SOCIETY OF AVIAN PALEONTOLOGY AND EVOLUTION

- Newsletter -

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SOCIETY OF
AVIAN
PALEONTOLOGY
AND
EVOLUTION

Executive Council

Dear SAPE Members,

This is my last letter as the President of SAPE. It has been an honor to serve in this capacity, a pleasure to work together with the Executive Council, and a wonderful opportunity to get to know some of you much better. Today, science continues to be at risk, and our studies on avian evolution have an even greater role to play than in the past. Our passion for the evolutionary history of such charismatic organisms—and yes, living dinosaurs—has tremendous power. It carries the opportunity to engage and enthuse people of all ages and all backgrounds in better understanding the nature of science, thereby helping humanity further embrace scientific answers to the global challenges before us. Our collective role continues to be deciphering the complex evolutionary history of birds, diving into deep time to discover evidence that can clarify such an amazing saga. And we have clearly done a very good job! I'm excited to see the diversity of research undertaken by our members, how fossils (new and old) are being visualized and analyzed through new technologies and approaches, and how every year our research becomes more collaborative and integrative by combining a diversity of tools from fields other than paleontology. I'm also excited to see a new crop of paleornithologists, professionals dedicated to the understanding of the evolution of birds, and a number of passionate aspiring scientists who carry the promise to further our investigations and professional mission. I'm pleased to leave the leadership of our Society in the able hands of Ursula Göhlich (our President Elect) and to see that there is no shortage of phenomenal discoveries along with people who can understand their significance. I want to thank the Executive Council for working with me during these last 3+ years, particularly Vanesa De Pietri and Adam Smith who have agreed to remain in their capacity for another term. I look forward to seeing you in Malaga—I know we'll have another fantastic meeting!

Luis M. Chiappe, SAPE President

SOCIETY OF AVIAN PALEONTOLOGY AND EVOLUTION

UNIVERSIDAD DE MÁLAGA

1ST CIRCULAR

10TH INTERNATIONAL MEETING OF THE SOCIETY OF AVIAN PALEONTOLOGY AND EVOLUTION

MALAGA, SPAIN, 25–29 MAY 2020

Meeting Website
https://sape2020.com

Venue
The meeting will be held at the Rectorate Building of the University of Malaga, a neo-Mudéjar style building that is located in the heart of the old town. Malaga is the capital of the Costa del Sol and one of the major cities in Spain, with an impressive history and an even more interesting present. Its excellent weather and beaches combined with its impressive heritage and network of world-class museums makes Malaga an ideal venue for the 10th International Meeting of SAPE.

Organizing committee
Francisco José Serrano (Chair), *Spanish Royal Academy of Sciences*
Paul Palmqvist (Co-Chair), *Universidad de Málaga*
Borja Figueirido, *Universidad de Málaga*
Antonio-Román Muñoz Gallego, *Universidad de Málaga*
Alberto Martín-Serra, *Universidad de Málaga*
Juan Antonio Pérez-Claros, *Universidad de Málaga*
Guillermo Rodríguez Gómez, *Universidad de Málaga*
Alejandro Pérez-Ramos, *Universidad de Málaga*
Guillermo Navalón, *Oxford University, U.K.*
Jesús Marugán-Lobón, *Universidad Autónoma de Madrid*
Fernando Escaso, *Universidad Nacional de Educación a Distancia (UNED)*
Francisco Ortega, *Universidad Nacional de Educación a Distancia (UNED)*

Scientific committee
Alyssa Bell, *Natural History Museum of Los Ángeles County, U.S.A*
Luis M. Chiappe, *Natural History Museum of Los Ángeles County, U.S.A*
Anusuya Chinsamy-Turan, *University of Cape Town, South Africa*
Jorge Cubo, *Sorbonne Université, France*
Daniel J. Field, *University of Cambridge, U.K.*
Michael Habib, *University of Southern California, U.S.A*
Jesús Marugán-Lobón, *Universidad Autónoma de Madrid, Spain*
Jingmai O´Connor, *Institute of Vertebrate Paleontology and Paleoanthropolgy, China*
Marco Pavia, *Museo di Geologia e Paleontologia Torino, Iltaly*
Adam Smith, *Campbell Geology Museum, U.S.A*
Francisco J. Serrano, *Spanish Royal Academy of Sciences, Spain*
Claudia Tambussi, *Universidad Nacional de Córdoba, Argentina*
Alexander Vargas, *Universidad de Chile, Chile*
Trevor Worthy, *Flinders University, Australia*
Nikita Zelenkov, *Russian Academy of Sciences, Russia*

Preliminary Schedule
Monday, 25th – Evening "ice breaker" get together in the Rectorate Building
Tuesday, 26th – Opening Talk and Scientific Sessions
Wednesday, 27th – Scientific Sessions and Old Town guided tour
Thursday, 28th – Scientific Sessions and Half-day excursion (birdwatching and ringing)
Friday, 29th – Scientific Sessions, Auction, Plenary Meeting and Closing Dinner
Saturday, 30th – Post-Meeting excursion (Breathtaking hiking and birdwatching)

Pre-meeting Field Trip (22th - 24th May)
Two-day trip to the beautiful town of Cuenca, located at the mid-west of Spain. Between other activities, attendances will visit the paleontological site of Las Hoyas (Early Cretaceous), the Paleontological Museum, and enjoy of a guided tour of the old town. Estimated costs for this excursion are 200-300 euros.

Dates and Deadlines
2nd Circular: January 2020
Registration opening: 1st February 2020
Proposals for symposia deadline: 1st March 2020
Abstract submission deadline: 15th April 2020
Registration deadline for Pre-meeting Field Trip: 25th April 2020

Proceedings

We are pleased to announce that 10th SAPE meeting and the subsequent proceedings will be dedicated to Professor José Luis Sanz in order to honor his outstanding paleornithological contributions. We are in the process of negotiating the publication of the proceedings in a special issue of a JCR journal. Deadline for manuscript submission will be shortly after the meeting, in July-August 2020.

Oral presentations and posters
Both oral and poster presentations are invited. We encourage presentations on all aspects of Avian Paleontology, Morphology, Paleobiology, Evolution, and theoretical issues. Abstracts will be single-reviewed by the scientific committee.

Symposia or special sessions
Proposals for possible symposia have to be sent to info@sape2020.com before 1st March 2020. If necessary (depending on how many proposals we get and how many talks are offered for each symposium) a selection will be made by the scientific committee.

Travel grants
SAPE will be awarding the Cécile Mourer-Chauviré travel grant/s to eligible attendees of the meeting (see announcement elsewhere in this Newsletter). The fund honors the prestigious career and outstanding dedication to mentoring of Cécile Mourer-Chauviré, SAPE's first Secretary and one of the Society's founding members. In addition to these grants, the non-profit organization "Sierra Elvira Foundation" will award one or more grants to predoctoral researchers from Spain in order to cover travel costs (further information will be provided in the 2nd circular).

Auction
Members are encouraged to bring reprints, books, casts or any other items to be auctioned. The auction benefits SAPE and allows the Society to provide additional aid for travel to meetings.

Pre-attendance inquiry
In order to get a good organization and a conference fee as low as possible, we would like to estimate the approximate number of attendees. For this reason, if you have plans to attend the meeting, we kindly request that you send an email to info@sape2020.com checking one of the next two options:
__ I have plans to attend the Meeting in Malaga
__ I have plans to attend both, the Meeting and the Pre-meeting Field Trip

More detailed information about the meeting will be provided in January 2020 with the 2nd Circular.

Francisco J. Serrano,
Chair of the Organizing Committee of SAPE 2020
Juan de la Cierva Postdoctoral Researcher, Spanish Royal Academy of Sciences, Madrid (Spain)
Research Associate, Dinosaur Institute, Natural History Museum of Los Ángeles County (CA, U.S.A)
Email: fjsa@uma.es

PROPOSED AMENDMENT OF ARTICLE 6 (MEETINGS) OF SAPE'S CONSTITUTION

A vote to move SAPE meetings from a four- to a three-year cycle and therefore change our Constitution (see proposed amendment below) will take place in Málaga. In 2016, the Society's Secretary sent out an email to members and non-members gauging interest in shortening our meeting cycles. The overwhelming response was a "yes". Now, and according to our Constitution, we have received five proposals by members of the Society to amend the Constitution accordingly. The proposed amendment was distributed in last year's newsletter and is reproduced again below. The Executive Council will present its recommendation on this proposed amendment at the Stated Business Meeting of the SAPE. Adoption of an amendment by the SAPE requires three-fourths majority vote of members of the SAPE present and voting at the Stated Business Meeting. Adopted amendments shall become effective at the close of that Stated Meeting.

Current Article 6: The Society shall hold an international meeting once every **four** years for the transaction of business and for scientific sessions. If, for any reason, a regularly scheduled meeting cannot be held as planned, the Executive Council will arrange for an alternative site and/or date. The host site for the Stated Meeting will preferably alternate among continents, with no continent being eligible to host the Stated Meeting twice in succession unless no satisfactory alternative is available. The host site for the Stated Meeting will be selected as specified in the Bylaws.

Proposed Amendment of Article 6: The Society shall hold an international meeting once every **three** years for the transaction of business and for scientific sessions. If, for any reason, a regularly scheduled meeting cannot be held as planned, the Executive Council will arrange for an alternative site and/or date. The host site for the Stated Meeting will preferably alternate among continents, with no continent being eligible to host the Stated Meeting twice in succession unless no satisfactory alternative is available. The host site for the Stated Meeting will be selected as specified in the Bylaws.

CALL FOR NOMINATIONS

The Executive Council has set up a Nominations Committee to seek candidates for Vice President of the Society and for five new Members at Large to serve during the next term. Members at Large cannot serve consecutive terms but are allowed to skip a term and be re-elected. Nominations should be sent to the Secretary, who will distribute them to the Committee. Self-nominations are all accepted. As stated in our bylaws, only those members who have belonged to the Society continuously for five years or more are eligible for election to an office of the Society or to the Executive Council as a Member-at-Large. The election of these future Executive Council members will take place at the upcoming meeting in Malaga.

