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KEY WORDS

Eco-evo-devo, teeth, development, bats, deep homology, space biology

CURRENT AND PAST POSITIONS

- Since 2024** **CRCN CNRS – leading tenured researcher at ISEM Montpellier, France**
- 2020-2023** **Assistant Project Scientist (Research Associate)**
The origin of heterodonty in bats and mammals
University of California, Los Angeles, PI: Pr. Karen Sears
- 2017-2020** **Postdoctoral research associate**
Evo-devo of sensory adaptation and tooth development in Noctilionoid bats
University of California, Los Angeles, Advisor: Pr. Karen Sears
- 2015-2017** **Postdoctoral research associate**
Evo-devo of sensory adaptation in Noctilionoid bats
University of Illinois at Urbana-Champaign, Illinois, Advisor: Pr. Karen Sears
- 2014** **Postdoctoral scholar short-term (2 months)**
Ecole Normale Supérieure de Lyon, IGFL, Postdoctoral research position, 4 months

EDUCATION

- 2009-2013** **PhD in Evolutionary and Developmental Biology – Molecular Zoology group**
Ecole Normale Supérieure de Lyon, IGFL, France
Thesis: “Evo-devo of the Eda pathway, from the evolution of signaling to the establishment of shape”. Advisors: Pr. Vincent Laudet and Dr. Sophie Pantalacci
Highest honors and felicitations from the committee
- 2007-2008** **Master 2 “high school and higher education”/Préparation à l’agrégation**
Ecole Normale Supérieure de Lyon, France, highest educational degree for highschool and undergrad education in Biology and Geology. Major: A, Molecular Biology
Agrégation: admissible; CAPES: admitted, position offered, **national ranking 4/3393**
- 2008-2009** **Master “research” Biosciences**
- 2006-2007** Ecole normale supérieure de Lyon, IGFL Master 1 and 2 - **With honors**
Theses: “Alternative isoforms of the *Edaradd* gene in evolution” and “The cryptic species diversity of the genus *Proasellus*”. Advisors: Sophie Pantalacci and Vincent Laudet (2008-2009) and Christophe Douady (2006-2007)
- 2005-2006** **Licence in Molecular and Cellular Biology**
Ecole normale supérieure de Lyon, France – EU equivalent of Bachelor, 2 months lab experience – published research (see MBE 2008)
Supervisor: Sophie Pantalacci

AWARDS AND GRANTS

2023 ERC Consolidator grant – 2.65M€

2023 ANR MODJAW collaborator (PI G. Billet, MNHN) 2023, invited for step 2 (February 2024).

2023 Bat Biology Foundation award – 3k\$ for our 2024 DR fieldtrip to sequence 3 bats species for the Bat1k consortium/BBF

2023 Tremplin ERC – 110k€

2022 Wellcome Trust – Career Development Award – invitation for interview, not awarded

2021 UCLA Chancellor’s award for postdoctoral research – awardee

The Chancellor’s Award for Postdoctoral Research recognizes the 10 most important contributions (among the ~1400 postdocs from all disciplines) that postdoctoral scholars make to UCLA’s research mission – **7500\$**

<https://www.postdoc.ucla.edu/chancellors-award-for-postdoctoral-research/>

2020 NSF IOS grant - Leader investigator of the project - Collaborators: PIs Karen Sears (UCLA), Sharlene Santana (UW) and Paul François (Mc Gill)

Starting July 2020 – **600k\$**

2020 iBiology Young Scientists Seminar Award – winner

Talk available here: <https://www.ibiology.org/evolution/bat-vision/>

2017 MBI workshop travel grant – 600\$

2012 Grant ARC (Research against Cancer Association) Foundation

Awarded a project on the role of EDAR in cancer – One year of full support ~20k€

2009 Teaching fellowship – “monitorat”

Extra salary for teaching activities including: TA, full lectures and full courses teaching and conception – 80h/year ~ 7.75k€/year

2009 MRT PhD fellowship

Supporting 3 years of salary for research - Ranked 3/50 (15/50 were awarded) ~12.25k€/year

