

Curriculum Vitae Maja Ruetten

Last name	Ruetten
First name	Maja
Qualifications	Dr met vet, Dipl ECVP, FVH (Pathology)
Date of birth	26.04.1975
Nationality	Swiss
Languages	German, Italian, French, English, (Spanish)
Actual position	Owner of private veterinary diagnostic laboratory, Pathovet AG (www.pathovet.ch)
Address	Pathovet AG Buckstrasse 2 CH-8317 Tagelswangen, Switzerland Tel.: 052 208 99 20 Fax: 052 208 99 29 E-Mail: maja.ruetten@pathovet.ch

Scientific education, training and council boards

1994 – 2000

Veterinary Curriculum, Vetsuisse Faculty, University Zurich.

25.4. – 3.10.1998

Visiting student in several different veterinary private practices, Cape Town, East London, Queenstown and Outshorn, South Africa.

2004

Dr. met. vet.: E-learning tool of diagnostic pathology of lung and liver. (Vetsuisse Faculty Zürich, Supervisor: Prof. A. Pospischil).

2005 – 2008

Residency in veterinary pathology at the Institute of Veterinary Pathology, Vetsuisse Faculty, University Zürich Development (as Editor) online veterinary pathology e-learning tool "Swiss Virtual Veterinary Pathology" (<https://www.animal-patho.org/en/>).

2008

Diplomate European-College of Veterinary Pathologists (ECVP), with specialisation on Zoo- and Wildlife Pathology.

2010 – present

Co-Secretary of Association of Swiss Veterinary Pathologists ("Schweizer Verein für Tierpathologie", SVTP).

2011 – 2014

Faculty representative of assistant lecturers, Vetsuisse Faculty, Zürich.

2013

National specialisation of pathology: FVH (Pathology).

2014

Proctor of board exam committee of ECVP.

2015 - present

Elected council member (executive) of Society of Swiss Veterinarians (<http://www.gstsvs.ch/de/die-gst/organe-und-kommissionen/vorstand.html>) (Areas of responsibility: Further education of veterinarians and Journal of Swiss Archive of Veterinary Medicine (Schweizer Archiv für Tierheilkunde, SAT), the world's oldest veterinary journal, celebrating its 200th birthday this year.

Professional employment

2000 – 2001

Assistant, in clinical practice of Dr med vet. T. Theus, Müstair GR, Switzerland.

2001 – 2009

Assistant lecturer, Institute of Veterinary Pathology, University of Zürich.

2009 – 2016

Oberassistant and senior pathologist, Institute of Veterinary Pathology with special interest in pathology of exotic species, University of Zurich.

2016

Owner and CEO of PathoVet AG.

Lectures and awards

2008 – 2016

Lecturer: pathology of bone marrow and lymphatic tissue (2nd year) and supervisor clinical rotation of senior veterinary students in veterinary pathology (5th year).

2014

"Best coach award – pathobiology" virbac, Vetsuisse Faculty Zurich.

2015

"Best coach award – pathobiology" virbac, Vetsuisse Faculty, University Zurich.

Lecturer for postgraduates

2008 – 2016

Moderator of "Wednesday Slide Conference", Joint Pathology Center, internal medicine of small animals (ECVIM), oncology (ECVDI), ophthalmology (ECVO).

Reviewer

- Tierärztliche Wochenzeitschrift
- Swiss Archive of Veterinary Medicine (Schweizer Archiv der Tierheilkunde, SAT)
- Veterinary Pathology
- Journal of Zoo and Wildlife Medicine
- PLOS ONE

Grants (competitive and non competitive)

- SVWZH: Swiss Zoo and Wildlife society, 2015: gene analysis and comparision of genes regulating iron metabolism, including hepcidin blood levels in three different lemur species: 3000 CHF
- Marie Louise von Muralt-Stiftung für Kleintiere 2014: Plattet P., Knell S., Ruetten M., Forterre F. Design of Pharmacologically-Controlled Vectors for Oncolytic Virotherapy. 140'000 CHF.
- SVSM Swiss porcine medicine society: E-learning project support "www.pigmed.org": 50'000 CHF
- E-learning Vetsuisse Faculty Zurich for "Virtuelle Sektion bei Rind und Pferd": 24'000 CHF
- SVAP University of Zürich: Reprogramming website www.animalpatho.org: 99'000 CHF

