

## CURRICULUM VITAE

Marcelo R. Sánchez-Villagra

<http://www.msanchezlab.net/>

Born April 25, 1970, in Buenos Aires,  
Argentina (Citizen of Switzerland)  
Life partner: Aline Ramires, son: Levi



Office Address: Paläontologisches Institut, Universität Zürich, Karl Schmid-Strasse 4, CH-8006 Zürich, Switzerland

### Academic Positions

Professor of Palaeobiology, University of Zürich (6. 2019 to date)  
Director, Palaeontological Inst. & Museum UZH (8.2017 to date)  
Associate Professor of Palaeobiology, University of Zürich (2. 2013-5.2019)  
Interim Director, Palaeontological Inst. & Museum UZH (1.8.2013-31.1.2014)  
Assistant Professor of Palaeontology, University of Zürich (2007-2012)  
Adjunct Professor of Palaeontology, Erdwissenschaften, ETH Zürich (2009 to date)  
Researcher (Curator equivalent in the USA), Evolutionary Developmental  
Palaeobiology, Department of Palaeontology, The Natural History Museum,  
London (5.2004-11 2006)  
Adjunct Lecturer (Privatdozent), Lehrstuhl Zoologie, Universität Tübingen, Germany  
(7.2003 – 11.2006)  
Junior Lecturer (Wissenschaftlicher Assistent), Lehrstuhl Zoologie, Universität  
Tübingen, Germany (11.1998 - 7.2003)  
Teaching Assistant, Department of Biological Anthropology and Anatomy, Duke  
University, USA (9.1993-10.1998)  
Research Assistant, Paleobiology Collection, Museo de Ciencias Naturales de la  
Universidad Simón Bolívar, Caracas (1-7.1991)

### Education

Habilitation, University of Tübingen. July 2003. Topic: Ontogeny and phylogeny  
in mammals (Prof. W. Maier)  
Ph.D., Duke University, Department of Biological Anthropology and Anatomy,  
October 1998. Dissertation Title: 'Patterns of morphological change in the  
ontogeny and phylogeny of the marsupial skull' (Profs. R. Kay and K. Smith)  
Licenciado en Biología (B. S.) *cum Laude*, Univ. Simón Bolívar, Caracas, 5.1992.

### Honorary Academic Positions and Awards

2003-2020 'Research Associate', Section of Mammals, Carnegie Museum of Natural  
History, Pittsburgh  
2005-2013 'Visiting researcher', RIKEN Center of Developmental Biology, Kobe

- 2003- 2006 'Museum Associate in Mammalogy', Natural History Museum of Los Angeles County
- 2003 'Fritz-Frank-Förderpreis' - Prize of German Society of Mammalogy
- 1997 Honorable Mention, Predoctoral Fellowship. Soc. Vertebrate Paleontology
- 1996 Best Student Paper Prize, Division of History and Philosophy of Biology, Society of Integrative and Comparative Biology
- 1992 'Antonio José de Sucre' Award 1992, Venezuelan Government for academic excellence (Scholarship to cover all costs of Ph.D. study at Duke University)
- 1991 'Bryan Patterson Award' 1990-1991 of the Society of Vertebrate Paleontology

#### Teaching Experience

As Course Coordinator and Main Instructor (Zürich, in German):

Biologie, Grundkurs Biodiversität BIO 121 – 12 Vorlesungen über alle Chordata (2009-2013, 2015-2023)

As Main Instructor (Zürich, in German or English):

Grundvorlesung BIO113, Modul Grundkurs Biodiversität Wirbeltiere (2023)

Blockkurs – Evolutionsmorphologie von Wirbeltieren (2007-2023)

Palaeontological Excursion in Switzerland (3 weeks, Nov. 2020, March 2021)

Palaeontological Excursion to Chile (2 weeks, Jan. 2018)

Palaeontological Excursion to Argentina (2 weeks, Sept. 2014)

Palaeontological Excursion to Venezuela (2 weeks, Feb. 2011; Nov. 2013)

BIO 280: Animal Variation under Domestication (2019, 2021-2023)

Seminar 'Evolutionary Biology and the Social Sciences' (2014)

Summer Internships in Palaeobiology (2013-2017)

1-Tag Exkursion Tessin, Breggia Park: Wirbeltierpalaeontologie (2017)

Research practical, BIO 780 (2015-2017)

As Co-Instructor (Zürich, in German and English):

Blockkurs – Palaeobiology of Vertebrates (2009-2023)

BUSS Summer school of life sciences, Zürich (2013, 2014, 2016)

BIO 591 Seminar: Paläobiologie der Säugetiere (2008, 2012, 2016, 2018)

BIO 395: Concepts in Evolutionary Biology (2016, 2018)

BIO 554: Topics in Evolutionary Biology, Graduate Programme (2010-16, 2023)

Biologie, Grundkurs Biodiversität und Evolution – 2 Vorlesungen (2007, 2008)

2-Tägige Exkursion: Wirbeltierpalaeontologie Süddeutschlands (2009, 2010, 2012, 2016)

As Co-Instructor (University College London):

Lectures and Practical: Mammalian Evolution (2005)

As Co-Instructor (London, Imperial College):

Lectures and Practicals: Vertebrate Palaeontology and Evolution (2005)

As Main Instructor (Tübingen, in German):

'Großpraktikum' (Main Zoology Course, including lab):

Hemichordata (Spring 1999, 2000, 2001, 2002)

Tunicata (Spring 2000)

Amphibians (Summer 2002)  
Turtles (Summer 2005)  
Mammals (Fall 1999, 2000, 2001, 2002, 2003, 2004, Spring 2001, 2002, 2003)

'Praktikum'

Introduction to the methods of phylogenetic reconstruction - morphological and molecular data (Fall 2002, 2003, 2004, 2005)

Seminars:

Evolution of Tetrapods (Fall 2003)  
Phylogeny of mammals (Fall 1999, Spring 2001, 2002, 2003)  
Research on mammalian evolution (Spring 2000)

'Exkursionen'

Zoological Excursion (full day) to the Wilhelma Zoo, Stuttgart (Spring 1999-Fall 2003)

Palaeontological Excursion (full day) to the Löwentor Museum, Stuttgart (Fall 2003)

As Teaching Assistant (USA, in English): Human Anatomy (Fall 1994, 1996), Human Evolution (Spring 1995), Intro. to Biol. Anthropol. and Anatomy (Fall 1995), Primate Anatomy (Spring 1996), and Human Gross Anatomy for medical students (Fall 1996, 1997).

Co-director of special course (Cuba, in Spanish): Workshop in Systematics (1998). Organized by the Center for Biodiversity of the American Museum of Natural History (with Drs. Ross MacPhee and Inés Horovitz). One-week intense course with labs.

#### Grants Obtained

*More than US\$5.000 (grants of junior lab members not listed)*

- 2023 Research Partnership Grant, Leading House for the Latin American Region, 'A palaeontological, archaeological and genomic study of early humans in northern South America' (CHF 14,810)
- 2022 Swiss National Fond: 'An experimental study of morphological changes in the initial phase of the domestication process' (CHF 381'630)
- 2022 Swiss National Fond, Spirit: 'South American Pleistocene Megafaunal Diversification and Extinction – An Evaluation of the Historical Roth collection in Zurich' (CHF 243'936)
- 2021 Swiss National Fond, AGORA (Science communication): 'Chicken: queen of the dinosaurs' CRARP3\_205799 (CHF 38'000)
- 2019 Lehrkredit, Universität Zürich 'A synergy of web-based, digital and traditional approaches to communicate concepts on evolution' (CHF 27'136)
- 2017 Stiftung für wissenschaftliche Forschung an der Universität Zürich, 'The origin of morphological diversity in chicken domestication as model for evolution – a developmental and comparative perspective on Swiss and Japanese breeds (CHF 14'039)

- 2017 Swiss National Fond, 'The developmental bases of variation in mammalian domestication: comparative ontogenetic and experimental approaches' (CHF 600'000).
- 2015 National Geographic Society Committee for Research and Exploration, PI: Dr. Edwin Cadena; Co-PI Sánchez-Villagra, Scheyer. Giant Turtles from the Miocene of Venezuela (USD 15'000)
- 2015 EPFL Leading House - Swiss Bilateral Programmes, Seed Money Grant 2015 Latinamerica 'Morphological diversity and growth in cattle and horse domestication: The Vaca Nata and the Falabella from Argentina' (CHF 15,550)
- 2015 Swiss National Fond, International Short Visit 'Testing for competition or ecological replacement in extinct carnivore faunas' (Invitee: Dr. Analía Forasiepi, CONICIT; CHF 10,530)
- 2014 Swiss National Fond, R'Equipe: 'A new high-resolution Computed Tomography facility for Paleobiological and Anthropological Research at the University of Zürich' (co-PI: Prof. C. Zollikofer; CHF 165,000)
- 2014 Swiss National Fond, AGORA (Science communication): 'A new Museum exhibit on Evolution: The Diversity of Crocodiles and their ancestors in geological time' (CHF 163,755)
- 2013 Swiss National Fondm, 'Postnatal development and the generation of morphological and life history diversity in mammalian evolution: a study of heterochrony, modularity and bone histology in extant and extinct forms': 3 years, 3 x PhD positions and technical position (CHF 598,148)
- 2012 Cogito Stiftung, Symposium 'Evolutionary Biology and the Human/Social Sciences' (CHF 30,000)
- 2011 Swiss National Fond, SINERGIA (co-PIs: Walter Salzburger, Heinz Furrer): 'Pattern and process in evolutionary radiations of fossil and living actinopterygian fishes' (CHF 945'097, 2/3 of which were for Zürich)
- 2010 Swiss National Fond: 'Heterochrony and modularity in mammalian evolution: An examination of the developmental bases of adaptive radiations in three clade-pairs' (CHF 411,151)
- 2009 Leverhulme grant for 2 years postdoctoral position (Co-PI, PI: R. J. Asher, Univ. Cambridge, UK): 'Evolution in developmental sequences in basal placental mammals'. (CHF 280,000)
- 2009 Swiss National Fond (enlargement of on-going project): 'Heterochrony and modularity in the rodent skeleton: Testing the developmental bases of adaptive radiations in mammalian evolution' (1 year) (CHF 108'564)
- 2007 Swiss National Fond: 'Skeletal heterochronies in mammals and the marsupial-placental dichotomy' (3 years) (CHF 260,000)
- 2007 FAN-Zürcher Universitätsverein: 'Skeletal heterochronies in living reptiles and in fossils from the UNESCO site of Monte San Giorgio, Ticino', 2 years (CHF 100,000)

2007 Grant from National Geographic Society, USA: 'The Oligocene to Miocene Marine and Terrestrial Biota of Northern Venezuela' (co-Investigator; Project leader: Dr. Kenneth Johnson, Natural History Museum, London) (CHF 14,500)

