



# Juan David Leongómez

ASSOCIATE PROFESSOR

Faculty of Psychology, Universidad El Bosque

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*I am a researcher mainly interested in human behaviour, as well as quantitative methods and reproducible science.*

## About me

I am an Associate Professor and Researcher at **EvoCo: Human Behaviour and Evolution Lab**, and leader of the **CODEC: Cognitive and Behavioural Sciences** research group (classified as **A1**), Faculty of Psychology, at Universidad El Bosque in Bogotá, Colombia. I am also a founding and board member of the **Latin American Association for Human Behavioral and Evolutionary Sciences (LAAHBES)**. My research primarily focuses on human vocal communication, mate choice, and musicality, as well as bioacoustics, psychoacoustics, and hormonal effects on human behaviour. I have published some of the first articles demonstrating within-individual changes in voice pitch in response to the social status of the listener, as well as the significant effects of voice modulation on listeners in courtship contexts. Passionate about quantitative methods and R programming, I advocate for reproducibility and open science. In line with these values, I serve as a **recommender** (editor) for **Peer Community In Registered Reports**.



## Skills

<b>Programming</b>	R (advanced: all data wrangling, analysis, plots and tables —and even this CV— made in R)
<b>Reproducible Reports</b>	Markdown/R Markdown/Quarto (including L <sup>A</sup> T <sub>E</sub> X and HTML code). Version control: Git and GitHub
<b>Quantitative Research</b>	General and generalised models, linear mixed-effects models, multi-model inference, machine learning
<b>Software</b>	RStudio, Visual Studio Code, Praat, Audacity, InkScape, Zotero
<b>Languages</b>	English/Spanish (native)

## Research

<b>Research Areas</b>	Human voice • Vocal modulation • Mate choice • Human behaviour
<b>Primary Research Methods</b>	Experimental designs • Acoustic analysis • Geometric morphometrics • Stimuli rating

## Education

### University of Stirling

PHD - PSYCHOLOGY

- Research project: **Contextual musicality: vocal modulation and its perception in human social interaction**
- Supervisors: Prof. S. Craig Roberts and Prof. Anthony C. Little
- Committee members: Prof. Phyllis C. Lee (dissertation chair) and Prof. Stuart Semple

Stirling, UK

2014

### University of Liverpool

MSC IN EVOLUTIONARY PSYCHOLOGY

- Research project: **Variation of pitch and loudness range of human voice in response to intra- and inter-sexual stimuli**
- Supervisor: Prof. S. Craig Roberts
- Best overall performance in the MSc

Liverpool, UK

2009

### Universidad Pedagógica Nacional

BA IN MUSIC PEDAGOGY

- GPA: 4.28/5.00
- Research project: 4.90/5.00 | **El origen no humano de la música**

Bogotá, Colombia

2006

## Relevant further education

## Eindhoven University of Technology

### IMPROVING YOUR STATISTICAL INFERENCES

- GPA: 100/100 (see [certificate](#))

Coursera 

2024

## Johns Hopkins University

### PRACTICAL MACHINE LEARNING

- GPA: 97/100 (see [certificate](#))

Coursera 

2021

## University of Dundee

### STATISTICAL PROGRAMMING IN R AND LINEAR MIXED MODELS

Dundee, UK

2012

## Working Experience

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### Universidad El Bosque

Bogota, Colombia

#### ASSOCIATE PROFESSOR

Apr. 2019 - Present

- Researcher at [EvoCo: Human Behaviour and Evolution Lab](#)
- Leader of the [CODEC: Cognitive and Behavioural Sciences](#) research group (since 2016)
- [Methodological and statistical advisor](#) for postgraduate and faculty research projects
- Supervision of a variety of undergraduate research projects associated with psychology and biology
- Member of the Research Committee
- Member of the Advisory Committee on Research Ethics

### Universidad El Bosque

Bogota, Colombia

#### ASSISTANT PROFESSOR

Jan. 2015 - Apr. 2019

- Researcher at [EvoCo: Human Behaviour and Evolution Lab](#)
- Leader of the [CODEC: Cognitive and Behavioural Sciences](#) research group (since 2016)
- [Methodological and statistical advisor](#) for postgraduate and faculty research projects
- Organiser of the Nerd Café weekly conference series of the Faculty of Psychology (2016-2017)
- Supervision of a variety of undergraduate research projects associated with psychology and biology
- Postdoctoral stay (2018-2019)
- Co-supervision of Doctoral Students: [Milena Vásquez-Amézquita](#) (PhD in Neuroscience, University of Valencia, Spain – 2015-2018)
- Co-supervision of Doctoral Students: Francisco Javier Flores (Professional Doctorate in Counselling Psychology, University of East London, UK – 2016-2018)

### Universidad de La Sabana

Chia, Colombia

#### CATHEDRATIC PROFESSOR

Jan. 2015 - Dec. 2016

- Teaching and supervision of research projects

### University of Stirling

Stirling, UK

#### RECOGNISED TEACHER IN PSYCHOLOGY

2011 - 2014

- Supervision of an MSc research project (Evolutionary Psychology MSc)
- Marking and statistical advice to MSc students

### Universidad Pedagógica Nacional

Bogota, Colombia

#### AUXILIAR PROFESSOR

2010

- Member of the Research Committee
- Supervision of research projects

## Teaching Experience

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### Universidad El Bosque

Bogota, Colombia

#### ASSOCIATE PROFESSOR

2019

- Quantitative Methods II (Psychology MSc) (2019)

### Universidad El Bosque

Bogota, Colombia

#### ASSISTANT PROFESSOR

2015 - 2018

- Quantitative Methods II (Psychology MSc) (2017-2018)
- Research Degree Project (2018)
- Quantitative Methods I (Psychology MSc) (2017)
- Sources and Documentation Styles in Psychology (2015)

## Universidad de La Sabana

CATHEDRATIC PROFESSOR

- Evolution and Development of Vocal Communication: Songs, Fashion, and Language (2016)
- Inferential Statistics (2015 - 2016)
- Descriptive Statistics (2015 - 2016)

