

## Dan Dediu

ICREA Research Professor  
Department of Catalan Philology and General Linguistics,  
University of Barcelona,  
Gran Via de les Corts Catalanes 585,  
08007 Barcelona, Spain

Phone: +34-934034696  
email: [dan.dediu@icrea.cat](mailto:dan.dediu@icrea.cat)  
Web: <https://www.icrea.cat/Web/ScientificStaff/dan-dediu-350058>  
Nationality: Dutch  
Birth date & place: 31/08/1974, Focșani, Romania

### Positions, affiliations and editorial activity

- 2021 – ICREA Research Professor, Department of Catalan Philology & General Linguistics, University of Barcelona, ES
- 2021 – *Affiliation & (2024 –) Scientific committee*, Univ. Barcelona Institute for Complex Systems (UBICS), Univ. Barcelona, ES
- 2018 – 2021 *IDEXLyon Fellow*, Laboratoire Dynamique Du Langage/Université Lumière Lyon 2, Lyon, FR
- 2019 – *Editorial board member*, Linguistic Typology (De Gruyter) <https://www.degruyter.com/view/j/lity>
- 2017 – 2018 *EURIAS Fellowship* (10 months, October – July), Collegium de Lyon, FR
- 2017 – 2019 *Affiliation*, Language & Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, NL
- 2016 (Feb) *Visiting Professor*, Empirical Foundations of Linguistics International Chair, Université Sorbonne Nouvelle Paris 3, Paris, FR
- 2015 – *Executive editor*, Journal of Language Evolution (Oxford University Press) <http://jole.oxfordjournals.org>
- 2012 – 2017 *Senior investigator*, Language & Genetics Department, and *Project leader* “Genetic biasing in language and speech”, Max Planck Institute for Psycholinguistics, Nijmegen, NL
- 2011 – 2017 *Research Fellow* (affiliation), Donders Institute for Brain, Cognition and Behaviour, Nijmegen, NL
- 2008 – 2012 *Postdoc*, Neurobiology of Language Department, Max Planck Institute for Psycholinguistics, Nijmegen, NL
- 2007 – 2008 *ESRC Postdoctoral Fellow*, Linguistics and English Language, The University of Edinburgh, UK
- 2007 *Research Associate*, Linguistics and English Language, The University of Edinburgh, UK  
DTRF short grant (Jim Hurford, Jan. – Feb.) & AHRC-funded project (April McMahon, April – June)
- 1997 – 2004 *Software Engineer, Project Manager & Technical Leader*, Softwin, Bucharest, Romania.

### Education and professional training

- 2019 – 2021 Université Lumière Lyon 2, FR: *Habilitation à Diriger des Recherches* (HDR); mentor: François Pellegrino
- 2019 – 2020 Université Lumière Lyon 2, FR: *Formation* “parcours des nouveaux MCF et enseignants 2nd degré”
- 2004 – 2006 Language Evolution and Computation Research Unit, The University of Edinburgh, UK  
*PhD*; supervisors: Simon Kirby and Jim Hurford, awarded with *no corrections*
- 2001 Max Planck Institute for Human Ethology, Seewiesen, DE, *SOCRATES Exchange Program* (Mar.-May)
- 2000 – 2002 Department of Biology, University of Bucharest, RO  
*MSc* in Neurobiology and Behavior; supervisor: Carmen Strungaru
- 1996 – 1998 Department of Psychology, University of Bucharest, RO, undergraduate studies (no degree)
- 1993 – 1997 Department of Mathematics, University of Bucharest, RO  
*BSc* in Mathematics and Computer Science; thesis adviser: Luminița State

### Awards, Honors and Grants

- 2023 – 2025 *Proyectos de Generación de Conocimiento* PID2022-138501NB-I00 (€ 40,125 grant + € 111.758 one PhD position), University of Barcelona, ES
- 2018 – 2021 *IDEXLyon Fellowship Award* no. 16-IDEX-0005 (€ 1,100,000), Université de Lyon, Lyon, FR
- 2017 – 2018 *EURIAS Fellowship* (€ 30,000), Collegium de Lyon, FR
- 2012 – 2017 *NWO Vidi grant* 276-70-022 (€ 800,000), Max Planck Institute for Psycholinguistics, Nijmegen, NL
- 2007 – 2008 *ESRC UK Postdoctoral Research Fellowship* (£ 88,132), The University of Edinburgh, UK
- 2007 *Development Trust Research Fund (DTRF)* (£ 3,128; with Jim Hurford), The University of Edinburgh, UK
- 2004 – 2006 *ORS UK Award* no. 2003014001 & *Studentship* (tuition fees + £ 7,500/year), The Univ. of Edinburgh, UK
- 2001 *SOCRATES Exchange Program*, Max Planck Institute for Human Ethology, Seewiesen, Germany (Mar.-May)
- 1993 – 1997 *Studentship*, Department of Mathematics, University of Bucharest, RO
- 1990 – 1993 *National Contests (Olympiads) in Informatics*, Romania, various prizes and mentions

## Teaching and summer/winter schools

2025 (Jan)	<u>Advanced course</u> (1 week) <i>Statistical methods for describing and understanding (large-scale) linguistic diversity</i> (LOT Winter School, Nijmegen, NL)
2025 (2 <sup>nd</sup> semester)	<u>Advanced course</u> <i>Regression and beyond for language scientists but not only</i> (Applied Linguistics, Univ. Barcelona, ES)
2024 (1 <sup>st</sup> semester)	<u>Advanced course</u> <i>Regression and beyond for language scientists but not only</i> (Servei de Tecnologia Lingüística [STeL], Univ. Barcelona, ES)
2024 (Oct)	<u>Guest lecture</u> : <i>Language change vs. language evolution</i> (Historical linguistics undergrad course, Univ. Barcelona, ES [in Catalan])
2024 (1 <sup>st</sup> semester)	<u>Course</u> <i>Empirical Linguistics</i> (CCiL: Postgraduate Program in Cognitive Science, Catalonia, ES)
2024 (Mars)	<u>Guest lecture</u> : <i>Parlem de colors!</i> (UBICS/Department of Physics, Univ. Barcelona, ES [in Catalan])
2023 (1 <sup>st</sup> semester)	<u>Course</u> <i>Interdisciplinary applications of linguistic concepts</i> (CCiL: Postgraduate Program in Cognitive Science, Catalonia, ES)
2022 (1 <sup>st</sup> semester)	<u>Course</u> (½ semester) <i>Interdisciplinary applications of linguistic concepts</i> (CCiL: Postgraduate Program in Cognitive Science, Catalonia, ES)
2021 (1 <sup>st</sup> semester)	<u>Course</u> <i>Empirical Linguistics</i> (CCiL: Postgraduate Program in Cognitive Science, Catalonia, ES)
2019	<u>Lectures</u> <i>The genetic foundations of language and speech</i> (Charles University, Prague, CZ)
2019 – 20 (1 <sup>st</sup> semester)	<u>Course</u> <i>Statistics</i> (Master «Sciences Cognitives» 2 <sup>nd</sup> year, Université Lumière Lyon2, FR)
2018 – 21 (1 <sup>st</sup> semester)	<u>Course</u> <i>Language Sciences</i> (Master «Sciences Cognitives» 2 <sup>nd</sup> year, Université Lyon2, FR)
2016	<u>Guest lecture</u> <i>Language and speech for AI</i> (Artificial Intelligence MSc, Radboud University, Nijmegen, NL)
2016	<u>Lectures</u> <i>Biases in language evolution</i> (Summer School of Linguistics, Litomyšl, CZ)
2016	<u>Lectures</u> <i>Language, genes &amp; evolution</i> (Empirical Foundations of Linguistics, Paris, FR)
2015	<u>Lecture</u> <i>Language origins and evolution</i> (Radboud Summer School, Nijmegen, NL)
2014 – 17	<u>Lectures</u> <i>Genetics and evolution of language</i> (University of Edinburgh, UK)
2014	<u>Lectures</u> <i>Genetics &amp; language</i> (LOT Summer School, Nijmegen, NL)
2013	<u>Lectures</u> <i>Genetics &amp; language</i> (LSA Summer School, Ann Arbor, USA)
2013	<u>Lectures</u> <i>Genetics &amp; language</i> (DGfS Sommerschule 2013, Berlin, DE)
2013	<u>Lecture</u> <i>Nature and nurture</i> (International Max Planck Research School, Nijmegen, NL)
2011 – 15	<u>Lecture</u> <i>Genetic and linguistic diversities</i> (MSc Donders Graduate School, Nijmegen, NL)
2010, 2012, 2013	<u>Course</u> <i>Introduction to statistics using R</i> (MPI, Nijmegen, NL)
2011, 2013	<u>Lectures</u> <i>Language and genetics: A brief overview</i> (University of Edinburgh, UK)
2006 – 07	<u>Lecture</u> <i>Genetics and human evolution</i> (University of Edinburgh, UK)
2004 – 07	<u>Tutor</u> : <i>Linguistics 1; Statistics &amp; Exp. Design; Psychology 1&amp;2</i> (University of Edinburgh, UK)