PUBLICATIONS

*: equal contributions; **Students**

Published:

26. Grossnickle, D. M., **Sadier, A.**, Patterson, E., Cortés-Viruet, N. N., Jiménez-Rivera, S. M., Sears, K. E., & Santana, S. E. (2024). The hierarchical radiation of phyllostomid bats as revealed by adaptive molar morphology. *Current Biology*. <https://doi.org/10.1016/j.cub.2024.02.027>

25. Anthwal, N., **Hall, R. P.**, **de la Rosa Hernandez, F. A.**, **Koger, M.**, Yohe, L. R., Hedrick, B. P., Davies, K. T. J., Mutumi, G. L., Roseman, C. C., Dumont, E. R., Dávalos, L. M., Rossiter, S. J., **Sadier***, **A. (co-last)**, & Sears*, K. E. (2023). Cochlea development shapes bat sensory system evolution. *The Anatomical Record*, 1–12. <https://doi.org/10.1002/ar.25353>

24. **Sadier, A.**, Anthwal, N., Krause, A. L., Dessalles, R., Lake, M., Bentolila, L. A., Haase, R., **Nieves, N. A.**, Santana, S. E., & Sears, K. E. (2023). Bat teeth illuminate the diversification of mammalian tooth classes. *Nature Communications*, 14(1), Article 1. <https://doi.org/10.1038/s41467-023-40158-4>

23. Mutumi GL, Hall RP, Hedrick BP, Yohe LR, **Sadier A**, Davies KTJ, Rossiter SJ, Sears KE, Dávalos LM, Dumont ER. 2023. Disentangling Mechanical and Sensory Modules in the Radiation of Noctilionoid Bats. *The American Naturalist* 000–000. <https://www.journals.uchicago.edu/doi/full/10.1086/725368>

22. Anthwal, N., Urban, D. J., **Sadier, A.**, **Takenaka, R.**, Spiro, S., Simmons, N., Behringer, R. R., Cretkos, C. J., Rasweiler, J. J., & Sears, K. E. (2023). Insights into the formation and diversification of a novel chiropteran wing membrane from embryonic development. *BMC Biology*, 21(1), 101. <https://doi.org/10.1186/s12915-023-01598-y>