*Pre-Zürich:*

- 2006 Grant from the Palaeontology Research Fund, Natural History Museum, London: 'The Oligocene to Miocene Marine and Terrestrial Biota of Northern Venezuela' (co-PI: Dr. Kenneth Johnson)
- 2004 Grant from National Geographic Society, USA (Main investigator): 'Fossil vertebrates from the Oligocene and Miocene of Venezuela.'
- 2003 Grant from Government of Baden-Württemberg, Germany: 'Funktionelle Anatomie und Phylogenie des Vestibularorgans bei Marsupialia, mit Hilfe hochauflösender Computer-Tomographie'
- 2001 Grant from Government of Baden-Württemberg, Germany: 'Mittelkänozoische Fossilien aus einer wenig bekannten Wüstenregion in Nordwest-Venezuela'
- 2001 Deutsche Forschungsgemeinschaft, Research Grant (2 years): 'A comprehensive morphological analysis of higher level relationships of marsupial mammals'
- 2001 National Geographic Society, Committee of Research and Exploration Grant (Main investigator): 'Middle Cenozoic fossils from unexplored areas in Northwestern Venezuela'
- 1999 Grant from Government of Baden-Württemberg, Germany: 'Computergestützte dreidimensionale Rekonstruktion embryonaler Strukturen von Wirbeltieren' (with Dr. Sven Gemballa).
- 1997 Grant to support workshop in systematics in Cuba, 1998. Center for Biodiversity of the American Museum of Natural History (with Drs. Ross MacPhee and Inés Horovitz)
- 1997 German Academic Exchange Program (DAAD), Grant to support research stay in Germany (4 months)

*Less than US\$ 5.000*

- 2023 Alumni UZH. Support for hosting the 96<sup>th</sup> German Mammalogical Society Congress in Zurich, August 2023.
- 2021 Congressi Stefano Franscini, Workshop 'The South American Ethnosphere: Human Diversity in Time and Space', with C. Barbieri and T. Bartoletti. Monte Verità, August 2021.
- 2019 Latinoamerica Zentru Zürich, Support for special event on South American Biodiversity, 18. Oct. 2019
- 2008 Palaeontological Association, Support for organisation of Symposium 'Fossilised Ontogenies' at the II Meeting of the European Society for Evolutionary Developmental Biology, Ghent, August 2008

2006 Percy Sladen Memorial Fund, Linnean Society, to support palaeontological fieldwork in Venezuela, May-June 2006

2006 SYNTHESIS grant from the European Union, to support research at the Naturkunde Museum in Berlin, July 2006

2006 RIKEN, Center for Developmental Biology, Kobe (Japan), Research Visit Grant, April 2006

2005 RIKEN, Center for Developmental Biology, Kobe (Japan), Research Visit Grant, August 2005

2004 Kyoto University Foundation (Japan), Research Visit Grant, August 2004.

2003 High Lat-Research Visit Grant, Swedish Museum of Natural History, Stockholm.

2002 Research Study Grant, Natural History Museum of Los Angeles County, USA

2001 Deutsche Forschungsgemeinschaft, Grant to support trip to a Congress in USA

2000 Jurassic Foundation (with Dr. Fernando Novas), Grant to support study of early ornithischian from Venezuela

1999 Deutsche Forschungsgemeinschaft, Grant to support research trip to USA

1996 LASPAU (Academic Programs for the Americas) Trustees' Fund Award

1995 Collection Study Grant, American Museum of Natural History

1994 Tinker Field Research Fellowship, Duke University USA

#### Fieldwork Experience

Expedition leader in palaeontological expeditions to Venezuela (at least once a year 2023, 2020, 2019, 2010-2017, 2001-2008, 1999, 1995, 1993, 1991)

Expedition co-leader in palaeontological expedition to the Swiss Alps, Schesaplana, Graubünden (2008)

Crew member in palaeontological expeditions to Argentina (2014), Bolivia (1992, 1994), Colombia (1992, 2014), Egypt (1995), Cuba (1998), Venezuela (1989-90)

Crew member in BIOMA / Universidad Simón Bolívar biodiversity expedition, collection of bats and small mammals from Southern Venezuela (2/1990)

Investigator in behavioural ecology of howler monkeys, PI Dr. T. Pope (Univ. of Florida), Hato El Frío, Venezuelan Llanos (7-9/'91; 7-8/'93)

#### Language Skills

English, German, Spanish: read, write, and speak fluently

French: read and speak with difficulties

Invited Talks (Seminar series, featured speaker, plenary and outreach talks)

URPP Evolution in Action, Mini-Symposium 'Evolution and Morphogenesis', Morphogenesis and comparative ontogeny in the animal domestication process, 5.4.2024

Palaeontologisches Institut UZH, Palaeomntologisches Kolloquium. 'From fossil trader to paleontologist: On Swiss-born naturalist Santiago Roth and his scientific contributions'. 06.03.2024

Invited Talk, University of Fribourg, Seminars in Biology, On dogs, chicken and goldfish: Domestication and the evolutionary process of morphological diversification. 5.12.2023

Outreach talk, Goldene Schätze: Vielfalt der Goldfische dank Domestikation und Evolution, Zoologisches Museum's 'Wissens to Go Abends', UZH, 9.11.2023.

Kinder Uni UZH, Vom Wolf zum Chihuahua Über die Domestizierung unserer Haustiere, 29.11.2023

Outreach talk, On the evolutionary origins of hands and feet, 'Lange Nacht der Zürcher Museen', Palaeontologisches Museum UZH, 2 Sept. 2023.

Invited Talk. From fossil trader to paleontologist: On Swiss-born naturalist Santiago Roth and his scientific contributions, Special symposium 'Swiss and German explorers in South America – their scientific work and legacy in museum collections' at Latinamerican Zentrum UZH. 25 August 2023.

Invited Talk, Naturhistorische Gesellschaft Nürnberg, 'Neue Erkenntnisse über die Domestikation der Tiere: Über Hunde, Hühner, Kühe und Goldfische', 3. July 2023.

Senioren Uni UZH, Neue Erkenntnisse über die Domestikation der Tiere: Über Hunde, Hühner, Kühe und Goldfische, 9.3.2023.

Invited Talk, 'Cultural macroevolution in South America and beyond: of domestic dogs, blowguns and cranial modifications'. Workshop 'New Results and Methods in Reconstructing Population History', 31 Januar 2023.

Outreach Museum Talk, 'Sprechende Schildkröten? Die Evolution der vokalen Kommunikation unter Wirbeltieren', Zoologisches Museum der Universität Zürich, 29 January 2023.

Invited Talk, 'About Goldfish and other topics'. Festschrift W. Maier, Tübingen, 'Vergleichende Entwicklungsgeschichte'. 17 December 2022.

Invited Talk, 'On chicken, goldfish and cattle – morphological diversification in the domestication process'. Emerging biology lectures, hosted by Naturalis Museum and University of Leiden. 31 October 2022.

Invited Talk, 'Dogs in South America: A biological, cultural evolutionary and ethnological survey' (held with Dr. Cristiana Bertazoni), Department of Anthropology, University of Zurich, 24.10.2022.

Invited Talk, 'Animal Domestication in the South American Ethnosphere', Collegium Helveticum, Zurich, Symposium: 'Poetics, Ethics and Politics of the Forest in Latina American Cultures' 23. June 23 2022.

Invited Talk, 'Domestikation als Startvorteil? Wie domestizierte Arten zu Invasoren werden', Ringvorlesung Biologie und Erkrankungen der Wildtiere, VetSuisse 16 Nov. 2021

Invited Talk, 'Another way of being: a cultural evolution perspective on the South American Ethnosphere', Metamorfosis y Perspectivismo en la Narrativa Latinoamericana, Romanisches Seminar UZH Special Symposium, 12 Nov. 2021

Invited Talk, 'Neue Erkenntnisse über die Domestikation der Tiere: Über Hunde, Hühner, Kühe und Goldfische', Freunde des BIOTOPIA – Naturkundemuseum Bayern, Munich, 3. Nov. 2021

Invited Talk, 'Claude Lévi-Strauss: The Humanist Forerunner of Cultural Evolution Studies', *Tristes Tropiques: Readings of Lévi-Strauss*, 14 Oct. 2021

Invited Talk, 'Cultural macroevolution in South America: Three case studies', Workshop 'The South American Ethnosphere: Human Diversity in Time and Space', Congressi Stefano Franscini, Monte Verità, August 2021

Invited Talk, Main Plenary, 'XVI Encontro Nacional de Biologia Evolutiva' (online) Portugal. 16-17. Dec. 2020.

Invited Talk, 'The logic of domesticated animals: a developmental look at them and ourselves' University of Geneva, 28. Feb. 2020.

Invited Talk, 'El continente Americano como experimento: flautas, animales domesticados y fósiles como testimonios de evolución biológica y cultural' Instituto del Patrimonio Cultural, Caracas Nov. 2019.

Invited Talk, 'Domestikation und der Ursprung von *Homo sapiens*' Mammut Museum Niederweningen, 19. May 2019.

Invited Talk 'Hilgendorf Talk', 'Modern human origins and 'self-domestication'- an organismal and developmental perspective', Universität Tübingen, January 2019.

Invited Talk, 'On dog, cat, horse, cow and chicken heads– examining morphological diversity and its developmental bases in domesticated animals', Dresden Senckenberg Institution Oktober 2018.

Invited Talk, 'Panpipe evolution and transpacific human migrations', Mini-symposium, Latin American Center Zurich (LZZ) and Paleontological Institute and Museum University of Zurich, Aug. 2018.

Invited Talk, École d'été 2018 « Méthodes de l'interdisciplinarité. 'La biología de la diversidad animal y sus orígenes – su potencial para estudios e inspiración en las ciencias sociales y las artes'. University of Zurich, Romanistik. 21 June 2018.

Invited Symposium Talk, 'On dogs, cats, chicken, and - humans? Morphological diversity and its developmental bases in domesticated animals', Evolutionary Medicine Seminar Series UZH, 9.5.2018.

Invited Talk, 'New Paleontological Discoveries in the American Tropics – Tempo and mode of evolution in the biodiversity of terrestrial and marine environments of northern South America', University of Southern California, Geology, 4.2018.

Invited Talk, 'On dog, cat, horse, cow and chicken heads– examining morphological diversity and its developmental bases in domesticated animals', University of Southern California, Zoology, 4.2018.

Invited Talk, 'New Paleontological Discoveries in the American Tropics – Tempo and mode of evolution in the biodiversity of terrestrial and marine environments of northern South America', University of Helsinki, Geology, 3.2018.

Invited Talk, 'On dog, cat, horse, cow and chicken heads– examining morphological diversity and its developmental bases in domesticated animals', University of Helsinki, Institute of Biotechnology, 3.2018.

Invited Talk, Okümenische Kirche Langnau am Albis 'Naturwissenschaft – Methoden und Fragestellungen'. 15.3.2018



Invited (Skype) Talk, Universidad de Tucumán, Argentina, workshop on current evolutionary theory. 'Procesos de Domesticación Una perspectiva desde la Biología del Desarrollo'.

Invited Symposium Talk, 'On dog, cat, horse, cow and chicken heads– examining morphological diversity and its developmental bases in domesticated animals.', Gordon Research Conference, Craniofacial Morphogenesis & Tissue Regeneration, 2.2018.

Invited Talk, 'On horses, dogs and chicken – the evolutionary morphology of domestication', Universität Basel, Zooarcheology, 12.2017.

Invited Talk, 'Domestikation als Modell für die Evolution', Ringvorlesung Domestikation, University of Zürich, 12 Oktober 2017.

Invited Talk, 'Animalicum – Der Tier & Wir Kongress', 'Wie die Katze zum Menschen kam', Bregenz, Austria, March 2017.

Invited Talk, Zoological Institute Russian Academy of Science, St. Petersburg, 'On Domestication and Evolution in Islands', October 2016.

Keynote 30 Jornadas Argentinas de Paleontología de Vertebrados, Buenos Aires, 'La evolución del desarrollo y la paleontología de vertebrados', May 2016.

