Alba Refoyo-Martínez

PERSONAL DETAILS

Phone: (+45) 91 92 54 85
Mail: albarema@gmail.com
Address: Marmorvej 39, 3tv
2100 Copenhagen, Denmark
LinkedIn:
 https://www.linkedin.com/in/albarefoyo
Github:
 https://github.com/albarema

SKILLS

- Statistical data analysis
- Data management
- Data visualization
- Project management in cross-disciplinary groups
- Bioinformatics
- Software development
- Team leadership
- Mentoring

LANGUAGES

- English: proficiency
- Spanish: native
- Danish: beginner

EXPERTISE

- R
- R Markdown
- Python
- Jupyter Notebooks
- Conda
- Snakemake
- Bash scripting
- Git & Github

PERSONAL QUALITIES

- Motivated by challenges
- Proactive learner
- Highly organized
- Analytical
- Independent
- Decision-making
- Positive

SUMMARY

- 6 years' experience in bioinformatics, computational biology, and population genetics
- Demonstrated proficiency in the development of novel scientific software and reproducible open-source computational pipelines
- Deep expertise in scientific computing, using Python, R, snakemake and conda

EXPERIENCE

University of Copenhagen

Postdoctoral researcher   Nov 2022 - Present
- Developed novel computational tools and pipelines for processing genomic data
- Expanded the utility of R packages to specific research inquiries
- Conducted population genetic modelling in collaboration with Variant Bio

PhD student
Lundbeck Foundation Geogenetics Centre, Globe Institute   Oct 2019 - Oct 2022
Department of Integrative Biology at University of California, Berkeley   Sep 2022 - Oct 2022

- Computed statistical analyses and constructed computational pipelines for genomic data
- Programmed modelling of evolutionary complex processes
- Predicted genetic disease risk from whole-genome sequence data
- Implemented a tool to process tree-sequence data structures to track evolutionary events
- Performed data visualization of complex time-series genomic data

Master's student   Apr 2018 - Sep 2019
- Developed software in R to detect selection in complex demographic histories and evaluated its performance with state-of-the-art tools

EDUCATION

Doctor in Philosophy (DPhil)	***University of Copenhagen***	**2019-2022**
Change of research environment	*University of California, Berkeley*	Sep. 2022
Master of Science (MSc) in Bioinformatics	***University of Copenhagen***	**2017-2019**
Elective student	*Copenhagen Business School*	
Bachelor of Science (BSc) in Health Biology	***Universidad de Alcalá***	**2013-2017**
Erasmus program	*Vrije Universiteit Brussel*	2016-2017

SCIENCE COMMUNICATION

I have contributed to numerous high-impact publications and developed my communication skills by presenting at global conferences.

- The Selection Landscape and Genetic Legacy of Ancient Eurasians. Irving-Pease, E.K.*, **Refoyo-Martínez, A**.*, Ingason, A.*, [...], Racimo, F., Willerslev, E., 2022. *Nature accepted*
- Genetic risk for Multiple Sclerosis originated in Pastoralist Steppe populations. Barrie, W.*, Yang, Y.*, Attfield, K.E.*, Irving-Pease, E.K.*, E., Scorrano, G., Jensen, LT., Armen, A.P., Dimopoulos, EA., Stern, A**., Refoyo-Martínez, A**., [...], Willerslev, E., 2022. *Nature accepted*
- Population Genomics of Stone Age Eurasia. Allentoft, M.E.*, Sikora, M.*, **Refoyo-Martínez, A**.*, Irving-Pease, E.K.*, [...], Racimo, F., Kristiansen, K., Willerslev, E., 2022. *Nature accepted*
- How robust are cross-population signatures of polygenic adaptation in humans?. **Refoyo-Martínez, A**., Liu, S., Jørgensen, A. M., Jin, X., Albrechtsen, A., Martin, A. R., Racimo, F., 2020. *Peer Community Journal*
- Identifying loci under positive selection in complex population histories. **Refoyo-Martínez, A**., daFonseca, RR, Halldorsdottir, K, Arnason, E, Mailund, T, Racimo, F., 2019. *Genome Research*

VOLUNTEERING

- Conference chair (Evolutionary and Population Genetics in Denmark – EPIC 2023)
- Conference organizer (Evolutionary and Population Genetics in Denmark – EPIC 2022)
- Globe PhD Committee member organizing the GLOBE PhD Day 2022
- Course instructor in computational lab classes for PhDs in 'Analysis of large-scale datasets'
- Teaching assistant for bachelor students in 'Interaction design (KOMIT)' on the interaction and usability of user interfaces