CALL FOR MEMBERSHIP AND DONATIONS

As SAPE enters its 34th year as a research society, maintaining current members and attracting new ones continues to be a central goal of our international society. The Executive Council is proposing an increase in dues from $20.00 USD to $40.00 USD subject to a majority vote at the next SAPE meeting. If approved, the new dues will go into effect immediately. You can join SAPE or renew your membership online with a credit card by visiting our website (http://www.sapesociety.org). Dues cover the period *up until the next SAPE meeting in Spain (2020*). Thank you for your support. Your membership dues provide opportunities for students to present their research via the Cécile Mourer-Chauviré travel grant and also provide the necessary funds to host our quadrennial meetings and for the maintenance of our website. You can also make donations to the society via the website. Please consider making memorial or other donations in honor of colleagues and friends. Contact SAPE President Luis Chiappe or Treasurer Adam Smith to learn more about how your donation would be used to further the scientific and educational goals of SAPE.

CALL FOR PROPOSALS FOR THE SAPE MEETING 2023/2024

The Executive Council is seeking proposals from institutions and/or individuals interested in hosting the SAPE meeting in 2023 or 2024. A vote will take place in Málaga 2020, so come prepared with a presentation! In the meantime, expressions of interest can be sent to the President Luis Chiappe.

NEWS FROM MEMBERS AND RECENT PUBLICATIONS

ARGENTINA

CAROLINA ACOSTA HOSPITALECHE, from the Museo de La Plata, continues working mainly on Antarctic birds, including penguin and other Cretaceous and Paleogene birds. Particularly, two specimens recently studied are worth mentioning: an exquisitely preserved wing with fossilized integument assigned to *Palaeeudyptes gunnari*, and the first skull with associated postcranium belonging to *Anthropornis grandis*, both from the Eocene of Marambio/Seymour Island (Antarctica).

Carolina is also working in collaboration with her Ph.D. students Lic. ALEJANDRA SOSA (anatomy, functional morphology, and modularity of penguin spine, particularly fossil specimens from Antarctica and Argentina), Lic. ALEJANDRA PIRO (anatomy and phylogeny of Procellariiformes, including fossil specimens from Argentina, Chile, Perú and Antarctica), and Lic. LUIS GARAT (osteohistology in modern and Eocene penguins from Antarctica). As a result, a detailed osteological description of the skull of *Oceanites oceanicus* has been published, and some other contributions related with the doctoral projects are currently in process. She is happy to announce that NADIA HAIDR has successfully finished her Ph.D!

Carolina was also the leader Guest Editor, together with Dr. JAVIER N. GELFO, and Dr. J. ALISTAIR CRAME, of the Special Issue " Geology and paleontology of the James Ross Basin, Antarctic Peninsula" published this year. In this volume, the essence of the Antarctic Treaty is honored and celebrated. Ten original scientific works are presented by researchers from ten different countries (Argentina, Australia, Belgium, Canada, Chile, New Zealand, Poland, Spain, UK, USA) in a collaboration that highlights the current state of knowledge of this classic geological site, addressing both highly relevant questions and opening exciting new lines of inquiry for Antarctic Earth Sciences. The complete volume is free to download at http://www.aps-polar.org/paper/2019/30/03

Together with Uruguayan colleagues, she described the first penguin fossil from Uruguay.

CLAUDIA TAMBUSSI at CICTERRA in Córdoba (Argentina) continues to work on Mio-Pliocene birds of Sierras Pampeanas at La Rioja and Córdoba in Argentina. Her research projects are predominately dealing with paleobiology and the evolution of South American and Antarctic birds. She dedicates much of her time following up on her students, in particular those who are doing their theses and postdoctoral projects.

RICARDO DE MENDOZA, from Museo de La Plata, published a few works this year, one with MARIANA PICASSO presenting materials of a teratorn from the Miocene of Argentina, and the rest with other colleagues on Anseriformes, mostly about the diving and flightless Miocene duck *Cayaoa bruneti*. He's currently working with CLAUDIA TAMBUSSI and RAUL GÓMEZ on the evolution of diving in ducks, and starting to work with JULIETA CARRIL and CLAUDIO BARBEITO on osteohistology of extant and extinct foot-propelled divers.

FEDERICO "DINO" DEGRANGE continues to work at the CICTERRA (UNC, CONICET) on the paleobiology of terror birds (Cariamiformes, Phorusrhacidae). Together with CLAUDIA TAMBUSSI, LAWRENCE WITMER, RYAN RIDGELY and DON CERIO, he continues to work on several aspects of these birds such as brain anatomy, eye size and visual acuities, and the evolution of cranial akinesis. He is also finishing a research project with Claudia on the Mio-Pliocene birds of Sierras Pampeanas at La Rioja in Argentina. Together with JULIA CLARKE and collaborators, he has been working on the description of new *Phorusrhacos* skull remains. Together with Claudia and

collaborators, he has published a new stem-Anseriformes from the Paleogene of Antarctica. Ongoing projects include the study of the brain anatomy of the mentioned stem anseriform, the study of fossil birds from the Eocene of Patagonia (in collaboration with Dr. POL) and, in collaboration with researchers from Mar del Plata and Florianopolis cities, the re-description of the Cathartiform *Dryornis pampeanus* based on new material.

MARIA MANUELA DEMMEL FERREIRA is in the second year of her PhD thesis, under the supervision of F.J. Degrange and G. Tirao (FaMAF, UNC). Using CT scans and 3D modelling, her thesis is about the evolution and disparity of South American Passeriformes´ brain anatomy over the last 25 million years. She has published a morpho-functional analysis of the cranio-mandibular complex of the caprimulgiform *Systellura longirostris*, and nowadays she is leading a research project on the brain anatomy of Piciformes and Galbuliformes.

This year has been very productive in the Laboratorio de Anatomía Comparada y Evolución de los Vertebrados, at the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia". We are working on several topics regarding the early evolution and origin of birds, as well as bird history in South America during the Cenozoic. SEBASTIÁN ROZADILLA and GASTÓN LO COCO are working on several new fossil remains of Cretaceous birds from Argentina. Further, Sebastián Rozadilla is working on the phylogenetic position of Ratites, and detailed comparisons with extinct Mesozoic bird clades. On the other side, Gastón, together with MATÍAS MOTTA have sent several MS regarding the myology of different bird clades. Further, he is analyzing several fossil birds from Ecuador, including new extinct owls from the Pleistocene. Matías is working hard on bird origin and evolution, with detailed comparisons with derived maniraptoran theropods. He has finished a detailed work on the anatomy of a new avian-like paravian of uncertain affinities from Patagonia. Work in progress by FEDERICO AGNOLIN, MATÍAS MOTTA and FEDERICO BRISSÓN EGLI, includes detailed description of South American paravians, as well as novel hypotheses regarding the early steps of bird flight.

ACOSTA HOSPITALECHE, C., HAIDR, N., PAULINA CARABAJAL, A. & REGUERO, M. (2019): First skull of the giant *Anthropornis grandis* associated with postcranial elements. – Comptes Rendus Paleovol, 18: 599–617.

ACOSTA HOSPITALECHE, C., JADWISZCZAK, P., CLARKE, J. & CENIZO, M. (2019). The fossil record of birds from the James Ross Basin, West Antarctica. – Advances in Polar Sciences, Vol. 30 No. 3: 251–273.

ACOSTA HOSPITALECHE, C., JONES, W., MONTENEGRO, F., RINDERKNECHTC, A. & CHAPPORE, D. (2019): First penguin fossil (Aves, Spheniscidae) from Uruguay. – Journal of South American Earth Sciences.

AGNOLIN, F., MOTTA, M. J., BRISSON, F., LO COCO, G., & NOVAS, F. E. (2018): Paravian Phylogeny and the Dinosaur-Bird Transition: AN Overview. – Frontiers in Earth Science 6: 252.

AGNOLIN, F. L., BOGAN, S., & ROZADILLA, S. (2019): Short Note Were ibises (Aves, Threskiornithidae) present in Antarctica?. – Antarctic Science, 31: 35–36.

DE MENDOZA, R.S. (2019): Phylogenetic relationships of the early Miocene diving and flightless duck *Cayaoa bruneti* (Aves, Anatidae) from Patagonia: homology or convergence? – Papers in Palaeontology, pp. 1–9, doi: 10.1002/spp2.1268

DE MENDOZA, R.S. & PICASSO, M.B.J. (2019): A teratorn (Aves: Teratornithidae) from the early late Miocene of Buenos Aires, Argentina. Historical Biology. https://doi.org/10.1080/08912963.2019.1634706.