Schweizer Geologen Tag, EPFL Lausanne, März 2016, Plenary Speaker, 'Deep Time and Origins'

'Schweizerischer Blinden- und Sehbehindertenverband, Sektion Zürich-Schaffhausen', Krokodil im Baum Exhibit Talk, 26. September 2015

'Flying Science', Basel, Keynote on the evolution of bicycles, August 2015

Evolution and Ecology Seminar, IEES UZH, May 2015

Anthropologisches Institut Seminar, UZH, April 2015

'Think different' Seminar, Invited speaker, Zoologisches Institut Uni Basel, April 2015

'Flying Science', Basel, Keynote on Dinosaurs and Birds, March 2015

Institute of Biology, 'Top Lecture', Leiden University, Netherlands, March 2015

Museum für Naturkunde Berlin, Darwin's Birthday Keynote, February 2015

Royal Veterinary College London, January 2015

University of Tokyo Museum, May 2014

Paläontologisches Museum Universität Zürich, December 2013.

XV Congreso y 12 jornadas de Educación de la Sociedad de Ciencias Morfológicas de La Plata, Argentina (plenary speaker, via Skype), August 2013

Studienkreis Zürcher Mineraliensammler, June 2013

École normale supérieure de Lyon, February 2013

University of Plymouth, February 2013

University of Bristol, February 2013

Focus Terra Zürich, February 2013

Natur Museum Winterthur, November 2012

Paläontologische Gessellschaft 100<sup>th</sup> Meeting, Berlin, Keynote Speaker, Sept. 2012

Smithsonian Institution, Barro Colorado Island, May 2012

Smithsonian Institution, Panama, Palaeobiology group May 2012

Smithsonian Institution, Panama, (Tupper Symposium), May 2012  
Swiss Systematics Association, opening talk, November 2011  
Universität Basel, Zoologisches Institut, October 2011  
European Meeting of PhD Students in Evolutionary Biology, EMPSEB, Portugal,  
August 2011 (invited, featured speaker)  
Society of Molecular Biology, Kyoto, July 2011 (invited symposium speaker)  
Kyoto University Museum, July 2011  
RIKEN Ctr. Dev. Biology, Kobe, July 2011  
Symposium on evolutionary constraints, Zoological Society London, Nov. 2010  
(featured speaker)  
'The Evolution of Form', Konrad Lorenz Institute, Vienna, Sept. 2010  
(invited Altenberg symposium speaker)  
Ringvorlesung 'Evolution' (Darwin-Jahr UZH/ETH), Zürich Oct. 2009  
Paläontol. Museum München, Opening Special Exhibit (featured speaker), Juli 2009  
University of Jena, Institut für Spezielle Zoologie, Juli 2009  
University of Konstanz, Department of Biology, April 2009  
University of Zürich, Institut of Oral Biology, February 2009  
University of Bonn, December 2008  
Phylogenetisches Symposium Hamburg (plenary talk), November 2008  
Museum für Tierkunde, Dresden, April 2008  
University of Melbourne, Australia, February 2008  
University of New South Wales, Australia, February 2008  
University of Leiden, January 2008  
University of Cambridge, October 2007  
University of Zürich, Botanical Institute, September 2007  
University of Leicester, New Walk Museum, July 2006  
Universität Bonn, Institut für Palaeontologie, December 2005  
Queen Mary College, University of London, October 2005  
University College London, May 2005  
Oxford University Museum, April 2005  
Natural History Museum Bern, Switzerland, November 2004  
Kyoto University Museum, August 2004  
University of Lund, Department of Genetics, February 2004  
Swedish Museum of Natural History, Stockholm, August 2003  
Natural History Museum of Los Angeles, April 2003  
University of California at Berkeley, April 2003  
Florida Museum of Natural History, March 2003  
University of Oxford, Department of Zoology, February 2003  
Museum für Naturkunde, Berlin, September 2002  
Natural History Museum of Los Angeles, June 2002  
Universität Essen, Department of Zoology, May 2001  
University of Massachusetts, Amherst, November 2000  
University of Wisconsin, Madison, Department off Zoology, March 2000

Carnegie Museum of Natural History, Pittsburgh, March 2000  
Duke University, North Carolina, March 2000  
University of California at Riverside, February 2000  
University of Helsinki, Department of Zoology, October 1999  
Universität Tübingen, Zoologisches Institut, July 1997  
University of Wisconsin, Madison, Department of Zoology, March 1997  
Universidad del Zulia, Museo de Biología, June 1996  
George Washington University, Department of Biology, January 1996

#### Editorial and Professional Service

Associate Editor, *Journal of Vertebrate Paleontology* (2013-2021)  
Member of Editorial Board, *Royal Society Open Science* (2019- to date)  
Member of Editorial Board, *Vertebrate Zoology*, Senckenberg (2018- to date)  
Member of Editorial Board, *Revista del Museo de La Plata* (January 2017 to date)  
Member of Editorial Board, *Journal of Anatomy* (June 2015 to date)  
Member of Editorial Board, *MorphoMuseum* (March 2015 to date)  
Member of Editorial Board of *Journal of Experimental Zoology, Molecular and Developmental Evolution* (2013 - 2021)  
Member of Editorial Board of *Organisms and Diversity* (January 2010 to date)  
Member of Editorial Board of *Swiss Journal of Palaeontology* (January 2010 to date)  
Member of Editorial Board of *Acta Zoologica* (2008-2017)  
Member of Editorial Board of *Journal of Mammalian Evolution* (January 2007-2020)  
Editor for 'Morphology and Systematics' in *Mammalian Biology* (2007-2012)  
Guest Editor for special issues of: *Journal of Experimental Zoology: Molecular and Developmental Evolution* (2023); *Seminars in Cell and Developmental Biology* (2010), *Palaeontologische Zeitschrift* (2008), *Journal of Systematic Palaeontology* (2006), *Special Papers in Palaeontology* (2004).

Member of European Research Council ERC (European Union) Review panel (LS8, Evolutionary Biology), 2015, 2017, 2019

External reviewer: Leibniz Institutes, Senckenberg Museum (2013), IGFL Inst. Functional Genomics, École Normale Lyon (2013).  
Member of the Executive Committee (2007-2010), Webmaster (2007-2016), Nominating Committee (2019), International Society of Vertebrate Morphology  
Member of the Gregory Award Committee, Society of Vertebrate Paleontology (since 2017).

Manuscripts reviewed (average 18 / year in the last 20 years) for *Acta Zoologica*, *Ameghiniana*, *American Journal of Physical Anthropology*, *American Museum Novitates*, *Amphibia-Reptilia*, *Anatomical Record*, *Andean Geology*, *Biological Reviews*, *Cambridge University Press*, *Caribbean Journal of Science*, *Evolution*, *Evolution and Development*, *Frontiers in Psychology*, *Handbuch der Zoologie*, *Journal of Anatomy*,

*Journal of Comparative Physiology, Journal of Evolutionary Biology, Journal of Experimental Zoology Molecular and Developmental Evolution, Journal of the Geological Society, Journal of Mammalian Evolution, Journal of Morphology, Journal of Ornithology, Journal of Paleontology, Journal of South American Earth Sciences, Journal of Systematic Palaeontology, Journal of Theoretical Biology, Journal of Vertebrate Paleontology, Journal of Zoology, Mammalian Biology, Mitteilungen aus dem Museum für Naturkunde Berlin, Nature, Nature Ecology and Evolution, Naturwissenschaften, Neues Jahrbuch für Geologie und Paläontologie, Organisms Diversity & Evolution, Oxford University Press, Palaeontologia Electronica, Palaeontology, Papéis Avulsos de Zoologia, Plos Biology, Plos One, Proceedings of the Natural Academy of Sciences USA, Proceedings of the Royal Society, Revista Museo de La Plata, Science, Systematic Biology, Trends in Ecology and Evolution, Vertebrate Zoology, Zoological Journal of the Linnean Society, Zoological Science, Zoological Scripta, Zoology.*

Grant proposals and research prizes reviewed for *Human Science Frontier Program, SNF; Uni Genf Research Council (Switzerland), DFG (Germany), NERC (UK), National Geographic Society (USA), CONICET Research Council (Argentina), Comisión Biodiversidad, Ecología, Genética y Evolución BEGE FONCYT Argentina, Finnish Academy of Sciences (Finland), L'Agence Nationale de la Recherche (France), Smithsonian Institution Research Prize*

Evaluator of proposal for Promotion at the professorial level: University of Vienna, Humboldt Universität Berlin (x2), State University of New York at Stony Brook, University of Louisville (x2), LMU Munich.

Deputy Director, Graduate Programme in Evolutionary Biology, University of Zurich (since 2016).

Member of Forschungskommission University of Zurich, 2010-2020.

Founding member of Sustainability Committee, University of Zurich, 2013-2021

Member of Steering Committee, Latinoamerican Zentrum University of Zurich (since March 2017)

Member of several committees at the University of Zurich, past events and tasks: Darwin's Year 2009; New Exhibit on Mass Extinctions, faculty searches at the Dpt. Anthropology (2017), Dept. Evol & Env. Sci. (2017, 2016, 2013, 2010), Zoological Institute (2009); Promotion committees in Mathematics (2024, 2018), among many others.

Member, Patronatskomitee, Mammutmuseum Niederweningen

University of Tübingen, Institut of Zoology: Member of committees concerning fund allocation for graduate students and grant proposal to acquire computer technology for teaching purposes (2001-2003).

Student/Postdoc representative of the 'Division of Integrative and Comparative Issues,' Society for Integrative and Comparative Biology (1997-1999)

Organiser of Symposia:

- Main organiser/host: 96th Annual Meeting of the German Society for Mammalian Biology, Zurich, 25 - 27 August 2023

- Main organiser/host: 2023 Annual Conference of the Latin American Center Zurich and Workshop of The Swiss School of Latin American Studies: América del Sur Amerindia: Orígenes, diversidad cultural y transformaciones & Natural History Collections: Swiss and German explorers. Zurich, 24-25 Aug. 2023.
- Co-Organisador (w. 4 colleagues, with Inst. Patrimonio Cultural, IVIC). Primer Simposio de Investigación En Arqueología y Paleontología de Venezuela. Caracas, 14 y 15 de Septiembre de 2023.
- 'The South American Ethnosphere: Human Diversity in Time and Space' ETH CSF meetings 2021, Monte Verità ([www.csf.ethz.ch/csf-meetings.html](http://www.csf.ethz.ch/csf-meetings.html)) (co-organiser Chiara Barbieri, Tomás Bartoletti)
- 'Variation under domestication: an organismal and morphological perspective' International Congress of Vertebrate Morphology, Prague, July 2019 (co-organiser M. Geiger)
- URPP Mini Symposium: 'Domestication - A Genomics and Evo-Devo Perspective'. Organisers: Marcelo R Sánchez-Villagra and Ueli Grossniklaus. 25 May 2018.
- 'Ringvorlesung Domestikation: Aus der freien Wildbahn... in die Zivilisation: Die Domestikation des Lebens' Autumn Semester 2017, 13 speakers, UZH.
- 'Evo-Devo of Domestication' – VI Meeting of the European Society for Evolutionary Developmental Biology, Uppsala, 2016
- 'Evolution, Development and Integration of the Vertebrate Brain and skull' – International Congress of Vertebrate Morphology, Washington DC, July 2016 (co-organiser G. Bever, B-A Bhullar)
- 'Evolution and the Human & Social Sciences: New perspectives' (Autumn 2013 & Autumn 2014) (co-organiser 2013 N. Beck)
- 'Fossilised Ontogenies' – II Meeting of the European Society for Evolutionary Developmental Biology, Ghent, August 2008
- 'Comparative Ontogeny and Homology' – International Congress of Vertebrate Morphology, Paris, July 2007 (co-organiser O. Rieppel)
- Meeting of the Central European Turtle Evolutionary Biologists - December 2nd 2014, Zürich (co-organiser I. Werneburg)