Publication list (50, peer reviewed)

- **Feline sarcoid in a 1-year-old domestic short-haired cat caused by bovine papillomavirus type 14 in Switzerland.** Kiefer C, Tobler K, Ramsauer S, Biegel U, Kuehn N, **Ruetten M (2017)** *Schweizer Archiv für Tierheilkunde (SAT)* 159(9):487-491. doi: 10.17236/sat00127.
- **Congenital occipitoatlantoaxial malformation in a Warmblood mare.** Brünisholz HP, Wildhaber N, Hoey S, **Ruetten M**, Boos A, Kümmeler JM (2017) *Equine Vet Education* 22 AUG 2017, DOI: 10.1111/eve.12789.
- **Similichlamydia in epitheliocystis coinfection of Gilthead seabream gills: Unique morphological features of a deep branching chlamydial family.** Seth-Smith HMB, Katharios P, Dourala N, Mateos JM,

Fehr AGJ, Nufer L, Ruetten M, Guevara Soto M, Vaughan L. (2017) Ca. *Front Microbiol.* 8, 508. doi: 10.3389/fmicb.2017.00508.

- **Experimental *Toxoplasma gondii* infections in pigs: Humoral immune response, estimation of specific IgG avidity and the challenges of reproducing vertical transmission in sows.** Basso W, Grimm F, Ruetten M, Djokic V, Blaga R, Sidler X, Deplazes P (2017) *Vet Parasitol* 236: 76-85. doi: 10.1016/j.vetpar.2017.01.026. Epub 2017 Feb 3.
- **Altered plasma lipidome profile of dairy cows with fatty liver disease.** Gerspach C, Imhasly S, Gubler M, Naegeli H, Ruetten M, Laczko E (2017) *Res. Vet. Sci.* 110: 47-59, doi: 10.1016/j.rvsc.2016.10.001. Epub 2016 Oct 5.
- **Variation in fat content between liver lobes and comparison with histopathological scores in dairy cows with fatty liver.** Gerspach C, Imbasly S, Klinger R, Hilbe M, Hartnack S, Ruetten M (2017) *BMC Vet Res* 13: 98-109, DOI 10.1186/s12917-017-1004-9.
- **Emerging pathogens of gilthead seabream: characterisation and genomic analysis of novel intracellular β -proteobacteria.** Seth-Smith HM, Dourala N, Fehr A, Qi W, Katharios P, Ruetten M, Mateos JM, Nufer L, Weilenmann R, Ziegler U, Thomson NR, Schlapbach R, Vaughan L. (2016) *ISME J.* 10, 1791-803. doi: 10.1038/ismej.2015.223.
- **A Zebrafish model for Chlamydia infection with the obligate intracellular pathogen *Waddlia chondrophila*.** Fehr AGJ, Ruetten M, Seth-Smith HMB, Nufer L, Voegtlin A, Lehner A, Greub G, Crosier PS, Neuhauss SCF, Vaughan L (2016) *Front Microbiol.* 7, 1829. doi: 10.3389/fmicb.2016.01829.
- **Investigation of coagulation and serum biochemistry profiles in dairy cattle with different degrees of fatty liver.** Gerspach C, Ruetten M, Riond B (2016) *Schweizer Archiv der Tierheilkunde (SAT)*, 12(12):811-818, DOI: 10.17236/sat00096.
- **Outbreak of sheepox in farmed sheep in Kyrgyzstan: detailed histological, electronmicrographical and molecular Characterization.** Aldaiarov N, Stahel A, Nufer L, Jumakanova Z, Tulobaev A, Ruetten M (2016) *Schweizer Archiv der Tierheilkunde (SAT)*, 158(7): 529-532.
- **Blood plasma lipidome profile of dairy cows during the transition period.** Imhasli S, Bieli U, Naegeli HP, Nyström, Ruetten M, Gerspach C (2015) *BMC Vet Res* 11:252. doi: 10.1186/s12917-015-0565-8.
- **Molecular characterization and virus 1 neutralization patterns of severe, non-epizootic forms of feline calicivirus infections resembling virulent systemic disease in cats in Switzerland and in Liechtenstein.** Willi B, Spiri AM, Meli ML, Samman A, Hoffmann K, Sydler T, Cattori V, Graf F, Diserens KA, Padrucci I, Nesina S, Berger A, Ruetten M, Riond B, Hosie MJ, Hofmann-Lehmann R. (2015) *Vet Microbiol* DOI: 10.1016/J.vetmic.2015.10.015.
- **A novel Endozoicomonas species causes disease in larval cultures of sharpsnout seabream and exhibits genome degradation.** Katharios P, Seth-Smith HMB, Fehr A, Mateos JM, Qi W, Richter D, Nufer L, Ruetten M, Ziegler U, Thomson NR, Schlapbach R, Vaughan L (2015) *Nature Sci Rep* DOI: 10.1038/srep17609.
- **Histologic, immunohistochemic, and electron microscopic characterization of a malignant Iridophoroma in a dwarf bearded dragon (*Pogona henrylawsoni*).** de Brot S, Sydler T, Nufer L, Ruetten M (2015) *J Zoo Wildlife Med* 46(3): 000–000, 2015.
- **Evaluation of zebrafish as a model to study the pathogenesis of the opportunistic pathogen *Cronobacter turicensis*.** Fehr A, Eshwar AK, Neuhauss SCF, Ruetten M, Lehner A, Vaughan L (2015) *Emerg Microbes Infect* 4,