Chia, Colombia

2015 - 2016

## University of Stirling

RECOGNISED TEACHER IN PSYCHOLOGY

- Animal Behaviour (lecture on vocal communication) (2012)
- Quantitative Methods (Psychology MSc – several lectures, practical supervision, one-on-one teaching) (2012-2014)
- Cognition Module (leading research projects in psychoacoustics) (2012-2014)

Stirling, UK

2012 - 2014

## Universidad Pedagógica Nacional

AUXILIAR PROFESSOR

- Research Project I (2010)
- Research Lab II (2010)

Bogota, Colombia

2010

## Scholarships, Awards and Honors

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### Universidad El Bosque

‘PAPYRUS’ AWARD

- Most impactful article in Arts and Humanities

Bogota, Colombia

Oct. 2024

### Universidad El Bosque

IX EXCELLENCE AWARDS

- COP\$10.000.000

Bogota, Colombia

Dec. 2022

### Ig Nobel Prize

ECONOMICS PRIZE

- For ‘trying to quantify the relationship between different countries’ national income inequality and the average amount of mouth-to-mouth kissing’ (Watkins, et al., 2019)

Cambridge, MA, USA.

Sep. 2020

### Universidad El Bosque

VIII EXCELLENCE AWARDS

- COP\$7.000.000

Bogota, Colombia

Dec. 2019

### Universidad El Bosque

VII EXCELLENCE AWARDS

- COP\$5.000.000

Bogota, Colombia

Dec. 2018

### Universidad El Bosque

VI EXCELLENCE AWARDS

- COP\$5.000.000

Bogota, Colombia

Dec. 2017

### Experimental Psychology Society

GRINDLEY GRANTS

Canterbury, UK

Sep. 2014

### Minciencias

FRANCISCO JOSÉ DE CALDAS SCHOLARSHIP FOR DOCTORAL STUDIES

Bogota, Colombia

Oct. 2010 - Oct. 2014

### School of Life Sciences – University of Liverpool

ANNUAL PRIZE IN EVOLUTIONARY PSYCHOLOGY

- Best overall performance in the MSc

Liverpool, UK

Oct. 2009

### University of Liverpool

UNIVERSITY OF LIVERPOOL INTERNATIONAL SCHOLARSHIP

Liverpool, UK

Sep. 2008 - Sep. 2009

### Colfuturo

SCHOLARSHIP-LOAN PROGRAMME

Bogota, Colombia

Sep. 2008 - Sep. 2009

## Grants

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## Universidad El Bosque

Bogota, Colombia

XI INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2023

Feb. 2024 - Present

- Project: Effect of real and simulated resource control on androphilic women's preferences for masculinity in men's faces: an experimental study using eye-tracking
- PI: Milena Vásquez-Amézquita
- COP\$89.979.750

## Minciencias

Bogota, Colombia

POSTDOCTORAL RESEARCH STAYS - COLCIENCIAS BENEFICIARIES 2017

Jan. 2018 - Jan. 2019

- Project: Perceptible signals of physical and mental health in faces, voices and body odors, and their relationship with hormonal levels
- COP\$84.000.000

## Universidad El Bosque

Bogota, Colombia

IX INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2017

Jan. 2018 - Dec. 2021

- Project: Perceptible signals of physical and mental health in faces, voices and body odors, and their relationship with hormonal levels
- COP\$136.586.537

## Universidad El Bosque

Bogota, Colombia

VIII INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2016

Jan. 2017 - Dec. 2020

- Project: Effects of evolutionary relevant static signals (sex, dominance, and attractiveness) on the cortical processing of human faces
- COP\$80.000.000

## Universidad El Bosque

Bogota, Colombia

VII INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2015

Jan. 2016 - Dec. 2019

- Project: Effects of hormone levels, masculinity and femininity, on pitch discrimination in men and women
- COP\$13.000.000

## Publications

15	<i>h-index</i>	30	<i>g-index</i>	22	<i>i10-index</i>	44	Publications
Total		Citations		Mean		Median	
914		20.77		9.5			

## RECOMMENDATIONS



**Note:** For more information about my role as a [recommender](#) (equivalent to Associate Editor) for *Peer Community In Registered Reports*, see the section dedicated to my [editorial roles](#) below.

**Leongómez, J. D.** (2024). The interplay of music, movement, and culture on rhythm processing. *Peer Community in Registered Reports*, 100646. <https://doi.org/10.24072/pci.rr.100646>

## PUBLISHED JOURNAL ARTICLES AND WORKS

Ackerman, J., Samore, T., Fessler, D. M. T., Kupfer, T. R., Choi, S., Merrell, ..., **Leongómez, J. D.**, ..., & Žeželj, I. (in press). I see sick people: Beliefs about sensory detection of infectious disease are largely consistent across cultures. *Brain Behavior and Immunity*.

Savage, P. E., Ampiah-Bonney, A., Arabadjiev, A., Arhine, A., Ariza, J. F., ..., **Leongómez, J. D.**, ..., & Zariquiey, R. (In Principle Accepted). Does singing enhance cooperation more than speaking does? A global experimental Stage 1 Registered Report. *Peer Community In Registered Reports*. Preprint: <https://doi.org/10.31234/osf.io/pr3m9>

Hadavi, S., Kuroda, J., Shimozone, T., **Leongómez, J. D.**, & Savage, P. E. (In Principle Accepted). Cross-cultural relationships between music, emotion, and visual imagery: A comparative study of Iran, Canada, and Japan [Stage 1 Registered Report]. *Peer Community In Registered Reports*. Preprint: <https://doi.org/10.31234/osf.io/26yg5>

Martínez, C. A., & **Leongómez, J. D.** (2024). Dehumanizing framing effects on agency, punishment, and re-socialization attributions towards ex-perpetrators in post-conflict. *Peace and Conflict: Journal of Peace Psychology*, 30(3), 327–337. <https://doi.org/10.1037/pac0000710>