21. Yohe LR, Fabbri M, Lee D, Davies KTJ, Yohe TP, Sánchez MKR, Rengifo EM, Hall RP, Mutumi G, Hedrick BP, **Sadier A**, Simmons NB, Sears KE, Dumont E, Rossiter SJ, Bhullar B-AS, Dávalos LM. n.d. Ecological constraints on highly evolvable olfactory receptor genes and morphology in neotropical bats. *Evolution* n/a. <https://doi.org/10.1111/evo.14591>
20. Santana SE*, Grossnickle DM*, **Sadier A (co-first)***, Patterson E, Sears KE. 2022. Bat Dentitions: A Model System for Studies at the Interface of Development, Biomechanics, and Evolution. *Integrative and Comparative Biology* 62:762–73. <https://academic.oup.com/icb/article/62/3/762/6586353?login=false>
19. **Sadier A.**, Sears, K. and Womack, M. Unravelling the heritage of lost traits, **J Exp Part B**. <https://doi.org/10.1002/jez.b.23030>
18. **Howenstine, A. O., Sadier, A.**, Anthwal, N., Lau, C. L., & Sears, K. E. (2021). Non-model systems in mammalian forelimb evo-devo. *Current Opinion in Genetics & Development*, 69, 65-71. <https://doi.org/10.1016/j.gde.2021.01.012>
17. Hall, R.P., Mutumi, G.L., Hedrick, B.P., Yohe, L.R., **Sadier, A.**, Davies, K.T.J., Rossiter, S.J., Sears, K., Dávalos, L.M. and Dumont, E.R. (2021), Find the food first: An omnivorous sensory morphotype predates biomechanical specialization for plant based diets in phyllostomid bats. **Evolution** <https://doi.org/10.1111/evo.14270>
16. Nojiri T, Wilson LAB, López-Aguirre C, Tu VT, Kuratani S, Ito K, Higashiyama H, Son NT, Fukui D, **Sadier A**, Sears KE, Endo H, Kamihori S, Koyabu D. 2021. Embryonic evidence uncovers convergent origins of laryngeal echolocation in bats. **Current Biology** 31:1353-1365.e3. <https://doi.org/10.1016/j.cub.2020.12.043>
15. **Sadier A**, Urban DJ, Anthwal N, **Howenstine AO**, Sinha I, Sears KE, Sadier A, Urban DJ, Anthwal N, Howenstine AO, Sinha I, Sears KE. 2020. Making a bat: The developmental basis of bat evolution. **Genetics and Molecular Biology** <http://dx.doi.org/10.1590/1678-4685-gmb-2019-0146>
14. **Sadier A.**, Santana S., Sears K. The role of core and variable Gene Regulatory Network modules in tooth development and evolution (2020) **Integrative and Comparative Biology**, icaa116 <https://doi.org/10.1093/icb/icaa116>
13. **Sadier, A.**, Jackman, W.R., Laudet, V and Gibert, Y. Vertebrate tooth type: is it signaled by a single organizing tooth? (2020) **BioEssays** 42 (6), 1900229 <https://doi.org/10.1002/bies.201900229>
12. C Darrin Hulsey, Karly E Cohen, Zerina Johanson, Nidal Karagic, Axel Meyer, Craig T Miller, **Alexa Sadier**, Adam P Summers, Gareth J Fraser (2020) Grand Challenges in Comparative Tooth Biology **Integrative and Comparative Biology** icaa038 <https://doi.org/10.1093/icb/icaa038>
11. Hedrick BP, Mutumi GL, Munteanu VD, **Sadier A**, Davies KTJ, Rossiter SJ, Sears KE, Dávalos LM, Dumont E. 2020. Morphological Diversification under High Integration in a Hyper Diverse Mammal Clade. *J Mammal Evol* 27:563–575 <https://doi.org/10.1007/s10914-019-09472-x>
10. Vial, J., Royet, A., Cassier, P., Tortereau, A., Dinvaut, S., Maillet, D., Gratadou-Hupon, L., Creveaux, M., **Sadier, A.**, Tondeur, G., et al. (2019). The Ectodysplasin receptor EDAR acts as a tumor suppressor in melanoma by conditionally inducing cell death. **Cell Death Differ** 26, 443–454. <https://doi.org/10.1038/s41418-018-0128-1>
9. **Sadier, A.**, Twarogowska, M., Steklikova, K., Hayden, L., Lambert, A., Schneider, P., Laudet, V., Hovorakova, M., Calvez, V., and Pantalacci, S. (2019). Modeling Edar expression reveals the hidden dynamics of tooth signaling center patterning. **PLoS Biol** 17, e3000064 <https://doi.org/10.1371/journal.pbio.3000064>
8. Sears, K., Maier, J.A., **Sadier, A.**, Sorensen, D., and Urban, D.J. (2018). Timing the developmental origins of mammalian limb diversity. **Genesis** 56. <https://doi.org/10.1002/dvg.23079>
7. **Sadier***, A., Davies*, K.T., Yohe, L.R., Yun, K., Donat, P., Hedrick, B.P., Dumont, E.R., Dávalos, L.M., Rossiter, S.J., and Sears, K.E. (2018). Multifactorial processes underlie parallel opsin loss in neotropical bats. **Elife** 7. <https://elifesciences.org/articles/37412>

