

Professional Experience:

04/24- ongoing	CEO of VAS-International again (ad interim)
07/22 – 04/24	Founder and CEO, Cadomovets- Group, Germany and Switzerland
10/06 – 10/22	CEO, Veterinary Anaesthesia Services-International, Winterthur , Switzerland
03/13 – 04/15	Senior Vicepresident, Association of Veterinary Anaesthetists
02/11 – 02/22	Member, Global Pain Council, World Small Animal Veterinary Association
03/11 – 03/13	President, Association of Veterinary Anaesthetists
10/10 – 03/13	Member, Council of the World Congress of Veterinary Anaesthesia (WCVA)
03/08 - 03/11	Vicepresident, Association of Veterinary Anaesthetists
10/09 – 12/11	President, IVAPM Foundation for Research and Scholarship, International Veterinary Academy of Pain Management
From 11/08	Head, Section of Experimental Anaesthesia and Analgesia, CABMM, Center of Applied Biotechnology and Molecular Medicine, University of Zürich and ETH, Eidgenössische Technische Hochschule, Zurich , Switzerland
03/12 – 09/12	Visiting Professor, Small Animal Anaesthesia and Analgesia, University of Mendoza, Mendoza , Argentina
09/08 – 09/12	Honorary Secretary, International Association for the Study of Pain (IASP), Special Interest Group Non-Human Species
From 10/07	Head, Experimental Anaesthesia and Analgesia, Musculo-Skeletal Research Unit, Vetsuisse Faculty, University of Zurich, Zurich , Switzerland
From 09/07	Founder and Director, VASTA, Veterinary Anaesthesia School für Technicians and Veterinarians, Winterthur with Lucerne and Lausanne Switzerland; Krakow and Warsaw , Poland; Timisoara and Bucharest , Romania; Moscow , Russia; Athens and Thessaloniki , Greece; Singapore , Singapore;
07/06 – 10/22	CEO, Veterinary Anaesthesia Services International, Winterthur Switzerland
02/06 – 06/06	Head and Chief of Service (ad interim), Section of Anaesthesiology, Vetsuisse-faculty, Berne , Switzerland
08/05 – 06/06	Chair and Academic Tutor for Clinical Education at the Department of Clinical Veterinary Medicine, Vetsuisse-faculty, Berne , Switzerland
01/05 - 01/12	Member, Ethics Commission for Animal Experimentation, Canton of Berne , Switzerland
11/04 – 06/06	Vicepresident Research and Development, Allevia GmbH, Berne , Switzerland
12/03 – 06/06	Member, Board of Directors, Small Animal Clinic, University of Berne, Berne , Switzerland
07/03 – 06/06	Head, Section of Small Animal Anaesthesia (13-16 employees), Department of Clinical Veterinary Medicine, University of Berne, Berne , Switzerland

12/02 – 06/06 Oberarzt (Assistant Professor), Section of Anaesthesiology, Department of Clinical Veterinary Medicine, University of Berne, **Berne**, Switzerland

02/01 - 07/02 Lecturer in Anesthesiology/Critical Patient Care
Department of Surgical and Radiological Sciences, School of Veterinary Medicine, University of California, **Davis**, California, U.S.A

08/00 - 02/01 Postdoctorate Associate in Anesthesiology
Department of Clinical Sciences, College of Veterinary Medicine, Cornell University, **Ithaca**, New York, U.S.A

08/98 - 07/00 Resident in Anesthesiology
Veterinary Medical Teaching Hospital, College of Veterinary Medicine, Cornell University, **Ithaca**, New York, U.S.A

03/98 – 08/98 Reseacher, Cardiovascular Anesthesia, Brigham and Women’s Hospital, Harvard University, **Cambridge**, Massachusetts, USA

08/96 - 03/98 Staff surgeon, Centro Medico Veterinario, **Lido di Camaione**, Italy

04/96 - 03/98 Assistant at the Centro Medico Veterinario, **Lido di Camaione**, Italy

Education:

02/14 - 06/14 GLP Study Director, University of Zürich, **Zürich**, Switzerland

09/07 - 11/08 EMBA, Hochschule St. Gallen, **St Gallen**, Switzerland

09/04 - 12/05 Diplomate, European College of Veterinary Anaesthesia and Analgesia

12/02 - 12/05 University of Berne, **Berne**, Switzerland, Dr. med vet

11/05 FELASA-certification for Project-Managers (Level 2), University of Zürich, **Zürich**, Switzerland