Kleisner, K., Tureček, P., Saribay, S. A., Pavlovič, O., **Leongómez, J. D.**, Roberts, S. C., Havlíček, J., Valentova, J. V., Apostol, S., Akoko, R. M., & Varella, M. A. C. (2024). Distinctiveness and femininity, rather than symmetry and masculinity, affect facial attractiveness across the world. *Evolution and Human Behavior*, 45(1), 82–90. <https://doi.org/10.1016/j.evolhumbehav.2023.10.001>

Vásquez-Amézquita, M., **Leongómez, J. D.**, Salvador, A., & Seto, M. C. (2023). What can the eyes tell us about atypical sexual preferences as a function of sex and age? Linking eye movements with child-related chronophilias. *Forensic Sciences Research*, 8, 5-15. <https://doi.org/10.1093/fsr/owad009>

Terry, J., Ross, R. M., Nagy, T., ..., **Leongómez, J. D.**, ..., & Field, A. P. (2023). Data from an international multi-centre study of statistics and mathematics anxieties and related variables in university students (the SMARVUS dataset). *Journal of Open Psychology Data*, 11(1), 8. <https://doi.org/10.5334/jopd.80>

- Leongómez, J. D.,** Havlíček, J., & Roberts, S. C. (2022). Musicality in human vocal communication: An evolutionary perspective. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 377, 20200391. <https://doi.org/10.1098/rstb.2020.0391>
- Santamaría-García, H., Burgaleta, M., Legaz, A., Flichtentrei, D., Cordoba-Delgado, M., Molina, J., Linares, J., Montealegre, J., Castelblanco Toro, S., Schulte, M., Paramo, J., Mondragón, I., **Leongómez, J. D.,** Salamone, P., González-Pacheco, J., Baez, S., & Ibañez, A. (2022). The price of prosociality in pandemic times. *Humanities and Social Sciences Communications*, 9, 15. <https://doi.org/10.1057/s41599-021-01022-2>
- Vásquez-Amézquita, M., Salvador, A., & **Leongómez, J. D.** (2022). Is digit ratio (2D:4D) different between sexual and non-sexual offenders, and non-offending men? Study of a Colombian sample [Existen diferencias en la ratio 2D:4D entre delincuentes sexuales y no sexuales, y hombres no delincuentes? Un estudio en una muestra colombiana]. *Interdisciplinaria. Revista de Psicología y Ciencias Afines*, 39(1), 127–141. <https://doi.org/10.16888/interd.2022.39.1.8>
- Watkins, C., Bovet, J., Fernandez, A. M., **Leongómez, J. D.,** Zelazniewicz, A., Correa Varella, M. A., & Wagstaff, D. (2022). Men say ‘I love you’ before women do: Robust across several countries. *Journal of Social and Personal Relationships*, 39(7), 2134–2153. <https://doi.org/10.1177/02654075221075264>
- Fiala, V., Třebický, V., Pazhoohi, F., **Leongómez, J. D.,** Tureček, P., Saribay, S. A., ... Kleisner, K. (2021). Facial attractiveness and preference of sexual dimorphism: A comparison across five populations. *Evolutionary Human Sciences*, 3, e38. <https://doi.org/10.1017/ehs.2021.33>
- Jones, B. C., DeBruine, L. M., Flake, J. K., Liuzza, M. T., ..., **Leongómez, J. D.,** ..., & Chartier, C. R. (2021). To which world regions does the valence-dominance model of social perception apply? *Nature Human Behaviour*, 5, 159–169. <https://doi.org/10.1038/s41562-020-01007-2>
- Kleisner, K., **Leongómez, J. D.,** Pisanski, K., Fiala, V., Cornec, C., Groyecka, A., ... Akoko, R. M. (2021). Predicting strength from aggressive vocalisations versus speech in African bushland and urban communities. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376, 20200403. <https://doi.org/10.1098/rstb.2020.0403>
- Kleisner, K., Tureček, P., Roberts, S. C., Havlíček, J., Valentova, J. V., Akoko, R. M., **Leongómez, J. D.,** Apostol, S., Varella, M. A. C., & Saribay, S. A. (2021). How and why patterns of sexual dimorphism in human faces vary across the world. *Scientific Reports*, 11, 5978. <https://doi.org/10.1038/s41598-021-85402-3>
- Leongómez, J. D.,** Pisanski, K., Reby, D., Sauter, D., Lavan, N., Perlman, M., & Varella Valentova, J. (2021). Voice modulation: From origin and mechanism to social impact. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376, 20200386. <https://doi.org/10.1098/rstb.2020.0386>
- Leongómez, J. D.,** Sánchez, O. R., Vásquez-Amézquita, M., & Roberts, S. C. (2021). Contextualising courtship: Exploring male body odour effects on vocal modulation. *Behavioural Processes*, 193, 104531. <https://doi.org/10.1016/j.beproc.2021.104531>
- Leongómez, J. D.,** Sánchez, O. R., Vásquez-Amézquita, M., Valderrama, E., Castellanos-Chacón, A., Morales-Sánchez, L., ... González-Santoyo, I. (2020). Self-reported health is related to body height and waist circumference in rural indigenous and urbanised Latin-American populations. *Scientific Reports*, 10, 4391. <https://doi.org/10.1038/s41598-020-61289-4>
- Bonilla, F. M., & **Leongómez, J. D.** (2019). Efectos de la expresión emocional y de la orientación del rostro sobre las respuestas conductuales y el componente N170. *Psychologia*, 13(2), 95–106. <https://doi.org/10.21500/19002386.3473>
- Vásquez Amézquita, M., **Leongómez, J. D.,** Seto, M. C., & Salvador, A. (2019). Differences in visual attention patterns to sexually mature and immature stimuli between heterosexual sexual offenders, nonsexual offenders, and nonoffending men. *Journal of Sex Research*, 56(2), 213–228. <https://doi.org/10.1080/00224499.2018.1511965>
- Vásquez-Amézquita, M., **Leongómez, J. D.,** Seto, M. C., Bonilla, F. M., Rodríguez-Padilla, A., & Salvador, A. (2019). Visual attention patterns differ in gynephilic and androphilic men and women depending on age and gender of targets. *Journal of Sex Research*, 56(1), 85–101. <https://doi.org/10.1080/00224499.2017.1372353>
- Watkins, C. D., **Leongómez, J. D.,** Bovet, J., Żelazniewicz, A., Korbmacher, M., Corrêa Varella, M. A., ... Bolgan, S. (2019). National income inequality predicts cultural variation in mouth to mouth kissing. *Scientific Reports*, 9, 6698. <https://doi.org/10.1038/s41598-019-43267-7>
- Culpepper, P. D., Havlíček, J., **Leongómez, J. D.,** & Roberts, S. C. (2018). Visually activating pathogen disgust: A new instrument for studying the behavioral immune system. *Frontiers in Psychology*, 9, 1397. <https://doi.org/10.3389/fpsyg.2018.01397>
- Danel, D. P., Valentova, J. V., Sánchez, O. R., **Leongómez, J. D.,** Corrêa Varella, M. A., & Kleisner, K. (2018). A cross-cultural study of sex-typicality and averageness: Correlation between frontal and lateral measures of human faces. *American Journal of Human Biology*, 30(5), e23147. <https://doi.org/10.1002/ajhb.23147>
- Vásquez-Amézquita, M., **Leongómez, J. D.,** Seto, M. C., Bonilla, F. M., Rodríguez-Padilla, A., & Salvador, A. (2018). No relation between digit ratio (2D:4D) and visual attention patterns to sexually preferred and non-preferred stimuli. *Personality and Individual Differences*, 120, 151–158. <https://doi.org/10.1016/j.paid.2017.08.022>
- Bonilla, F. M., & **Leongómez, J. D.** (2017). Efectos en la amplitud y la latencia del componente N170 ante la presentación de rostros emocionales de ira y miedo. *Psychologia*, 11(1), 39–48. <https://doi.org/10.21500/19002386.3100>
- Leongómez, J. D.,** Mileva, V. R., Little, A. C., & Roberts, S. C. (2017). Perceived differences in social status between speaker and listener affect the speaker's vocal characteristics. *PLOS One*, 12(6), e0179407. <https://doi.org/10.1371/journal.pone.0179407>