- **The effect of orally administered ranitidine and once-daily or twice-daily orally administered omeprazole on intragastric pH in cats.** Šutalo S, Ruetten M, Hartnack S, Reusch CE, Kook PH (2015) *J Vet Internal Med* 29(3):840-6. doi: 10.1111/jvim.12580.
- **Metastasized Leydig cell tumor in a dog.** Togni A, Ruetten M, Rohrer-Bley C, Hurter K (2015) *Schweizer Archiv für Tierheilkunde (SAT)* 2015(2): 111-114.
- **The human Bosniak model applied to a cat with renal cystadenoma.** Tierarztliche Praxis. Baloi P, Del Chicca F, Ruetten M, Gerber B (2015) *Ausgabe K, Kleintiere/Heimtiere 01/2015*; 43(1).
- **Endocarditis valvularis in a Boa constrictor (Boa constrictor occidentalis).** Wernick MB, Matos JM, Ebling A, Kühn K, Ruetten M, Hilbe M, Chang Rita (Li-Wen), Prohaska S, Hatt JM (2015) *J Zoo Wildlife Med* 46(1): 124–129.
- **Hepatic fungal infection in a young beagle with unrecognised hereditary cobalamin deficiency (Imerslund-Gräsbeck syndrome).** Kook PH, Drögemüller M, Leeb T, Hinden S, Ruetten M, Howard J (2015) *J Small Animal Practice* 56(2):138-141. doi: 10.1111/jsap.12251.
- **Ulcerative colitis and proctitis in two Swiss Braunvieh cows.** Braun U, Hilbe M, Gerspach C, Ruetten M (2015) *Schweizer Archiv für Tierheilkunde SAT*, 157(4):203-208 DOI: 10.17236/sat00016.
- **Wireless ambulatory esophageal pH monitoring in dogs with clinical signs interpreted as gastroesophageal reflux.** Kook PH, Kemp J, Ruetten M, Reusch CE (2014) *J Vet Internal Med* 28(6):1716-23. doi: 10.1111/jvim.12461.
- **Generalized Taenia crassiceps cysticercosis in a chinchilla (Chinchilla lanigera).** Basso W, Rütten M, Deplazes P, Grimm F (2014) *Vet Parasitol* 199(1-2): 116-120. doi: 10.1016/j.vetpar.2014.01.016.
- **Degenerative Liver Disease in young Beagle with Hereditary Cobalamin Malabsorption due to a Mutation in the Cubilin Gene.** Kook PH, Drögemüller M, Leeb T, Howard J, Ruetten M (2014) *J Vet Internal Med* 28(2): 666-671.
- **A frameshift mutation in the cubilin gene (CUBN) in Beagles with Imerslund-Gräsbeck syndrome (selective cobalamin malabsorption).** Drögemüller M, Jagannathan V, Howard J, Bruggmann R, Drögemüller C, Ruetten M, Leeb T, Kook PH (2014) *Animal Genetics*, 45(1):148-50. doi: 10.1111/age.12094.
- **Spontaneous progression of cutaneous angiomyomatosis to an infiltrative sarcoma-like tumour in a bull.** Ruetten M, Hauser M, Nuss K (2014) *New Zealand Vet J* 62(4):221-225. doi: 10.1080/00480169.2013.871194.
- **Unusual presentation of alveolar echinococcosis as prostatic and paraprostatic cysts in a dog.** Geigy CA, Kühn K, Rütten M, Howard J, Grimm F, Rohrer Bley C (2013) *BMC Vet Res* 9(1):159 doi: 10.1186/1746-6148-9-159.
- **Severe polyuria and polydipsia as major clinical signs in a horse with unilateral renal adenocarcinoma Eser.** Birkmann K, Trump M, Dettwiler M, Rütten M, Wehrli M (2013) *Equ. Vet. Educ* doi: 10.1111/eve.12123.
- **Generalized Taenia crassiceps cysticercosis in a chinchilla (Chinchilla lanigera).** Basso W, Rütten M, Deplazes P, Grimm F (2013) *Vet Parasitol* DOI:10.1016/j.vetpar.2013.09.016.
- **Pyometra and persistent hymen in an Alpaca.** Egloff C, Gerspach C, Ruetten M, Dettwiler M, Reichler I, Bleul U (2013) *Tierärztl Prax* 41(G): 185-189.
- **Reliability of ocular ultrasound examinations through comparison to histopathology: A retrospective study.** Gallhoefer NS, Bentley E, Ruetten M, Grest P, Haessig M, Kircher PR, Dubielzig RR, Pot SA (2013) *J Am Vet Med Assoc* 243(3): 376-388.