DE MENDOZA, R.S. & TAMBUSSI, C.P. (2019): *Cayaoa bruneti* (Aves: Anseriformes) from the early Miocene of Patagonia, Argentina: new materials and revised diagnosis. – Ameghiniana 56: 213–227. http://dx.doi.org/10.5710/AMGH.24.05.2019.3199

DEGRANGE, F.J., KSEPKA, D., & TAMBUSSI, C.P. (2018): Redescription of the oldest crown clade penguin: cranial osteology, jaw myology, neuroanatomy and phylogenetic affinities of *Madrynornis mirandus*. – Journal of Vertebrate Paleontology 38. DOI: 10.1080/02724634.2018.1445636

DEGRANGE, F.J.; EDDY, D.; PUERTA, P. & CLARKE, J. (2019): New skull remains of *Phorusrhacos longissimus* (Aves, Cariamiformes) from the Miocene of Argentina: implications for the morphology of Phorusrhacidae. – Journal of Paleontology 93: 1221–1233. DOI: 10.1017/jpa.2019.53

DEMMEL FERREIRA, M.M., TAMBUSSI, C.P., DEGRANGE, F.J., PESTONI, S., & TIRAO, G.A. (2019): Closing the beak in the absence of some jaw muscles in the nightjar *Systellura longirostris* (Aves, Caprimulgiformes). – Zoology 132: 6–16. DOI: 10.1016/j.zool.2018.11.001

GARCIA MARSÀ, J.A., TAMBUSSI, C.P., &CERDA, I.A. (2018): First evidence of globuli ossei in penguins (Aves, Sphenisciformes). What do they indicate about way of life? – Historical Biology 10.1080/08912963.2018.1508288

NOVAS, F.E., AGNOLIN, F.L. ROZADILLA, S., ARANCIAGA-ROLANDO, A.M., BRISSON-EGLI, F., MOTTA, M.J., CERRONI, M., EZCURRA, M.D., MARTINELLI, A.G., D´ANGELO, J.S., ALVAREZ-HERRERA, G., GENTIL, A.R., BOGAN, S., CHIMENTO, N.R., GARCÍA-MARSÀ, J.A., LO COCO, G., MIQUEL, S., BRITO, F.F., VERA, E.I., PÉREZ LOINAZE, V. & SALGADO, L. (2019): Palaeontological discoveries in the Chorrillo Formation (Maastrichtian, Upper Cretaceous), Santa Cruz Province, Patagonia, Argentina. Revista del Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", in press.

NOVAS, F.E., AGNOLIN, BRISSON-EGLI, F., LO COCO, G. (2019): Scapular girdle morphology in basal paravians and living ratites:Implications for the origin of flight. Bulletin of the American Museum of Natural History, in press.

PESTONI, S., DEGRANGE, F.J., TAMBUSSI, C.P., DEMMEL, M., & TIRAO, S. (2018): Functional morphology of the cranio-mandibular complex of the Guira cuckoo (Aves). – Journal of Morphology 279:780-791. ISSN 1097-4687 DOI: 10.1002/jmor.20810

PIRO, A. & ACOSTA HOSPITALECHE, C. (2019): Skull anatomy of the Wilson's Storm-petrel *Oceanites oceanicus* (Hydrobatidae, Procellariiformes). – Polar Biology. https://doi.org/10.1007/s00300-019-02536-x.

TAMBUSSI, C.P., DEGRANGE, F., DE MENDOZA, R., SFERCO, E., & SANTILLANA, S. (2019) A stem anseriform from the early Paleocene of Antarctica provides new key evidences in the early evolution of waterfowls. – Zoological Journal of the Linnean Society. DOI: 10.1093/zoolinnean/zly085

CONFERENCE ABSTRACTS:

CERIO, D.G.; DEGRANGE, F.J.; TAMBUSSI, C.P.; RIDGELY, R.C. & WITMER, L.M. Modeling visual abilities in

extinct species using Virtual Ophthalmoscopy, with a case study in predicting eye size, optical parameters, and visual fields in terror birds (Aves: Phorusrhacidae). – 78th Annual Meeting of The Society of Vertebrate Paleontology (SVP). Albuquerque, New Mexico, October 17–20 2018. http://vertpaleo.org/Annual-Meeting/Annual-Meeting-home.aspx.

CERIO, D.G.; DEGRANGE, F.J.; TAMBUSSI, C.P.; RIDGELY, R. & WITMER, L.M. Optical properties, ecological differences, and Virtual Ophthalmoscopy: Morphometry of optical parameters in diapsids and a case study in restoring visual fields in terror birds (Aves: Phorusrhacidae). *Journal of Morphology* 280, S1: S96. DOI: 10.1002/jmor.21003. – 12th International Congress of Vertebrate Morphology, Prague, Czech Republic, 21–25 July.

DEGRANGE, F.J.; TAGLIORETTI, M.L.; BRITO, G.R.R.; SCAGLIA, F. & TAMBUSSI, C.P. New remains of *Dryornis pampeanus*, a fossil cathartid from the Pliocene of Buenos Aires, Argentina. Publicación Electrónica de la Asociación Paleontológica Argentina: R45. – Reunión de Comunicaciones de la Asociación Paleontológica Argentina 2018, Puerto Madryn, Chubut province, 21–23 November 2018.

DEGRANGE, F.J.; TAMBUSSI, C.P.; WITMER, L.M.; DEMMEL FERREIRA, M.M. & SANTILLANA, S. Endocranial anatomy of a paleocene stem waterfowl (Aves, Anseriformes). Publicación Electrónica de la Asociación Paleontológica Argentina: R45. – Reunión de Comunicaciones de la Asociación Paleontológica Argentina 2018, Puerto Madryn, Chubut province, 21–23 November 2018.

DEGRANGE, F.J.; TAMBUSSI, C.P.; WITMER, L.M.; RIDGELY, R. & WROE, S. Comparisons of biomechanical performance between phorusrhacid (Aves, Cariamiformes) skull types. *Journal of Morphology* 280, S1: S21. DOI: 10.1002/jmor.21003. – 12th International Congress of Vertebrate Morphology, Prague, Czech Republic, 21–25 July.

DEMMEL FERREIRA, M.M. & BENÍTEZ SALDIVAR, M.J. ¿Qué perciben las hembras de *Sicalis flaveola* (Aves, Passeriformes) de lo que el macho vocaliza? Abstracts of XVIII Reunión Argentina de Ornitología (RAO): 69–70. . – XVIII Reunión Argentina de Ornitología (RAO), Tandil, Buenos Aires province, 4–6 September 2019.

DEMMEL FERREIRA, M.M. & DEGRANGE, F.J. Neuroanatomy of *Pseudoseisura cursor*, a fossil Furnariidae (Aves, Passeriformes) from the Pleistocene of Argentina. Publicación Electrónica de la Asociación Paleontológica Argentina: R10. – 33.as Jornadas Argentinas de Paleontología de Vertebrados, Córdoba, Córdoba province, 29–31May 2019.

DEMMEL FERREIRA, M.M.; DEGRANGE, F.J.; TIRAO, G.A. & TAMBUSSI, C.P. Neuroanatomy of South American Coraciimorphae: morphological differences of the endocranium of Piciformes and Galbuliformes. Abstracts of XVIII Reunión Argentina de Ornitología (RAO): 50. – XVIII Reunión Argentina de Ornitología (RAO), Tandil, Buenos Aires province, 4–6 September 2019.

Pérez, L., C. Acosta Hospitaleche, L. Gómez Peral, A. Gómez Dácal, M.A. Reguero, D.G. Poiré & C.E. Cavarozz. (2018): Atributos tafonómicos de los pingüinos (Aves, Sphenisciformes) paleógenos de la Isla Marambio (Seymour Island), Península Antártica, – PALEO NE, Recife, 4–7 December 2018.

TAMBUSSI, C.P.; DEGRANGE, F.J., CICCIOLI, P.L. & PREVOSTI, F. Aves fósiles de la Formación Toro Negro (Neógeno), Andes Centrales de la Argentina. Publicación Electrónica de la Asociación Paleontológica Argentina: R38. – 33.as Jornadas Argentinas de Paleontología de Vertebrados, Córdoba, Córdoba province, 29–31May 2019.

AUSTRALIA

The 2018-2019 year was again a big one for Avian Palaeontology at Flinders University, South Australia. WARREN HANDLEY submitted his PhD on endocranial anatomy of galloanseres and is looking forward to the next stage. ELLEN MATHER continues her PhD project on the fossil accipitrids of Australia, with a key focus being a late Oligocene accipitrid skeleton that preserves most limb elements. JACOB BLOKLAND is well into his project investigating the relationships of the fossil Oligocene and Miocene Australasian rails. But along the way has steered his Honours work on Paleogene penguins from the Chatham Islands into press – this should be out soon. PHOEBE MCINERNEY has joined the team to work on the anatomy of *Genyornis newtoni* and will have some wonderful new material we recently collected to work with. These include a complete articulated skull, although it is slightly crushed, an isolated rostrum and good pelves found in 2018.

Lab members had a great field trip in July to the Late Miocene Alcoota site 130 km northeast of Alice Springs and the team was introduced over a couple weeks to the wonders of excavating large dromornithid bones. Many nice specimens of *Ilbandornis* and *Dromornis* were recovered. The megafaunal necropolis of Lake Callabonna in northern South Australia was again visited in August-September 2019. Despite essentially no rain in the period since our visit a year before we found some excellent new material. These included 4 part skeletons of the rare (3 previous specimens) of the giant wombat *Phascolonus*, a complete articulated kangaroo (*Protemnodon*) skeleton and more gut contents for *Diprotodon*. But for the bird oriented folk a bevy of 3 *Genyornis* skeletons was discovered that produced some nice material including an uncrushed rostrum. In another site, after assessing a few previously located probable *Genyornis* skeletons we settled on excavating a nice part skeleton that has a perfect sternum, much of the thoracic vertebral series, the pelvis and legs. But what exactly lies inside the blocks will be a mystery we await with interest, though it seems the head is missing on this one.

Our project on Tongan avifaunas with DAVID BURLEY is about to be published. In this we describe a very large and new species for *Ducula* and *Hypotaenidia*. Other projects near completed (see publications) include description of Pliocene flamingo footprints from the Lake Eyre Basin, and a new tiny yet highly cursorial emu from the late Miocene Alcoota site. A largely DNA study on *Aptornis* revealed the surprising revelation that this Pleistocene giant flightless bird from New Zealand is the immediate sister taxon to the Madagascan Sarothruridae. At the same time we generated the most

comprehensive molecular phylogeny for Ralloidea which makes an excellent basis on which to assess fossils.

ELEN SHUTE was awarded her PhD in March, for her work on Pleistocene fossil birds from the Nullarbor Plain, Western Australia. She is now extending the Nullarbor work by identifying additional fossil material, describing further new species, and analysing the biogeographical history of Australian birds. She is also working on the fossil history of Night Parrots with view to informing conservation of the species.