Participation in Courses & Events related to Science & Art / Societal /  
Environmental Issues (selection)

- Invited speaker in Workshop 'New voices and approaches on Decolonization in Latin American Contexts'. In Conference 'Decolonizing Natural Histories. Museum d'Histoire Naturelle Neuchâtel'. 15-17 March 2023.
- Co-organiser of symposium 'Interspecies communication: challenging divided perspectives'. The 2023 conference of the Swiss Association for the Studies of Science, Technology & Society (STS-CH), Basel 31 Aug- 1 Sept 2023.
- Main Speaker at "Phaethon" association evening event, for the preservation of the biological and cultural heritage of Rhodes miniature horses (Archangelos, 13 Oct. 2022)

Scientific Mentor in ZhDK Zürcher Hochschule der Künste in course  
Science2Science, BA Scientific Visualization (Sept-Oct. 2021, 2022)  
Panel Member and co-host of event 'Evolution of Wind Instruments in South  
America', sponsored by the Latinoamerica Cente UZH, Zool. Mus. UZH (9.8.2019)  
Speaker at 'Ignite' talk slam series, 5 'On bulldog cows and dwarf horses' (6.2017)  
Invited commentator on 'Transgenic Art', Eduardo Kac & Jens Andermann, Café  
Voltaire Zürich (9.Feb.2015)  
Organiser and Host: 'Essbare Insekten' (Edible insects), evening  
talks/discussions/degustation event at the Zoological Museum University of  
Zürich for 150 attendants, on insect eating in Switzerland (3 Nov. 2014)  
Invited commentator Film 'Call of Life' (extinction and human affairs) organised by  
Nebenrolle Natur, at 'The Hub', Zürich (9.Feb.2014)

#### Museum exhibits

Project leader of 'Chicken' exhibit at the Zoological Museum, University of Zürich  
(opened 12. January 2021, 9 months)  
Project leader of 'Crocodiles' exhibit at the Zoological Museum, University of Zürich  
(opened Fall 2015, 6 months)  
Co-organiser in team of five: 'Massenaussterben' (Mass Extinction) exhibit at the  
Zoological Museum, University of Zürich (2009)

Students/Postdocs/Lab members/ PhD evaluations (details: [www.msanchezlab.net/](http://www.msanchezlab.net/))  
Previous lecturer in group: T. Scheyer (2.2007-3.2019)  
Current lecturers in group: Jorge Carrillo (50% start 9.2017 as postdoc), G. Aguirre  
(50% start 12.2014 as postdoc)  
Current post-docs: Kévin Le Verger (start 1.11.2021), Caroline Sommer-Trembo (start.  
1.4.2023).  
Main advisor of current PhD Students in Zurich: (projected completion date 1.2025):  
Aldo Benites (2.2025).  
Co-advisor current: Robert Yuan, ETH Group Tanja Stadler (start 2.2024)  
Current Masters Students in Zürich (projected completion date): -  
Past post-docs: Madeleine Geiger (Curator, St. Gallen), Anne-Claire Fabre (Assist.  
Prof. & Curator, Bern), M. Matschiner (Natural History Museum, University of  
Oslo), Madlen Stange (Curator, Bonn), T. Schmelzle (UZH), C. Pimiento (SNF  
Prof. Zurich), R. Salas-Gismondi (Lecturer, Peru), L. Kerber (Curator Museum  
Southern Brasil), E. Amson (Curator, Stuttgart), E. Maxwell (Curator, Stuttgart),  
D. Koyabu (Assist. Prof. Tokyo); C Bickelmann (Univ. Admin. Berlin); T.  
Scheyer (Prof, UZH); C Mitgutsch (Laboratory Technician, Humboldt  
Universität Berlin); I Werneburg (PD & Curator, Univ. Tübingen); L. Wilson  
(Assoc. Prof. Canberra); M. Delfino (Prof. Torino); S. Ladeveze (researcher  
CNRS); H. Müller (Martin-Luther-University Halle-Wittenberg); A. Goswami  
(Professor, NHM London).

Past-Habilitation thesis: Torsten Scheyer, October 2014.

Past doctoral students, current positions:

- Gabriel Cohen (7.2023), postdoctoral researcher Anthropology UZH
- Evelyn Hüppi (7.2022), environmental consultancy/museum curator assistant
- Ana Balcarcel (5.2022), UZH postdoctoral researcher Montpellier
- Daniel Núñez (2.2021; Swiss Embassy Grant), postdoctoral researcher UCLA
- Germán Montoya (7.2020; external, South Africa), postdoctoral researcher
- T. Argyriou (6.2018), postdoctoral researcher
- L. Heck (2.2018), private sector
- J. Carillo-Sánchez (5.2017), postdoctoral researcher Friburg
- M. Stange (5.2017), Junior Professor Bonn
- K. Veitschegger (5.2017), private sector
- J. Carillo-Briceño (9. 2016), Lecturer UZH
- C. Kolb (4.2016), head of geology private sector company
- M. Geiger (8.2015), Head Curator St Gallen Naturhistorisches Museum
- F. Galliari (4.2013, Universidad de La Plata; co-advised by Dr. A. Carlini)  
Conicet researcher, La Plata
- J. Hugi (9.2011), curator, Winterthur Museum
- T. Schmelzle (12.2010, Tübingen, co-advised by Prof. W. Maier), private sector
- I. Werneburg (7.2010), curator, Univ. Tübingen, Geology
- L. Wilson (7.2010), Associate Professor, Canberra
- A. Carlini (3.2010), Professor and permanent researcher at Museo and  
Universidad de La Plata (CONICET), Argentina
- V. Weisbecker (5.2008, Sydney, co-advised by Prof. M. Archer), Professor,  
Flinders University, Australia

Past Masters: Zürich: Kimberley Kissing (12.2023), Laurelle Küng (9.2023), Keesha Ming Martin (2.2023), Zoe Marie Christen (10.2022), Aldo Benítez (12.2021), Carlos Manuel Herrera (12.2020); Sinéad Lynch (2.2020), D. Zurita (9.2018), E. Hüppi (2.2018), A. Schweizer (2.2016), M. Aeschbacher (12.2015), M. Fuchs (2.2015), F. Straehl (2013), P. Meier (2012), L. Rager (2012), K. Polachowski (2011), T. Alloing (2011; co-advisor, Montpellier), M. Milhajevic (2010), C. Wimmer (2010); Tübingen and London: E. Barrow (2005), P. Menke (2004), L. Wurst (2004), S. Schmid (2004), N. Boos (2003), J. Prochel (2002), M. Döttling (2002), M. Großmann (2001)

External Examiner of doctoral dissertations (39): Universities of Basel (1), Cambridge (2), Carleton Ottawa (1) Dijon (2), Geneva (2), Helsinki (3), Jena (2), La Plata (2), Montpellier (2), Oxford (1), Paris (4), Poitiers (1), Tübingen (3), Western Australia (1), Sydney (1), Zürich (18);

External Examiner of Masters (9) at the University of Tübingen, Melbourne and Sydney.

External examiner of 3 Habilitations (Fiburg, 2xMontpellier) and of 2 Privatdozentur (Berlin, Frankfurt)

Host for researchers on sabbaticals and long research stays: Prof. Ardian Jusufi (since 2021, EMPA Robotics, Zurich); Dr. Leonardo Kerber (2019, Center of Palaeontology, Brasil); Dr. A. Forasiepi (2011, 2013, 2015, 2017, CONICET, Argentina); Dr. Christopher Sheil (2008, John Carroll Univ., USA).

#### Scholarly Societies

Society of Vertebrate Paleontology (since 1991), International Society of Vertebrate Morphologists (since 1993), Society of Integrative and Comparative Biology (1994-2000), Deutsche Zoologische Gesellschaft (2000-2006), Deutsche Gesellschaft für Säugetierkunde (since 2000), Palaeontological Association (2004-2015).

#### Exhibiton Catalogue / Virtual Exhibit

2. Aguirre G, Hüppi E, Sánchez-Villagra MR. 2022. Virtual exhibit Chicken - Erbe der Dinosaurier, Paläontologisches Institut und Museum [www.pim.uzh.ch/museum/soa/22/dinohuhn/index.php](http://www.pim.uzh.ch/museum/soa/22/dinohuhn/index.php)
1. Scheyer TM, Straehl F, Sánchez-Villagra MR. 2015. Das Krokodil im Baum – Ein Katalog zur Ausstellung. Scidinge Hall.
  - 1b. Scheyer TM, Straehl F, Sánchez-Villagra MR. 2015. Crocodile in a tree – a catalogue to the Museum’s exhibit. Scidinge Hall.

#### Books

6. Sánchez-Villagra MR, Carrillo-Briceño JD, Jaimes A, Arvelo L. 2024. *Venezuela Arqueológica*. Scidinge Hall. In press.
5. Sánchez-Villagra MR. 2022. *The Domestication Process*. Princeton University Press.
4. Sánchez-Villagra MR, MacLeod N (eds). 2014. *Issues in Palaeobiology: A Global View*. Scidinge Hall. 289 pp.
3. Sánchez-Villagra MR (eds). 2012. *Venezuela Paleontológica*. Printworkart Press. 382 pp.
- 2c. (Italian Translation of 2: Sánchez-Villagra MR. 2014. *Embrioni nel tempo profondo. Il registro paleontologico dell'evoluzione biologica*. Firenze University Press)
- 2b. (German Translation of 2: Sánchez-Villagra MR. 2013. *Embryonen aus der Tiefenzeit*. Vdf Verlag)
2. Sánchez-Villagra MR. 2012. *Embryos in Deep Time*. University of California Press.
1. Sánchez-Villagra MR, Aguilera OA, Carlini AA (eds). 2010. *Urumaco and Venezuelan Palaeontology – The fossil record of the Northern Neotropics*. Indiana University Press. 286 pp.

#### Edited volumes

5. Sánchez-Villagra MR (ed). 2022. *The evolutionary and developmental morphology of domestication in birds and mammals*. Jour Exp Zool Mol Dev Evol.



4. Sánchez-Villagra MR (ed). 2010. *Developmental Vertebrate Palaeontology*. Seminars in Cell and Developmental Biology. doi:10.1016/j.semcd.2009.12.001.
3. Sánchez-Villagra MR, Aguilera O (eds). 2008. *Vertebrate Palaeontology in Venezuela*. Palaeontologische Zeitschrift. 82:103-245.
2. Sánchez-Villagra MR (ed). 2006. *New Vertebrate Finds from the Neogene of Venezuela*. Journal of Systematic Palaeontology. 4(3), 211-306.
1. Sánchez-Villagra MR, Clack JA (eds). 2004. *Fossils of the Castillo Formation, Venezuela: Contributions on Neotropical Palaeontology*. Special Papers in Palaeontology, 71. 112 pp.