04/05 FELASA-certification for Researchers (Level 1), University of Zürich, **Zürich**, Switzerland

08/98 - 07/00 Cornell University, **Ithaca**, New York, U.S.A
Residency in Veterinary Anesthesia

04/96 - 03/98 University of Pisa, **Pisa**, Italy
Dott medicina veterinaria

10/92 - 03/96 Ludwig-Maximilians-Universität, **Munich**, Germany
Clinical studies and final examinations of Veterinary Medicine, DVM

11/88 - 08/92 Università degli Studi, **Pisa**, Italy
Studies of Veterinary Medicine and examinations of the preclinical years/preliminary examinations

10/87 - 02/88 Universität zu Köln, **Cologne**, Germany
Studies of Biological Chemistry

Recent Awards

10/24 Top 10 Global Game-Changing Entrepreneurs, Place number 3, Entrepreneurmirror, UK; <https://entrepreneurmirror.com/top-10-game-changing-entrepreneurs/>

10/23 Pfizer-Awards for best Neurology Research, Basel, Switzerland

Main Research Interests:

- Alternative Application routes for anaesthesia and analgesia drugs
- Cardiac Anaesthesia
- Anaesthesia for Brain diseases
- Anaesthesia in Primates
- Cardiac adaptations to anaesthesia in pigs
- Pain Recognition in sheep
- Reduction of Morbidity and Mortality in Small Animals

Main Professional Interests:

- International and global collaborations in small animal veterinary medicine
- Economical development of small animal veterinary practice
- Quality Assurance, Small Animal Medicine
- Safety Assurance, Small Animal Anaesthesia

Ongoing Own Research:

- Awareness of and clinical demand for anaesthesiologists in veterinary practice in the EU and Switzerland
- Intranasal alfaxalone for induction of anaesthesia in rabbits, pigs, sheep and cats
- Clinical Parameters of S(+)-ketamine use for induction of anaesthesia in rabbits
- Cardiovascular effects of S(+)-ketamine in rabbits
- Characterization and quantification of sheep nociceptive-specific proprioceptors in the knee joint
- Stifle intraarticular analgesia in goats undergoing arthroscopic cartilage repair: The influence of bupivacaine on mitotic rate of chondrocytes
- Possibilities of non-surgical approaches to the dorsal root ganglion of lumbar spinal segments in sheep
- Non-invasive, in vivo electrophysiologic characterization of primary afferent nociceptive activity at the intact dorsal root ganglion of lumbar spinal segments in sheep
- Clinical comparison of sciatic and femoral nerve blocks versus epidural anaesthesia with local anaesthetics for sheep undergoing hindlimb orthopaedic surgery
- Pharmacokinetics and dosage determination of two transdermal analgesic devices in the pig
- Transdermal application of an oxygen carrier solution mixture for antiinflammatory treatment of chondral-defect induced arthritis of the knee of sheep

Selected Publications:

- **Peter W. Kronen:** Epidural Anesthesia and Analgesia in Dogs and Cats; in: Andrea Lawrence–Battaglia (ed.): Small Animal Emergency and Critical Care, Mosby, New York, 2000 [book chapter]
- **Peter W Kronen**, Paula F Moon, John W Ludders, Robin D Gleed, Thomas B Kern, John F Randolph, Hollis N Erb: Comparison of two insulin protocols for diabetic dogs undergoing cataract surgery, Veterinary Anesthesia and Analgesia, 2003
- **Peter W Kronen:** Inhalation Anesthesia; in: Eugene P Steffey (ed.): Anesthetic Management of the Horse, Recent Advances in Veterinary Medicine, International Veterinary Information Services (IVIS), www.ivis.org [book chapter, last updated January 2003]
- Paula Larenza and **Peter W Kronen:** Facts and Myths in Sighthound Anaesthesia, Hunde, 2004
- Friedrich S Eckstein, **Peter W Kronen**, Mario Stalder, Olivier L Levionnois, Erich Gygax, Claudia Zobrist, Hansjörg Jenni, Balthasar Eberle, Thierry P Carrel: Stenting of the posterior leaflet in mitral valve insufficiency, Heart Surgery Forum, 2005
- **Peter W Kronen**, Olivier L Levionnois, Friedrich S Eckstein, Yves PS Moens: Prolonged recovery and respiratory depression after fentanyl infusion in a sheep undergoing mitral valve replacement, Laboratory Animals, 2005
- **Peter W Kronen**, John W Ludders, Hollis N Erb, Paula F Moon, Robin D Gleed, Sharon Koski: A synthetic fraction of feline facial pheromones calms but does not affect struggling in cats before intravenous catheterization, Veterinary Anaesthesia and Analgesia, 2006
- Claudia Spadavecchia, Olivier L Levionnois, **Peter W Kronen**, Massimo Leandri, Luciano Spadavecchia, Urs Schatzmann: Peri-MAC isoflurane depression of a nociceptive withdrawal reflex evoked by transcutaneous electrical stimulation in ponies, American Journal of Veterinary Research, 2006
- Olivier L Levionnois, Claudia Spadavecchia, **Peter W Kronen**, Urs Schatzmann: Physical and physiological effects of three different modes of electrical stimulations to determine the isoflurane MAC in Shetland Ponies, Veterinary Anesthesia and Analgesia, 2007
- Larenza MP, Landoni MF, Levionnois OL, Knobloch M, **Kronen PW**, Theurillat R, Schatzmann U, Thormann W.: Stereoselective pharmacokinetics of ketamine and norketamine after racemic ketamine or S-ketamine administration during isoflurane anaesthesia in Shetland ponies. Br J Anaesth. 2007 Feb;98(2):204-12.
- Olivier L Levionnois, **Peter W Kronen:** Management of anaesthesia for open-heart mitral valve surgery with cardiopulmonary bypass in a sheep, Laboratory Animals, 2007
- Isabelle Iff, **Peter W Kronen:** Verbrennungen durch Elektrokardiogramm-Elektroden nach der Anästhesie: ein Fallbericht, Der Praktische Tierarzt, 2006
- Olivier L Levionnois, **Peter W Kronen**, Claudia Spadavecchia, Urs Schatzmann : Determination of the minimum alveolar concentration (MAC) of isoflurane in Shetland ponies using three different modes of electrical stimulation as supramaximal noxious inputs. Veterinary Anaesthesia and Analgesia, 2007
- **Peter W Kronen:** Monitoring of Patients under Anaesthesia (commissioned review paper), European Journal of Companion Animal Practice, 2007
- **Peter W Kronen**, Normand S Ducharme, Robin D Gleed: Locally injected, but not intravenous and topical lidocaine effectively treats cardiac arrhythmias during myocardial incisions in a horse, Frontiers in Veterinary, 2008