## Administrative responsibilities

2024 –	<u>Univ. of Barcelona Institute for Complex Systems (UBICS)</u> , University de Barcelona, ES ( <i>scientific committee member</i> )
2024 –	<u>MA in Cognitive Science and Language (CCiL)</u> , multiple Catalan Universities, ES ( <i>linguistics branch coordinator</i> )
2024 –	<u>SeRIAL (regular seminar)</u> , Dept. philology & general linguistics, University of Barcelona, ES ( <i>co-initiator &amp; co-organizer</i> )
2019 – 2021	<u>LABEX ASLAN</u> project, Université de Lyon, FR ( <i>steering committee member &amp; theme coordinator</i> )
2012	<u>Online forum and wiki for statistics with R</u> , MPI Nijmegen, NL ( <i>setup + moderation</i> )
2009 – 2012	<u>Biological infrastructure of language</u> series of meetings, Donders Institute, Nijmegen, NL ( <i>co-organizer</i> )
2010 – 2017	<u>The library committee</u> , MPI Nijmegen, NL ( <i>member</i> )
2008, 2009	<u>Foundations of evolutionary theory reading group</u> , MPI Nijmegen, NL ( <i>co-organizer</i> )

## Membership (past and present)

The *Philological Society* (UK); *European Human Behaviour and Evolution Association*; *European Society for Human Genetics*; *European Society for Evolutionary Developmental Biology*; *Association for Linguistic Typology* (ALT); *Societas Linguistica Europaea* (SLE); *LAGB*; *CNATDCU (RO): Biology and Biochemistry*; *The Cultural Evolution Society*; Réseau transdisciplinaire prioritaire (RTP) “*Evolutionary human sciences*”.

## Supervision, mentorship and PhD committee memberships:

<b>main supervisor</b>	<b>4 PhD theses (1 ongoing):</b> <a href="#">R. Janssen</a> (MPI Nijmegen, NL; 2013–2018), <a href="#">R. Amselme</a> (Université Lumière Lyon 2, FR; 2019–2022; Greenberg Award of the ALT 2024: <i>honorable mention</i> ), <a href="#">M. Josserand</a> (Université Lumière Lyon 2, FR; 2020–2023: <i>thesis awards</i> of Université Lyon 2 & of the Complex Systems Society France, 2024), <a href="#">A. García Matarredona</a> (Universitat de Barcelona, ES; 2024–). <b>6 Master’s theses:</b> <a href="#">E. Jennings</a> (Vrije Universiteit Amsterdam, NL; 2019), <a href="#">M. Josserand</a> (Université Lumière Lyon 2, FR; 2020), <a href="#">L.-E. Stiffi</a> (Universitat de Barcelona, ES; 2023), <a href="#">V. González</a> (Universitat de Barcelona, ES; 2023), <a href="#">A. Calonge Cases</a> (Universitat de Barcelona, ES; 2024), <a href="#">M. Kluz</a> (Universitat de Barcelona, ES; 2024).
<b>co-supervisor</b>	<b>6 PhD theses (2 ongoing):</b> <a href="#">V. Kolipakam</a> (MPI Nijmegen, NL; 2010–2012), <a href="#">J. Collins</a> (Radboud University Nijmegen, NL; 2016–2024), <a href="#">L. Siqueira do Prado</a> (Université Lyon 1, FR; 2018–2022), <a href="#">N. Ulrich</a> (Université Lumière Lyon 2, FR; 2019–2022), <a href="#">D. Zhang</a> (Universitat de Barcelona, ES; 2023–), <a href="#">Y. Yakubenkova</a> (Universitat Pompeu Fabra, ES; 2024–). <b>3 Master’s theses:</b> <a href="#">E. Meeussen</a> (Radboud University Nijmegen, NL; 2011–2012, 2014), <a href="#">V. Kogan</a> (University of Edinburgh, UK; 2015–2016), <a href="#">F. Thevenard</a> (Université Lumière Lyon 2, FR; 2021).
<b>mentor</b>	<b>2 Postdocs:</b> <a href="#">S. Mojsik</a> (MPI Nijmegen, NL; 2013–2016), <a href="#">M. Tang</a> (Université Lumière Lyon 2, FR; 2019–2021).
<b>advisory/follow-up committees</b>	<b>4 PhD theses:</b> <a href="#">V. Kogan</a> (University of Barcelona, ES; 2017–2020) and <a href="#">L. Vandever</a> (University Bordeaux Montaigne, FR; 2018–), <a href="#">M. Mahaut</a> (Univ. Pompeu Fabra, ES; 2022), <a href="#">M. Poli</a> (Univ. de Paris, FR; 2024).
<b>thesis committee</b>	<b>1 HDR thesis committee:</b> <a href="#">C. Moulin-Frier</a> (University of Bordeaux/INRIA, FR, 2022) <b>7 PhD thesis committees:</b> <a href="#">H. Xiang</a> (Radboud University Nijmegen, NL, 2012), <a href="#">W. Schueller</a> (INRIA Bordeaux, France, 2018), <a href="#">A. Suire</a> (Institut des Sciences de l’Évolution, Montpellier, France, 2019; “rapporteur”), <a href="#">I. Douros</a> (LORIA/Université de Lorraine, France, 2020), <a href="#">A. Andirko</a> (University of Barcelona, Spain, 2021), <a href="#">C. Robertson</a> (Radboud University Nijmegen, NL, 2021), <a href="#">L. Vandever</a> (University Bordeaux Montaigne, FR; 2022). <b>11 Master’s thesis committees:</b> <a href="#">S. Kuleshova</a> (Université Paris Nanterre, FR, 2022), <a href="#">A. Bertin</a> (Universitat de Barcelona, ES, 2022), <a href="#">D. Lopez</a> (Universitat de Barcelons, ES, 2022), <a href="#">J. Martínez Pérez</a> (Universitat de Barcelona, ES, 2022), <a href="#">M. Carbó Meix</a> (Universitat de Barcelona, ES, 2022), <a href="#">Y. Yakubenkova</a> (Universitat de Barcelona, ES, 2022), <a href="#">D. Zhang</a> (Universitat de Barcelona, ES, 2023), <a href="#">A. Duque</a> (Universitat de Barcelona, ES, 2024), <a href="#">L. Gerencir</a> (Universitat de Barcelona, ES, 2024), <a href="#">T. Kamalyan</a> (Universitat de Barcelona, ES, 2024), <a href="#">W. Beckes</a> (Universitat de Barcelona, ES, 2024).