- Cobey, K. D., Nicholls, M., **Leongómez, J. D.**, & Roberts, S. C. (2015). Self-reported dominance in women: Associations with hormonal contraceptive use, relationship status, and testosterone. *Adaptive Human Behavior and Physiology*, 1(4), 449–459. <https://doi.org/10.1007/s40750-015-0022-8>
- Leongómez, J. D.** (2015). La música como objeto de estudio científico: consideraciones en torno a la musicalidad y el origen de la música. (*Pensamiento*), (*Palabra*) y *Obra*, 13, 77–86. <https://doi.org/10.17227/2011804X.15PP077.86>
- Leongómez, J. D.** (2014). *Contextual musicality: vocal modulation and its perception in human social interaction* [PhD, University of Stirling]. <http://hdl.handle.net/1893/21102>
- Leongómez, J. D.**, Binter, J., Kubicová, L., Stolařová, P., Klapilová, K., Havlíček, J., & Roberts, S. C. (2014). Vocal modulation during courtship increases perceptivity even in naive listeners. *Evolution and Human Behavior*, 35(6), 489–496. <https://doi.org/10.1016/j.evolhumbehav.2014.06.008>
- Binter, J., **Leongómez, J. D.**, Moyano, N., Valentova, J., Jouza, L., & Klapilová, K. (2012). Sex differences in the incidence of sexual fantasies focused on evolutionary relevant objects. *Anthropologie*, 50(1), 83–93. <http://puvodni.mzm.cz/Anthropologie/article.php?ID=1413>
- Ferdenzi, C., Lemaître, J.-F., **Leongómez, J. D.**, & Roberts, S. C. (2011). Digit ratio (2D:4D) predicts facial, but not voice or body odour, attractiveness in men. *Proceedings of the Royal Society B: Biological Sciences*, 278(1724), 3551–3557. <https://doi.org/10.1098/rspb.2011.0544>
- Leongómez, J. D.** (2009). *Variation of pitch and loudness range of human voice in response to intra- and inter-sexual stimuli* [MSc]. University of Liverpool.
- Leongómez, J. D.** (2008). El origen no humano de la música. (*Pensamiento*), (*Palabra*) y *Obra*, 1, 87–97. <https://revistas.pedagogica.edu.co/index.php/revistafba/article/view/50>

## PREPRINTS AND ARTICLES UNDER REVIEW

- Ariza, J. F., & **Leongómez, J. D.** (2025). *Spontaneous thought and memory consolidation: An investigation into mindwandering evoked by preferred music and its influence on short-term memory consolidation*. PsyArXiv. [https://doi.org/10.31234/osf.io/wbfs3\\_v1](https://doi.org/10.31234/osf.io/wbfs3_v1)
- Vásquez-Amézquita, M., Martínez-González, M. B., Chivers, M. L., & **Leongómez, J. D.** (2025). *Does trait sexual desire predict subjective sexual response to erotic stimuli? Effects of participant and stimulus gender, and relationship status among cisgender heterosexual women and men*. [Manuscript submitted for publication].
- Vásquez-Amézquita, M., Castellanos-Chacón, A., Medina-Sarmiento, W., Cepeda, V., Martínez-González, M. B., & **Leongómez, J. D.** (2025). *Resource availability and experiences of partner violence shape facial masculinity preferences in Colombian women*. Open Science Framework. <https://doi.org/10.31219/osf.io/me47r>
- Castellanos-Chacón, A., **Leongómez, J. D.**, Arias-Otero, D., Uribe-Jaramillo, V., & Vásquez-Amézquita, M. (2025). *Effects of stimulus emotional content on gaze pattern: an eye-tracking study*. [Manuscript submitted for publication].