- Bali MS, Gebhardt-Henrich S, Keller P, Steiger A, Gattermann R, Bergamasco L, **Kronen P**, Doherr MG, Botteron C, Tomek A, Jaggy A.: Electroencephalography in the diagnosis of hydrocephalus in golden hamsters (*Mesocricetus auratus*). *Lab Anim.* 2008
- Larenza MP, Knobloch M, Landoni MF, Levionnois OL, **Kronen PW**, Theurillat R, Schatzmann U, Thormann W.: Stereoselective pharmacokinetics of ketamine and norketamine after racemic ketamine or S-ketamine administration in Shetland ponies sedated with xylazine. *Vet J.* 2008
- Levionnois O, **Kronen PW**: Development of post-pump syndrome in a sheep after mitral valve stenting. *Lab Anim.* 2008
- Levionnois OL, Spadavecchia C, **Kronen PW**, Schatzmann U.: Determination of the minimum alveolar concentration of isoflurane in Shetland ponies using constant current or constant voltage electrical stimulation. *Vet Anaesth Analg.* 2009
- Spadavecchia C, Levionnois O, **Kronen P**, Andersen OK.: The effects of isoflurane minimum alveolar concentration on withdrawal reflex activity evoked by repeated transcutaneous electrical stimulation in ponies. *Vet J.* 2010 Mar;183(3):337-44.
- C Templin, M Meyer, MF Müller, V Djonov, R Hlushchuk, I Dimova, S Flueckiger, **P Kronen**, M Sidler, K Klein, F Nicholls, JR Ghadri, K Weber, D Paunovic, R Corti, SP Hoerstrup, TF Lüscher, U Landmesser: Coronary optical frequency domain imaging (OFDI) for in vivo evaluation of stent healing: comparison with light and electron microscopy. *Eur Heart J.* 2010 Jul;31(14):1792-801.
- SD Jenni, N Fouché, K Klein, M Sidler, **PW Kronen**, B von Rechenberg, TM Glaus, CC Schwarzwald: Induction of Pulmonary Arterio-Venous Shunting in Peracute Pulmonary Hypertension after Cement and Bone Marrow Fat Embolism in Sheep, Abstract Presentation at ECVIM 2010 in Toulouse
- Nikola Cesarovic, Flora Nicholls, Andreas Rettich, **Peter Kronen**, Michael Hässig, Paulin Jirkof, Margarate Arras; Isoflurane and sevoflurane provide equally effective anaesthesia in laboratory mice; *Laboratory Animals*; 44: 329-336, 2010
- Von Plocki, Stephanie, David Armbruster, Karina Klein, Käthis Kämpf, Katalin Zslinsky, Monika Hilbe, **Peter Kronen**, Elliott Gruskin, Brigitte von Rechenberg: Biodegradable sleeves for metal implants to prevent implant-associated infection: an experimental in vivo study in sheep. *Vet Surg.* 2012 Apr;41(3):410-21.
- Michael Plecko, Nico Lagerpusch, Daniel Andermatt, Robert Frigg, Rudolf Koch, Michèle Sidler, **Peter Kronen**, Karina Klein, Katja Nuss, Alexander Bürki, Stephen Ferguson, Ulrich Stoeckle, Jörg A. Auer, Brigitte von Rechenberg: The influence of different osteosynthesis configurations with locking compression plates (LCP) on stability and fracture healing after an oblique 45° angle osteotomy. *Injury.* 2012 Jul;43(7):1041-51
- Michael Plecko, Christine Sievert, Daniel Andermatt, Robert Frigg, **Peter Kronen**, Stefan Stübinger, Katja Nuss, Alexander Bürki, Stephen Ferguson, Ulrich Stoeckle and Brigitte von Rechenberg: Osseointegration and biocompatibility of different metal implants- a comparative experimental investigation in sheep. *BMC Musculoskelet Disord.* 2012 Mar 8;13:32.
- Christian Templin, Robert Zweigerdt, Kristin Schwanke, Ruth Olmer, Jelena-Rima Ghadri, Maximilian Emmert, Ennio Müller, Silke M Küest, Susan Cohrs, Roger Schibli, **Peter Kronen**, Monika Hilbe, Dirk Strunk, Axel Haverich, Thomas Lüscher, Simon Hoerstrup, Phillip Kaufmann, Ulf Landmesser, Ulrich Martin: Transplantation and Tracking of Human

Induced pluripotent Stem Cells in a Pig Model of Myocardial Infarction: Assessment of Cell Survival, Engraftment and Distribution by Hybrid SPECT-CT Imaging of Sodium Iodide Symporter Transgene Expression. *Circulation*. 2012 Jul 24;126(4):430-9.