## Reviewing activity

<b>Funding bodies:</b>	<i>Leverhulme Trust</i> (UK) <i>ESRC</i> (UK); <i>Marsden Fund</i> (New Zealand); <i>European Research Council</i> (ERC); <i>NIAS-Lorentz</i> (NL); <i>Leakey Foundation</i> (US); <i>Swiss Science Foundation</i> (Switzerland); <i>Agence Nationale de la Recherche</i> (France); <i>German Research Foundation</i> (DFG); <i>NSF</i> (USA).
<b>Journals:</b>	<i>American Journal of Physical Anthropology</i> ; <i>Archaeological and Anthropological Sciences</i> ; <i>BioEssays</i> ; <i>Bioinformatics</i> ; <i>Biolinguistics</i> ; <i>Biology and Philosophy</i> ; <i>Brain and Language</i> ; <i>Bulletin of Mathematical Biology</i> ; <i>Cognition</i> ; <i>Current Anthropology</i> ; <i>Diachronica</i> ; <i>Evolution</i> ; <i>Evolution and Human Behaviour</i> ; <i>Evolutionary Psychology</i> ; <i>Faits de Language</i> ; <i>Frontiers</i> ; <i>Human Biology</i> ; <i>Human Nature</i> ; <i>Interaction Studies</i> ; <i>Interface</i> ; <i>International Journal of Bilingualism</i> ; <i>Journal of Experimental Phonetics</i> ; <i>Journal of Neurolinguistics</i> ; <i>Laboratory Phonology</i> ; <i>Language</i> ; <i>Language Dynamics and Change</i> ; <i>Language Learning</i> ; <i>Learning and Individual Differences</i> ; <i>Linguistic Typology</i> ; <i>Nature</i> ; <i>Nature Ecology and Evolution</i> ; <i>Nature Human Behaviour</i> ; <i>Neuroimage</i> ; <i>Open Linguistics</i> ; <i>Open Research Europe</i> ; <i>Philosophical Transactions Royal Society B</i> ; <i>Proceedings Royal Society B</i> ; <i>PLoS ONE</i> ; <i>PNAS</i> ; <i>Psychonomic Bulletin and Review</i> ; <i>Royal Society Open Science</i> ; <i>Science</i> ; <i>Scientific Reports</i> ; <i>The Journal of the Acoustical Society of America (JASA)</i> ; <i>Trends in Cognitive Sciences</i> ; <i>Topics in Cognitive Science</i> ; <i>TOPOI</i> ...
<b>Books:</b>	<i>Oxford University Press</i> ; <i>Cambridge University Press</i>
<b>Conferences:</b>	<i>EVOLANG</i> (2008 – 2024); <i>CACLL</i> (2014 – 2016); <i>EACL</i> (2012) ...

## Workshops and conferences (co-)organized

2021	<a href="#">EvoLyon’2021</a> , Lyon, France (co-organizer)
2020	<a href="#">Workshop : Constituency, wordhood, and the morphology-syntax distinction</a> , Lyon, France (co-organizer)
2018	<a href="#">Workshop Non-linguistic causes of linguistic diversity (SLE2017)</a> , Zürich, Switzerland (co-organizer)
2017	<a href="#">XLanS: Triggers of language change in the Language Sciences</a> , Lyon, France (co-organizer)
2014	<a href="#">International symposium on Tonal Aspects of Languages (TAL2014)</a> , Nijmegen (co-organizer)
2012	<a href="#">Workshop Introduction to statistics using R</a> , MPI Nijmegen (organizer and trainer)
2011	<a href="#">Workshop Vocal tract, speech perception, genes &amp; language typology</a> , MPI Nijmegen (organizer)
2010	<a href="#">Workshop Multi-level techniques with R</a> , MPI Nijmegen (organizer and trainer)
2008, 2009, 2014	<a href="#">The Nijmegen Lectures</a> , MPI Nijmegen (co-organizer and discussant, 2008)

## Language skills

*Romanian* (native); *English* (full proficiency); *Dutch* (working proficiency; CEFR B2); *French* (professional proficiency); *Catalan* (professional proficiency; CEFR C1); *Spanish* (intermediate).

## Computers, scientific software and databases

Programming since 1985 in several languages (Pascal, C/C++, LISP...), now mostly in R (Rmarkdown) & Python, with some Stan and Julia, as needed. Professional MS Windows programmer (1997-2004), currently mostly on Linux and macOS, developing cross-platform free and open-source software such as AdhereR (<https://www.adherer.eu/>) and *Language family classifications* (<https://github.com/ddediu/lgfam-newick>), among others. For more info please see <https://github.com/ddediu>.

## Wider impact

### Population genetics and linguistic diversity

My first paper, **Dediu & Ladd (2007 PNAS)**, has generated a lot of media coverage and scientific and public debates (more than 40,000 views, 380 citations, and an Altmetric score of 118 in the top 2% of all outputs ever tracked), as it proposed – for the first time clearly articulated and supported by quantitative data and methods – that **variation between languages** (in particular, the use or not of pitch distinctions to convey differences in meaning – *tone*) may be due to **genetic differences between populations**. This has been covered, for example, by the *New Scientist* (UK), *Scientific American* (USA), *Science* (USA), *National Geographic* (USA), *Discover Magazine* (USA), *Wissenschaft.de* (Germany), and *CBC radio “Quirks & Quarks” programme* (Canada), among others.