## Educational Resources and Science Communication

### INVESTIGACIÓN ABIERTA (YOUTUBE CHANNEL)



Investigación Abierta [Open Research] is a YouTube channel (in Spanish) where I post videos and tutorials related to quantitative research methods and open science, as well as useful open source software.

- Leongómez, J. D.** [Investigación Abierta]. (2023). *Meta-análisis de correlaciones en R* [Meta-analysis of correlations in R] [Video]. YouTube. [https://jdleongomez.info/en/post/meta\\_corr\\_r/](https://jdleongomez.info/en/post/meta_corr_r/)
- Leongómez, J. D.** [Investigación Abierta]. (2021). *Hacer meta-análisis en jamovi es muy fácil* [Meta-analysis in jamovi is very easy] [Video]. YouTube. <https://jdleongomez.info/en/post/meta/>
- Leongómez, J. D.** [Investigación Abierta]. (2020). *Poder estadístico y tamaño de muestra en R* [Statistical power and sample size calculation in R] [3 Videos]. YouTube. <https://jdleongomez.info/en/post/power/>
- Leongómez, J. D.** [Investigación Abierta]. (2020). *¿Qué es un valor p? Te lo puedo mostrar gráficamente y con simulaciones* [What is a p-value? I can show you graphically] [Video]. YouTube. <https://jdleongomez.info/en/post/pvalue/>
- Leongómez, J. D.** [Investigación Abierta]. (2020). *Introducción a jamovi* [Introduction to jamovi] [2 Videos]. YouTube. <https://jdleongomez.info/en/post/jamovi/>
- Leongómez, J. D.** [Investigación Abierta]. (2020). *Introducción a OBS Studio* [Introduction to OBS Studio] [Video]. YouTube. <https://jdleongomez.info/en/post/obs/>

### ONLINE PRACTICAL GUIDES

- Leongómez, J. D.** (2023). Meta-análisis de correlaciones y meta-regresión en R: Guía práctica [Meta-analysis of correlations and meta-regression in R: A Practical Guide]. *MetaArXiv*. <https://doi.org/10.31222/osf.io/yaxd4>



Leongómez, J. D. (2020). Análisis de poder estadístico y cálculo de tamaño de muestra en R: Guía práctica [Statistical power analysis and sample size calculation in R: A practical guide]. Zenodo. <https://doi.org/10.5281/zenodo.3988776>

## PUBLIC ARTICLES

Mileva, V. R., & Leongómez, J. D. (2018). Want to know if your partner's cheating on you? Just listen to their voice. *The Conversation*. <https://theconversation.com/want-to-know-if-your-partners-cheating-on-you-just-listen-to-their-voice-92387>

Mileva, V. R., & Leongómez, J. D. (2017). We change our voice when we talk to high-status people, shows new study. *The Conversation*. <https://theconversation.com/we-change-our-voice-when-we-talk-to-high-status-people-shows-new-study-80053>

## SHINY APPS FOR EDUCATIONAL PURPOSES



Developed interactive apps in R using **Shiny** mainly for for teaching and illustrating statistical concepts. In this section you can find some examples.

Leongómez, J. D. (2023). **PowerSimulate** [Computer software collection]. <https://shiny.jdl-svr.lat/PowerSimulate/>

- **PowerSimulate: Correlation**, [https://shiny.jdl-svr.lat/PowerSimulate\\_corr\\_EN/](https://shiny.jdl-svr.lat/PowerSimulate_corr_EN/)
- **PowerSimulate: Independent t-test**, [https://shiny.jdl-svr.lat/PowerSimulate\\_ind\\_t\\_EN/](https://shiny.jdl-svr.lat/PowerSimulate_ind_t_EN/)
- **PowerSimulate: Paired t-test**, [https://shiny.jdl-svr.lat/PowerSimulate\\_pair\\_t\\_EN/](https://shiny.jdl-svr.lat/PowerSimulate_pair_t_EN/)

Leongómez, J. D. (2023). **ScolarlyOutput**: Create and Export a complete plot of your academic Google Scholar profile (Version 1.0.0) [Computer software]. <https://doi.org/10.5281/zenodo.8060475>

Leongómez, J. D. (2021). **ProbDnD**: Probability of getting a score in DnD, combining multiple dice and a modifier [Computer software]. [https://github.com/JDLeongomez/ProbDnD\\_EN](https://github.com/JDLeongomez/ProbDnD_EN)

## Conference Presentations, Posters and Workshops

Leongómez, J. D. (2023, August). *Powering your conclusions: Exploring the vital importance of statistical power and sample size for reliable inference*. Invited talk presented at XXIX Institutional Research Congress (Universidad El Bosque), Bogotá, Colombia. [https://investigaciones.unbosque.edu.co/s/D-00730\\_\\_ViceInvestigaciones\\_\\_-agenda-Congreso-Institucional-linxs-1.pdf](https://investigaciones.unbosque.edu.co/s/D-00730__ViceInvestigaciones__-agenda-Congreso-Institucional-linxs-1.pdf)

Leongómez, J. D. (2023, July). *From data to knowledge: Conducting meta-analyses of correlations and t-tests*. Invited workshop presented at Summer Institute of the International Society for Human Ethology (ISHE), Universidade Federal de Pernambuco, Recife, Brazil. [https://ishe.org/wp-content/uploads/2023/07/BoA\\_v06\\_km.pdf](https://ishe.org/wp-content/uploads/2023/07/BoA_v06_km.pdf) (see [certificate](#))

Leongómez, J. D. (2023, July). *Ensuring reliable results: Power analysis and sample size estimation in behavioural research*. Invited workshop presented at Summer Institute of the International Society for Human Ethology (ISHE), Universidade Federal de Pernambuco, Recife, Brazil. [https://ishe.org/wp-content/uploads/2023/07/BoA\\_v06\\_km.pdf](https://ishe.org/wp-content/uploads/2023/07/BoA_v06_km.pdf) (see [certificate](#))

Leongómez, J. D., Havlíček, J., & Roberts, S.C. (2022, October). *Musicality in human vocal communication*. Paper presented as part of The Evolution of Human Musicality symposium at the 4th Brazilian Meeting on Evolution of Human Behavior (University of São Paulo), São Paulo, Brazil. [https://youtu.be/gK\\_r10r4nfs?t=9662](https://youtu.be/gK_r10r4nfs?t=9662)

Leongómez, J. D. (2022, October). *jamovi face-to-face session*. Workshop for the Research Training Plan of the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia.

