

- Professor in Small Animal Veterinary Surgery and Dentistry
- Head of department "Small animal surgery, Anaesthesiology and Dentistry"
- Research associate RMeS lab (Regenerative Medicine and Skeleton), UMR INSERM 1229-Oniris-Université de Nantes
- Scientific director of the CRIP, Oniris (Center for Preclinical Research and Investigation)

### Academic Cursus:

1994 Doctor in Veterinary Medicine, Nantes, France  
1995 Master of Sciences in Pharmacology, Nantes; France  
1996 Master of Sciences in Biomaterials, Paris, France  
1998 University degree in Laparoscopic Surgery, Tours, France  
1999 PhD in Experimental Surgery and Biomaterials, Nantes; France  
2001 Postdoctoral fellowship, Orthopedic Biomechanics Laboratory, Harvard Medical School, Boston, USA  
2005 Degree for directing research (HDR)  
2005-2008 : Residency of the European College of Veterinary Surgery (ECVS) (Supervisor : Pr. Gert Niebauer)

### Professional membership:

2004-2010: President-elect, President and Past President of the European Veterinary Dental Society (EVDS)

- Elected member of the Board of Governors, Oniris Veterinary school since 2003
- Member of the EVDS (European Veterinary Dental Society) since 1999
- Member of the French Small Animal Veterinary Association (AFVAC) since 1995 (soft tissue surgery, orthopaedic surgery and dentistry working groups)
- Member of the ESVOT (European Society of Veterinary Orthopaedics and Traumatology) since 2008
- Member of the AOVET since 2008

### Honors:

1996 Honors for Doctor in Veterinary Medicine Thesis, University of Nantes  
1997 Bioceramics 10, Paris, best oral presentation at the annual seminar of young researchers  
1999 PhD thesis, with honors, University of Nantes  
2007 Resident Award for Best Small Animal Presentation, 16<sup>th</sup> Annual Scientific Meeting of European College of Veterinary Surgeons, Dublin, 2007

### International expertise :

- French research agency (ANR) expert for bone and joints diseases and biomaterials
- Reviewer for the journals Biomaterials, Acta Biomaterialia, Acta Orthopaedica and French and international veterinary journals
- Elected Member of the AO Vet European Board from 2012 to 2018
- AO Foundation Trustee and AOVET representative for the AO Foundation transdivisinal "Soft Tissue Management Initiative" curriculum group since 2017
- Head of the Erasmus + program with the Veterinary Faculty of the University of Belgrade, Serbia 2017-2019
- Visiting Professor at the Veterinary Faculty of the University of Belgrade, Serbia 2020-2025 (one month a year)

### Publications and presentations:

- 176 articles in peer reviewed journals (124 international and 52 national)
- 236 communications in international congresses and seminars
- H index = 42
- 5973 citations

- Top 5 cited articles:
  - **Gauthier O**, Bouler J-M, Aguado E, Pilet P and Daculsi G. Macroporous biphasic calcium phosphate ceramics: Influence of macropore diameter and macroporosity percentage on bone ingrowth. *Biomaterials* 1998;19:133-139. 618 citations.
  - Bouler JM, Pilet P, **Gauthier O**, Verron E. Biphasic calcium phosphate ceramics for bone reconstruction: A review of biological response. *Acta Biomater* 2017;53:1-12. 314 citations.
  - Peter B, Pioletti DP, Bouler JM, Laïb S, Bujoli B, Guicheux J, Zambelli PY and **Gauthier O**. Calcium phosphate drug delivery system : influence of local zoledronate release on bone implant osteointegration. *Bone* 2005;36:52-60. 274 citations.
  - Le Nihouannen D, Daculsi G, Saffarzadeh A, **Gauthier O**, Delplace S, Pilet P and Layrolle P. Ectopic bone formation by microporous calcium phosphate ceramic particles in Sheep muscles. *Bone* 2005 ;36 :1086-1093. 264 citations.
  - **Gauthier O**, Müller R, von Stechow D, Lamy B, Weiss P, Bouler JM, Aguado E, Daculsi G. In vivo bone regeneration with injectable calcium phosphate biomaterial: a three-dimensional micro-computed tomographic, biomechanical and SEM study. *Biomaterials* 2005;26:5444-5453. 182 citations.
- 5 important recent articles:
  - Balaguer T, Fellah BK, Boukhechba F, Traverson M, Mouska X, Ambrosetti D, Dadone B, Michiels JF, Amri EZ, Trojani C, Bouler JM, **Gauthier O**, Rochet N. Combination of blood and biphasic calcium phosphate microparticles for the reconstruction of large bone defects in dog: A pilot study. *J Biomed Mater Res A* 2018;106:1842-1850.
  - Le Ferrec M, Mellier C, Lefèvre FX, Boukhechba F, Janvier P, Montavon G, Bouler JM, **Gauthier O**, Bujoli B. In vivo resorption of injectable apatitic calcium phosphate cements: Critical role of the intergranular microstructure. *J Biomed Mater Res* 2020;108B:367–376.
  - Gonçalves H, Pascal-Moussellard H, Lesoeur J, Schnitzler V, Fellah BH, Wagner NMS, Mellier C, Bouler JM, Bujoli B, **Gauthier O**. Injection of Calcium Phosphate Apatitic Cement/Blood Composites in Intervertebral Fusion Cages: A Simple and Efficient Alternative to Autograft Leading to Enhanced Spine Fusion. *Spine (Phila Pa 1976)*. 2020 Oct 15;45(20):E1288-E1295. doi: 10.1097/BRS.0000000000003598
  - Schreiber K, Decouture B, Lafragette A, Chollet C, Bruneau M, Nicolle M, Wittmann C, Gadrat F, Mansour A, Forest-Villegas P, **Gauthier O**, Touzot-Jourde G. A novel autotransfusion device saving erythrocytes and platelets used in a 72h survival swine model of surgically induced controlled blood loss. *PLoS One* 2022 Mar 24;17(3):e0260855. doi:10.1371/journal.pone.0260855.
  - Philouze P, Malard O, Albert S, Badet L, Baujat B, Faure F, Fuchsmann C, Jegoux F, Lacau-St-Guily J, Marie JP, Ramade A, Vergez O, Ceruse P, **Gauthier O**. A new animal model of laryngeal transplantation. *J Clin Med* 2022;11(21):6427. doi: 10.3390/jcm11216427.
- 1 book and 3 book chapters in veterinary surgery
- 3 international patents (2005, 2008, 2016), with the most recent international patent associating the CNRS, the University of Nantes and Oniris College of Veterinary Medicine, entitled : « Phosphocalcic cement composition comprising blood ». Bouler JM, **Gauthier O**, Janvier P, Bujoli B, Janvier P  
Patent n°: 16 305 399.4 – 1455  
Date of submission : 06.04.16

#### Teaching activities

Lectures (30 hours/year), workshops (4 days/year), drylabs and wetlabs (4 days/year) for veterinary students and for vet practitioners in continuing education program.

Clinical activities in operating theater and consultations (3 days/week)

#### Research grants and PhD projects supervision

Supervisor or co-supervisor of 7 PhD students

Supervisor of 86 Master of Sciences Degree research work (DVM degree)