6. Hedrick, B.P., Yohe, L., Vander Linden, A., Davalos, L.M., Sears, K., **Sadier, A.**, Rossiter, S.J., Davies, K.T.J., and Dumont, E. (2018). Assessing Soft-Tissue Shrinkage Estimates in Museum Specimens Imaged With Diffusible Iodine-Based Contrast-Enhanced Computed Tomography (diceCT). **Microsc Microanal** 24, 284–291. <https://doi.org/10.1017/s1431927618000399>
5. Urban, D.J., Anthwal, N., Luo, Z.-X., Maier, J.A., **Sadier, A.**, Tucker, A.S., and Sears, K.E. (2017). A new developmental mechanism for the separation of the mammalian middle ear ossicles from the jaw. **Proc Biol Sci** 284. <https://doi.org/10.1098/rspb.2016.2416>
4. Gibert, Y., Samarut, E., Pasco-Viel, E., Bernard, L., Borday-Birraux, V., **Sadier, A.**, Labbe, C., Viriot, L., and Laudet, V. (2015). Altered retinoic acid signalling underpins dentition evolution. **Proc Biol Sci** 282. <https://royalsocietypublishing.org/doi/10.1098/rspb.2014.2764>
3. **Sadier, A.**, Lambert, E., Chevret, P., Decimo, D., Semon, M., Tohme, M., Ruggiero, F., Ohlmann, T., Pantalacci, S., and Laudet, V. (2015). Tinkering signaling pathways by gain and loss of protein isoforms: the case of the EDA pathway regulator EDARADD. **BMC Evol Biol** 15, 129. <https://doi.org/10.1186/s12862-015-0395-0>
2. **Sadier, A.**, Viriot, L., Pantalacci, S., and Laudet, V. (2014). The ectodysplasin pathway: from diseases to adaptations. **Trends Genet** 30, 24–31. <https://doi.org/10.1016/j.tig.2013.08.006>
1. Pantalacci, S., Chaumot, A., Benoit, G., **Sadier, A.**, Delsuc, F., Douzery, E.J.P., and Laudet, V. (2008). Conserved features and evolutionary shifts of the EDA signaling pathway involved in vertebrate skin appendage development. **Mol Biol Evol** 25, 912–928. <https://doi.org/10.1093/molbev/msn038>

BOOK CHAPTERS

- Alexa Sadier**, Vladimír Soukup. (2023). Initiation and Periodic Patterning of Vertebrate Dentitions. In *Odontodes*. CRC Press.
- Sadier, A.** (2019). How Do Gene Networks Promote Morphological Evolution. In *Old Questions and Young Approaches to Animal Evolution*, J.M. Martín-Durán, and B.C. Vellutini, eds. (Cham: Springer International Publishing), pp. 209–234.
- Sadier, A.A.** (2016). Regulatory and Coding Changes in Developmental Evolution, Roles of. In *Encyclopedia of Evolutionary Biology*, R.M. Kliman, ed. (Oxford: Academic Press), pp. 433–440.

CONFERENCE PRESENTATIONS

- AbSciCon 2024 - oral communication** Sadier Alexa, Masafumi Muratani 106-05 How to build an alien: exploring the evolutionary rules of multicellular life
- NASBR 2023 - oral communication** Sadier Alexa, Dave Grossenickle, Sharlene Santana and Karen Sears Understanding the developmental foundation of extreme diversification of bat teeth
- NASBR 2023 - poster** Marina Zernik, Sadier Alexa, Dave, Darshan Narang, Omer Gokcumen, Karen Sears Salivary Gland Diversification During the Adaptive Radiation of Noctilionoid Bats
- ICVM 2023 - oral communication – invited speaker** Sadier Alexa, Dave Grossenickle, Sharlene Santana and Karen Sears Understanding the developmental foundation of extreme diversification of bat teeth
- IBRC 2022 – oral communication** Sadier Alexa for Karen Sears - Using Wild Bats to Investigate the Cellular Basis of Longevity
- PanAmEvoDevo-SDB 2022 – oral communication – invited speaker** Sadier Alexa, Dave Grossenickle, Sharlene Santana and Karen Sears Understanding the developmental foundation of extreme diversification of bat teeth
- EuroEvoDevo 2022 – oral communication:** Sadier Alexa, Dave Grossenickle, Sharlene Santana and Karen Sears - Understanding the developmental foundation of extreme diversification in bat molars

SICB 2022 – oral communication – oral communication: Sharlene Santana*, Dave Grossenickle*, Alexa Sadier* Bat dentitions: a model system for studies at the interface of development, biomechanics, and evolution