- **Peter Kronen** in: 6. Leipziger Blaue Hefte, Bd 1.; 171-174, 2012:
Ein kleiner Unterschied mit grossen Konsequenzen, nicht nur für den Patienten: was macht ein Anästhesist in der normalen Kleintierpraxis?
- **Peter Kronen**, in: 6. Leipziger Blaue Hefte, Bd 1.; 175-176, 2012: Lokalanästhesie
- Michael Plecko, Nico Lagerpusch, Daniel Andermatt, Robert Frigg, Rudolf Koch, Michèle Sidler, **Peter Kronen**, Karina Klein, Katja Nuss, Alexander Bürki, Stephen Ferguson, Ulrich Stoeckle, Jörg A Auer, Brigitte von Rechenberg: The dynamisation of locking plate osteosynthesis by means of dynamic locking screws (DLS)-an experimental study in sheep. *Injury*. 2013 Oct;44(10):1346-57.
- Von Rechenberg B, Orv Génot, K Nuss, L Galuppo, M Fulmer, E Jacobsen, **P Kronen**, K Zlinszky, JA Auer: Evaluation of four biodegradable, injectable bone cements in an experimental drill hole model in sheep. *Eur J Pharm Biopharm*. 2013 Sep;85(1):130-8.
- K Klein, E Zamparo, **PW Kronen**, K Kämpf, M Makara, T Steffen, B von Rechenberg B.: Bone augmentation for cancellous bone- development of a new animal model. *BMC Musculoskelet Disord*. 2013 Jul 2;14:200.
- R Binder, **P Kronen**, V Marashi, Y Moens, U Pohl T Rüllicke: Grundsätze des Versuchsrefinements; R Binder, N Alzmann, H Grimm (Hrsg): *Wissenschaftliche Verantwortung im Tierversuch*, S 230-265, Nomos-Verlag Baden-Baden (**book chapter**)
- AS Mallik, K Nuss, **PW Kronen**, K Klein, A Karol, B von Rechenberg, DA Rüfenacht, I Wanke, Z Kulcsár: A new-generation, low-permeability flow diverting device for treatment of saccular aneurysms. *Eur Radiol*. 2014 Jan;24(1):12-8.
- Michèle Sidler, Nathalie Fouché, Ingmar Meth, Friedrich von Hahn, Brigitte von Rechenberg, **Peter W Kronen**: Preliminary Study on carprofen concentration measurements after transcutaneous treatment with Vetdrop in a microfracture joint defect model in sheep, *BMC Veterinary Research*, 2014, Vol. 10, article number 268
- K Mathews K, **PW Kronen**, D Lascelles, A Nolan, S Robertson, PV Steagall, B Wright, K Yamashita: Guidelines for recognition, assessment and treatment of pain: WSAVA Global Pain Council members and co-authors of this document. *J Small Anim Pract*. 2014 Jun;55(6):E10-68.
- K Klein, J Schense, **PW Kronen**, N Fouche, M Makara, K Kämpf, T Steffen, B von Rechenberg: Feasibility Study of a Standardized Novel Animal Model for Cervical Vertebral Augmentation in Sheep Using a PTH Derivate Bioactive Material. *Vet. Sci*. 2014, 1, 96-120;
- M Sidler, N Fouché, I Meth, F von Hahn, B von Rechenberg, **PW Kronen**: Preliminary study on carprofen concentration measurements after transcutaneous treatment with Vetdrop® in a microfracture joint defect model in sheep. *BMC Vet Res*. 2014 Dec 9;10:268.
- H Richter, M Plecko, D Andermatt, R Frigg, **PW Kronen**, K Klein, K Nuss, SJ Ferguson, U Stöckle, B von Rechenberg: Dynamization at the near cortex in locking plate osteosynthesis by means of dynamic locking screws: an experimental study of transverse tibial osteotomies in sheep. *J Bone Joint Surg Am*. 2015 Feb 4;97(3):208-15.

- S Stübinger, A Drechsler, A Bürki, K Klein, **P Kronen**, B von Rechenberg: Titanium and hydroxyapatite coating of polyetheretherketone and carbon fiber-reinforced polyetheretherketone: A pilot study in sheep.
- S Stübinger, R Bucher, PW Kronen et al: Ligature-induced peri-implantitis in minipigs revisited, *Periodontics and prosthodontics*, 2016:2(1)
J Biomed Mater Res B Appl Biomater. 2016 Aug;104(6):1182-91
- M Mumme, A Steinitz, KM Nuss, K Klein, S Feliciano, **P Kronen**, M Jakob, B von Rechenberg, I Martin, A Barbero, K Pelttari: Regenerative Potential of Tissue-Engineered Nasal Chondrocytes in Goat Articular Cartilage Defects.
Tissue Eng Part A. 2016 Nov;22(21-22):1286-1295.
- Z Kulcsár, A Karol, **PW Kronen**, P Svende, K Klein, O Jordan, I Wanke: A novel, non-adhesive, precipitating liquid embolic implant with intrinsic radiopacity: feasibility and safety animal study.
Eur Radiol. 2017 Mar;27(3):1248-1256
- LC Weiland, K Kluge, APN Kutter, **PW Kronen**: Clinical evaluation of intranasal medetomidine-ketamine and medetomidine-S(+)-ketamine for induction of anaesthesia in rabbits in two centres with two different administration techniques. *Vet Anaesth Analg*. 2017 Jan;44(1):98-105.
- S Osorio Lujan, W Habre, Y Daali, Z Pan, **PW Kronen**: Plasma concentrations of transdermal fentanyl and buprenorphine in pigs (*Sus scrofa domesticus*).
Vet Anaesth Analg. 2017 Jan 11. pii: S1467-2987(17)30040-5.
- Jacco Baker, Sandra Roubos, Edmond J. Remarque, Saskia S Arndt, **Peter W Kronen** and Jan AM Langermans (joint senior authors): Effects of buprenorphine, butorphanol or tramadol premedication on anaesthetic induction with alfaxalone in common marmosets (*Callithrix jacchus*), *Veterinary Anaesthesia and Analgesia*, 45 (3), 2018: 309-319
- Michael Hugelshofer, Raphael M Buzzi, Christian A Schaer, Henning Richter, Kevin Akeret, Vania Anagnostakou, **Peter W Kronen** et al.: Haptoglobin Administration into the subarachnoid space prevents hemoglobin-induced cerebral vasospasm, *J Clin Invest*, 2019;129 (12): 5219-5235
- Florian Willmitzer, Francesca del Chicca, Patrick Kircher, Adriano Wang-Leandro, **Peter W Kronen** et al.: Diffusion weighted and Perfusion-weighted magnetic resonance imaging of the prostate gland of healthy adult dogs, *AJVR* 2019: 80(9)
- Nevena Paunovic, Yinyin Bao,... **Peter W Kronen**,... et al: Three-dimensional printing of customized bioresorbable airway stents, *bioRxiv preprint 2020*
- B von Rechenberg, M Sidler, **PW Kronen**: Transcutaneous drug delivery, *Horizon 2020 Projects*
- Nevena Paunovic, Yinyin Bao, Fergal Brian Coulter, Kunal Masania, Anna Karoline Geks, Karina Klein, **Peter W Kronen** et al.: Digital light 3D printing of customized bioresorbable airway stents with elastomeric properties, *Science Advances*, 2021, 7(6)
- Alexis Laurent, Philippe Abdel-Sayed, ... **Peter Kronen**, ... Salim E Darwiche: Industrial development of standardized fetal progenitor cell therapy for tendon regenerative medicine: preliminary safety in xenogeneic transplantation; *Biomedicines*, 2021, 9: 380ff
- Simon Reiländer, Wolfgang Schmehl,... **Peter Kronen**, ... Lorenz Meinel: Oral Use of therapeutic carbon monoxide for anyone, anywhere, and anytime; *ACSBiomater-Sci.Eng.*; 2023, 9(6) 2937-2948