#### Papers submitted

- Le Verger K, Ladevèze S, Letenneur C, Fisher V, Sánchez-Villagra MR, Solé F. Cranial Osteology Of The Oldest European Carnivoran: *Cynodictis* (Amphicyonidae).
- Benites-Palomino A, Aguirre-Fernandez G, Velez-Juarbe J, Carrillo-Briceño JD, Sanchez R, Sánchez-Villagra MR. In revision. Trophic Interactions of Sharks and Crocodylians with a Sea Cow from The Miocene of Venezuela. Journal of Vertebrate Paleontology.
- Le Verger K, Küng LC, Fabre A-C, Schmelzle T, Wegmann A, Sánchez-Villagra MR. Submitted. Phenomics of Goldfish in an Evolutionary Perspective: Commonalities and Lack of Universals in the Domestication Process. Evolution Letters.
- Sánchez-Villagra MR, Vander Velden F, Bertazoni C. On the lack of domestic dogs in Pre-Columbian Lowland Amazonia and their deep history of entanglements with humans in South America.
- Roose-Miron L, Michelotti da Costa I, Pretto FA, Müller T, Sánchez-Villagra MR, Kerber L. A revaluation of the skull and neuroanatomy of *Siriusgnathus niemeyeri* (Cynodontia: Traversodontidae): ontogenetic patterns and paleobiological implications for traversodontids

#### Papers in press in peer-reviewed journals

##### Papers about 3D databases in peer-reviewed journals / scientific video

- Benites-Palomino A, Aguirre-Fernández G, Baby P, Ochoa D, Altamirano-Sierra A, Flynn JJ, Sánchez-Villagra MR, Tejada J, de Muizon C, Salas-Gismondi R. 2024. 3D model related to the publication: The largest freshwater odontocete: a South Asian river dolphin relative from the Proto-Amazonia. MorphoMuseum e221. doi: 10.18563/journal.m3.221
- Ferreira JD, Negri FR, Sánchez-Villagra MR, Kerber L. 2020 3D model related to the publication: Small within the largest: Brain size and anatomy of the extinct *Neopiblema acrensis*, a giant rodent from the Neotropics. MorphoMuseum. doi:10.18563/journal.m3.107

- Carrillo JD, Amson E, Jaramillo C, Sánchez R, Quiroz L, Cuartas C, Rincón AF, Sánchez-Villagra MR. 2018. 3D models related to the publication: The Neogene record of northern South American native ungulates. *MorphoMuseum* 4, e61
- Schweizer AV, Lebrun R, Wilson LAB, Costeur L, Schmelzle T, Sánchez-Villagra MR. 2017. 3D models related to the publication: Size Variation under Domestication: Conservatism in the inner ear shape of wolves, dogs and dingoes. *Morphomuseum*.
- Latimer AE, Loza CM, Sánchez-Villagra MR, Carlini AA. 2017. 3D models related to the publication: Sensory anatomy of the most aquatic of carnivorans: the Antarctic Ross seal, and convergences with other mammals. *MorphoMuseum* 3(4)-e7 [doi: 10.18563/m3.3.4.e7].
- Sánchez-Villagra MR, Maxwell E, Furrer H. 2013. Body elongation in early fish evolution: [www.youtube.com/watch?v=LgP1Plw8Mys](http://www.youtube.com/watch?v=LgP1Plw8Mys) (animation: Dirk Baum)

Papers in peer-reviewed journals (16 Journal Covers) –  
The lab list of publication is available at:  
<http://www.msanchezlab.net/publications/index.php>

240. Jorgewich-Cohen G, Werneburg I, Jobbins M, Ferreira GS, Taylor MD, Bastiaans D, Sánchez-Villagra MR. 2024. Morphological diversity of turtle hyoid apparatus is highly linked to feeding behaviour. *Integrative Organismal Biology* obae014, <https://doi.org/10.1093/iob/obae014>.
239. Ming KM, Le Verger K, Geiger M, Schmelzle T, Georgalis GL, Shimbo G, Sasaki M, Ohdachi SD, Sánchez-Villagra MR. 2024. Insular dwarfism in horses from the Aegean Sea and the Japanese Archipelago. *Mammalian Biology* <https://doi.org/10.1007/s42991-024-00408-4>
238. Carrillo-Briceño JD; Ruiz-Ramoni D, Sánchez R, Jaimes A, Chávez-Aponte E, Prevosti FJ, Segura V, Carlini AA, Garbé L, Tombret O, Zazzo A, Sánchez-Villagra MR. 2024. Cauca: megafaunal and felid fossils (Mammalia) from a Pleistocene site in northwest Venezuela. *Fossil Record* 27, 187–207.
237. Benites-Palomino A, Aguirre-Fernández G, Baby P, Ocho D, Altamirano A, Flynn J, Sánchez-Villagra MR, Tejada-Lara JV, De Muizon C, Salas-Gismondi R. 2024. The Largest Freshwater Odontocete: A South Asian River Dolphin Relative from The Proto-Amazonia. *Science Advances* 10, eadk6320.
236. Ferreira JD; Rinderknecht A; de Moura Bubadué J, Flores Gasparetto L, Dozo MT, Sánchez-Villagra MR, Kerber L. 2024. Unveiling the neuroanatomy of *Josephoartigasia monesi* and the evolution of encephalization in caviomorph rodents. *Brain Structure and Function*. <https://doi.org/10.1007/s00429-024-02762-y>

235. Jobbins M, Rücklin M, Sánchez Villagra MR, Lelièvre H, Grogan E, Szrek P, Christian Klug. 2024. Extreme lower jaw elongation in a 'placoderm' reflects high disparity and modularity in early vertebrate evolution. *Roy Soc Open Sci* 11:231747.
234. Balcarcel AM, Geiger M, Sánchez-Villagra MR. 2024. Skull form variation in goats: a quantification of differences across breeds and domestic status. *Scientific Reports* 14:917.
233. Sánchez-Villagra MR, Bond M, Reguero M, Bartoletti TJ. 2023. From fossil trader to palaeontologist: On Swiss-born naturalist Santiago Roth and his scientific contributions. *Swiss Jour Palaeontol* 142, 19.
232. Menéndez LP, Barbieri C, Guadalupe López Cruz I, Schmelzle T, Breidenstein A, Barquera R, Borzi G, Schünemann V, Sánchez Villagra MR. 2023. On Roth's "human fossil" from Baradero, Buenos Aires Province, Argentina: morphological and genetic analysis. *Swiss Jour Palaeontol* 142, 26.
231. Ronez C, Carillo-Briceño JD, Hadler P, Sanchez-Villagra MR, Pardiñas U. 2023. First Pliocene sigmodontine rodents (Mammalia: Cricetidae) in Northernmost South America: tests of biogeographic hypotheses and revised evolutionary scenarios. *Roy Soc Open Sci.* 10: 221417.
230. Carrillo-Briceño JD, Vezzosi RI, Ming KM, Christen ZM, Mothé D; Ruiz-Ramoni D, Sánchez-Villagra MR. 2023. Nearctic Pleistocene ungulates from the Pampean region (Argentina) in the historical collections of Santiago Roth in Switzerland: an overview. *Swiss Jour Palaeontol.* 142, 12.
229. Christen ZM, Sánchez-Villagra MR, Le Verger K. 2023. Cranial and Endocranial Comparative Anatomy of the Pleistocene Glyptodonts from the Santiago Roth Collection. *Swiss Jour Palaeontol.* 142, 14.
228. Hayashi S, Kubo MO, Sánchez-Villagra MR, Taruno H, Izawa M, Shiroma T, Nakano T, Fujita M. 2023. Variation and process of life history evolution in insular dwarfism as revealed by a natural experiment. *Frontiers in Earth Science*, section Paleontology. DOI 10.3389/feart.2023.1095903
227. McKay CJ, Luckett WP, Sánchez-Villagra MR. 2023. Vestigial Structures and Variation in the Evolution of the Marsupial Mammal Dental Development - A Study of the Woolly Opossum *Caluromys philander*. *Journal of Mammalian Evolution* 30:21–31.
226. Loza CM, Sánchez Villagra MR, Scarano, AC, Romero M, Barbeito CG, Carlini AA. 2023. The brain of fur seals, seals, and walrus (Pinnipedia): a comparative anatomical and phylogenetic study of cranial endocasts in an evolutionary radiation of semiaquatic mammals. *Journal of Mammalian Evolution* 30:1011–1028.
225. Jorgewich-Cohen G, Townsend SW, Rodrigues Padovese L, Klein N, Praschag P, Ferrara CR, Ferrara CR, Ettmar S, Menezes S, Pinatti Varani A, Serano J, Sánchez-Villagra MR. 2022. Common Evolutionary Origin of Acoustic Communication in choanate vertebrates. *Nature Communications.* 13, 6089.

224. Núñez-León D, Nagashima H, Sánchez-Villagra MR. 2022. Morphological variation in the chondrocranium in chicken domestication. *Jour Exp Zool Mol Dev Evol*. <https://doi.org/10.1002/jez.b.23177>.
223. McKay CJ, Sommer-Trembo C, Sánchez-Villagra MR. 2022. The portrayal of animal interactions in nature documentaries by David Attenborough and Bernhard Grzimek. *Evolution: Education and Outreach* 15:15.
222. Sánchez-Villagra MR. 2022. Claude Lévi-Straus as a humanist forerunner of cultural macroevolution studies. *Evolutionary Human Sciences*. 4:e31.
221. Geiger M, Sánchez-Villagra MR, Sherratt E. 2022. Cranial shape variation in domestication: the case of rabbits. *Jour Exp Zool Mol Dev Evol*. <https://doi.org/10.1002/jez.b.23171>.
220. Carlini AA, Carrillo-Briceño JD, Jaimes A, Aguilera O, Zurita AE; Iriarte J, Sánchez-Villagra MR. 2022. Damaged glyptodontid skulls from Late Pleistocene sites of northwestern Venezuela: evidence of hunting by humans? *Swiss Journal of Palaeontology*. 141:11.
219. Nummela S, Aguirre-Fernández G, Smith KK, Sánchez-Villagra MR. 2022. Growth pattern of the middle ear in the gray short-tailed opossum, *Monodelphis domestica*. *Vertebrate Zoology* 72: 487-494. <https://doi.org/10.3897/vz.72.e83544> .
218. Segura V, Flores D, Geiger M, Amson T, Sánchez-Villagra MR. 2022. Biological and cultural history of domesticated dogs in the Americas. *Anthropozoologica* 57(1):1-18.
217. Herrera CM, Geiger M, Núñez-León D, Nagashima H, Gebhardt-Henrich SG, Toscano MJ, Sánchez-Villagra MR. 2022. Skeletal variation in bird domestication: limb proportions and sternum in chicken, with comparisons to mallard ducks and Muscovy ducks. *PeerJ* 10:e13229.
216. Balcarcel AM, Geiger M, Clauss M, Sánchez-Villagra MR. 2022. The mammalian brain under domestication: Discovering patterns after a century of old and new analyses. *Journal of Experimental Zoology B: Molecular and Developmental Evolution*:1-24 [doi: 10.1002/jez.b.23105].
215. Ascarrunz E, Sánchez-Villagra MR. 2022. The macroevolutionary and developmental evolution of the turtle carapacial scutes. *Vertebrate Zoology* 72: 29–46.
214. Jorgewich-Cohen G, dos Santos Henrique R, Dias PH, Sánchez-Villagra MR. 2022. The evolution of reproductive strategies in turtles. *PeerJ* 10:e13014
213. Aguirre-Fernández G, Barbieri C, Graff A, Perez de Arce J, Moreno H, Sánchez-Villagra MR. 2021. Cultural macroevolution of musical instruments in South America. *Humanities and Social Sciences Communications* 8:208.
212. Geiger M, Schoenebeck J, Schneider RA, Fischer M, Schmidt M, Sánchez-Villagra MR. 2021. Exceptional changes in skeletal anatomy under domestication: the case of brachycephaly. *Integrative Organismal Biol* 3:obab023.
211. Núñez-León D, Cordero GA, Schindwein X, Jensen P, Stoeckli E, Sánchez-Villagra MR, Werneburg I. 2021. Shifts in growth, but not differentiation,