### Human evolution and the origins of language

My work on the **interplay between human evolution and the origins of speech and language** (**Dediu & Levinson, 2013 Front. Lang.**; **Dediu & Levinson, 2018 Curr. Opin. Behav. Sci.**), and in particular the proposal that language and speech are very old, evolved gradually and were not specific to modern humans but were shared by our evolutionary cousins the Neanderthals and the Denisovans, fired the academic and public imagination and were widely discussed and analyzed. For example, Dediu & Levinson (2013 *Front. Lang.*) currently has almost 130,000 views and is in the top 1% of all research outputs ever tracked by Altmetric. Some of this coverage includes *New Scientist* (UK), *Discover Magazine* (USA), *BBC News* (UK), *Süddeutsche Zeitung* (Germany), as well as public talks at the *Santa Barbara Museum of Natural History*, California, US (2014) and the *CosmoCaixa Science Museum*, Barcelona, Spain (2017).

### Linguistic complexity

Our paper **Coupé et al. (2019 Sci. Adv.)**, showing that there is a **trade-off between information density and speech rate**, with languages gravitating around the same information rate of about 39 bits/second, being thus equally good at transmitting information, has captured the public’s attention, having an Altmetric score of more than 2,000 and having been downloaded more than 100,000 times, and was covered by, among others, *Science* (USA), *The Atlantic* (USA), *New Scientist* (UK), *Discover Magazine* (USA), *Welt* (Germany), *orf.at* (Austria), and *Sciences et Avenir* (France).

### Vocal tract anatomy, variation in speech sounds, and sound symbolic connexions

My research program concerning the effects of inter-individual **variation in the anatomy of the speech organs** on phonetic and phonological differences between languages, concretized in a series of collaborations and publications (e.g., **Moisik & Dediu, 2017 J. Lang. Evol.**; **Janssen et al., 2019 J. Phonetics**; **Dediu & Moisik, 2019 Glossa**; **Dediu et al., 2019 Nat. Hum. Beh.**; **Blasi et al., 2019 Science**), and complemented by the investigation of its **genetic bases** (**Dediu et al., 2022 Hum. Genetics**; **Gisladottir et al., 2023 Sci. Adv.**), has a wide scientific and popular impact. For example, Dediu et al. (2019 *Nat. Hum. Beh.*) is in the top 3% of publications ever tracked by Altmetric, being covered by *Discover Magazine* (USA) and *wissenschaft.de* (Germany), while Blasi et al. (2019 *Science*) has an Altmetrics score of more than 1,900 being in the top 1% of all publications (and in the top 1% of all papers in *Science*), being covered by more than 140 news outlets including *The Guardian* (UK), *New York Times* (USA), *Arstechnica* (USA), *New Scientist* (UK), *National Geographic* (USA), *De Standaard* (Belgium), *de Volkskrant* (Netherlands), *Le Figaro* (France), *Libération* (France), *Le Monde* (France), *Pour la Science* (France), *CBC Radio “Quirks & Quarks”* (Canada), *Radio Canada* (Canada) and *TV ARTE “Reconnexion”* (France/Germany). Some speech sounds, such as the “trilled r”, are puzzling, and their distribution among the world’s languages (often overestimated; **Anselme et al., 2023 JIPA**) needs an explanation: one good candidate is them having **performative and sound symbolic connections**. Our very recent work connecting “r” with touch across many languages (**Ćwiek et al., 2024 JASA**) has already been covered by, for example, *The Guardian* (UK), *Español News (ES)* and *Scientific American (USA)*.

### Adherence to treatment in real life

The open and free implementation of computer tools for estimating and visualizing patterns of **adherence to treatment** from electronic medical records (AdhereR; [www.adherer.eu](http://www.adherer.eu); **Dima & Dediu, 2017 PLoS ONE**; **Allemann et al., 2019 Front. Pharmacol.**) is generating a lot of interest within the health and clinical communities, with workshops (for example, at **ESPACOMP 2019**) and a **webinar**. AdhereR is being used in various real-world settings, being a component of an integrated approach involving all the relevant actors and subsystems.

## List of Outputs (including talks, software & databases)

Measure (2/2/2025)	Web of Science/Publons	Scopus	Google Scholar
Unique ID	<a href="#">ResearcherID: E-3279-2012</a>	<a href="#">ORCID: 0000-0002-0704-6365</a>	<a href="https://scholar.google.com/citations?hl=en&amp;user=JbQKSMoAAAAJ">https://scholar.google.com/citations?hl=en&amp;user=JbQKSMoAAAAJ</a>
Number of publications	76	68	157
Number of citations	1516	1732	3672
h-index	22	23	32 (i10-index 48)

More info at: <https://www.icrea.cat/Web/ScientificStaff/dan-dediu-350058> and <https://departament-filcat-linguistica.ub.edu/directori-organitzatiu/dan-dediu>.

### Publications

Google Scholar citations (as of 2<sup>nd</sup> of January, 2025) are given as [#].

#### Peer-reviewed journal articles

##### Under review & in preparation

Anselme, R., Pellegrino, F., Dediu, D. (*under review*). Not just the alveolar trill, but all “r-like” sounds are associated with roughness across languages, pointing to a more general link between sound and touch (Matters Arising). *Scientific Reports*.

Dediu, D., Wang, L., Wong, P.C.M., Wu, M. (*under revision*). Using psychometrics and Signal Detection Theory to investigate tone perception in 490 native speakers of Kam (Dong). *Scientific Reports*.

Josserand, M., Pellegrino, F., Dediu, D., Caparos, S. (*in preparation*). There is more than meets the eye: The dual role of perception in shaping color lexicons. *Topics in Cognitive Science (topiCS)*. [Special Issue “Diverse Minds: Incorporating Diversity into Cognitive Science Research”]

Jacobs, B., Eising, B., Dediu, D. (*in preparation*). Variability between languages and cultures in the symptoms, perception and attitudes to stuttering: a comprehensive literature review.

#### 2024

Josserand, M., Pellegrino, F., Grosbeck, O., Dediu, D., Raviv, L. (2024). Adapting to Individual Differences: An Experimental Study of Language Evolution in Heterogeneous Populations. *Cognitive Science*, **48**(11), e70011. [doi:10.1111/cogs.70011](https://doi.org/10.1111/cogs.70011) [0]

Josserand, M., Allasonnière-Tang, M., Pellegrino, F., Dediu, D., de Boer, B. (2024). How Network Structure Shapes Languages: Disentangling the Factors Driving Variation in Communicative Agents. *Cognitive Science*, **48**(4), e13439. [doi:10.1111/cogs.13439](https://doi.org/10.1111/cogs.13439) [2]

Ćwiek, A., Anselme, R., Dediu, D., Fuchs, S., Kawahara, S., Oh, G., Paul, J., Perlman, M., Caterina, P., Reiter, S., Rachid Ridouane, Zeller, J., Winter, B. (2024). The alveolar trill is perceived as jagged/rough by speakers of different languages. *Journal of the Acoustical Society of America (JASA)*, **156**(5), 3468–3479. [doi:10.1121/10.0034416](https://doi.org/10.1121/10.0034416) [1]

Benítez-Burraco, A., Dediu, D. (2024). The evolution of language and speech: What we know from genetics. In N. Gontier, A. Lock, C. Sinha (Eds.), *The Oxford Handbook of Human Symbolic Evolution* (1st ed.). Oxford University Press. [doi:10.1093/oxfordhb/9780198813781.013.29](https://doi.org/10.1093/oxfordhb/9780198813781.013.29) [0]