- **Idiopathic esophagopathies resembling gastroesophageal reflux disease in a dog.** Muenster M, Hoerauf A, Luebke-Becker A, Grest P, **Ruetten M** (2013) *Tierarztl Prax Ausg K Kleintiere Heimtiere*. 41(3): 173-179.
- **Ocular manifestations of a metastatic adenocarcinoma in a horse.** Matheis FL, Birkmann K, **Ruetten M**, Pot SA, Spiess BM (2013) *Vet Ophthalmol* 16(3): 214-218.
- **Unusual presentation of alveolar echinococcosis as prostatic and paraprostatic cysts in a dog.** Geigy C, Kühn K, **Rütten M**, Howard J, Grimm F, Rohrer Bley C (2013) *BMC Vet Res* 9(1): 159.
- **Situs ambiguous in a Brown Swiss cow with polysplenia: Case report.** Boos A, Geyer H, Mueller U, Peter J, Schmid T, Gerspach C, Previtali M, **Ruetten M**, Sydler T, Schwarzwald CC, Schraner EM Braun U (2013) *BMC Vet Res* 9:34.
- **Imaging diagnosis-conventional and functional magnetic resonance imaging of a brain abscess in a goat.** Dennler M, Carrera I, Beckmann K, Ritz J, **Rütten M**, Kircher PR (2013) *Vet Radiol Amp Ultrasound DOI:10.1111/vru.12050*.
- **Symptomatic treatment of ascites with a peritoneo-vesical automated fluid shunt system in a dog.** Venzin C, Kook PH, Jenni S, Wilhelm S, Degen T, Braun A, **Ruetten M**, Glaus TM (2012) *J Small Animal Prac* 53(2): 126-131.
- **Squamous cell carcinoma of the reticulum and liver in a Simmental cow.** Braun U, Trösch L, Koschwanez M, **Rütten M**, Hilbe M (2012) *Schweiz Archiv Tierheilkunde (SAT)* 154(8):331-5.
- **Feasibility and safety of endoscopic ultrasound-guided fine needle aspiration of the pancreas in dogs.** Kook PH, Baloi P, **Ruetten M**, Pantchev N, Reusch CE, Kircher PR (2012) *J Vet Intern Med* 26(3): 513-517.
- **Biphasisches Mesotheliom bei einer Braunviehkuh: Klinische, histomorphologische, immunhistochemische und elektronenmikroskopische Befunde.** Braun U, **Ruetten M**, Bleul U, Previtali M, Krüger S, Gerspach C, Geiger S, Sydler T (2012) *Schweiz Archiv Tierheilkunde (SAT)* 154(1): 33-38.
- **Exploring the life cycle of Besnoitia besnoiti - experimental infection of putative definitive and intermediate host species.** Basso W, Schares G, Gollnick NS, **Ruetten M**, Deplazes P (2011) *Vet Parasitol* 178(3-4): 223-34. Epub 2011 Jan 21.
- **Behandlung einer Candida-Dermatitis bei einer Spornschildkröte (Geochelone sulcata).** Friedrich A, Friedrich R, Heckers K, **Ruetten M**, Steinmetz HW (2010) *Tierärztliche Praxis. Ausgabe K, Kleintiere*, 38(6): 328-332.
- **Rectal duplication cyst in a cat.** Kook PH, Hagen R, Willi B, **Ruetten M**, Venzin C (2010) *J Feline Med Surg* 12(12): 978-981. Epub 2010 Nov 5.
- **Bovine herpes mammillitis in three dairy cows.** Syring C, Grest P, **Ruetten M**, Bleul U (2010) *Tierärztliche Praxis. Ausgabe G, Grosstiere/Nutztiere*, 38(5): 317-320.
- **Clinical course of a malignant peripheral nerve sheath tumor in a Siberian tiger (Panthera tigris altaica).** Steinmetz HW, **Ruetten M**, Ruess-Melzer K, Ohlerth S, Lischer C, Oevermann A, Bode-Lesniewska B, Hatt JM (2010) *J Vet Diagnostic Invest* 22(6):970-975.
- **Sonographic findings in an alpaca with Mycobacterium kansasii infection.** Braun U, Previtali M, Gautschi A, Forster E, Steininger K, Irmer M, Reichle S, Sydler T, Wiederkehr D, **Ruetten M**, Hoelzle L (2009) *Schweiz Archiv Tierheilkunde (SAT)* 151(6): 287-290.
- **Introduction to the Swiss way of teaching veterinary pathology in the twenty-first century: application of e-learning modules.** Pospischil A, Djamei V, **Ruetten M**, Sydler T, Vaughan L (2007) *J Vet Med Educat* 34(4): 445-449.