- foreshadow the formation of exaggerated forms under chicken domestication. *Proc Roy Soc B*. <https://doi.org/10.1098/rspb.2021.0392>
210. Balcarcel AM, Veitschegger K, Clauss M, Sánchez-Villagra MR. 2001. Intensive human contact correlates with smaller brains: differential brain size reduction in cattle types. *Proc Roy Soc B*. <https://doi.org/10.1098/rspb.2021.0813>
209. Wilson LAB, Balcarcel A, Geiger M, Heck L, Sánchez-Villagra MR. 2021. Modularity patterns in mammalian domestication and developmental hypotheses for diversification. *Evolution Letters* 5:385-396.
208. Segura V, Sánchez-Villagra MR. 2021. Human-Canid Relationship in the Americas: An Examination of canid biological attributes and domestication. *Mammalian Biology*. <https://doi.org/10.1007/s42991-021-00129-y>
207. Hüppi E, Werneburg I, Sánchez-Villagra MR. 2021. Evolution and development of the bird chondrocranium. *Frontiers of Zoology* 18:21.
206. Herrera-Castillo CM, Carrillo-Briceño JD, Sánchez-Villagra MR. 2021. Non-invasive imaging reveals new cranial material of the basal ornithischian dinosaur *Laquintasaura venezuelae*, early Jurassic of Venezuela. *Anartia* 32:53-60.
205. Carrillo-Briceño JD, Sánchez R, Scheyer TM, Carrillo JD, Delfino M, Georgalis GL; Kerber L, Ruiz-Ramoni D, Birindelli JLO, Cadena EA, Rincón AF, Chavez-Hoffmeister M, Carlini AA; Carvalho MR, Trejos-Tamayo R; Vallejo F, Jaramillo C, Jones DS, Sanchez-Villagra MR. 2021. A Pliocene–Pleistocene continental biota from Venezuela. *Swiss Journal of Palaeontology* 140:9.
204. Benites-Palomino A, Reyes-Cespedes AE, Aguirre-Fernández G, Sanchez R, Carrillo-Briceño JD, Sanchez-Villagra MR. 2021. A Stem Delphinidan' from the Caribbean region of Venezuela. *Swiss Journal of Palaeontology* 140:6
203. Balcarcel AM, Sánchez-Villagra MR, Segura V, Evin A. 2021. Singular patterns of skull shape and brain size change in the domestication of South American camelids. *Journal of Mammalogy* 102:220-235.
202. Recht J, Schuenemann VJ, Sánchez-Villagra MR. 2020. Host Diversity and Origin of Zoonoses: The Ancient and the New. *Animals* 10, 1672.
201. Lynch S, Sánchez-Villagra MR, Balcarcel AM. 2020. Description of a fossil camelid from the Pleistocene of Argentina, and a cladistic analysis of the Camelinae. *Swiss Journal of Palaeontology*. 139, 5.
200. Aguirre-Fernández G, Blasi D, Sánchez-Villagra MR. 2020. Panpipes as units of cultural analysis and dispersal. *Evolutionary Human Science*. 2:E17.
199. Cordero GA, Sánchez-Villagra MR, Werneburg I. 2020. An irregular hourglass pattern describes the tempo of phenotypic development in placental mammal evolution. *Biology Letters* 16 (5):20200087.
198. Cadena EA, Scheyer TM, Carrillo-Briceño JD, Sánchez R, Aguilera-Socorro OA, Vanegas A, Pardo M, Sánchez-Villagra MR. 2020. The anatomy, paleobiology and evolutionary relationships of the largest extinct side-necked turtle. *Science Advances* 6: eaay4593.

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1. Sánchez-Villagra MR. 2009. Aussterben in den letzten zwei Millionen Jahren. Pp. 50-53. In: Furrer H, Haffner M (eds). Massenausterben und Evolution. Universität Zürich, Palaeontologisches Institut und Museum.

#### Conference Presentations (Talks and Posters, Published Abstracts)

249. Carrillo-Briceño JD, Jaimes A, Reyes-Céspedes AE, Mothé D, Le Verger K, Chávez-Aponte E, Carlini AA, Sánchez-Villagra MR. 2024. Hunting, butchering and use of megafauna resources during the Late Pleistocene in northern South America (Venezuela). VI Encuentro Internacional de Arqueología Amazónica (EIAA), Colombia, Sept. 2024.
248. Jaimes A, Carrillo-Briceño JD, Vargas D, Martin C, de Jesús I, Sánchez-Villagra MR. 2024. Diversidad tecnológica de El Jobo y otras industrias de proyectiles del Cuaternario de Venezuela. VI Encuentro Internacional de Arqueología Amazónica (EIAA), Colombia, Sept. 2024.
247. Jaimes A, Barbieri C, Vargas D, Sánchez Villagra MR. 2024. Excavaciones arqueológicas y evidencias macrobotánicas prehispánicas provenientes de la

- cueva La Capilla, Edo. Lara, Venezuela. VI Encuentro Internacional de Arqueología Amazónica (EIAA), Colombia, Sept. 2024.
246. Aguirre-Fernández G, Jett SC, Carrillo-Briceño JD., Barbieri C, Cámara-Leret R, Sánchez-Villagra MR. 2024. Blowguns in the Amazon through time. VI Encuentro Internacional de Arqueología Amazónica (EIAA), Colombia, Sept. 2024.
245. Vargas D, Sánchez-Villagra MR. 2024. Venezuelan zooarchaeology: A review. VI Encuentro Internacional de Arqueología Amazónica (EIAA), Colombia, Sept. 2024.
244. Le Verger K, Küng LC, Fabre A-C, Schmelzle T, Wegmann A, Sánchez-Villagra MR. 2024. Exploring morphospaces through the phenomics of goldfish domestication. Morphometrics Meeting, Dijon.
243. Le Verger K, Küng L, Fabre A, Schmelzle T, Wegmann A, Sánchez-Villagra MR. 2024. Phenomics of goldfish domestication in an evolutionary perspective. Biology 2024, Zurich.
242. Jobbins M, Rücklin M, Sánchez Villagra MR, Lelièvre H, Grogan E, Szrek P, Klug C. 2023. Extreme lower jaw elongation in an alien-looking placoderm from Morocco. Swiss Geosciences Meeting 2023.
241. Rangel-de Lázaro G, Sánchez-Villagra MR, Ward S, Raymond C, Lynch S, Wilson L. 2023. Las Modificaciones Craneales en el Tiempo y el Espacio de las Culturas Indígenas del Caribe" at the Latinamerica Zentrum UZH Annual Conference & SSLAS workshop (Switzerland). August 2023.
240. Alfonso-Rojas A, Carrillo-Briceño JD, Sánchez R, Sánchez-Villagra MR, Head JJ. 2023. An early origin of gigantism in Anacondas revealed by the fossil record. Society of Vertebrate Paleontology Annual Meeting, Cincinnati, Ohio, October 18-21, 2023.
239. Sánchez-Villagra MR. 2023. The theft of rationality: Empiricism in the New World and the European Encounter. In Panel: P11 - Interspecies Communication: Challenging Divided Perspectives. The 2023 conference of the Swiss Association for the Studies of Science, Technology & Society (STS-CH), Basel 31 Aug- 1 Sept 2023.
238. Jorgewich Cohen G; Sánchez-Villagra MR. 2023. Shared origins of acoustic communication in land vertebrates. In: Panel Interspecies Communication: Challenging Divided Perspectives. The 2023 conference of the Swiss Association for the Studies of Science, Technology & Society (STS-CH), Basel 31 Aug- 1 Sept 2023.
237. Sommer-Trembo C; Sánchez-Villagra MR. 2023. Behavior and communication in Fish. In: Panel Interspecies Communication: Challenging Divided Perspectives. The 2023 conference of the Swiss Association for the Studies of Science, Technology & Society (STS-CH), Basel 31 Aug- 1 Sept 2023.
236. Le Verger K, Ramstein N, Lonneux O, Ijspeert A, Scheyer TM, Sanchez-Villagra MR, Jusufi A. 2023. The mammalian knight: when evolution leads to armor and



- weaponry. 96<sup>th</sup> DGS Meeting of the German Society For Mammalian Biology, Zurich, 25 - 27 August.
235. Benites-Palomino AM, Aguirre-Fernández G, Sánchez R, Carrillo-Briceño JD, Sánchez-Villagra MR. 2023. A Dugongine Sirenian From The Miocene Of Venezuela With Shark-Crocodylians Bite Marks Interactions. 20<sup>th</sup> European Association of Vertebrate Palaeontologists Conference. Sabadell, Spain, 26.6.-1.7.2023.
  234. Vezzosi RI, Carrillo-Briceño JD, Mothé D, Sánchez-Villagra MR. 2023. Nearctic Pleistocene Ungulates from The Pampean Region (Argentina) In A Historical Collections of Santiago Roth. 36 Jornadas Argentinas de Paleontología de Vertebrados 22 to 24 of May, La Rioja, Argentina. Libro de Resúmenes, 86 p. (poster)
  233. Ming KM, Geiger M, Le Verger K, Schmelzle T, Georgalis GL, Ohdachi SD, Sánchez-Villagra MR. 2023. Combined effect of Insular dwarfism and domestication in horses of Greece and Japan. International Conference Evolution in Action. Congressi Stefano Franscini, Monte Verità, Switzerland. 11.-15.6. 2023.
  232. Balcarcel AM, Fabre AC, Evin A, Sánchez-Villagra MR. 2023. Does behavioral selection correlate with brain size? Testing the evolutionary plasticity of the brain with the cattle and dog breed models. 13 Intl. Cong. Vertebrate Morphology, Cairns Australia, 28.7-1-8.2023
  231. Le Verger K, Küng LC, Fabre AC, Schmelzle T, Aguirre-Fernández G, Sánchez-Villagra MR. 2023. Phenomics Of Goldfish Domestication. 13 Intl. Cong. Vertebrate Morphology, Cairns Australia, 28.7-1-8.2023
  230. Jorgewich-Cohen G, Jobbins M, Baastians D, Werneburg I, Sánchez-Villagra MR. 2023. Evolutionary shifts in the morphological diversity of turtle hyoid structures are subjected to feeding behaviour. 13 Intl. Cong. Vertebrate Morphology, Cairns Australia, 28.7-1-8.2023
  229. Wilson LAB, Balcarcel A, Geiger M, Heck L, Sánchez-Villagra MR. 2023 Modularity patterns in mammalian domestication: assessing developmental hypotheses for diversification. 13 Intl. Cong. Vertebrate Morphology, Cairns Australia, 28.7-1-8.2023
  228. Rangel-de Lazaro G, Sánchez-Villagra MR, Ward S, Raymond C, Wilson L. 2023. A Study of the Temporal Sequence and Global Spatial Distribution of Cranial Modification. Society for American Archaeology 88th Annual Meeting. Portland, OR, March 29 - April 2, 2023.
  227. Ward SM, Rangel-de Lazaro G, Raymond C, Wilson LAB, Sánchez-Villagra MR. 2022. Investigating the Global Spatiotemporal Distribution of Intentional Cranial Modification. Meetings of the Australasian Society for Human Biology.
  226. Küng LC, Le Verger K, Fabre A-C, Schmelzle T, Aguirre-Fernández G, Sánchez-Villagra MR. 2022. Morphological diversification in the goldfish domestication process. Poster. Sixth Conference: Interdisciplinary Approaches in Fish Skeletal Biology, Olhão, Algarve, Portugal. November 9-12.