#### 2023

Dediu, D. (2023). Ultraviolet light affects the color vocabulary: Evidence from 834 languages. *Frontiers in Psychology*, **14**. [doi:10.3389/fpsyg.2023.1143283](https://doi.org/10.3389/fpsyg.2023.1143283) [2]

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Dediu, D. (2015). [An introduction to genetics for language scientists: Current concepts, methods, and findings](#). Cambridge, UK: Cambridge University Press. [54]

## Theses

Dediu, D. (2021). *Language and speech in their wider context: Understanding the effects of our evolution, environment, bodies and minds through the lens of quantitative methods*. HDR (Habilitation à Diriger des Recherches en France; Language Sciences), Université Lumière Lyon 2, France. [0]

Dediu, D. (2007). [Non-spurious correlations between genetic and linguistic diversities in the context of human evolution](#). PhD Thesis, Linguistics and English Language, University of Edinburgh, UK. [15]

Dediu, D. (2002). *Evolution of syntax: memes-genes coevolution in the multiregional context*. MSc Thesis, Department of Biology, Master's Program in Neurobiology and Behavior, University of Bucharest, Romania. [0]

## Non-peer-reviewed publications and invited contributions

### 2020

Blasi, D. E., Moran, S., Moisik, S. R., Widmer, P., Dediu, D., Bickel, B. (2020). Languages, evolution and statistics: Human sound systems were shaped by changes in bite configuration. Response to Tarasov & Uyeda (2020). *BioRxiv* (preprint). [doi:10.1101/2020.02.27.965400](https://doi.org/10.1101/2020.02.27.965400) [1]

Dediu, D., Ladd, D. R. (2020). Genetic influences on tone? New experimental evidence and its consequences for linguistics. *PsyArXiv* (preprint). [doi:10.31234/osf.io/vkb7w](https://doi.org/10.31234/osf.io/vkb7w) [1]

Dediu, D., Moisik, S.R. (2020). Are the sounds of languages influenced by climate, environment and biology?. In A. Calude, L. Bauer (Eds.), *Questions about Language: What Everyone Should Know About Language in the 21<sup>st</sup> Century*. Routledge. [0]

### 2018

Benitez-Burraco, A., Dediu, D. (2018). Ancient DNA and language evolution: a special section. *Journal of Language Evolution*. Advance online publication. [doi:10.1093/jole/lzx024](https://doi.org/10.1093/jole/lzx024) [2]

## 2016

Dediu, D. (2016). [A multi-layered problem](#). *IEEE CDS Newsletter*, **13**, 14-15. [0]

Dediu, D., de Boer, B. (2016). Language evolution needs its own journal [Editorial]. *Journal of Language Evolution*, **1**, 1-6.  
[doi:10.1093/jole/lzv001](https://doi.org/10.1093/jole/lzv001) [35]

## 2014

Dediu, D., Graham, S. A. (2014). [Genetics and Language](#). In M. Aronoff (Ed.), *Oxford Bibliographies in Linguistics*. New York: Oxford University Press. [2]

Gussenhoven, C., Chen, Y., Dediu, D. (Eds.). (2014). *The 4th International Symposium on Tonal Aspects of Languages*. [ISCA Archive](#). [0]

## 2013

Dediu, D. (2013). [Genes: Interactions with language on three levels — Inter-individual variation, historical correlations and genetic biasing](#). In P.-M. Binder, K. Smith (Eds.), *The language phenomenon: Human communication from milliseconds to millennia* (139-161). Berlin: Springer. [7]

Dediu, D., Cysouw, M., Levinson, S.C., Baronchelli, A., Christiansen, M. H., Croft, W., Evans, N., Garrod, S., Gray, R., Kandler, A. Lieven, E. (2013). [Cultural evolution of language](#). In P. J. Richerson, M. H. Christiansen (Eds.), *Cultural evolution: Society, technology, language, and religion*. Strüngmann Forum Reports, vol. 12 (303-332). Cambridge, Mass: MIT Press. [109]

Ladd, D.R., Dediu, D. (2013). Genes and linguistic tone. In H. Pashler (Ed.), *Encyclopedia of the mind* (pp. 372-373). London: Sage Publications. [doi:10.4135/9781452257044.n137](https://doi.org/10.4135/9781452257044.n137) [2]

Levinson, S.C., Dediu, D. (2013). [The interplay of genetic and cultural factors in ongoing language evolution](#). In P. J. Richerson, M. H. Christiansen (Eds.), *Cultural evolution: Society, technology, language, and religion*. Strüngmann Forum Reports 12 (219-232) Cambridge, Mas: MIT Press. [44]

## 2012

Dediu, D., Dingemanse, M. (2012). [More than accent: Linguistic and cultural cues in the emergence of tag-based cooperation](#) [Commentary]. *Current Anthropology*, **53**:606-607. [doi:10.1086/667654](https://doi.org/10.1086/667654) [2]

## 2010

Dediu, D. (2010). Linguistic and genetic diversity - how and why are they related? In M. Brüne, F. Salter, W. McGrew (Eds.), *Building bridges between anthropology, medicine and human ethology: Tributes to Wulf Schiefenhövel* (pp. 169-178). Bochum: Europ. Universitätsverlag. [1]

## 2009

Hurford, J. R., Dediu, D. (2009). [Diversity in language, genes and the language faculty](#). In R. Botha, C. Knight (Eds.), *The cradle of language* (pp167-188). Oxford: Oxford University Press. [15]

## Talks, posters and lectures

For talks and posters, if there are more than one authors, the underlined author is the presenter.

## Plenary and invited talks at international conferences and workshops

### 2025

International workshop “[Bridging the gap: Unifying approaches to linguistic evolution](#)”, University of Zürich, Switzerland (March). Invited: TBA

LOT Winter School’s “[Schultink Lecture](#)”, Radboud University, Nijmegen, The Netherlands (January). Invited: *Seeing, thinking and talking about colour: from genetics to inter-individual variation and cross-linguistic diversity*

### 2024

International workshop “[Linguistic and Cognitive Science Meet Diversity](#)”, Max Planck Institute for Evolutionary Anthropology (EVA), Leipzig, Germany (July). Invited: *Inter-individual and cross-linguistic diversity meet... the color lexicon!*

International workshop “[C-LESTE](#)” (Cross-Linguistic Explorations in Space, Time and Evolution), University of Tübingen, Germany (June). Invited: *What do we need phylogenies for, if they're not the end goal? (Weak) biases and selection in language evolution*. [with T. Brochhagen]

## 2023

Annual Symposium “Phenotype-Genotype interactions”, Words, bones, genes and tools; University of Tübingen, Germany (December).