Leongómez, J. D. (2022, September). *Introduction to jamovi: Modern, free, open source alternative for statistical analysis*. Presentation for the Research Training Plan of the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia. <https://investigaciones.unbosque.edu.co/eventos/cuestioneseticas-jjnlm-92bkj-n249w-hbnhl-6tpj4-pm22x-8m3yh-645tt-gw59h-xwc6x-d9sgw-6fzel-hm6dd-2wrls-569m2-8zns8-rg363>

Leongómez, J. D. (2022, August). *Beyond Open Access: The need for comprehensive Open Science to address the implications of the naturalisation of malpractice and the replication crisis*. Presentation for the Research Training Plan of the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia. <https://investigaciones.unbosque.edu.co/eventos/cuestioneseticas-jjnlm-92bkj-n249w-hbnhl-6tpj4-pm22x-8m3yh-645tt-gw59h-xwc6x-d9sgw-6fzel-hm6dd-2wrls-569m2-8zns8>

Leongómez, J. D. (2022, April). *How reliable is the scientific literature? Open science as a strategy to address the implications of the naturalisation of bad practices and the replication crisis*. Presentation organised by the Research Unit of the Faculty of Psychology (Universidad El Bosque), Bogotá, Colombia. <https://youtu.be/F198MoBqSaI>

Leongómez, J. D. (2020, November). *How many participants do I need? Statistical power analysis and sample size calculation in R*. Workshop presented at the Online International Congress of Neurosciences: Brain and Behaviour in times of COVID-19 (Universidad El Bosque, Universidad de los Andes), Bogotá, Colombia. <https://youtu.be/tVB9sh5ZFHO>

Leongómez, J. D. & Sánchez, O. R. (2019, September). *Association between height and waist circumference with health in rural indigenous and urban populations in Latin America*. Paper presented at the XXV Institutional Research Congress (Universidad El Bosque), Bogotá, Colombia. <https://static1.squarespace.com/static/5fb667be752a000eaf4b5869/t/60454941f7f209159575a773/1615153475374/Memorias+-XXV+Congreso+2019.pdf>

- Leongómez, J. D.,** Sánchez, O.R., Vásquez-Amézquita, M., Valderrama, E., Castellanos-Chacón, A., Morales-Sánchez, L., Nieto, J., & González-Santoyo, I. (2019, August). *Self-reported Health is Related to Body Height and Waist Circumference in Rural Indigenous and Urbanised Latin-American Populations*. Paper and poster presented at the VII Summer Institute of the International Society for Human Ethology (ISHE), Zadar, Croatia. Poster: <https://jdleongomez.info/en/publication/leongomez2020/PosterA0.pdf>
- Leongómez, J. D.** (2019, June). *Experimental Designs*. Workshop at the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia.
- Leongómez, J. D.,** Murray, A.K., & Roberts, S.C. (2018, September). *Contextualising courtship: Male body odour effects on vocal modulation*. Paper presented at the XXIV Biannual Conference for Human Ethology (ISHE), Santiago, Chile.
- Leongómez, J. D.** (2017, September). *Effects of hormonal levels, masculinity and femininity, on men's and women's pitch discrimination*. Paper presented at the XXIII Institutional Research Congress (Universidad El Bosque), Bogotá, Colombia.
- Leongómez, J. D.** (2017, August). *The sound of seduction: Vocal modulations and their effects during courtship*. Plenary session at the 2nd Symposium of Neurosciences, Cognition and Society (Universidad Javeriana), Bogotá, Colombia.
- Leongómez, J. D.** (2017, March). *Is the relationship between musical and linguistic processing a vestige of the evolutionary origins of music?*. Plenary session at the 2017 Brain Awareness Week 2017 (Universidad El Bosque), Bogotá, Colombia.
- Leongómez, J. D.,** Mileva, V.R., Little, A.C., & Roberts, S.C. (2016, August). *Perceived differences in social status between speaker and listener affect the speaker's vocal characteristics*. Paper presented at the XXIII Biennial Congress On Human Ethology (ISHE), Stirling, UK.
- Leongómez, J. D.,** Binter, J., Kubicová, L., Stolařová, P., Klapilová, K., Havlíček, J., & Roberts, S.C. (2014, April). *Vocal modulation during courtship increases perceptivity even in naive listeners*. Paper presented at the European Human Behaviour and Evolution Association (EHBEA) Annual Meeting 2014 (University of Bristol), Bristol, UK.
- Leongómez, J. D.,** & Roberts, S.C. (2013, April). *The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals*. Oral presentation for the Mind and Brain Group (University of Stirling), Stirling, UK.
- Leongómez, J. D.,** & Roberts, S.C. (2013, March). *The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals*. Poster presented at the European Human Behaviour and Evolution Association (EHBEA) Annual Meeting 2013 (VU University Amsterdam), Amsterdam, Netherlands.
- Leongómez, J. D.** (2013, March). *Voice research techniques using Praat*. Workshop at the Faculty of Humanities (Charles University), Prague, Czech Republic.
- Leongómez, J. D.** (2013, March). *Acoustic Communication*. Oral presentation at the Centre for Theoretical Study, Prague, Czech Republic.
- Leongómez, J. D.,** & Roberts, S.C. (2012, May). *The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals*. Oral presentation for the Group of Human Ethology (Charles University), Prague, Czech Republic.
- Leongómez, J. D.** (2013, March). *Voice research techniques using Praat*. Workshop at the Scottish Universities Psychology Postgraduate Research Training – SUPPORT (University of Stirling), Stirling, UK.
- Leongómez, J. D.,** & Roberts, S.C. (2011, February). *The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals*. Oral presentation for the Behaviour and Evolution Research Group (University of Stirling), Stirling, UK.
- Leongómez, J. D.,** & Roberts, S.C. (2010, December). *Context-dependant modulation of vocal parameters*. Poster presented at The Language of Music, the Music of Language; Meeting 2: Entrainment/Meaning (Centre for Music & Science, University of Cambridge), Cambridge, UK.