- Bart R Thompson, Henning Richter, Kevin Akeret,...**Peter W Kronen**,...et al.: Blood oxygenation-level dependent cerebrovascular reactivity imaging as strategy to monitor CSF-hemoglobin toxicity, JStroke and Cerebrovascular diseases, 32(3), March 2023, 16985
- Salim E Darwiche, Anna Kaczmarek,...Peter Kronen, ...Karina Klein: Combined electric and magnetic field therapy enhances bone repair and regeneration in two tibia osteotomy models in sheep; March 2023, preprint: DOI: [10.21203/rs.3.rs-2638037/v1](https://doi.org/10.21203/rs.3.rs-2638037/v1) PPR: PPR623766
- BR Thomson, N Schwendinger, K Beckmann, T Gentinetta, D Couto, S Wymann,...**PW Kronen**,...DJ Schaer & M Hugelshofer: Haptoglobin attenuates Cerebrospinal Fluid Hemoglobin-Induced Neurological Deterioration in Sheep. Translational Stroke Research, 2024, DOI: <https://doi.org/10.1007/s12975-024-01254-9>
- Brigitte von Rechenberg, Rieke S. Gehrke, Karina Klein, **Peter W Kronen**, Salim Darwiche, Jeanni Zbinden, Karl Wieser, Alexandre Lädermann: Studying Edema Formation After Release of the Infraspinatus Muscle as an Experimental Model of Rotator Cuff Lesions in Sheep: A Histological Analysis, Am J SportsMed, 52 (5),
- Sarah Schleich, **Peter Kronen**, Adva Krivitsky, Nevena Paunović, Coulter Fergal Brian, Agnieszka, Anna Karol, Anna Geks, Yinyin Bao, Jean-Christophe Leroux, Brigitte von Rechenberg, Daniel Franzen , Karina Klein: Effects of shape and structure of a new 3D-printed personalized bioresorbable tracheal stent on fit and biocompatibility in a rabbit model, PLOS One, 2024, June 25.

Supervisor of PhD- dissertations:

- Evaluation der Aufwachphase von Katzen nach einer routinemässigen Ovarioektomie (2005)
- Subcutaneous S(+)-and racemic ketamine for anaesthesia induction in rabbits: a comparison of clinical parameters, (2008)
- Concentration analysis and pharmacokinetic considerations after transdermal application of carprofen with a new application device (2012)
- Evaluation of a multiparametric pain scale for the perioperative application in sheep (2014)
- Clinical evaluation of intranasal medetomidine-ketamine and medetomidine-S(+)-ketamine for induction of anaesthesia in rabbits in two centres with two different administration techniques. (2016)
- Plasma concentrations of transdermal fentanyl and buprenorphine in pigs (*Sus scrofa domestica*). (2017)
- Clinical evaluation of intranasal midazolam and alfaxalone for induction of anaesthesia in rabbits (2024)