2nd Asia Evo conference – oral communication - invited speaker August 2021: Sadier Alexa, Sharlene Santana, Paul François and Karen Sears - Understanding the GRN behind bat molar extreme diversification

Bat1K symposium batellite meeting – oral communication: Sadier Alexa, Sharlene Santana, Paul François and Karen Sears - Understanding the GRN behind bat molar extreme diversification

SRC Pop-up Early career symposia 2020 / evo-devo – oral communication – invited speaker: Sadier Alexa, Andrew Krause, Dessalles Renaud, Nieves Natalie, Santana Sharlene and Karen Sears - Bat teeth at the cusp: Finding new rules for the patterning of post-canine teeth in mammals

SICB 2020 – oral communication – invited speaker: Sadier Alexa, Krause Andrew, Dessalles Renaud, Nieves Natalie, Santana Sharlene and Karen Sears - Finding new rules for the patterning of post-canine teeth in mammals

TMD 2019 – oral communication: Sadier Alexa, Dessalles Renaud, Nieves Natalie, Santana Sharlene and Karen Sears - Finding new rules for the patterning of post-canine teeth in mammals: insights from Noctilionoid bats

ICVM 2019 – oral communication – invited speaker: Sadier Alexa, Dessalles Renaud, Nieves Natalie, Santana Sharlene and Karen Sears - Finding new rules for the patterning of post-canine teeth in mammals: insights from Noctilionoid bats

NASBR 2018 – oral communication: Sadier Alexa, Dessalles Renaud, Nieves Natalie, Santana Sharlene and Karen Sears - Finding new rules for the patterning of post-canine teeth in mammals: insights from Noctilionoid bats

NASBR 2018 – poster: Sadier, Alexa; Sears, Karen New developmental constrained for the establishment of the molar row in Noctilionoid bats - Deciphering genomic and developmental mechanisms that underlie vision adaptations in noctilionoid bats

EuroEvoDevo 2018 – oral communication: Sadier Alexa, Dessalles Renaud, Nieves Natalie, Santana Sharlene and Karen Sears - Finding new rules for the patterning of post-canine teeth in mammals: insights from Noctilionoid bats

LASDB 2017 – oral communication: Sadier Alexa, Santana Sharlene and Karen Sears - Establishing dental patterning in noctilionoid bats

PanAmEvoDevo 2017 - oral communication: Sadier, Alexa; Davalos, Liliana; Dumont, Elizabeth; Rossiter, Stephen; Sears, Karen - Deciphering genomic and developmental mechanisms that underlie vision adaptations in noctilionoid bats

PanAmEvoDevo 2017 - poster: Sadier, Alexa; Sears, Karen - New developmental constrained for the establishment of the molar row in Noctilionoid bats

Morphogenesis workshop MBI 2017 - poster: Sadier, Alexa; Santana Sharlene, Sears, Karen - Modeling the developmental foundations of adaptive radiation

EuroEvoEvo 2016 - oral communication: Sadier, Alexa; Davalos, Liliana; Dumont, Elizabeth; Rossiter, Stephen; Sears, Karen - Deciphering genomic and developmental mechanisms that underlie vision adaptations in noctilionoid bats

PanAmEvoEvo 2015 - poster: Sadier A, Lambert E, Chevret P, Décimo D, Semon M, Tohmé M, Ruggiero F, Ohlman T, Pantalacci S, Laudet V. - Tinkering signaling pathways by gain and loss of protein isoforms: the case of the EDA pathway regulator EDARADD.

SMBE 2013 - oral communication: Sadier A, Pantalacci S, Besson M, Ohlmann T, Pantalacci S and Lauvet V - How conserved signaling pathways drive diversification: lessons from a phylogenetic-functional approach

TMD Tooth morphogenesis and differentiation 2013 - poster: Sadier A, Lambert A, Peltier M, Laudet V and Pantalacci S - Edar highlights the dynamics of molar row patterning

Euro Evo Devo 2012 - poster: Sadier A, Besson M, Chevret P, Ohlmann T, Pantalacci S and Laudet V - Mosaic evolution through gain/loss of protein isoforms: the case of EDARADD involved in epithelial appendages development

2nd Joint Meeting of the British and French Societies for Developmental Biology 2011 - poster: Sadier A, Lambert A, Laudet V and Pantalacci S - Edar as a positive regulator of tooth patterning.