Invited: *Genes and cultural evolution influence language at multiple levels: focusing on the vocal tract and speech.*

International workshop “Computational phylogenetics and language (pre)history: Achievements, challenges and prospects”, University of Crete, Rethymno, Greece (May). Invited: *What do we need phylogenies for, if they're not the end goal? (Weak) biases and selection in language evolution.*

## 2022

International workshop “UBICS day”, Institute for Complex Systems (UBICS), University of Barcelona, Spain (September). Invited: *Language and languages: complex systems (co-)evolving at the intersection of biology, environment and culture.*

## 2021

International Symposium “Molecular Anthropology of Language: Results and Prospects”, NCCR Evolving Language, University of Zürich, Switzerland (September). Invited: *Culture, environment and genes interact in complex ways to “nudge” language change and influence linguistic diversity.*

Annual Symposium “Biocultural Implications: An Agenda for Integrative Approaches”, Words, bones, genes and tools; University of Tübingen, Germany (December). Invited: *A biocultural perspective is fundamental to understanding language diversity.*

## 2019

Embodied Speech International Workshop, Paris, France (April). Invited: *Speech is not isolated from the body of the speakers: how variation in vocal tract anatomy affects phonetic and phonological diversity.*

## 2017

12<sup>th</sup> Conference of the Association for Linguistic Typology (ALT12), Canberra, Australia (December). Public plenary: *Variation is not noise: from genetics to language change and diversity.*

4<sup>th</sup> International Workshop on Sound Change (WSC4), Edinburgh, UK (April). Invited: *Constraints, affordances, biases: the gentle influence of biological variation on sound change.*

23<sup>rd</sup> International Symposium on Theoretical and Applied Linguistics (ISTAL23), Thessaloniki, Greece (March). Plenary: *From genes to linguistic diversity: vocal tract anatomy and cross-linguistic variation.*

## 2015

4<sup>th</sup> Protolang Conference, Rome (September). Plenary: *Language does not evolve in a void: culture, biology and the physical environment.*  
Strings and Structures Workshop, Universität zu Köln, Germany (May). Invited: *Languages evolve: parallels & interactions between languages & genes.*

Causality in the Language Sciences Workshop, Leipzig, Germany (April). Invited: *Across levels and timescales: causal bridges from molecules to linguistic diversity.*

Evolution of Language workshop, SMART Cognitive Science, Amsterdam, The Netherlands (March). Invited: *Shaping each other: language and speech in their wider context.*

## 2014

Human vocal development and animal communication, 5<sup>th</sup> meeting of the European Society for Evolutionary Developmental Biology, Vienna, Austria (July). Invited: *Language evolution and change: the impact of modern evolutionary thinking.*

Dependencies in Language Workshop, Maillen, Belgium (June). Invited: *Dependencies, correlations and causality: why do we care about them?*

## 2013

Minerva-Gentner Symposium, Nijmegen, The Netherlands (June). Invited: *Genetic stories behind village sign languages – the co-evolution of deafness with sign language.*

Language, Cognition and Computational Models, Paris, France (May). Invited: *The interplay between linguistic and biological evolution – computational models of genetic biases.*

Dialectes Humains et Communication Animale, Grenoble, France (March). Invited: *Some quantitative approaches to analyzing language dialects.*

## 2012

Workshop Tone: Theory and Practice, Max Planck Institute for Evolutionary Anthropology, Leipzig (September). Invited: *What does genetics have to do with language? with special reference to tone.*

Workshop on the Origins of Communication Systems, Konrad Lorenz Institute, Vienna, Austria (July). Invited: *Genetics and language phylogeny as data sources and modeling targets.*

## 2011

Biological Evolution and Diversification of Languages (BEDLAN), University of Turku, Finland (September). Invited: *Are some structural features of language more stable than others and if so, why?.*

Computational Historical Linguistics Workshop, International Conference on Historical Linguistics, Osaka, Japan (July). Invited: *The stability of typological features.*

## 2010

Biological Evolution and Diversification of Languages (BEDLAN), University of Turku, Finland (September). Invited: *Language diversity and its relationships with genes, history and space.*

CEE 2010 Symposium – Integrating Genetic and Cultural Approaches to Language, Queen Mary University of London (February). Invited: *Are languages really independent from genes?*

## 2007

ISHE Human Ethology Summer School, Max Planck Institute, Andechs, Germany (July). Invited: *Relationships between Genetic and Linguistic Diversities: The Case of Tone.*

## 2006

Tone: mind, brain, evolution, Konstanz, Germany (October). Invited (with D.R. Ladd): *Genetic Influences on Tonogenesis and the Geographical Distribution of Tone Languages.*

## Public talks

### 2017

Opening of the “TALKING BRAINS” Exhibition, Cosmocaixa Science Museum, Barcelona, Spain (October): *Language Evolution and Genetics – a complex, multi-level and cross-disciplinary relationship.*

### 2014

Santa Barbara Symposium on Human Origins II, Santa Barbara Museum of Natural History, California, US (September): *Modern human dispersal in Eurasia: any linguistic traces?*

## Invited talks at departmental meetings and smaller workshops

### 2024

The Human Diversity seminar, Department of Finnish and Finno-Ugric languages, University of Turku, Finland (August). *Color has it all: from genetics, perception, cognition and environment to large-scale cross-linguistic variation*

Regular EVIL meeting, University Pompeu Fabra, Barcelona, Spain (March). *Replaying the tape of evolution revisited (kind of): major transitions, path dependency and predictability on/of complex fitness landscapes, or, is language different?*

Language Evolution Amsterdam (LEA), University of Amsterdam, The Netherlands (February). *Linguistic diversity: from weak individual biases to large-scale structural differences between languages*

Institute Seminar, Max Planck for Evolutionary Anthropology, Leipzig, Germany (March). *The overwhelming strength of the weak: large-scale cross-linguistic patterns emerge from small individual biases*

UBICS “Face 2 Face” (1st edition: Diversity), Barcelona, Spain (January). *Diversity ↔ Complexity in language: (weak) bias amplification in structured linguistic communities*

### 2023

The 107th ICREA Colloquium, Barcelona, Spain (October). *So far, so close: Two illustrations of how languages and their speakers adapt to their communicative niche [with F. Pellegrino]*

NCCR 3rd Interdisciplinary Workshop on Evolution “Still Thinking about Evolution”, Université de Neuchâtel, Switzerland (April). *Language, languages and evolution: is there anything besides metaphors?*

## 2022

Seminar für Sprachwissenschaft, General Linguistics, University of Tübingen, Germany (January). *Blue and green, or grue? The color lexicon at the intersection of the environment, genetics and culture* [with M. Josserand]

Language and cognition lab, UC Berkeley, US (April). *Blue and green, or grue? The color lexicon at the intersection of the environment, genetics and culture* [with M. Josserand]

Communication signals: what to compare and how, IMéRA, Aix-Marseille Université, France (May). *Anatomie du tractus vocal et production de la parole humaine : variations inter- individuelles et variations inter-linguistiques.*

## 2021

NCCR "Evolving language" (Online seminar), Geneva, Switzerland (March). *Language and speech adapt to their environment, but what does that actually mean?*

## 2020

Laboratoire Biométrie et Biologie Evolutive (LBBE), Université Lyon 1, Lyon, France (February). *Language and speech are evolutionary systems: the influence of our own biology on language evolution and diversity.*