JACQUELINE NGUYEN (Australian Museum) continues to work on Cenozoic songbirds and has ongoing collaborations with Mike Archer and Sue Hand (UNSW Sydney) and with Gavin Prideaux and Elen Shute (Flinders University).

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RIGAL, S., KIRCH, P.V., & WORTHY, T.H. (2018): New prehistoric avifaunas from the Gambier Group, French Polynesia. – Palaeontologica electronica, Article 21.3.4A, pp 1-35. https://doi.org/10.26879/892.

WORTHY, T.H., & BURLEY, D. (In press 2019): The Prehistoric avifaunas from the Kingdom of Tonga. – Zoological Journal of the Linnean Society. ID is ZOJ-03-2019-3641.R1.

WORTHY, T.H., HAND, S.J., ARCHER, M., SCOFIELD, R.P., DE PIETRI, V.L. (2019): Evidence for a giant parrot from the Early Miocene of New Zealand. – Biology Letters 15(8): 20190467. https://doi.org/10.1098/rsbl.2019.0467.

YATES, A.M. & WORTHY, T.H. (2019): A diminutive species of emu (Casuariidae: Dromaiinae) from the late Miocene of the Northern Territory, Australia. – Journal of Vertebrate Paleontology, e1665057.

AUSTRIA

URSULA GÖHLICH dealt predominantly with different projects on Miocene proboscideans and other mammals from Miocene and Pleistocene localities in the past year, which resulted in a series of publications (not listed below). Recent paleornithological research was limited to a small contribution about a very few bird fossils from an Oligocene locality (Shine Us) in Western Mongolia (citation below). Furthermore, Ursula is currently co-authoring an article together with A. CHINSAMY-TURAN, A. CANOVILLE, and D. ANGST on bone-histological investigations on aepyornithids.

DAXNER-HÖCK, G. ERBAJEVA, M.A., GÖHLICH, U.B., LÓPEZ-GUERRERO, P., NARANTSETSEG, T., MENNECART, B., OLIVER, A., VASILYAN, D. & ZIEGLER, R. (2019): The Oligocene Vertebrate assemblage of Shine Us (Khaliun Basin, Western Mongolia). – Annalen des Naturhistorischen Museums in Wien 121A: 195-256. (open access)

BULGARIA

ZLATOZAR BOEV is involved in the project "Zooarchaeological study of the 'Forum Serdica' based on the remains of vertebrates from the center of Sofia (4—19 BC) (2015 – 2018)". He also studied archaeornithological material of the medieval capital of Bulgaria, Pliska, 9-10th c. AD.

He is the scientific tutor of one PhD candidate, Volen Arkumarev: "Movement and individual range of the Gryffon Vulture (*Gyps fulvus* Hablizl, 1783) in Bulgaria".

BOEV, Z. (2019): Late Antiquity (3-5 century A.D.) Fauna from Building Excavations on Exarch Joseph Street (Sofia City, Bulgaria. – Bulletin of the Natural History Museum – Plovdiv, 4: 1–8.

BOEV, Z. (2019): Late Antiquity animal remains of the military settlement near Barkach village (Pleven Region, CN Bulgaria). – ZooNotes, 145: 1–3.

BOEV, Z. (2019): Past distribution of *Monachus monachus* in Bulgaria – subfossil and historical records (Carnivora: Phocidae. – Lynx, n. s. (Praha), 49: 163–176 (2018). ISSN 0024-7774 (print), 1804–6460 (online)

BOEV, Z. (2019): The Eurasian Collared Dove (*Streptopelia decaocto* Frivaldszky, 1838) – a subrecent invasive species of the avifauna of Bulgaria (subfossil records). – ZooNotes 141: 1–3 (2019). www.zoonotes.bio.uni-plovdiv.bg ISSN 1313-9916.

POPULAR SCIENCE:

BOEV, Z. (2018): The Forum of Serdica – a zoopantheon under pavement in the centre of Sofia. – Priroda, BAS, 4: 62–68.

Boev, Z. (2019): The herons – these ancient perfect fishers. – Priroda, BAS, 1: 86–94.

Boev, Z. (2019): Speleornithology. – Priroda, BAS, 2: 72–78.

Boev, Z. (2019): Underground livestock farm in the centre of Sofia 17 centuries ago. – Priroda, BAS, 3: 72–77.

Boev, Z.(2019): Last leopards in Bulgaria. – Priroda, BAS, 3: 78–83.

CHINA

JINGMAI O'CONNOR continues her work on Mesozoic birds at the IVPP, now aided by postdoctoral researcher ALIDA BAILLEUL, PhD student Wu Qian and Master's student LIU SHUMIN. Together with BAILLEUL, they are developing a state of the art histochemical lab at the IVPP. O'Connor is the 2019 recipient of the Charles Schuchert Award, given to a paleontologist under 40 whose research shows excellence and promise.

WANG MIN continues his work about Mesozoic birds. Early this year, he and his colleagues finished a taxonomic revision of the basal pygostylian Confuciusornithiformes, extensively revised the diagnosis of all the named species, and suggested that '*Confuciusornis suniae*', 'Confuciusornis feducciai', '*Jinzhouornis yixianensis*', '*Jinzhouornis zhangjiyingia*', and '*Confuciusornis jianchangensis*' are all junior synonyms of *Confuciusornis sanctus*. '*Confuciusornis chuonzhous*' is referred to Confuciusornithiformes incertae sedis. This study suggests that the Confuciusornithiformes consists of one family, three genera, and four species at this point: *Confuciusornis sanctus*, *Confuciusornis dui*, *Changchengornis hengdaoziensis*, and *Eoconfuciusornis zhengi*.

BAILLEUL, A.M., O'CONNOR, J.K., & SCHWEITZER, M.H. (2019): Dinosaur paleohistology: review, trends and new avenues of investigation. – PeerJ, 7:e7764.

BAILLEUL, A.M., O'CONNOR, J.K., ZHANG S., LI, Z., WANG, Q., LAMANNA, M., ZHU, X., & ZHOU, Z. (2019). An Early Cretaceous enantiornithine (Aves) preserving an unlaid egg and probable medullary bone. – Nature Communications, 10(1275): 1–10.

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O'CONNOR, J.K. (2019): The trophic habits of early birds. – Palaeogeography, Palaeoclimatology, Palaeoecology, 513: 178–195

O'CONNOR, J.K., & ZHOU, Z. (In press): The evolution of the modern avian digestive system – insights from paravian fossils from the Yanliao and Jehol biotas. – Palaeontology.

O'CONNOR, J.K., FALK, A.R., WANG, M., & ZHENG, X. (In press): First report of immature feathers in juvenile enantiornithines from the Early Cretaceous Jehol avifauna. – Vertebrata Palasiatica.

O'CONNOR, J.K., ZHENG, X., DONG, L., WANG, X., WANG, Y., ZHANG, X., ZHOU, Z. (2019): *Microraptor* with ingested lizard suggests non-specialized digestive function. – Current Biology, 29: 1–7.

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WANG M, O'CONNOR, J.K., & ZHOU, Z. (2019): A taxonomical revision of the Confuciusornithiformes (Aves: Pygostylia). – Vertebrata Palasiatica, 57(1): 1–37

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XIN, L.D, O'CONNOR, J.K., CHIAPPE, L.M., MCKELLAR, R.C., CARROLL, N., HU, H., BAI, M., & LEI, F. (2019): A new enantiornithine with unusual pedal proportions found in amber. – Current Biology, 29(14): 2396–2401

XING, D., MCKELLAR, R.C., O'CONNOR, J.K., BAI, M., TSENG, K., & CHIAPPE. L.M. (2019): A fully feathered enantiornithine foot and wing fragment preserved in mid-Cretaceous Burmese amber. – Scientific Reports, 9(927): 1–9

FRANCE

DELPHINE ANGST is continuing to work on the ecology and biology of large fossil flightless birds using a multidisciplinary approach. She is currently in the middle of her two years postdoctoral position at the University of Bristol in the School of Earth Science with a European Marie Curie Fellowship. She works in collaboration with MIKE BENTON and EMILY RAYFIELD on the ecology and the biology of the dodo using multidisciplinary approaches, including skeletal function, bone microstructure and histology, isotopes analyses and Finite Element Analyses. Using these different tools, she will work on the locomotion, diet, sexual dimorphism and population structure of the dodo.

During the last year she published in *Anatomical Record* an important work done in collaboration with ANUSUYA CHINSAMY-TURAN, JONATHAN BARNOUD and RAPHÄEL CORNETTE on the variability of the guinea fowl bony crest and the impact on the fossils' interpretations. This paper focused on the sexes and ontogenetic distinctions on the modern guinea fowl using a geometric morphometric approach applied on the bony and keratin crest. This large study based on more than 200 specimens will be very useful to help interpret similar structures in the fossil record.

On top of this work on modern birds, she continues her collaboration with ERIC BUFFETAUT on several

projects including the description of the well preserved femora of the Late Cretaceous bird *Gargantuavis*, but also on one paper on the importance of the old cast as a source of data when the original specimen is lost (in collaboration with CÉDRIC AUDIBERT and JÉRÔME TABOUELLE as well), and a preliminary work on a large Ostrich from China.