- **Clinical, cytogenetic and hormonal findings in a stallion with hypospadias – a case report.** Bleul U, Theiss F, Ruetten M, Kahn W (2007) *Vet Rec* 173(3): 679-682. *Epub 2006 Jul 3.*
- **Cerebral listeriosis in an adult Freiberger gelding.** Ruetten M, Lehner A, Pospischil A, Sydler T (2006) *J Comp Pathol* 134(2-3): 249-253. *Epub 2006 Mar 20.*
- **Colic in a cow caused by lymphoma of the urinary bladder.** Braun U, Ruetten M, Högger R, Germann S, Nuss K (2004) *Vet Rec* 155(24): 777-778.

Presentations at congresses, seminars

Conference chairs

- Combined congress of American Association of Zoo Veterinarians (**AAZV**), European Association of Zoo and Wildlife Veterinarians (**EAZWV**), Atlanta, USA **2016:** Chair of the session: emerging diseases

Oral presentations and seminars

- **The Zoo and Wildlife Health conference,**
24-27. 5. 2017, Berlin, Germany
Gene analysis of hepcidin and blood levels in three different lemur species and changes in response to a toxoplasma infection
- **Symposium of Graduate School for Cellular and Biomedical Sciences,**
4.4.2017, Bern, Switzerland
Gene analysis and comparision of genes concerning iron metabolism in three different lemur species
- **ACVP Primate Pathology Pre-Meeting Workshop:** Infectious Disease in Non-Human Primate,
3.12.2016, New Orleans, USA
Toxoplasmosis in Lemurs, regulation of hepcidin before and after
- **Zytologieseminar Tierklinik Aarau West,**
Oberengstringen, Switzerland, 19.10.2016
Zytologie der Körperhöhlenflüssigkeiten
- **Schweizer Tierärzte Tagung (Swiss Veterinary Medicine Congress),**
Lausanne, Switzerland, 11-13 May 2016:
1. Zoonosis and the consequences for daily life of Veterinarians
2. Liver Cytology: What is possible and where are the limits?
3. Endoscopic biopsies in dogs and cats (keynote lecture combined with PD Dr. P. H. Kook): overview of diseases and further investigations
- **Association of Swiss Zoo- and Wildlife Veterinarians,**
March 2016, Bern, Switzerland:
Research project presentation: Gene analysis and comparision of genes regulating iron metabolism, including hepcidin blood levels in three different lemur species
- **Cytology seminar 2016 Locarno:**
General, skin and lymphnode cytology of small animals.
Locarno, Switzerland

- **Deutsche Arbeitstagung Zootiere:** Tuberkulosis in Asian Elephants and other exotic species.