Atelier HELAN<sup>2</sup>, Laboratoire Dynamique Du Langage (DDL), Lyon, France (January). *Linguistic diversity is influenced by variation in the anatomy of the vocal tract: some examples.*

RTP Evolutionary Human Sciences Online Meeting, France (November). *Language evolution, change and diversity in the light of our biology.*

## 2019

Institutul de Cercetare al Universității din București (ICUB / Digital Humanities), Bucharest, Romania (November). *Some quantitative and data-driven approaches to studying linguistic diversity and the processes that shape it and Language and speech in their wider environment: ecological, physical and biological influences on linguistic diversity.*

Conférence EvoLyon'2019, INSA Lyon, Lyon, France (November). *Langage et parole sont des systèmes évolutifs: l'influence de l'environnement et de notre biologie sur la diversité linguistique.*

Institut des Sciences de l'Évolution de Montpellier (UMR 5554), Montpellier, France (November). *Biology and language: vocal tract variation influences cross-linguistic phonetic and phonological diversity.*

Charles University, Prague, Czech Republic (October). *The Genetic Foundations of Language and Speech.*

Collegium de Lyon, Institut d'Études Avancées, Lyon, France (October). *Data, quantitative methods and results: from Health Behaviours to Language Change and Diversity* [with A.L. Dima].

Equipe de Neuro-Ethologie Sensorielle, CNRS UMR 9197, Saint-Etienne, France (June). *Speech and language are affected by the biology of the speakers.*

Workshop "Exploring Language", Aston University, Birmingham, UK (May). *From biology to language: vocal tract variation shapes phonetic and phonological diversity across languages.*

## 2018

Catalan Institute for Advanced Studies (ICREA), University of Barcelona, Spain (December). *Language is affected by several non-linguistic factors (and that includes biology).*

INRIA Bordeaux, France (December). *Simulating the influence of vocal tract anatomy on sound change and linguistic diversity.*

Ecole Normale Supérieure, Lyon, France (November). *Language change in non-homogeneous networks with biased nodes.*

“Language Across Time” workshop, Institute of Language, Communication and the Brain (BLRI), Aix-en-Provence, France (July). *Inter-individual and inter-group variation : influences on language evolution, change and diversity.*

## 2017

Collegium de Lyon, Institut d'Études Avancées, Lyon, France (November). *Language evolves! About the cultural, environmental and biological factors that shape it.*

Atelier HELAN<sup>2</sup>, Laboratoire Dynamique Du Langage (DDL), Lyon, France (September). *Variation at all levels: how much, where and why would it matter?*

## 2016

Linguistics and English Language, University of Edinburgh, UK (October). *Vocal tract anatomy and language: non-linguistic factors may influence language diversity and evolution.*

Department of Linguistics and Philology, [Uppsala University](#), Sweden (June). *Vocal tract anatomy and language: non-linguistic factors may influence language diversity and evolution.*

Séminaire du [Laboratoire Dynamique Du Langage](#), Lyon, France (March). *The anatomy of language evolution.*

Colloquium of the Departement d'Etudes Cognitives, [Ecole Normale Supérieure](#), Paris, France (February). *From genes to language universals and linguistic diversity.*

## 2015

[Max Planck Institute for Evolutionary Biology](#), Plön, Germany (November). *Extra-linguistic factors nudge language evolution (but language is not passive and fights back!).*

## 2014

Department of Comparative Linguistics, [University of Zurich](#), Switzerland (November). *What can we learn from two natural experiments in language evolution, us and the Neandertals?*

Catalan Institute for Advanced Studies (ICREA), [University of Barcelona](#), Spain (April). *On the antiquity of speech and language.*

Artificial Intelligence Lab, [Vrije Universiteit Brussel](#), Belgium (February). *On the antiquity of speech and language.*

Department of Biological Anthropology, [University of Cambridge](#), UK (February). *On the antiquity of speech and language.*

## 2013

Human Evolutionary Past, [Max Planck Institute Erling Andechs](#), Germany (October). *Did the Neandertals talk? And if so, what?*

## 2011

Language Evolution and Computation Research Unit, [University of Edinburgh](#), UK (January). *The stability of typological features.*

## 2009

Workshop on Iterated Language Learning, Institute for Logic, Language and Computation, [University of Amsterdam](#) (April). *Genetic biasing & Bayesian iterated language learning.*

## Regular presentations and posters at conferences and workshops

### 2024

[57<sup>th</sup> Annual Meeting of the Societas Linguistica Europaea \(SLE\) 2024](#), University of Helsinki, Finland (August). Authors: [C. Coupé](#), Y. Mi Oh, D. Dediu, F. Seifart and F. Pellegrino. *Trade-offs between information and speech rate in naturalistic speech from 49 non-WEIRD languages*

[57<sup>th</sup> Annual Meeting of the Societas Linguistica Europaea \(SLE\) 2024](#), University of Helsinki, Finland (August). Authors: M. Josserand, [D. Dediu](#), F. Pellegrino, S. Caparos. *Differences in color perception across populations may shape color naming*

[International Conference on the Evolution of Language \(Evolang\) 2024](#), Madison, USA (May). Authors: [M. Josserand](#), F. Pellegrino, D. Dediu, L. Raviv. *Testing the role of minorities in shaping language evolution: An experimental study*

### 2022

[Joint Conference on Language Evolution \(JCoLE\)](#), Kanazawa, Japan (September). Authors: [Anselme R.](#), Pellegrino F., Dediu D. *R you sure that your /r/ is trilled? A methodological caveat*

[Joint Conference on Language Evolution \(JCoLE\)](#), Kanazawa, Japan (September). Authors: [Josserand M.](#), Caparos S., Pellegrino F., Dediu D. *The colour lexicon is shaped by environment and biology: comparing Himba and French colour perception*

### 2020

[13<sup>th</sup> International Conference on the Evolution of Language \(EVLANG XIII\)](#), Brussels, Belgium (April). Authors: [D. Dediu](#), S.R. Moisk. *Vocal tract anatomy as a time machine: what can we infer about the “deep” linguistic past?* [canceled due to covid-19]

[13<sup>th</sup> International Conference on the Evolution of Language \(EVLANG XIII\)](#), Brussels, Belgium (April). Authors: [K. Smith](#), D. Dediu. *Did partial hearing loss shape Australian phonology? An empirical test using spoken iterated learning.* [canceled due to covid-19]

[13<sup>th</sup> International Conference on the Evolution of Language \(EVLANG XIII\)](#), Brussels, Belgium (April). Poster with [C. Coupé](#), F. Pellegrino, Y.-M. Oh, D. Dediu. *Evolutionary perspectives on speech and information rates.* [canceled due to covid-19]

## 2019

“Prehistoric languages beyond the limits of comparative linguistics” workshop, SLE 2019, Leipzig University, Germany (August). *Glimpses into the “deep” past: what can vocal tract anatomy say about lost linguistic diversity?*

Interaction and the Evolution of Linguistic Complexity, University of Edinburgh, UK (June). Authors: D. Dediu, M. Karsai, S. Lérique, J.-P. Magué. *Individual variation, network heterogeneity and linguistic complexity: which way does the relationship go?*