225. Balcarcel AM, Orliac M, Sánchez-Villagra MR. 2022. Brain and skull evolution in selected Artiodactyla: form changes in microevolution and macroevolution. 95th Annual Meeting of the German Society for Mammalian Biology, Hamburg.
224. Martin Ming K, Geiger M, Georgalis G, Scheyer TM, Sánchez-Villagra MR. 2022. The curious cases of insular dwarfism in horses: comparative morphology of Greek horses from Skyros and Rhodes. 95th Annual Meeting of the German Society for Mammalian Biology, Hamburg.
223. Christen ZM, Sánchez-Villagra MR, Le Verger K. 2022. Cranial and Endocranial Comparative Anatomy of Pleistocene Glyptodonts. The 68th Symposium of Vertebrate Palaeontology and Comparative Anatomy, London, Sept.
222. Carrillo-Briceño JD; Jaimes A; Sánchez R; Reyes-Céspedes AE; Ruiz-Ramoni D; Chavez-Aponte E; Carlini AA, Aguilera O; Sánchez-Villagra MR. 2022. On the trail of new evidences of Late Pleistocene human-megafauna interactions from Northern South America (Venezuela, Falcón state). The 68th Symposium of Vertebrate Palaeontology and Comparative Anatomy, London, Sept.
221. Le Verger K, Sánchez-Villagra MR. 2022. Far side of the perfect evolutionary scenario: reassessment of the anagenetic hypothesis of the Neosclerocalyptinae. The 68th Symposium of Vertebrate Palaeontology and Comparative Anatomy, London, Sept.
220. Raymond C, Sánchez-Villagra MR, Rangel-de Lázaro G, Ward S, Wilson LAB. 2022. The temporal sequence and global spatial distribution of cranial modification practices. Cultural Evolution Society Annual Meeting in Aarhus, Denmark, Sept 21-23 (Lightning talk, online).
219. Bertazoni C, Sánchez-Villagra MR. 2022. Towards a cultural macroevolution of dog domestication in South America. Cultural Evolution Society Annual Meeting in Aarhus, Denmark, Sept 21-23 (Lightning talk, online).
218. Aguirre-Fernández G, Jett SC., Carrillo-Briceño JD., Sánchez-Villagra MR. 2022. Blowguns in time and space. Cultural Evolution Society Annual Meeting in Aarhus, Denmark, Sept 21-23 (Lightning talk, online).
217. Balcarcel AM, Orliac M, Lynch S, Sánchez-Villagra MR. 2022. New skulls and cranial endocasts of fossil camelids suggest great brain complexity during the Pleistocene. Society of Vertebrate Paleontology.
216. Jorgewich-Cohen G, Townsend SW, Rodrigues Padovese L, Klein N, Ferrara CR, Ettmar S, Menezes S, Pinatti Varani A, Serano J, Sánchez-Villagra MR. 2022. Common Evolutionary Origin of Acoustic Communication in Turtles. Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles. Tucson, Arizona, USA.
215. Rabi M, Carrillo-Briceño JD, Bodogan T, Sánchez-Villagra MR, Scheyer TM. 2021. Plesiomorphic Morphology in an early Protostegid Turtle From The Cretaceous of Venezuela. 18th European Association of Vertebrate Paleontology Conference, Benevento, IT.
214. Fabre A-C, Stadler D, Sánchez-Villagra MR. 2021. A morphometric study of skull variation in Goldfishes: Morphospace expansion through domestication.

- Second Asia Evo Conference / Annual Meeting of the Society of Evolutionary Studies, Japan.
213. Balcarcel AM, Orliac M, Veitschegger K, Clauss M, Sánchez-Villagra MR. 2021. Brain evolution in selected extant and extinct Artiodactyla clades: morphological and size changes in microevolution and macroevolution. SVPCA Oxford, 7-9 September 2021 (talk)
  212. Balcarcel AM, Orliac M, Veitschegger K, Clauss M, Sánchez-Villagra MR. 2021. Brain evolution in selected extant and extinct Artiodactyla clades: morphological and size changes in microevolution and macroevolution. Deutsche Zoologische Gesellschaft DZG 2021 (Poster).
  211. Wilson LAB, Balcarcel A, Geiger M, Heck L, Sánchez-Villagra MR. 2020. Modularity patterns in mammalian domestication: assessing developmental hypotheses for diversification. SMEF 11 - Symposium of Morphometrics and Evolution of Shape. 30 June-2 July 2021 Montpellier.
  210. Wilson LAB, Balcarcel A, Geiger M, Heck L, Sánchez-Villagra MR. 2020. Modularity patterns in mammalian domestication: evidence for the neural crest cell hypothesis? Australasian Evolution Meeting. 3 - 4 Dec. 2020
  209. Balcarcel A, Sánchez-Villagra MR, Orliac M. 2020. The Pleistocene Camelid Brain. 18th Swiss Geoscience Meeting 2020, 6-7 November 2020, Zurich.
  208. Balcarcel A, Orliac M, Sánchez-Villagra MR. 2020. The last epoch of camelid brain evolution. Swiss Geosciences Meeting, Zurich.
  207. Lynch L, Balcarcel A, Marcelo Sánchez-Villagra MR. 2019. The Evolution of the Camelidae. 17th Swiss Geoscience Meeting, Fribourg 2019.
  206. Scheyer TM, Hutchinson JR, Strauss O, Delfino M, Carrillo-Briceño JD, Sánchez R, Sánchez-Villagra MR. 2019. Anatomy of the girdle regions of the giant *Purussaurus mirandai* (Caimaninae, Alligatoridae) from the Miocene of Venezuela. 17th Swiss Geoscience Meeting, Fribourg 2019.
  205. Kerber L, Ferreira Jd, Machado EF, Santos Franco A, Sánchez-Villagra MR. 2019. The Paranasal Sinuses of Caviomorph Rodents. Congresso Brasileiro de Paleontologia.
  204. Graff A, Aguirre-Fernández G, Sánchez-Villagra MR. 2019. The cultural evolution of musical instruments in South America. VIII Oxbridge Conference on Brazilian Studies. Oct. 2019.
  203. Carrillo-Briceño JB, Aguilera O, Sánchez-Villagra MR. 2019. Neotropical freshwater fish fauna in "deep time": a perspective from the Caribbean basins of Colombia and Venezuela. Palaeontologische Gesellschaft, Munich.
  202. Sánchez-Villagra MR. 2019. The Logic of Domesticated Mammals: a developmental perspective on morphological diversification associated with tameness and selective breeding. German Mammalogical Society, Dresden.
  201. Lynch S, Balcarcel A, Sánchez-Villagra MR. 2019. Evolution of the Camelidae. German Mammalogical Society, Dresden.
  200. Sánchez-Villagra MR. The logic of domesticated mammals and birds. Int. Cong. Vert Morphology, Prague July 2019.

199. Balcarcel A, Segura V, Lynch S, Sánchez-Villagra MR. 2019. Domestication and cranial shape disparity in South American Camelids. Int. Cong. Vert Morphology, Prague July 2019.
198. Cordero GA, Sánchez-Villagra MR, Werneburg I. 2019. Support for the developmental hourglass model: Is there a phylotypic stage in mammals? Int. Cong. Vert Morphology, Prague July 2019.
197. Hüppi E, Núñez D, Nagashima H, Werneburg I, Sánchez-Villagra MR. Variation and conservation in chondrocranial development in the domesticated fowl (*Gallus gallus domesticus*) and other birds. Int. Cong. Vert Morphology, Prague July 2019.
196. Núñez-León D; Nagashima H; Jensen P; Esther Stoeckli E; Werneburg I, Sánchez-Villagra MR. 2019. Development in a domestication framework: Morphological change from fowl to chickens. Int. Cong. Vert Morphology, Prague July 2019 (poster).
195. Scheyer TM, Hutchinson JR, Strauss O, Delfino M, Carrillo-Briceño JD, Sánchez R, Sánchez-Villagra MR. 2019. Anatomical specialization in the largest of caimans: the girdle of *Purussaurus mirandai* (Alligatoridae) from the Miocene of Venezuela. Int. Cong. Vert Morphology, Prague July 2019.
194. Scheyer TM, Felder A, Heck L, Sánchez-Villagra MR. 2019. Bone histology of the smallest horse breed, the Falabella. International Society of Palaeohistology, Cape Town, July 2019.
193. Aguirre-Fernández G, Jost J, Hilfiker S, Sánchez-Villagra MR. 2019. Fossil cetaceans from the Upper Marine Molasse of Switzerland. Biology Zürich 2019.
192. Hüppi E, Sánchez-Villagra MR. 2019. Early development of the skull (chondrocranium) in the domesticated fowl (*Gallus gallus domesticus*) and comparison with other birds. Biology Zürich 2019.
191. Balcarcel A, Lynch S, Sánchez Villagra MR. 2019. New Pleistocene Camelidae from Argentina: exceptional fossil skull challenges current phylogenies of this group. Biology Zürich 2019.
190. Herrera CM, Nagashima H, Sánchez-Villagra MR. 2019. Postcranial diversity in chicken: diversification and conservatism following domestication. Biology Zürich 2019.
189. Núñez-León D; Nagashima H; Jensen P; Stoeckli E; Sánchez-Villagra MR. 2019. Fowl and chicken early development: organogenesis and phylotypic stage in a domestication framework. Biology Zürich 2019.
188. Núñez-León D, Stange M, Wilson LAB, Stoeckli ET, Jensen P, Schneider RA, Sánchez-Villagra MR. 2018. Fowl domestication: Morphological variation and its developmental bases. 7th Euro Evo Devo, Gallaway.
187. Sanchez-Villagra MR. 2018. Variation under domestication in mammals and birds - ongoing work to celebrating Darwin and the neural crest. SICB Soc Inte. & Comp. Biology, Division of Vertebrate Morphology. Regional Meeting in Europe, London, Natural History Museum. 11 May 2018.

186. Carrillo JD, Silvestro D, Zizka A, Jaramillo C, Bacon C, Faurby S, Sánchez-Villagra MR, Antonelli A. 2018. Examination of migration patterns during the Great American Biotic Interchange. V International Palaeontological Congress, Paris.
185. Sánchez-Villagra MR, Carrillo-Briceño JD, Stange M, Carrillo JD, Salzburger W, Matschiner M. 2018. The evolution of shark, ray and catfish diversity on Tropical America and the closure of the Central American Seaway – a palaeontological and molecular examination. V International Palaeontological Congress, Paris
184. Salas-Gismondi R, Moreno-Bernal JW, Scheyer TM, Sánchez-Villagra MR, Jaramillo C. 2018. Neotropical gavialoids: a case study to explore patterns of longirostry in crocodylians. V International Palaeontological Congress, Paris
183. Heck L, Stange M, Clauss M, Sánchez-Villagra MR. 2017. Morphological disparity and developmental shape changes in domesticated horses. Deutsche Zoologische Gesellschaft Tagung.
182. Hüppi E, Werneburg I, Forasiepi AM, Tzika AC, Sánchez-Villagra MR. 2017. External morphology and chondrocranial development in therian mammals. Deutsche Gesellschaft Säugetierkunde Conference.
181. Geiger M, Lindholm A, Sánchez-Villagra MR. 2017. Rapid evolution in domestication – the case of the ‘domestication syndrome’ in tamed wild house mice (*Mus domesticus*). XVI Congress European Society of Evolutionary Biology, Groningen, the Netherlands.
180. Sánchez-Villagra MR, Segura V, Geiger M, Heck L, Veitschegger K, Flores D. 2017. The role of phylogeny in morphological and developmental studies of animal domestication. BioSyst Europe, Gotheburg.
179. Stange M, Sánchez-Villagra MR, Salzburger W, Matschiner M. 2017. Bayesian divergence-time estimation with genome-wide SNP data. BioSyst Europe, Gotheburg.
178. Heck L, Stange M, Clauss M, Sánchez-Villagra MR. 2017. On horse domestication: skull morphospace and life history changes. BioSyst Europe, Gotheburg.
177. Sánchez-Villagra MR, Segura V, Geiger M, Heck L, Veitschegger K, Flores D. 2017. On the lack of a universal pattern associated with mammalian domestication - differences in skull growth trajectories across phylogeny. Cuarto Encuentro de Morfometría, Universidad Nacional de La Rioja, Agosto de 2017.
176. Sánchez-Villagra MR, Segura V, Geiger M, Heck L, Veitschegger K, Flores D. 2017. On the lack of a universal pattern associated with mammalian domestication - differences in skull growth trajectories across phylogeny. XXX Jornadas Argentinas de Mastozoología, a realizarse en el mes de Noviembre de 2017, Bahia Blanca, Bs As, Argentina.
175. Zurita Altamirano AD, Carrillo JD, Forasiepi AM, Gabriel Aguirre-Fernández, Scheyer TM, Sánchez-Villagra MR. 2017. ‘Rediscovery’ of the Allemann Vertebrate Collection from the Santa Cruz Formation (Late Early Miocene), Argentina at the Paleontological Museum, Zurich. 15th Annual Meeting of the