Associated to these works, other studies are in progress on modern and fossil large ground birds. Delphine's work on the bone histology of the bony crests of guineafowl is in progress, and this work will allow us to have a better understanding of this structure (construction, function, ontogeny…) so as to better understand the similar structures in fossil birds such as dromornithids. In parallel, a bone histology study of the large ground birds, including Aepyornithidae, Gastornithidae, Dinornithiformes and Ratites is in progress with Anusuya Chinsamy and Aurore Canoville. A complementary and more complete study of the bone growth pattern of the Aepyornithidae is currently in progress in collaboration with Anusuya Chinsamy, Ursula Göhlich and Aurore Canoville, and will be submitted very soon. Moreover, the first sampling of Phorusrhacidae was done in order to do the first bone histology study of this group. A new study is in progress on the poorly known taxon *Gastornis russelli* from the Paleocene of France, with interesting implications about ontogenetic changes in *Gastornis*, as well as the description of a new very large mandible of *Gastornis* from southern France. Finally, a paper is in progress in collaboration with ANTONIO SANCHEZ-MARCO on the first vertebrate fauna of the Canary Island and will hopefully been submitted very soon.

ESTELLE BOURDON is currently doing some work on the paleontological collections in the Musée des Confluences, Lyon (France). She is also applying for various museum jobs. She continues her research on fossil birds from Eocene localities in Morocco and France.

ERIC BUFFETAUT has published several papers on the history of research on aepyornithids, including a discussion of Etienne de Flacourt's *Vouron patra* (concluding that elephant birds were very probably still in existence in the 17th century), a review of the first illustrations of *Aepyornis* eggs, and a comment on old casts of the holotypic material of *Aepyornis maximus* (with Cédric Audibert, Jérôme Tabouelle and Delphine Angst). Other recently published joint papers with Delphine include an abstract on the giant Early Pleistocene ostrich from China and a description of a well-preserved *Gargantuavis* femur from southern France that supports the conclusion that that giant bird is an ornithurine that should be placed in a family of its own.

The multi-authored paper on the Allemann collection of Miocene vertebrates from Patagonia, including Eric's description of the phorusrhacid material, has appeared in the *Swiss Journal of Palaeontology*. The long-awaited description of a remarkably well-preserved enantiornithine skeleton from the Late Cretaceous of Henan (China) is finally nearing completion.

Eric's current research projects with Delphine include the description of a recently discovered enantiornithine coracoid from the Late Cretaceous of southern France and a new *Gargantuavis* femur from Provence. Their project on the Pleistocene ostriches of China is going on, with, among others, a study of a well-preserved egg kept at Beijing University (Beida). Eric is also working on the long-delayed description of the giant birds from the Late Paleocene of Rivecourt in northern France and on newly discovered Maastrichtian birds from North Africa.

CÉCILE MOURER-CHAUVIRÉ in collaboration with MARIE-FRANÇOISE BONIFAY, has described a new species of eagle from the Early Pleistocene of Ceyssaguet (La Voûte-sur-Loire, Haute-Loire). This species has been named *Aquila claudeguerini* in tribute to their late colleague and friend Claude Guérin. In collaboration with MARTINE FAURE and DOMINIQUE GOMMERY, Cécile participated in a book about Alfred Grandidier, naturalist and explorer of Madagascar in the XIXth century. If A. Grandidier is not the first author to have described the *Aepyornis*, it is he who discovered the fossiliferous locality of Ambolisatra, and gathered an important collection of fossil material that is now preserved in the Paris Muséum national d'Histoire naturelle. Alone, or in collaboration with Alphonse Milne-Edwards, A. Grandidier has described a large quantity of recent or extinct bird species. In May and June, Cécile took part to the last excavation campaign of the Grotte du Bison, at Arcy-sur-Cure (Yonne). The layers excavated in 2019 were occupied by Neanderthal men. Some of the bird bones found there are showing utilisation tracks by the Neanderthals. The paper by LOUCHART et al. on the Scops Owls of the Mascarene Islands, signalled as in press in the preceding letter, has been published at the end of 2018.

In the Laboratoire de Géologie de Lyon, ANTOINE LOUCHART continued working on several projects, some of which are currently ending in publications being submitted, and monograph chapters; this includes birds from the Neogene of the Siwalik Hills of Pakistan, and birds from the late Miocene of the United Arab Emirates. Other projects include investigations on insular birds, from various perspectives. The collective study on the origins of the Mascarene extinct owls using ancient DNA was published in autumn 2018. A long lasting collaboration with ANDRZEJ ELZANOWSKI on ostriches, focused on South African fossil representatives, is now near its term. Several students supervised by Antoine have also undertaken, or are currently working on, different studies, including on island birds, but also other subjects. SÉGOLÈNE RIAMON, now in her second year PhD, continues studying *Sylviornis neocaledoniae* under various aspects. Work is progressing well, and the first publications are near completion. A short field investigation will take place in New Caledonia in a few months, in order to complete some material, together with JEAN-CHRISTOPHE BALOUET (who discovered almost all fossil vertebrates of the island, in the 70-80s). This collaboration with Jean-Christophe, after a long time of absence from the field of paleontology, is a very happy event, his contribution to avian paleontology, and of course particularly in New Caledonia, being so prominent. Ségolène also finished work on an important passerine from the Oligocene of Luberon, now being submitted, as well as on her previous work on fossil birds from the early Miocene of Uganda (with new, earliest occurrences of several taxa). Third year license student in Earth sciences ANAÏS DUHAMEL (ENS de Lyon) studied a nice tiny fossil wing from the Oligocene of Luberon, belonging to a new genus of the Piciformes, with important biogeographical implications, and soon to be submitted. Later in a second internship, she studied a cranium (and endocast and inner ear) of the Rodrigues Island owl *Otus murivorus*, leading to unexpected results on the ecology, evolution and behaviour of this fascinating owl, and which will also be submitted soon, in collaboration with JULIAN HUME. Anaïs is currently continuing working on other bird fossils, and has further

projects in avian paleontology toward a PhD. Another third year license student in Earth sciences, JEAN-MARC BRETON, studied the distribution of insular extant bird taxa across different types of islands worldwide using statistics; although involving 'only' extant species and subspecies, this work reveals interesting patterns of colonization of islands across avian families. Finally, a master's student from Université de Rennes (supervised by Emmanuel Robert, head of collections at Université Lyon 1), MARINE CAUËT, had part of her internship working on new fossils from the early Miocene of the region south of Bordeaux (Saucats, Cestas, Pont-Pourquey, Léognan, southwestern France), which led to new occurrences, and new taxa, planned for publication.

ANGST, D., BARNOUD, J., CORNETTE, J., CHINSAMY-TURAN, A., (in press): Sex and ontogenetic variation in the crest of *Numida meleagris*: Implications for crested vertebrates. – *Anatomical Record*, special issue.

BOURDON, E. (2018): Les oiseaux à pseudo-dents. − Géochronique, 146: 40−44.

BOURDON, E. (2018): A roller-like bird from the Eocene of Denmark and the evolution of avifaunas in the early Cenozoic. − Dansk Naturhistorisk Forening Årsskrift 25, 26, 27: 42–51.

BUFFETAUT, E. (2018): Elephant birds under the Sun King? Etienne de Flacourt and the *Vouron patra*. – Boletim do Centro Português de Geo-História e Pré-História 1 (1): 13–19.

BUFFETAUT, E. (2019): Early illustrations of *Aepyornis* eggs (1851-1887): from popular science to Marco Polo's roc bird. – Anthropozoologica, 54 (12): 111-121.

BUFFETAUT, E. & ANGST, D. (2019): Une autruche géante contemporaine des premiers Chinois. - Cahiers de la Réserve naturelle Sainte-Victoire, numéro spécial (congrès APF 2019), p. 19.

BUFFETAUT, E. & ANGST, D. (2019): A femur of the Late Cretaceous giant bird *Gargantuavis* from Cruzy (southern France) and its systematic implications. – Palaeovertebrata, 42 (1) e3: 1–6.

BUFFETAUT, E, AUDIBERT, C., TABOUELLE, J. & ANGST, D. (2019): Useful old casts: a comment on Hansford & Turvey (2018), 'Unexpected diversity within the extinct elephant birds (Aves: Aepyornithidae)'. – Royal Society Open Science, 6:181826. http://dx.doi.org/10.1098/rsos.181826.

CHINSAMY-TURAN, A., ANGST, D., CANOVILLE, A., & GÖHLICH, U.B. (in prep.): Biological implications of the bone histology of the Madagascan giant, extinct bird, *Aepyornis*.

FAURE, M., GOMMERY, D., & MOURER-CHAUVIRÉ, C. (2019): Alfred Grandidier, naturaliste et géographe de Madagascar au XIX^{ème} siècle. – Paris : Supplément au Bulletin de liaison des membres de la Société de Géographie.

LOUCHART, A. (in press): Birds. – In BADGLEY, C., PILBEAM, D., & MORGAN, M. (Eds.), At the Foot of the Himalayas: Paleontology and Ecosystem Dynamics of the Siwalik Record of Pakistan. Baltimore: Johns Hopkins University Press.

LOUCHART, A., BIBI, F., & STEWART, J. (in press): 9. The birds of the late Miocene Baynunah Formation, Abu Dhabi Emirate. – BIBI, F., KRAATZ, B.P., BEECH, M., & HILL, A. (Eds.), The Late Miocene Baynunah Formation of Abu Dhabi (United Arab Emirates). New York: Springer.

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GERMANY

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MAYR, G. (2019): Hypotarsus morphology of the Ralloidea supports a clade comprising *Sarothrura* and *Mentocrex* to the exclusion of *Canirallus*. – Acta Ornithologica 54: 51–58.

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MAYR, G. & SMITH, T. (2019): New Paleocene bird fossils from the North Sea Basin in Belgium and France. – Geologica Belgica 22 (1-2): 35–46.
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NORDÉN, K.K., FABER, J.W., BABAROVIĆ, F., STUBBS, T.L., SELLY, T., SCHIFFBAUER, J.D., PEHAREC ŠTEFANIĆ, P., MAYR, G., SMITHWICK, F.M. & VINTHER, J. (2019): Melanosome diversity and convergence in the evolution of iridescent avian feathers - implications for paleocolour reconstruction. – Evolution, 73: 15–27.