Euro Evo Devo 2010 - poster: Sadier A, Chevret P, Lambert A, Pantalacci S and Laudet V - Evolution through gain/loss of protein isoforms: the case of EDARADD involved in epithelial appendages development

INVITED SEMINARS

2023 Origin and diversification of mammalian tooth classes **University of Strasbourg, France**

2023 Origin and diversification of mammalian tooth classes **CNRS, France**

2022 Developmental constraints driving phenotypic diversification: eco-evo-devo of bat dentition **CNRS, France**

2022 Developmental constraints shaping phenotypic diversification: bat eco-evo-devo **IGFL, France**

2021 Developmental constraints shaping phenotypic diversification: bat eco-evo-devo **CDB dept, UCL, UK**

2021 Developmental constraints shaping phenotypic diversification: bat eco-evo-devo **GEE dept, UCL, UK**

2021 Bat (teeth) as a new eco-evo-devo system for the evolution of developmental rules **ISEM Université de Montpellier, France**

2020 Bat teeth at the cusp: Finding new rules for the patterning of post-canine teeth in mammals, **McGill University, Montréal, Canada**

2019 Deciphering the rules that underlie species diversity: insight from African bats, **CBI, Yaoundé, Cameroon**

2019 Deciphering the rules that underlie species diversity: insight from Trinidadian bats, **University of St Augustine, Trinidad**

2016 Deciphering genomic and developmental mechanisms that underlie adaptive evolution in noctilionoid bats - **Indiana State University**

2013 Evo-devo of the Eda pathway, from the evolution of signaling to the establishment of shape - **University of Utah**

TEACHING EXPERIENCE AND MENTORING

Teaching

2022 **UCLA** – Guest lecture “Bat teeth as a research system to study the evolution of novelties”

2021 **UCLA** – MCB 160 Light microscopy, guest lecture – “Deep DIVE into bi-photon imaging”

2020 **UCLA** – MCB 160 Light microscopy, guest lecture – “Deep DIVE into bi-photon imaging”

2019 **UCLA** - Fiat Lux Class, invited lecture – how to be a field scientist

2016 **UIUC** – IB202 Anatomy and Physiology class

2013 **COMENIUS project** - Visiting researcher in high school for the European project COMENIUS http://ec.europa.eu/education/lifelong-learning-programme/comenius_en.htm

2009-2012 **ENS Lyon, France** – Teaching fellowship “monitorat”

- *Full lecture – Next generation sequencing, applications and evolution – master level
 - *Full lecture – Genomic technics and GMO
 - *In-class activity: hormone and pathology, evolution of nuclear receptors,
 - *Development and supervision of a whole teaching course for Bachelor and Master
 - *Lab activities: 2/3 weeks lab session full time
 - *Med school teaching - TA
- Total hours of teaching: 232 hours**

Mentoring

PhD students

- 2023 M. S. Núñez-Novas PhD student** – International PhD student – Museum of Santo Domingo Dominican Republic – co-advisors B. Lim and J. Zorrilla. PhD defense: summer 2024 “Murciélagos (Chiroptera Blumenbach, 1779) de la isla la Española: Identificación, distribución espacial, variación morfométrica, diversidad genética y ecología trófica”
- 2020 Aidan Howenstine UCLA PhD student** – experiment, review writing
Dissertation project “The developmental networks behind limb development”
Mentoring. Fieldwork training and mentoring.
- 2019 Clive Lau, UCLA PhD student** – fieldwork training and mentoring
Lab mentoring.
- 2018 Kathryn Stanchack UW, PhD student** – fieldwork training and mentoring