- European Association of Vertebrate Palaeontologists Munich, Germany. Zitteliana 91, page 97.
174. Veitschegger K, Sánchez-Villagra MR. 2017. An Overview of the Life History and Growth of Cave Bears. 15th Annual Meeting of the European Association of Vertebrate Palaeontologists Munich, Germany. Zitteliana 91, page 92.
  173. Veitschegger K, Wilson LAB, Nussberger B, Camenisch G, Keller LF, Sánchez-Villagra MR. 2017. 'Resurrecting' Darwin's Extinct Niata Cow - An Anatomical, Biomechanical, Genetic, and Morphometric Study of Morphological Novelty in Cattle. 15th Annual Meeting of the European Association of Vertebrate Palaeontologists Munich, Germany. Zitteliana 91, page 92.
  172. Stange M, Matschiner M, Aguirre-Fernández G, Salzburger W, Sánchez-Villagra MR. 2017. Bayesian divergence- time estimation and skull shape evolution in sea catfishes (Ariidae). Biology17 Bern, 2 -3 February 2017
  171. Aguirre-Fernández G, Menecart B, Sánchez-Villagra MR, Sánchez R, Costeur L. 2017. Disentangling phylogeny from habitat inferences on A periotic - the case of a Neogene iniid from Venezuela. 8th International Meeting on the Secondary Adaptation of Tetrapods to Life in Water, Berlin April 2017.
  170. Stange M, Matschiner M, Aguirre-Fernández G, Salzburger W, Sánchez-Villagra MR. 2016. Morphological Evolution in Neotropical Ariidae. DZG Deutsche Zoologische Gesellschaft 2016.
  169. Carrillo-Briceño JD; Luz Z; Hendy A, Jaramillo C, Vennemann TW, Kocsis L, Sánchez-Villagra MR. 2016. Colombian fossil elasmobranchs from the "last days" of the Central America Seaway and their environmental significance. Swiss Geological Society Geneva.
  168. Carrillo JD, Sánchez-Villagra MR. 2016. Endemic South American mammals from the Neotropics: phylogeny, diversity, and implications for the Great American Biotic Interchange. Swiss Geological Society Geneva.
  167. Geiger M, Sánchez-Villagra MR. 2016. Skeletal growth and life history evolution in domestic dogs. Euro Evo Devo Biannual Meeting, Uppsala, June 2016.
  166. Kerber L, Sánchez-Villagra MR. 2016. A first approach to the phylogenetic transformations of the middle ear ossicles of caviomorph rodents: a character analysis. X Simpósio Brasileiro de Paleontologia de Vertebrados.
  165. Argyriou T; Friedman M; Romano C, Kogan I, Sánchez-Villagra MR. 2016. Endocranial anatomy and systematic position of the early actinopterygian Saurichthys, revisited by means of high resolution computer-assisted microtomography. Society of Vertebrate Paleontology Annual Meeting.
  164. Carrillo-Briceño JB, Amson E, Zurita A, Sánchez-Villagra MR. 2016. A taxonomic and geographic study of Herman Karsten's XIX century paleovertebrate collection from the northern Neotropics. Society of Vertebrate Paleontology Annual Meeting.
  163. Veitschegger K, Sánchez-Villagra MR. 2016. Brain Size Evolution in Cave Bears (*Ursus spelaeus*). European Association of Vertebrate Palaeontology Annual Meeting.

162. Carlini AA, Bond M, Sánchez-Villagra MR, Tonni EP. 2016. Santiago Roth: El Coleccionismo De Fósiles Y La "Formación Pampeana. IV Congreso Argentino De Historia De La Geología. 15 – 16 septiembre de 2016.
161. Carrillo JD, Sánchez-Villagra MR. 2016. Neogene mammals from the Neotropics (Venezuela and Colombia): implications for the Great American Biotic Interchange. Progressive Palaeontology Meeting, Oxford, UK
160. Stange M, Aguirre-Fernández G, Salzburger W, Sánchez-Villagra MR. 2016. Morphological Evolution in Neotropical Ariidae. Evolution Meeting, Austin Texas.
159. Sánchez-Villagra MR, Geiger M, Veitschegger K, Schweizer A, Wilson LAB, Schneider Ra. 2016. A Developmental and palaeobiological Perspective on the origins of morphological transformations in mammalian domestication. 30 Jornadas Argentinas de Paleontología de Vertebrados, Buenos Aires, Mayo 2016.
158. Kolb C, Torsten M. Scheyer Tm, Amson E, Forasiepi A, Sánchez-Villagra MR. 2016. Bone And Tooth Microstructure In Extinct And Extant Mammals And Implications For Growth and Life History Evolution, with an Emphasis on Cervids as a Case Study. 30 Jornadas Argentinas de Paleontología de Vertebrados, Buenos Aires, Mayo 2016.
157. Heck L, Sánchez-Villagra MR. 2016. The Falabella – Morphologically Special Or “Just” A Small Horse? 30 Jornadas Argentinas de Paleontología de Vertebrados, Buenos Aires, Mayo 2016.
156. Heck L, M R Sánchez-Villagra MR. 2016. Morphological disparity, growth and life history variation in domesticated horses. International Congress of Vertebrate Morphology, Washington DC.
155. Veitschegger K, Wilson LAB, Camenisch G, Keller LF, Sánchez-Villagra MR. 2016. Darwin's Niata - an anatomical, morphometric, and genetic study of an extinct cattle breed: expanding morphological boundaries through selective breeding. International Congress of Vertebrate Morphology, Washington DC.
154. Koyabu K, Sánchez-Villagra MR. 2016. Evolution of Fetal Skeletogenesis in Mammals: Patterns, Diversity, and Modularity. International Congress of Vertebrate Morphology, Washington DC.
153. Aguirre-Fernández G, Sánchez-Villagra MR. 2016. Evolutionary analysis of panpipes to test for pre-Columbian contact across the Pacific. Workshop: “Frontiers of early human expansion in Asia: linguistic and genetic perspectives on Ainu, Japan and the North Pacific Rim” March 13-14, 2016, University of Zurich
152. Werneburg I, Laurin M, Koyabu D, Ascarrunz E, Sánchez-Villagra MR. 2015. Reconstruction of life history traits in early amniotes. 57. Phylogenetisches Symposium „Was bestimmt die Form? Die Morphologie in der Evolutionsbiologie“ organised by Stefan Richter and Christian Wirkner. Rostock November 20th-22nd 2015
151. Werneburg I, Laurin M, Koyabu D, Ascarrunz E, Sánchez-Villagra MR. 2015. Reconstruction of life history traits in early amniotes. Jahrestagung der

- Paläontologischen Gesellschaft, Saarland.
150. Aeschbach M, Carrillo J, Sánchez-Villagra MR. 2015. Patterns of skull morphological variation in capybaras (*Hydrochoerus* sp., Caviidae, Rodentia). Annual Meeting, German Society of Mammalogists, DGSK, Hannover DE.
  147. Heck L, Clauss M, Sánchez-Villagra MR. 2015. Gestation length and life history diversity among horse breeds. Annual Meeting, German Society of Mammalogists, DGSK, Hannover DE.
  146. Aguirre G, Sánchez-Villagra MR. 2015. An evolutionary systematic study of panpipes and a test for pre-Columbian contact among Oceania and South America. Meeting of the Galpin Society, University of Cambridge.
  145. Stange M, Aguirre Fernández G, Carrillo-Briceño JD, Salzburger W, Sánchez-Villagra MR. 2015. Morphological adaptation in a marine-freshwater habitat transition of Northern Neotropical Catfishes. European Society for Evolutionary Biology Meeting, Lausanne.
  144. Carrillo JD, Jaramillo C, Sánchez-Villagra MR. 2015. The Great American Biotic Interchange: studying biological invasions in deep time. European Society for Evolutionary Biology Meeting, Lausanne
  143. Sánchez-Villagra MR, Werneburg I, Laurin M, Koyabu D. 2015. A comprehensive phylogenetic study of mammalian embryology and skeletogenesis reveals the altricial life history of the placental ancestor, modularity and a brain-bone development link. European Society for Evolutionary Biology Meeting, Lausanne
  142. Geiger M, Hausman S, Sánchez-Villagra MR. 2015. Cranial suture closure in domestic dog breeds and relations to skull anatomy – a comparison with human patterns. Evolutionary Medicine Conference: Interdisciplinary Perspectives on Human Health and Disease”, University of Zurich (July 30–August 1, 2015). *Journal of Evolutionary Medicine* 3:31-32, conference proceedings.
  141. Sánchez-Villagra MR, Geiger M, Schneider RA. 2015. A review of the ‘domestication syndrome’ in mammals—the role of neural crest in morphological patterns and comparisons to human malformations. Evolutionary Medicine Conference: Interdisciplinary Perspectives on Human Health and Disease”, University of Zurich (July 30–August 1, 2015). *Journal of Evolutionary Medicine* 3:17-18, conference proceedings.
  140. Carrillo JD, Jaramillo C, Sánchez-Villagra MR. 2015. Neogene mammals from northern South America (Venezuela and Colombia): implications for diversity patterns and faunal evolution in the Neotropics. European Association of Vertebrate Paleontologist Meeting, Opole, Poland.
  139. Carrillo-Briceño JD, Maxwell E, Aguilera OA, Sánchez R, Sánchez-Villagra MR. 2015. Mio-Pliocene elasmobranch faunas from the Urumaco sequence (South Caribbean) and their paleoenvironmental significance. XIII EAVP meeting, Opole, Poland, 08-12 of July.
  138. Argyriou T, Maxwell EE, Furrer H, Sánchez-Villagra MR. 2014 First description of the spiral intestine in *Saurichthys* fishes: The effect of axial elongation on the



- anatomy of the viscera. Proceedings Society of Vertebrate Paleontology, 74th annual meeting, Berlin, Germany (poster presentation).
137. Argyriou T, Maxwell EE, Furrer H, Sánchez-Villagra MR. 2014. First description of spiral cololites from *Saurichthys* (Actinopterygii, Saurichthyidae): Body shape as a factor for determining intestinal morphology, in Proceedings 4th International Palaeontological conference, Mendoza, Argentina (poster presentation).
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