HUNGARY

EUGEN (JENŐ) KESSLER, has finished the research of the fossil avifauna of the Carpathian Basin, and the last two works have already been submitted.

KESSLER, E. (J.) (2019): Pigeons, sandgrouse, cuckoos, nightjars, rollers, bee-eaters, kingfishers and swifts in the European fossil avifauna and their osteological characteristics. – Ornis Hungarica, 27(1): 132–165. DOI: 10.2478/orhu-2019-0009

ITALY

In the last year, MARCO PAVIA continued the study of birds from African sites with the description of a fossil *Geronticus* Ibis and the ongoing study of the whole bird association from Kromdraai, and the beginning of the study of the bird association from Cooper's Cave (both locality in the Cradle of Humankind, South Africa). At the same time, he's been involved in a broad project on the locality of Langebaanweg (South Africa), led by the Iziko Museum of Cape Town, with the objective to organize the huge material found so far in order to have the complete knowledge of the birds from this extraordinary locality. The project with LISA CARRERA, a PhD student in Bologna is continuing with promising results. He is also still busy in local projects on extant birds, including a collaboration with GARY VOELKER (Texas A&M University) on the evolution of European bird species, their relationships with Africa, also inferred by the study of blood parasites.

Huge efforts in this last year were put into organizing the fossil and recent skeleton collections at the Torino University, with particular attention to the recent skeletons, which have significantly grown in terms of number of specimens and species

PAVIA, M. (2019): The bird osteological collection of the Dipartimento di Scienze della Terra of the Torino University, Italy. – Alauda, 87: 103–109.
PAVIA, M. (2019): *Geronticus thackerayi*, sp. nov. (Aves, Threskiornithidae), a new ibis from the hominin-bearing locality of Kromdraai (Cradle of Humankind, Gauteng, South Africa). – Journal of Vertebrate Paleontology, 39/3: e1647433.
MOVALLI, P., DUKE, G., RAMELLO, G., et al. (other 58 authors including Pavia, M.). (2019): Progress on bringing together raptor collections in Europe for contaminant research and monitoring in relation to chemicals regulation. – Environmental Science and Pollution Research, Volume 26/20: 20132–20136
RAKOVIC, M., NETO, J.M., LOPEZ, R.J., KOBLIK, E.V., FADEEV, I.V., LOHMAN, Y.V., AGHAYAN, S.A., BOANO, G., PAVIA, M., PERIMAN, Y., KLAT, Y., BEN DOV, A., COLLINSON, M., VOELKER, G., DROVETSKI, S.V. (2019): Geographic patterns of mtDNA and Z-linked sequence variation in the Common Chiffchaff and the 'chiffchaff complex'. – PLoS ONE, 14/1: e0210268.
PAVIA, M., BOANO, G. (2018): Recovery of skeletal elements and extended wing from a mounted specimen of the nearly extinct Slender-billed Curlew

(*Numenius tenuirostris*). – Rivista Italiana di Ornitologia, 88/1: 9-14.

DROVETSKI, S.V., FADEEV, I.V., RAKOVIC, M., LOPES, R.J., BOANO, G., PAVIA, M., KOBLIK, E.V., LOHMAN, Y.V., RED'KIN, Y.A., AGHAYAN, S.A., REIS, A., DROVETSKAYA, S.S., VOELKER G. (2018): A test of the European Pleistocene refugial paradigm, using a Western Palaearctic endemic bird species. – Proceedings Royal Society B, 285: 20181606.

NEW ZEALAND

At Canterbury Museum, VANESA DE PIETRI and PAUL SCOFIELD, in collaboration with TREVOR WORTHY and other long-standing members of the team have continued their work on fossil birds from St Bathans, New Zealand. New publications are planned for 2020.

In collaboration with researchers from Europe, Australia, and New Zealand, Vanesa is currently finishing a paper on a new species of Polynesian sandpiper (*Prosobonia*) from Henderson Island, which includes an assessment based on genomic data of the phylogenetic relationships of these birds. This project is part of a grant from the Marsden Fund of the Royal Society of New Zealand on the evolutionary history of shorebirds. As part of this grant, Vanesa, Paul, and the wider team are also working on the description of new fossil shorebirds from St Bathans, Australia, Europe, and the USA.

Paul has not only worked on fossil birds, but continues his research alongside several New Zealand researchers on the Holocene Avifauna of New Zealand.

Paul and Vanesa welcomed their son Rollo in January 2019; Vanesa was away from work on parental leave from mid-December 2018 to June 2019.

In March 2019, a small team including AL MANNERING and LEIGH LOVE visited the early Miocene St Bathans site in New Zealand's Central Otago province for our annual dig. Our next field season is scheduled for early February 2020.

Excavations by Leigh Love and preparation by Al Mannering of Paleocene and Miocene birds from North Canterbury have led to several significant new early penguins being discovered which are now being described by the Canterbury Museum team, in collaboration with GERALD MAYR, who visited New Zealand in December 2018. These collaborations on New Zealand Paleogene fossil birds are ongoing and resulted in the publication of one new penguin *Crossvallia waiparensis* and the oldest and smallest pelagornithid known so far.

BISHOP, P.J., SCOFIELD, R.P. & HOCKNULL, S.A. (2019): The architecture of cancellous bone in the hindlimb of moa (Aves: Dinornithiformes), with implications for stance and gait. – Alcheringa: An Australasian Journal of Palaeontology, 1–17.

BOAST, A.P., CHAPMAN, B., HERRERA, M.B., WORTHY, T.H., SCOFIELD, R.P., TENNYSON, A.J., HOUDE, P., BUNCE, M., COOPER, A. & MITCHELL, K.J. (2019): Mitochondrial genomes from New Zealand's extinct Adzebills (Aves: Aptornithidae: *Aptornis*) support a sister-taxon relationship with the Afro-Madagascan Sarothruridae. – Diversity, 11(2): 24.

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DE PIETRI, V.L., SCOFIELD, R.P., PRIDEAUX, G.J., & WORTHY, T.H. (2018): A new species of lapwing (Charadriidae: *Vanellus*) from the late Pliocene of central Australia. – Emu-Austral Ornithology, 118: 334–343.

DE PIETRI, V.L., MAYR, G. & SCOFIELD, R.P. (2019): *Becassius charadriioides*, an early Miocene pratincole-like bird from France: with comments on the early evolutionary history of the Glareolidae (Aves, Charadriiformes). – *PalZ*, 1–18. https://doi.org/10.1007/s12542-019-00469-8

KNAPP, M., THOMAS, J.E., HAILE, J., PROST, S., HO, S.Y., DUSSEX, N., CAMERON-CHRISTIE, S., KARDAILSKY, O., BARNETT, R., BUNCE, M., & GILBERT, M.T.P. (2019): Mitogenomic evidence of close relationships between New Zealand's extinct giant raptors and small-sized Australian sister-taxa. – Molecular phylogenetics and evolution, 134: 122–128

MATHER, E.K., TENNYSON, A.J.D., SCOFIELD, R.P., DE PIETRI, V.L., HAND, S.J., ARCHER, M., HANDLEY, W.D., & WORTHY, T.H. (2018): Flightless rails (Aves; Rallidae) from the early Miocene St Bathans Fauna, Otago, New Zealand. – Journal of Systematic Palaeontology, 17(5): 423–449. DOI: 10.1080/14772019.2018.1432710.

MAYR, G., DE PIETRI, V.L., LOVE, L., MANNERING, A., & SCOFIELD, R.P. (2019): Leg bones of a new penguin species from the Waipara Greensand add to the diversity of very large-sized Sphenisciformes in the Paleocene of New Zealand. – Alcheringa: An Australasian Journal of Palaeontology, 1–8. https://doi.org/10.1080/03115518.2019.1641619

MAYR, G., DE PIETRI, V.L., LOVE, L., MANNERING, A., & SCOFIELD, R.P. (2019): Oldest, smallest and phylogenetically most basal pelagornithid, from the early Paleocene of New Zealand, sheds light on the evolutionary history of the largest flying birds. – Papers in Palaeontology, https://doi.org/10.1002/spp2.1284

MAYR, G., DE PIETRI, V.L., SCOFIELD, R.P. & SMITH, T. (2019): A fossil heron from the early Oligocene of Belgium – the earliest temporally well-constrained record of the Ardeidae. – Ibis, 161: 79–90.

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of human arrival. – New Zealand Journal of Zoology, 46(2): 165–173.
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WORTHY, T.H., HAND, S.J., ARCHER, M., SCOFIELD, R.P., DE PIETRI, V.L. (2019): Evidence for a giant parrot from the Early Miocene of New Zealand. – Biology Letters 15(8): 20190467. https://doi.org/10.1098/rsbl.2019.0467.

NORWAY

HANNEKE MEIJER continues her work on Indonesian fossil avifaunas. Recent work has focused on Late Pleistocene and Holocene avian remains from Timor Leste, identifying an extinct species of *Turnix* from Holocene layers, and a presumably extinct species of crane from the Late Pleistocene layers. The crane likely represents an extirpated population of cranes, which were much more widespread throughout the Indonesian archipelago during the Quaternary. The extinction of a large-bodied bird on Timor would be in line with the extinction of other large avian taxa from Flores and indicates that Quaternary megafauna extinctions in Wallacea included avian taxa as well as proboscideans and reptiles. She published another paper on bone surface modifications on avian remains from the Middle Pleistocene So'a Basin on Flores that were initially thought to be made by ancient hominins. Detailed 3D surface analysis revealed that these modifications are likely to be very recent instead. Excavations on Flores are continuing next year and will include a locality that revealed a tibiotarsal shaft of an as of yet unknown large bird.

SAMUEL WALKER started his PhD under the supervision of Hanneke Meijer at the University of Bergen in 2017. His project focuses on longterm patterns in the Norwegian avifauna based on bird remains from archaeological localities. Samuel published his first paper, a revision of Medieval bird remains from Norway, this year. He continues his project by looking into early Holocene material and size and morphological changes within seabird species from this period.