Memberships in Professional Organisations:

- Founding Member, AiCVSA, Asian College of Veterinary Surgery and Anaesthesia
- Senior Founding Member, Polish Society of Veterinary Anesthesia
- Honorary Member, VITAR, Russian Society for Veterinary Anaesthesia and Analgesia

- Association of Veterinary Anaesthetists (AVA, member of the board of directors 2006-2009, Vice-President 2009 -2011, President 2011-2013, Vicepresident 2013-2015)
- European College of Veterinary Anaesthesia and Analgesia (ECVAA, Diplomate)
- International Anesthesia Research Society (IARS, founding member for the SIG Non-human species; Member of the board: 2012-2014)
- International Veterinary Academy of Pain Management (IVAPM, member of the board of directors)
- International Association for the Study of Pain (IASP)
- Special Interest Group for Pain in Non-human Species (IASP, honorary secretary, founding board member)
- European Federation of International Chapters of the International Association for the Study of Pain (EFIC)
- Gesellschaft Schweizer Tierärzte (GST/SVS)
- Gesellschaft Zürcher Tierärzte
- IVAPM-Foundation for Research and Scholarship (Founding President)
- Member, International Veterinary Emergency and Critical Care Society (IVECCS)

Selected International Presentations:

- Mindray Animal, Global Summit, Shenzhen 2024 and Xi An 2025, Keynote Speaker
- Numerous webinars and in-presence workshops in Germany, Switzerland, Poland, UK, Romania, China
- MEAVC- Satellite meeting, Cairo, May 2023, Main Speaker
- AVA- Autumn meeting September May 2023, Warsaw, Organizer, Invited Speaker
- AVA-Spring Meeting May 2022, Invited Speaker, several presentations, Nafplio, Greece
- German National Veterinary Congress, Leipzig, January 2012 (Keynote speaker)
- AVA-Spring Meeting, March 2000, Cambridge, UK
- 7th WCVA World Congress, October 2000, Berne, Switzerland
- 8th WCVA World Congress, 2003, Knoxville, TN, USA
- AVA-Autumn Meeting 2004, Vienna, Austria
- Continuing Education in Laboratory Animal Anaesthesia, November 2004, Berne, Switzerland (keynote speaker)
- AVA-Spring Meeting 2005, Rimini, Italy
- World Veterinary Congress 2005, Minneapolis, MN, USA (invited speaker, several presentations, 5 hours)
- 2nd Swiss Experimental Surgery Symposium (SESS), January 2006, Genève, Switzerland (invited speaker, 2 hours)
- 1st KIS-Bern (Kleintier-Intensiv-Symposium), September 2006, Berne, Switzerland (keynote speaker)
- University of Padova, Convention of Progress in Veterinary Anaesthesia, Oktober 2006, Padova, Italy (keynote speaker, 4 hours)
- SCIVAC, Corso di Formazione Professional Continua, Cremona, Italy, September 2007 (invited speaker, 4 hours)

- AVA-Spring Meeting, March 2009, Helsinki, Finland
- AVA-Spring meeting, April 2011, Bari, Italy
- Leipziger Tierärzte-Kongress, January 2012, Leipzig, Germany
- Universidad De Buenos Aires, April 2012
- Brazilian Society of Veterinary Surgery and Anaesthesia, November 2012, Florianopolis, Brazil
- Russian Society of Veterinary Anaesthesia (VITAR), November 2012, Moscow, Russia
- Greek Society of Small Animal Veterinarians, March 2013, Thessaloniki, Greece
- Tagung der Deutschen Gesellschaft für Primatenforschung, March 2014, Göttingen, Germany
- Swiss Society for Small Animal Medicine (SVK), May 2014, Interlaken, Switzerland
- Universidad de Mendoza, Mendoza, Argentina, June 2014
- Deutsche Veterinärmedizinische Gesellschaft, September 2014, Baden-Baden, Germany
- AVA- Autumn meeting 2014, Vienna, Austria
- Internationale Hundemesse, February 2015, Winterthur, Switzerland
- AVA Spring Meeting, March 2015, Caceres, Spain
- European Society of Veterinary Oncology (ESVONC), May 2015, Krakow, Poland
- World Congress of Veterinary Anaesthesiology, September 2015, Kyoto, Japan
- Russian National Veterinary Conference, St Petersburg, Russia, February 2016
- Deutsche Tierärzte Tage, April 2016, Baden-Baden, Germany
- Eastern European Veterinary Regional Congress, Belgrade, Serbia, September 2016
- Austrian Small Animal Veterinary Society (VÖK), December 2016, Vienna Austria
- Society of Belgian Small Animal Veterinarians (SAVAB), March 2017, Roeselaere, Belgium