Undergraduates and master students

- 2022 Marina Zernik** – undergraduate – full supervision, field assistant
- 2022 Fred Rosa** – REU student – full supervision – co-author
- 2021 Isaiah Milton** – postbac student – full supervision
- 2020 Juan Mendez** – undergraduate, UCLA – full supervision
- 2019-2020 R. Takenaka** - postgraduate field and lab supervision
- 2017 Natalie Nieves** – undergraduate, fieldwork in Puerto Rico, summer internship in the lab, co-author
- 2017-2020 Jacqueline Piekos, undergrad** – mentoring, full mentoring on lab project. Fieldwork training and mentoring. Successfully defended her PhD at Vanderbilt university
- 2018-2020 Michael Koger UCLA undergrad** - technics: morphometrics, molecular biology, project development, thesis writing, mentoring, co-author
Thesis: « Developmental basis of cochlea evolution in bats »
- 2015-2017 Supervision et co-supervision of 10 undergrads - UIUC**
- Kun Yun** Full supervision, **co-author** (Sadier et al. 2018), now a PhD student at Mayo Clinic
- Elliot Berger** Full supervision, now in med school, soon to be co-author
- 2011 Marc Besson** – Evo-devo of ectodermal appendages: *Edaradd* isoforms
Full supervision (master 1 student). Project, experiments, writing. Now an assistant professor at Banyls-sur-Mer

SCIENCE COMMUNICATION

Main outreach achievements

- Since 2019 Co-host of the French science podcast:** Podcast Science <https://www.podcastscience.fm/>
(~10k listeners per episode, 50k per month)
- 2021 Coach for the iBiology “Share Your Research competition”** <https://www.ibiology.org/syr-competition/>
- 2017 TEDx speaker** at TEDx Chamonix - <https://www.youtube.com/watch?v=kFctP0vKL-4>

Interviews, other outreach events

- 2024** Les Cogiteurs – interview for the magazine « les Cogiteurs » <https://lescogiteurs-science.fr/>
- 2023** Collaboration with **Marie Treibert**, youtube channel « **La boîte à Curiosité** » for the realization of a video about our 2023 Trinidad fieldtrip (*video still in production*).
- 2023** **Instagram account @explorabats** – with the support of the Bat Biology Foundation
- 2023** **Scientific consultant** for a photography project by Charles Villa <https://www.lebalbooks.com/image-bleue>
- 2022** Scientific consultant for a scicom video on the youtube channel (out in 2023) “**Scilabus**”
- 2022** Scientific consultant for the comic book “L’odyssée évolutive” by Pierre Kerner and Max Sandon <https://www.editions-delcourt.fr/series/serie-l-odysee-evolutive>
- 2022** Interviewed by AirZen radio <https://tinyurl.com/yw92u37m> and <https://tinyurl.com/bdd4wc93>
- 2021** Interviewed for the **podcast RadioBioClub** – “Fantastic Bats and Where They Live” <https://soundcloud.com/user-386034408/dr-alexa-sadier-fantastic-bats-and-where-they-live>
- 2020** **Skype a scientist** – 3 classes “How to make a bat?”
- 2019** **Exploring Your Universe** – UCLA outreach event <https://www.exploringyouruniverse.org>
- 2019** Interviewed by **Podcast Science** about bats and bat research (in French): <https://www.podcastscience.fm/emission/2019/04/15/podcast-science-370-chauve-souris/>
- 2019** Interviewed by the podcast **The Naked Scientists** about our eLife manuscript (see publications) <https://www.thenakedscientists.com/articles/interviews/evolution-through-bats-eyes>
- 2017** **Urbana Library Bats**, these fascinating animals
- 2015-2017** **IGB genome day** - Animation and creation of an outreach module
- 2009-2013** **Fête de la science** – annual outreach science festival, Lyon, France

Scientific interviews

- **The Node:** <https://thenode.biologists.com/behind-the-paper-what-bats-can-tell-us-about-the-evolution-of-mammalian-teeth/research/>
- **The Scientist** <https://www.the-scientist.com/news-opinion/duplicated-gene-helps-bats-survive-arms-race-with-viruses-70791>
- **National Geographic** <https://www.nationalgeographic.com/animals/article/marsupial-frog-teeth-evolutionary-mystery>