Of interest to SAPE members might also be the fact that the next meeting of the Bird Working Group of the International Council on Archaeozoology (ICAZ) will be hosted by Hanneke Meijer and colleagues and held in Bergen in June 2021. The Bird Working Group examines the relationships between people and birds in prehistoric, historic, and, at times, contemporary contexts. Group interests include, but are not limited to, identification of bird bones, the taphonomy of avian remains, methods of analysis and interpretation, the use of birds, and representations of birds in art. Everyone with an interest in these topics is welcome to attend.

WALKER, S.J., HUFTHAMMER, A.K., & MEIJER, H.J.M. (2019): Birds in Medieval Norway. – Open Quaternary, 5(1): 5. DOI: http://doi.org/10.5334/oq.58
H.J.M. MEIJER, D'ERRICO, F., QUEFFELEC, A., KURNIAWAN, I., SETIABUDI, E., SUTISNA, I., BRUMM, A., & VAN DEN BERGH, G.D. (2019): Characterization of bone surface modifications on a Early to Middle Pleistocene bird assemblage from Mata Menge (Flores, Indonesia) using multifocus and confocal microscopy. – Palaeogeography, Palaeoclimatology, Palaeoecology 529: 1–11. doi.org/10.1016/j.palaeo.2019.05.025
HORN, I.R., KENENS, Y., PALMBLAD, N.M., DALEBOUT, H., LANGEVELD, B., MEIJER, H.J.M., FISCHER, A., FLORENS, F. B.V., GILBERT, M.P.T., NIEMANN, J., VAN DER PLAS-DUIJVESTEIN, S. J., RIJSDIJK, K.F., & GRAVENDEEL, B. (2019): Palaeoproteomics of fossil bird bones for taxonomic classification. – Zoological Journal of the Linnean Society. doi.org/10.1093/zoolinnean/zlz012
MEIJER, H.J.M., LOUYS, J., & O'CONNOR, S. (2019): First record of avian extinctions from the Late Pleistocene and Holocene of Timor Leste. – Quaternary Science Reviews 203: 170–184

POLAND

ACOSTA HOSPITALECHE, C., JADWISZCZAK, P., CLARKE, J. & CENIZO, M. (2019). The fossil record of birds from the James Ross Basin, West Antarctica. – Advances in Polar Sciences, Vol. 30 No. 3: 251–273.
BOCHENSKI, Z.M., TOMEK, T., WERTZ, K., HAPP, J., BUJOCZEK, M. & SWIDNICKA, E. (2018): Articulated avian remains from the early Oligocene of Poland adds to our understanding of Passerine evolution. – Palaeontologia Electronica, 21.2.32A. 1–12.
BOCHENSKI, Z.M., WERTZ, K., TOMEK, T. & GOROBETS, L. (2019): A new species of the late Miocene charadriiform bird (Aves: Charadriiformes), with a summary of all Paleogene and Miocene Charadrii remains. – Zootaxa, 4624(1): 41–58.
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JADWISZCZAK, P. & ROTHSCHILD, B.M. (2019; online 2017): The first evidence of an infectious disease in early penguins. – Historical Biology, 31: 177–180.
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RUSSIA

LOPATIN, A.V., VISLOBOKOVA, I.A., LAVROV, A.V. STARTSEV, D.B., GIMRANOV, D.O., ZELENKOV, N.V., MASCHENKO, E.N., SOTNIKOVA, M.V., TARASENKO, K.K., & TITOV, V.V. (2019): The Taurida Cave, a new locality of early Pleistocene vertebrates in Crimea – Doklady Biological Sciences, 485: 40–43.

PALASTROVA, E.S., & ZELENKOV, N.V. (2018): Morphological specificity of the postcranial skeleton in larks (Passeriformes, Alaudidae) – The Russian Journal of Ornithology, 1736: 863–870.

VOLKOVA, N.V. (2019): The first fossil barbet (Aves, Ramphastidae) from Siberia – Journal of Ornithology. DOI: 10.1007/s10336-019-01719-x

ZELENKOV, N.V. (2018): The oldest Asian duck (Anseriformes: Romainvilla) and the origin of
Anatidae. – Doklady Biological Sciences, 483: 225–227.

ZELENKOV, N.V. (2019): A swan-sized anseriform bird from the late Paleocene of Mongolia. – Journal of Vertebrate Paleontology, e1531879. DOI: 10.1080/02724634.2018.1531879

ZELENKOV, N.V. (2019): Systematic position of *Palaeortyx* (Aves, ?Phasianidae) and notes on the evolution of Phasianidae – Paleontological Journal, 53: 194–202.

ZELENKOV, N.V. (2019): Cenozoic evolution of Eurasian anatids (Aves: Anatidae s.l.) – Zhurnal Obschei Biologii, 80: 323–333. [Russian]

ZELENKOV, N.V., LAVROV, A.V. STARTSEV, D.B., VISLOBOKOVA, I.A., & LOPATIN, A.V. (2019): A giant early Pleistocene bird from Eastern Europe: unexpected component of terrestrial faunas at the time of early Homo arrival – Journal of Vertebrate Paleontology: e1605521. DOI: 10.1080/02724634.2019.1605521

ZELENKOV, N.V. & PANTELEYEV, A.V. (2019): A small stem-galliform bird (Aves: Paraortygidae) from the Eocene of Uzbekistan – Coptes Rendus Palevol, 18: 517–523.

ZINOVIEV, A.V. (2018): Partial reconstruction of the Haast's Eagle (*Harpagornis moorei*, Aves, Accipitridae) pelvic musculature with morphofunctional implications. – Zoologichesky Zhurnal, 97: 1021–1025.

SPAIN

FRANCISCO "KIKO" SERRANO started a Postdoctoral Fellowship at the Spanish Royal Academy of Sciences in January 2019. At the same time, he started a position as Research Associate at Natural History Museum of Los Ángeles County (CA, U.S.A). Kiko continues his research on the aerial properties of early Cretaceous birds and the evolution of avian flight. His collaboration with LUIS CHIAPPE (NHM Los Ángeles) has produced several interesting results in the period 2018-2019. One study supported that paleoatmospheric variations played an important role in the flight evolution of early birds. Other two studies described new Early Cretaceous enantiornthines from China, *Orienantius ritteri* and *Gretcheniao sinensis*, and the aerial modelling of them revealed intermittent and continuous flapping flight. Also, a meticulous anatomical description and analyses of two new specimens of *Protopteryx fengningensis* showed that intermittent flight capacity was present in the earliest enantionithines. Collaboration with ANUSUYA CHINSAMY (University of Cape Town) shed light on the life history of *Confuciusornis* based on bone histology. Likewise, a collaboration with MICHAEL PITTMAN (Hong Kong University) provided new information for aerial modeling of *Sapeornis* from Laser Stimulated Fluorescence images, and in other paper, they and other colleagues reviewed the methods to infer flight properties in early theropods. Currently, Kiko is completely dedicated to the organization of the next SAPE meeting in his birth town (Málaga), as he is the chair of the hosting committee.

CHIAPPE, L.M., LIU, D., SERRANO F.J., ZHANG, Y. & MENG Q. (2019): Anatomy and flight performance of the early enantiornithine bird *Protopteryx fengningensis*: Information from two new specimens of the Early Cretaceous Huajiying Formation of China. In Special Issue "The Hidden World of Dinosaurs: Their Anatomy, Histology and Paleobiology ", J LAITMAN, P DODSON AND B HEDRICK (Eds). – The Anatomical Record, in press.

CHIAPPE, L.M., MENG Q., SERRANO F.J., SIGURDSEN, T., Wang, M., Bell, A. & Liu, D. (2019): New Bohaiornis-like bird from the Early Cretaceous of China: Enantiornithine interrelationships and flight performance. – PeerJ, in press.

CHINSAMY, A., MARUGÁN-LOBÓN, J., SERRANO F.J., & CHIAPPE, L.M. (2019): Osteohistology and life history of the basal pygostylian, *Confuciusornis sanctus*. In Special Issue "The Hidden World of Dinosaurs: Their Anatomy, Histology and Paleobiology ", J LAITMAN, P DODSON AND B HEDRICK (Eds). – The Anatomical Record, in press.

KNOLL, F., CHIAPPE, L.M., SANCHEZ, S., GARWOOD, R., EDWARDS, N., WOGELIUS, R., SELLERS, W., MANNING, P., ORTEGA, F., SERRANO F.J., MARUGÁN-LOBÓN, J., CUESTA, E., ESCASO, F. & SANZ, J.L. (2018): A diminutive perinate European Enantiornithes reveals an asynchronous ossification pattern in early birds. – Nature Communications, 9: 937: 1–9

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PITTMAN, M., HEERS, A., SERRANO, F.J., FIELD, D.J., HABIB, M., DECECCHII, A., KAYE, T. & LARSSON, H. (2019). Methods of studying early Theropod Flight. In Special Issue "*Early Flight Study: Methods, Current Status and New Frontiers",* M PITTMAN AND X XU (Eds.). – Bulletin of the American Museum of Natural History, in press.

SERRANO, F.J., CHIAPPE, L.M., PALMQVIST, P., FIGUEIRIDO, B., MARUGÁN-LOBÓN, J., & SANZ, J.L. (2018): Flight reconstruction of two European Enantiornithes (Aves, Pygostylia) and the achievement of bounding flight in Early Cretaceous birds. – Palaeontology, 61: 359–368

SERRANO, F.J., CHIAPPE, L.M., PALMQVIST, P., FIGUEIRIDO, B., LONG, J. & SANZ, J.L. (2019): The effect of long-

term atmospheric changes on the macroevolution of bird. – Gondwana Research, 65: 86–96

SERRANO, F.J., PITTMAN, M., KAYE, T., WANG X., ZHENG, X., CHIAPPE, L.M., & XU, X. (2019): Laser-stimulated fluorescence (LSF) refines flight modelling of the Early Cretaceous bird *Sapeornis*. In Special Issue "*Early Flight Study: Methods, Current Status and New Frontiers",* M PITTMAN AND X XU (Eds.). – Bulletin of the American Museum of Natural History, in press.