## Scientific Events

### ISHE International Congress 2024

MEMBER OF THE PROGRAMME COMMITTEE

- [Conference Program](#) (PDF)
- [Book of Abstracts](#) (PDF)
- [ISHE Meetings](#)

ISHE

July 12 - 16, 2024

### CIVN2020 - Online International Congress of Neurosciences: Brain and Behaviour in times of COVID-19

PRESIDENT OF THE SCIENTIFIC COMMITTEE

- [Book of Abstracts](#)
- [YouTube channel](#) (The entire congress is available)

Universidad El Bosque &

Universidad de los Andes

November 25 - 28, 2020

### 1st International Virtual Congress ISEP

MEMBER OF THE SCIENTIFIC COMMITTEE

- [Scientific Committee](#)

ISEP

May 5 - 7, 2020



## Editorial Appointments

**Note:** My verified review and editor record is available from my [Web of Science](#) profile.

### Peer Community In Registered Reports

Recommender

RECOMMENDER (EQUIVALENT TO ASSOCIATE EDITOR)

Since 2023

- Issue Stage 1 and Stage 2 recommendations
- [Recommender](#) profile

### Philosophical Transactions of the Royal Society B: Biological Sciences

Guest editorial team

GUEST EDITOR

2020 - 2021

- Theme Issue **Voice modulation: from origin and mechanism to social impact (Parte 1, Parte 2)**
- Edited by Juan David Leongómez, Katarzyna Pisanski, David Reby, Disa Sauter, Nadine Lavan, Marcus Perlman & Jaroslava Varella Valentova

### Frontiers in Psychology

Editorial team

REVIEW EDITOR

2018 - 2024

- Specialty section on [Evolutionary Psychology](#)
- [Loop](#) profile

### Ad Hoc Reviewer

Journals

JOURNALS INCLUDE

Since 2013

- [Peer Community In Registered Reports](#)
- [Proceedings of the Royal Society B: Biological Sciences](#)
- [Royal Society Open Science](#)
- [PLOS ONE](#)
- [Biology Letters](#)
- [Evolution and Human Behavior](#)
- [Scientific Reports](#)
- [Cortex](#)
- [Journal of Nonverbal Behavior](#)
- [Perception](#)
- [Basic and Applied Social Psychology](#)
- [Frontiers in Psychology](#)
- [Evolutionary Psychology](#)
- [Peace and Conflict: Journal of Peace Psychology](#)
- [Summa Psicológica](#)
- [Human Ethology](#)

### Academic Reviewer

Colombian Institutions

PUBLICATION/GRANT EVALUATION

Since 2015

- [Minciencias](#)
- [Universidad Nacional de Colombia](#)

## Research Supervision

### POSTGRADUATE

The Faculty of Psychology at Universidad El Bosque does not offer research degrees, and all M-level courses are professional masters. Because of this, opportunities to supervise postgraduate students are limited, and most of my postgraduate supervision has been external.

#### Milena Vásquez-Amézquita

Universitat de València, Spain

PHD IN NEUROSCIENCE

2015 - 2018

- Thesis (**Summa Cum Laude**): *Preferencias sexuales típicas y atípicas según sexo y edad de los estímulos: Utilidad de la técnica de rastreo ocular* [Typical and atypical sexual preferences according to sex and age of the stimuli: Usefulness of the eye tracking technique]
- Supervised together with Alicia Salvador

#### Francisco Javier Flores

U. of East London, UK

PROFESSIONAL DOCTORATE IN COUNSELLING PSYCHOLOGY

2015 - 2018

- Thesis: *What sense do people make of the functions of their 'behaviours that may be causing problems in their everyday life'? A hybrid deductive/inductive template analysis*
- Supervised together with Lisa Chiara Fellin

#### Xiomara Muñoz Sánchez & Diana Yelisa Escandón Martínez

Universidad El Bosque, Colombia

MSC IN PSYCHOLOGY

2021 - 2022

- Research project (**Distinction**): *Variables psicológicas y sociales asociadas a la práctica de la lactancia materna continuada en mujeres colombianas: una exploración desde la Inferencia Multimodelo (IM) y el Machine Learning (ML)* [Psychological and social variables associated with the practice of continued breastfeeding in colombian women: an exploration from Multimodel Inference (MI) and Machine Learning (ML)]
- Supervised together with [Luz Adriana Trujillo Terán](#)

#### Adrián Acosta Guerrero

Universidad El Bosque, Colombia

MSC IN PSYCHOLOGY

2019 - 2020

- Research project (**Distinction**): *La voz como predictor de sintomatología asociada a depresión y ansiedad* [Voice as a predictor of symptomatology associated with depression and anxiety]
- Supervised together with [Milena Vásquez-Amézquita](#)

- Research project (**Distinction**): *Sexy Chat: Mate-Choice Preferences for Speech Content in the Absence of Auditory Cues*
- Supervised together with [S Craig Roberts](#)

## UNDERGRADUATE

The supervised undergraduate students listed below come from different universities and academic programmes. This list only includes students for whom I was the main supervisor or who were awarded honours degrees. Additionally, I am currently supervising six students as a principal supervisor, and have supervised over 25 students as a co-supervisor.

### Andrés Castellanos-Chacón

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2017 - 2024

- Professional practice in research supervision (2017 - 2018)
- Project: *Señales perceptibles de salud física y mental en rostros, voces y olores corporales, y su relación con niveles hormonales* [Perceptible signs of physical and mental health in faces, voices, and body odours, and their relationship to hormone levels]
- Research project with **distinction**
- Teaching supervision (2019 - 2024)

### Tifany Lexandra Mancera Alméciga & Jefferson Guillermo Suarez Zambrano

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2023 - 2024

- Research project: *¿Somos capaces de detectar la tendencia a la infidelidad a partir de la voz?* [Are we able to detect the tendency to infidelity from voices?]