2015, Rapperswil, Switzerland
- **Zytologiefälle aus der Routinediagnostik am Beispiel der Haut.** Gesellschaft Zürcher Tierärzte,
2015, Uster, Switzerland
- Zytologie der Haut, **Schweizer Tierärztetagung, 2015, Basel, Switzerland.**
- Zytologie der Gelenke bei Kleintieren, **Schweizer Tierärztetagung, 2014, Interlaken, Switzerland.**
- **Case study: Porcine ulcerative dermatitis syndrome in sows: Resembling herpes-associated erythema multiforme.** Maja Ruetten, Anina Stahel, Esther Bürgi, Andreas Pospischil, Matthias Ackermann, Monika Engels. In: ESVG/ECVP/ESTP Conference 2011, *Uppsala, Sweden.*
- **Biphasisches Mesotheliom bei einer Braunviehkuh: Klinische, histomorphologisches, immunhistochemische und elektronenmikroskopische Befunde.** In: Zürich-München-Treffen, *2010, Zürich, Switzerland.*
- **Porcine circovirus type 2 infections in healthy pigs at slaughter.** In: Meeting of young veterinary pathologists, *2008, Saluzzo, Italy*
- **Sonographic findings in an alpaca with Mycobacterium kansasii infection.** In: Zürich - München - Treffen 2008, *Munich, Germany*

Poster presentations

- Outbreak of ulcerative vulvitis in a sheep flock caused by ovine herpesvirus type 2. Maja Ruetten, Anina Stahel, Andreas Pospischil, Matthias Ackermann, Monika Engels. In: ESVG/ECVP/ESTP conference 2011, Uppsala, Sweden
- Swiss virtual animal pathology: www.animalpatho.org. Pospischil, A; Ruetten, M; Djamei, V; Mathys, M; Sydler, T; Vaughan, L. In: 17th International Conference on Education and Information Systems, Technologies and Applications (EISTA 2009), Orlando, Florida, USA
- Haemochromatosis in the black rhinoceros (*Diceros bicornis michaeli*), aquired or congenital? Ruetten Maja, Steinmetz Hanspeter W., Clauss Marcus, Pospischil Andreas. In: ESVG/ECVP conference 2009, Krakow, Poland
- **Posterprize:** Acquired polycystic kidney disease in 4 African black rhinoceroses (*Diceros bicornis michaeli*) with renal haemochromatosis. Ruetten, Maja, Steinmetz Hanspeter, Claus Markus, Hatt Jean-Michel, Ossent Pete, Pospischil Andreas. In: ESVG/ECVP conference, 2008 Dubrovnik, Croatia
- A subcutaneous thoracic mass on a Siberian tiger (*Panthera tigris altaica*). Ruetten Maja, Hanspeter W. Steinmetz, Anna Oevermann, Katja Melzer, Stefanie Ohlerth, Jean-Michel Hatt. In: ESVG 2007, Munich, Germany