SWEDEN

PER ERICSON continues to work on the systematics of birds using primarily molecular data. He is currently involved in a long-term investigation of the bowerbird family (Ptilonorhynchidae) using phylogenomics. A first study of the systematic relationships and general evolution of the family is soon completed.

CAI, T.L., CIBOIS, A., ALSTRÖM, P., MOYLE, R.G., KENNEDY, J.D., SHAO, S.M., ZHANG, R.Y., IRESTEDT, M., ERICSON, P.G.P., GELANG, M., QU, Y.H., LEI, F.M., & FJELDSÅ, J. (2019): Near-complete phylogeny and taxonomic revision of the world's babblers (Aves: Passeriformes). – Molecular Phylogenetics and Evolution, 130: 346–356.

ERICSON, P.G.P., QU, Y.H., RASMUSSEN, P.C., BLOM, M.P.K., RHEINDT, F.E. & IRESTEDT, M. (2019): Genomic differentiation tracks earth-historic isolation in an Indo-Australasian archipelagic pitta (Pittidae; Aves) complex. – BMC Evolutionary Biology. doi: 10.1186/s12862-019-1481-5

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PROST, S., ARMSTRONG, E.E., NYLANDER, J., THOMAS, G.W.C., SUH, A., PETERSEN, B., DALEN, L., BENZ, B.W., BLOM, M.P.K., PALKOPOULOU, E., ERICSON, P.G.P. & IRESTEDT, M. (2019): Genome analyses show strong selection on coloration, morphological and behavioral phenotypes in birds-of-paradise. – GigaScience. doi: /10.1093/gigascience/giz003

QU, Y.H., CHEN, C.H., XIONG, Y., SHE, H.S., ZHANG, Y.E., CHENG, Y.L., DUBAY, S., LI, D.M., ERICSON, P.G.P., HAO, Y., WANG, H.Y., ZHAO, H.F., SONG, G., ZHANG, H.L., ZHANG, C., YANG, T., LIANG, L.P., WU, T.Y., ZHAO, J.Y., GAO. Q., ZHAI, W.W., & LEI, F.M. (2019): Rapid phenotypic evolution with shallow genomic differentiation during early stages of high elevation adaptation in Eurasian Tree Sparrows. – National Science Review, nwz138. doi: 10.1093/nsr/nwz138

UNITED KINGDOM

DANIEL FIELD began a permanent position in the Department of Earth Sciences at the University of Cambridge in late 2018, where his research group is primarily focused on the origins and early evolution of modern birds. The lab benefits from proximity to the excellent natural history museums at Cambridge (Sedgwick Museum of Earth Sciences and University Museum of Zoology), and the high-resolution scanning capabilities of the Cambridge Biotomography Centre. Daniel looks forward to seeing many SAPE colleagues in Malaga in the spring.

JUNYA WATANABE has moved to Cambridge, UK, to conduct a 2-year fellowship with Daniel Field. His current project focuses on evolutionary morphology of wing-propelled diving birds, aiming to comprehend potential importance of developmental bias (constraint) in evolutionary diversification of birds, by combining anatomical, morphometric, and comparative analyses. He is currently preparing a manuscript on reconstruction of the wing musculature of extinct flightless auks, a partial result of which has appeared in conferences in past years. Apart from that, a paper on Pleistocene birds from the Kazusa and Shimosa groups, central Japan, by him and his colleagues will appear soon on the Journal of Vertebrate Paleontology. The species reported are: *Melanitta fusca*, *Clangula hyemalis*, Anatidae? gen. et sp. indet., *Gavia stellata*, *Phoebastria* cf. *albatrus*, *Puffinus* cf. *puffinus* complex, Phalacrocoracidae gen. et sp. indet., *Alle* cf. *alle*, and *Mancalla* sp. Obviously, the occurrence of *Alle* from the mid-latitudes of the North Pacific is of much biogeographical significance.

In January 2019, JULIAN PENDER HUME organised a field trip to the palaeontologically poorly known Cape Verde Islands in the North Atlantic. This is part of an ongoing collaborative project with scientists in Portugal and the Canary Islands to better document the island's prehumen fauna. Preliminary work revealed the presence of now-extinct giant tortoise and giant skinks, with a number of new bird records. In March, he travelled to Copenhagen to work on the dodo skull held at the Natural History Museum, which, along with the Oxford dodo skull, comprise the only known specimens that originate from captive birds. A second project is to describe and illustrate all specimens of winter plumage Great Auk *Pinguinus impennis*, of which Copenhagen has one of the best-preserved. In May/June he worked in the Hawaiian Archipelago to finalise two projects on extinct seed predators and frugivores. The latter covers most island groups in the world and the initial results are proving extremely interesting. Fieldwork dominated early August to the end of September, with just five days home between trips to Mulu, Malaysia, Mauritius and southwest Madagascar; Mauritius and Madagascar were particularly successful. An excavation of the Mare la Chaux on Mauritius, a lime-rich swamp situated in the east of the island, and the only inland lowland fossil deposit so far discovered revealed vast numbers of vertebrate bones, with excellent preservation of pollen and plant seeds. The age of the site, based on 14C, is 12,000 YBP, making it the oldest fossil locality outside

of Madagascar and Aldabra in the Indian Ocean. Work will continue there next September. Reports of fossil remains from a swamp and new caves in Itampolo, southwest Madagascar prompted a return reconnaissance trip to survey the area. The swamp and some of the caves proved particularly exciting and contained lots of fossil material. A major excavation is planned for late 2020. The last quarter of 2019 is much less exhausting, and trips to the AMNH, New York in October and Natural History Museum, Brussels in November will nicely conclude a quite extraordinary palaeo year.

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USA

California

At the Natural History Museum of Los Angeles County (NHMNLA), NATE SMITH has resumed work on the phylogenetic relationships of Sulidae. He presented a phylogenetic analysis based on external morphological characters and its implications for dataset compatibility at the 2019 Society of Vertebrate Paleontology (SVP) conference in Brisbane (Australia). Several of his recent publications on early dinosaurs and their relatives also provide insight into the origin of avian growth strategies and evolution of sternal elements. During the last year, LUIS CHIAPPE and his Mesozoic avian research group advanced their studies on Cretaceous birds on several fronts. ALYSSA BELL led a morphometric-based study of modern diving birds and the extinct Hesperornithiformes in order to investigate hind limb adaptations and convergence among foot-propelled diving birds. BECKY WU and NATE CARROLL continued their PhD studies on dental replacement patterns in stem birds and Mesozoic feather development (primarily on data from amber and coprolite inclusions). They presented their initial results at the 2019 SVP meeting, with Nate just getting a Scientific Reports paper accepted for publication. Luis has been dividing his research focus between China (Jehol fossils) and Brazil (Late Cretaceous). He collaborated with ANUSUYA CHINSAMY, JESUS MARUGAN-LOBON, and FRANCISCO "KIKO" SERRANO on a study of growth patterns in the Early Cretaceous bird Confuciusornis, and joined forces with XING LIDA and JINGMAI O'CONNOR on the study of spectacular inclusions in mid-Cretaceous amber from Myanmar. He continues to work on stem bird aerodynamics with "Kiko" Serrano, and he's started a project on the interspecific variability of *Longipteryx* with JUAN ALVAREZ (high-school student at NHMLA) and WANG XURI. MAUREEN WALSH has spent many hours preparing (incredible) cranial material from the Late Cretaceous of Brazil as well as Jehol specimens at the Beijing Museum of Natural History for an upcoming exhibition planned to premier in Los Angeles in 2022.

Finally, although retired now for two years, KEN CAMPBELL continues working on fossil birds, primarily from Rancho La Brea, although that has been slowed by some years of work on Amazonian geology. A priority now is to complete the final details of the piciform paleoavifauna from Rancho La Brea, being undertaken with ZBIGNIEW BOCHENSKI.

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Connecticut

DANIEL KSEPKA continues to enjoy his time to the Bruce Museum, which is in a busy period as construction begins on an expansion that will double the size of the museum. Dan remains involved in two NSF projects as co-PI, "Collaborative Research: Advancing Bayesian Phylogenetic Methods for Synthesizing Paleontological and Neontological Data" and "All Birds: A Time-scaled Avian Tree from Integrated Phylogenomic and Fossil Data". While not focusing on phylogenetic analyses and descriptions of new taxa, he dabbles in avian brain evolution and reconstructing body size evolution in various clades. Dan and his wife Kristin have welcomed a baby daughter into the world in October 2019, and hope that she and her brother Michael may attend their first SAPE conference in 2020.

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Gainsville, Florida

As retirement approaches, DAVE STEADMAN has focused mostly on building up the already extensive modern skeleton collection of birds. Ongoing collaborative projects are mainly oriented to laboratory work after Hurricane Dorian destroyed the Abaco branch of the National Museum of The Bahamas in Marsh Harbour, which had served as home base for Bahamian vertebrate paleontology, on 1-2 September 2019. Parts of the Bahamian collection that could be salvaged now reside at the Florida Museum of Natural History.

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South Carolina

ADAM SMITH continues in his 4th year as curator at Clemson University's Campbell Geology Museum. Ongoing projects include collaborations focused on fossil birds from locations in the USA, Egypt, and China as well as projects on extant avian neuroanatomy and digital rendering of feathers with collaborators at Clemson University. Adam has been overseeing the expansion of the Campbell Museum's exhibit on "The Evolution of Flight & Flightlessness" and is pursuing ambitious plans for field work in the western US.

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