Teaching:

- Course initiator and leader: Emergency and Critical Care, Complete education with degree (1-year course with exam and diploma), Zurich, Switzerland
- Numerous (> 50) multi-day seminars and workshops regarding Anaesthesia machine, anaesthesia monitoring, Safety of Anaesthesia, Locoregional Anaesthesia, both online and in presence in collaboration with Mindray, RDW, BBraun, Covetrus, Anicura, several private vet-clinics, WSAVA, University of Zurich, FELASA etc.
- Numerous Clinical, Course-related and Classroom Teaching events for students, interns, veterinary technicians and residents at Cornell University and University of California
- Responsible for all didactic and clinical teaching in veterinary anaesthesia at the University of **Berne**
- Course Initiator and Leader: Seminars in Veterinary Anaesthesia (1hr weekly, 3year course), residents, interns, faculty, since January 2003, University of Berne, **Berne**, Switzerland
- Residency co-supervisor or supervisor at the University of **California** or the University
- Supervisor for PhD-Thesis at the University of **Zürich**
- Instructor, Veterinary Anesthesia for Laboratory Animals, course in laboratory animal sciences for animal use in research (LTK Modul 1, 2), Institute for Laboratory Animal Science, University of Zurich, **Zurich**, Switzerland

- Instructor, Veterinary Anesthesia for Laboratory Animals, special course in large animal anaesthesia (LTK Modul 4) Institute for Laboratory Animal Science, University of Zurich, **Zurich**, Switzerland
- Instructor, Veterinary Anesthesia for Laboratory Animals, course in laboratory animal sciences for animal use in research (LTK Modul 20), Institute for Laboratory Animal Science, University of Zurich, **Zurich**, Switzerland
- Improve International, Anaesthesia seminars for veterinary practitioners, courses in Frankfurt, Berlin, Munich Germany, Basel Switzerland and Vienna Austria
- Founder and Director for VASTA, Veterinär Anästhesie Schule für TechnikerInnen und ArzthelferInnen, Conceptualisation, structure and didactics for all courses and topics, theoretical and practical (Courses in Switzerland (since 2008), Russia (since 2013), Poland (since 2016), Romania (since 2019))

Other Activities:

From 05/2023	Member Board of Directors, Plakentiavet, Athens, Greece
From 04/2023	Member, Scientific Advisory Board, Metamount Research, Grenchen, Switzerland
From 10/2020	Member, Advisory Board, NetAP, Esslingen b. Zürich, Switzerland
11/11 –11/13	Member, Scientific Advisory Board- Veterinary, AOFoundation
03/10 - 10/22	Founding-Member, Global Pain Council of the WSAVA
03/13 - 03/15	Senior Vice President, Association of Veterinary Anaesthetists
03/11 - 03/13	President, Association of Veterinary Anaesthetists
10/09 - 4/11	Vice-President, Association of Veterinary Anaesthetists, Europe
09/07- 09/10	Member, Board of Directors, International Veterinary Academy of Pain Management
09/06 – 10/09	Member, Board of Directors, Association of Veterinary Anaesthetists, Europe
09/05 – 06/06	Member, National Swiss Committee for Academic Curricular Development in the Vetsuisse Faculties, Zurich and Berne , Switzerland
12/04 – 06/06	Member, Committee of Specializations and Continuing Education, Vetsuisse-faculty, Berne , Switzerland
Since 06/04	Founder and Director of the School of Continuing Education in Anaesthesia for Veterinary Technicians in Switzerland (VASTA, GST, VSTPA, AVA, IVAPM, etc.- approved), Winterthur , Switzerland
04/04 – 08/06	Cofounder, Public Relations Task Force of the Association of Veterinary Anaesthetists, Vienna and Berne
04/02 - 07/02	Anesthesia and Immobilization Consultant for the United States Marine Corps, Repopulation Project for free-ranging Water buffaloes in Guam, Guam , U.S.A
05/99 - 10/04	Veterinary Medical Advisor (Anaesthesia and Analgesia) for the Animals Asia Foundation, Kowloon, Hong Kong , China

Language skills:

German	Mother tongue
English	Fluent, written and spoken
Italian	Fluent, written and spoken
French	Basic knowledge
Spanish	Basic knowledge
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