### Scharik Yuliana Bello Lizarazo, Maria Camila Plazas López & Natalia Rodríguez Bautista

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2023 - 2024

- Research project: *¿Es posible percibir la promiscuidad de una persona con tan solo escuchar su voz?* [Is it possible to perceive a person's promiscuity just by listening to his or her voice?]

### Isabella Russo

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2023

- Research project: *¿El género, preferencia sexual y nivel de sociosexualidad de una persona podrían influir en su capacidad para detectar la sociosexualidad de otros a través de rostros?* [Could a person's gender, sexual preference and level of sociosexuality influence their ability to detect the sociosexuality of others from their faces?]

### Maria Camila Wilches & Johan Sebastián Castiblanco

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2022 - 2023

- Research project: *El rol del género en la identificación de la sociosexualidad a partir de las voces* [The role of gender in the identification of sociosexuality from voices]

### Angie Alejandra Lozano Sanjuan, Daniela Martínez Franco & Mariana Saavedra Botero

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2021 - 2022

- Research project (**Distinction**): *¿Somos capaces de detectar qué tan sociosexual es una persona a partir de su voz y/o su rostro?* [Are we able to detect the sociosexual orientation of a person from their voice and/or face?]

### John Jairo Rubio

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2021 - 2022

- Research project: *¿Existe relación entre la simetría facial y el atractivo de la voz?* [Association between facial symmetry and vocal attractiveness]

### Maria Daniela Martínez Luna & Juan Sebastián Preciado Ruíz

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2020 - 2021

- Research project (**Distinction**): *¿Existe relación entre la sociosexualidad y la voz?* [Is there a relationship between sociosexuality and voice?]

### Maria Paula Moreno Rodríguez & Andrés Felipe Orozco Serrato

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2019 - 2021

- Research project: *¿Existe relación entre la forma del rostro y la socio-sexualidad?* [Is there an association between face shape and socio-sexuality?]

### Danny Ferley Gaitan Rodríguez & Hasbleidy Gamboa Ordoñez

Universidad El Bosque, Colombia

BSc IN PSYCHOLOGY

2019 - 2020

- Research project: *Detección de infidelidad y sociosexualidad a partir de rostros: Análisis preliminar* [Perception of socio-sexuality from facial cues]

### Natalia Elizabeth Moreno Buitrago & Juan Felipe Pérez Ariza

U. Pedagógica Nacional, Colombia

BA IN MUSIC PEDAGOGY

2017 - 2019

- Research project (**Distinction**): *Musicalidad y cohesión social: una aproximación experimental y bibliográfica desde el trabajo en equipo* [Musicality and social cohesion: An experimental and bibliographic approach from teamwork]

## Paula Andrea Betancourt Velandia & Ana Sofía Gómez Castelblanco

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2018 - 2019

- Research project: *Hombres que alcanzan voces menos agudas y con un volumen más bajo, tienden a tener más relaciones sexuales casuales* [Men who achieve lower-pitched voices and with a lower intensity tend to have more casual sex]

## Maria Alejandra Abello Mozo

Universidad El Bosque, Colombia

BSC IN BIOLOGY

2017 - 2018

- Research project (**Distinction**): *Desarrollo y evaluación de una metodología nueva para manipular las variables del atractivo, dominancia y sexo simultáneamente en fotos de caras humanas con el programa PsychoMorph* [Development and evaluation of a new methodology to simultaneously manipulate attractiveness, dominance and sex in photos of human faces with PsychoMorph]

## Cindy Paola Moncada Gómez

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2017 - 2018

- Research project: *La voz del sexo casual: ¿las características vocales predicen la disposición al sexo sin compromiso en hombres y mujeres?* A [The voice of casual sex: do vocal characteristics predict willingness to engage in uncommitted sex in men and women? A]

## Laura Milena Estupiñan Aldana

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2017 - 2018

- Research project: *La voz del sexo casual: ¿las características vocales predicen la disposición al sexo sin compromiso en hombres y mujeres?* B [The voice of casual sex: do vocal characteristics predict willingness to engage in uncommitted sex in men and women? B]

## Vanessa Díaz Güiza

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2016 - 2018

- Research project: *La voz del sexo casual: ¿las características vocales predicen la disposición al sexo sin compromiso en hombres y mujeres?* C [The voice of casual sex: do vocal characteristics predict willingness to engage in uncommitted sex in men and women? C]

## Lina María García Hoyos

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2016 - 2018

- Research project: *¿Se puede determinar si una persona ha sido infiel a partir de su voz?* [Can you determine if a person has been unfaithful from their voice?]

## Angie Liliana Pérez Rodríguez

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2016 - 2017

- Research project: *Efectos de los niveles hormonales en la discriminación tonal de mujeres* [Effects of hormone levels on pitch discrimination in women]

## Lina María Morales Sánchez

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2016 - 2017

- Research project: *Discriminación tonal predice satisfacción con pareja y su inversión parental, en hombres y mujeres* [Pitch discrimination predicts partner satisfaction and parental investment, in men and women]

## Haydn Ricardo Roldán Morales

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY

2015 - 2016

- Research project: *El sonido de la seducción: discriminación tonal, satisfacción en pareja, y niveles hormonales en hombres* [The Sound of Seduction: Tonal Discrimination, Partner Satisfaction, and Hormone Levels in Men]

## Memberships

LATIN AMERICAN ASSOCIATION FOR HUMAN BEHAVIORAL AND EVOLUTIONARY SCIENCES (LAHBES)

Since 2024

INTERNATIONAL SOCIETY FOR HUMAN ETHOLOGY (ISHE)

2016 - Present

ASSOCIATION FOR PSYCHOLOGICAL SCIENCE (APS)

2013 - 2020

EUROPEAN HUMAN BEHAVIOUR AND EVOLUTION ASSOCIATION (EHBEA)

2013 - 2016