## 2018

12<sup>th</sup> International Conference on the Evolution of Language (EVOLANG XII), Torun, Poland (April). Authors: R. Janssen, D. Dediu and S.R. Moisik: *Agent model reveals the influence of vocal tract anatomy on speech during ontogeny and glossogeny.*

12<sup>th</sup> International Conference on the Evolution of Language (EVOLANG XII), Torun, Poland (April). Authors: C. Bentz, D. Dediu, A. Verkerk and G. Jäger: *Language family trees strongly reflect geography and demography.*

12<sup>th</sup> International Conference on the Evolution of Language (EVOLANG XII), Torun, Poland (April). Authors: D. Blasi, S. Moran, P. Widmer, S. Moisik, A. Margvelashvili, D. Dediu, B Bickel: *Probing the biological conditions for modern phonologies: the late emergence of labiodentals.*

## 2017

21<sup>st</sup> Conference of the European Society for Patient Adherence, Compliance, and Persistence (ESPACOMP21), Budapest, Hungary (December). With A.L. Dima. *Promoting Open Science in adherence research: towards transparent and reproducible analysis protocols with the new R package AdhereR.*

European Drug Utilisation Research Group (EuroDURG), Glasgow, UK (November). With A.L. Dima. *Introducing AdhereR: an R package for visualization of medication histories and calculation of adherence to medications using electronic healthcare data.*

31<sup>st</sup> Conference of the European Health Psychology Society (EHPS31), Padova, Italy (September). Poster with A.L. Dima. *Measuring health behaviours with electronic healthcare data: the case of medication adherence.*

## 2016

10<sup>th</sup> Language Resources and Evaluation Conference, Portorož, Slovenia (May). Poster with S.R. Moisik: *Defining and counting phonological classes in cross-linguistic segment databases.*

## 2014

10<sup>th</sup> International Conference on the Evolution of Language (EVOLANG X), Austria, Vienna (April). With S.C. Levinson: *Did the Neanderth(h)als talk and why would it matter?.*

10<sup>th</sup> International Conference on the Evolution of Language (EVOLANG X), Austria, Vienna (April). With S.G. Roberts and S.C. Levinson: *Detecting differences between the languages of neandertals and modern humans.*

## 2013

10<sup>th</sup> Conference of the Association for Linguistic Typology (ALT10), Leipzig, Germany (August). *Structural stability across methods, language (sub)families and geographic areas.*

Language Evolving: Genes and Culture in Ongoing Language Evolution, AAAS Annual Meeting, Boston (February). *Genetic biases in language and speech.*

## 2012

45<sup>th</sup> Annual Meeting of the Societas Linguistica Europaea, Stockholm, Sweden (August). *Structural stability of language.*

Second Workshop on Sound Change, Kloster Seeon, Germany (May). *Genetic biases and sound change.*

Annual Conference of the American Association of Applied Linguistics, Boston, Massachusetts, USA (March). Authors: Caldwell-Harris, C., Biller, A., Ladd, R., Dediu, D., Christiansen, M. *Musical ability and prior tone language experience facilitate learning an artificial tone language.*

Linguistic Evidence, University of Tübingen, Germany (February). Poster with M. Cysouw. *Some aspects of language are more stable than others: A comparison of eight methods.*

## 2010

Conference on Phonetic Universals, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany (October). *Genetic biasing in language diversity and universals.*

Models of Language Evolution: Does the Math Add Up?, EVOLANG8 (The Evolution of Language Conference), Utrecht, The Netherlands (April). *Bayesian Models of Language Evolution and Change.*



## 2008

7<sup>th</sup> [International Conference on the Evolution of Language \(EVLANG VII\)](#), Barcelona, Spain (March). *Genetically biased language transmission: The mechanism of gradual language evolution?*

## 2007

7<sup>th</sup> [Conference of the Association for Linguistic Typology \(ALT7\)](#), Paris, France (September). With D.R. Ladd. *Statistical approaches to linguistic typology: delineating the roles of geography and common descent.*

## 2006

Workshop: [Tone: mind, brain, evolution](#), Konstanz, Germany (October). With D.R. Ladd. *Genetic Influences on Tonogenesis and the Geographical Distribution of Tone Languages*

6<sup>th</sup> [International Conference on the Evolution of Language \(EVLANG VI\)](#), Rome, Italy (April). *Mostly Out of Africa, but what did the Others have to say?*

## Software and Databases

### AdhereR

<https://www.adherer.eu>

2016 – . An R package for computing and plotting various types of adherence to medication from electronic medical databases, designed and implemented from scratch with [Alexandra Dima](#), running on all operating systems currently supported by R (Linux, \*BSD, OSX, Windows), available on the Comprehensive R Archive Network (CRAN; <https://cran.r-project.org/package=AdhereR>). The source code is freely available on GitHub (<https://github.com/ddediu/AdhereR>). Currently being extended to multiple platforms (STATA, Python...) and new algorithms (e.g., polypharmacy) through collaborations with researchers in Basel, Barcelona, Stockholm, Geneva and Lyon, and we are exploring its large-scale deployment in real health care systems.

### Phonetic Features and counts

<https://github.com/ddediu/phon-class-counts>

2015. A collection of R scripts that define and count feature classes (e.g., “round front vowel”) on two segment databases: *Phoible* (<http://phoible.org>) and *Ruhlen* (<http://www.pnas.org/content/112/5/1265.abstract?tab=ds>), as well as a database with the resulting feature counts. This was designed and developed with Scott R. Moisk (<https://sites.google.com/site/scottmoisk/>), is cross-platform (Linux, \*BSD, OSX, Windows), and the source code, input data and output are available (mostly under GPL but portions of the input data are governed by their respective licenses) on GitHub: <https://github.com/ddediu/phon-class-counts>.

### Language family classifications as Newick trees

<https://github.com/ddediu/lgfam-newick>

2015. A collection of R scripts that convert language classifications to the Newick, a de facto standard in phylogenetics, from *Glottolog* (<http://glottolog.org/>), *Ethnologue* (<http://www.ethnologue.com/>), *WALS* (<http://wals.info/>) and *AUTOTYP* (<http://www.autotyp.uzh.ch/>), also adding branch length information from various sources. It runs cross-platform (Linux, \*BSD, OSX, Windows), and the source code and data (GPL except for parts of the input governed by their respective licenses) are available on GitHub: <https://github.com/ddediu/lgfam-newick>.

### BayesLang

<https://github.com/ddediu/BayesLang>

2010. Bayesian phylogenetic inference software designed for language typology (written in C++, running on Linux and Windows). Source code available at <https://github.com/ddediu/BayesLang>.

### GenLangCorrV4

2008 – 2009. A software platform for designing and running agent-based simulations of various types of gene-language interactions in a spatially-structured meta-population of interacting groups with complex demography and language transmission scenarios (written in C++, running on Linux).

### Rgedit

2009 – 2013. A graphical interface for R (coded using Python, GTK2 and GTK3) running on Linux and \*BSD. Source code freely available on SourceForge <http://sourceforge.net/projects/rgedit/> but no longer maintained.