Twitter collaborative accounts

- 2017** La bio au labo @laBioauLabo (French equivalent of @realscientist)
- 2016** En direct du labo (French equivalent of @biotweeps)

Public lectures

- 2007 and 2009** General scientific popularization seminar at the Réserve Naturelle des Aiguilles Rouges, Chamonix

FIELDWORK

- 2024** **Trinidad** – field leader of a 6 persons/3 labs team, permits requests, responsible for exporting the samples, bat captures, local collaborations
- 2024** **Dominican Republic** – field leader of a 4 persons/2 labs team, permits requests, responsible for exporting the samples, bat captures, local collaborations, sponsored by BBF
- 2023** **Belize** – field research in Lamanai, organized by Dr. Brock Felton and Dr. Nancy Simmons
- 2023** **Trinidad** – field leader of a 10 persons/4 labs team, permits requests, responsible for exporting the samples, bat captures, local collaborations
- 2022** **Belize** – field research in Lamanai, organized by Dr. Brock Felton and Dr. Nancy Simmons
- 2022** **Trinidad** – joint trip with a collaborator, local collaboration, sample collection
- 2019** **Cameroon** – trip co-organizer, field co-coordinator, responsible for exporting the samples, translator (French), bat capture, experiments, local reciprocal knowledge sharing and support

- 2019 Trinidad** – trip organizer, including permit requests, exporting the samples, establishing local contact, support and reciprocal knowledge sharing
- 2019 Dominican Republic** – trip organizer, including permit requests, exporting the samples, local contact, support and collaboration
- 2018 Dominican Republic and Trinidad** – trip organizer, including permit requests, exporting the samples, local contact, support and collaboration
- 2017 Puerto Rico, Dominican Republic and Trinidad** – field research, experiment, co-organizer
- 2017 Belize** – field research in Lamanai, organized by Dr. Brock Felton and Dr. Nancy Simmons
- 2016 Puerto Rico and Belize**

MUSEUM COLLECTIONS WORK

- 2018** Field museum, Chicago
- 2016** American Museum of Natural History – New York City

ACADEMIC ACTIVITIES AND SERVICE

- February 2024:** Editor, *Biological Journal of the Linnean Society*
- January 2023:** Associate editor, *Gene*
- August 2022:** GBatNet/BPEN – Leader of the international Evo-Devo phenomic group
- December 2021:** Member of the NASA AWG lab
- October 2021:** European Space Agency (ESA) Astronaut selection – Test phase 1 (1371/~23000 applicants) https://www.esa.int/About_Us/Careers_at_ESA/ESA_Astronaut_Selection
- Since 2021:** Editorial Board Member, *BMC Eco Evo* <https://bmcecolvol.biomedcentral.com/>
- Since 2019:** The Company of Biologists Prelighter, part of the @preLights community - See my prelights here: <https://prelights.biologists.com/profiles/aigverte/>
- Society member:** SigmaXi (nominated full member), EuroEvoDevo, PanAmEvoDevo, NASBR societies, SDB and BCI (Bat Conservation International), Bat1k genome project
- Symposium and conference organizer**
- 2024 EuroEvoDevo** - S-21 Evo-devo of Mammals, from paleontology to anthropology
 - 2024 AbSciCon** - Insights from Terrestrial Life: what evolutionary biology can bring to our understanding of life in extra-terrestrial environments
 - 2018 Evolution** - S-24 Evolution and development in deep time, merging insights from paleontology and developmental biology **with Ryan Felice, Montpellier, France**
 - 2013 – TMD - Organizing committee**
- Reviewer for academic journals** – eLife, BMC Evolutionary Biology, Proceeding of the Royal Society B, Evolution, Plos One, ICB, System Biology, Nature communications
- Representative of the PhD students** (elected) for the doctoral school Integrative Molecular and Cellular Biology (including meeting organisation (2009-2013))

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REFERENCES

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