

The center integrates terrestrial and marine research in a cross-disciplinary research program addressing fundamental questions on the origin, conservation and future of life and biological diversity on Earth.

Reserach team

At the end of 2017, the CMEC team comprised 21 senior scientists, including four world-leading scientists employed part-time (Miguel B. Araujo, Neil Burgess, Robert Whittaker; Rob Dunn) and one Associated Professor (Gary Graves from Smithsonian Institution).

The CMEC senior scientist worked in 2017 closely together with an exceptional chord of 7 assistant professors, 18 post-doctoral scientists and 19 PhD students from around the world. Additionally, 29 MSc and 13 BSc students graduated with supervision by CMEC researchers.

Senior and junior researchers received two awards and 21 grants in 2017.



The annual research center retreat was held in the region of Alentejo, Portugal. All PhD students and postdocs presented and discussed their research projects together with the center leader and senior scientists.

Reserach

CMEC has, during the eight year of funding, achieved an excellent level in publications with 166 papers published in an international peer-reviewed journals, including three in *Science*, one in *PNAS* and one in *Royal Proc. B* – three of the “high prestige” journals targeted by the center for publication of our best work.

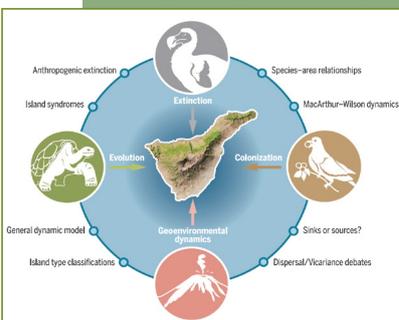
A broader paradigm for island biogeography

Fifty years after its first publication, the equilibrium theory of island biogeography remains one of the most influential ideas in ecology. But in ignoring the long-time perspective of island build-up and species evolution it may have missed an important part of the picture of island diversity.

In two review papers in *Biological Reviews* and *Science*, CMEC researchers described how recent insights in island biogeography have opened a much broader understandig by taking a deep-time perspective.

Much of this understanding comes from work that has taken place at CMEC over the last small decade. the geological life cycle of the islands themselves.

The key insight to emerge from this work is that the biological life on islands is closely intertwined with the geological life cycle of the islands themselves.

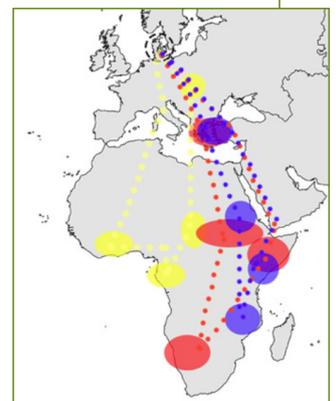


Migratory birds track resource peaks

The ability to fly makes birds among the most mobile organisms enabling them to seasonally migrate between areas separated by long distances. The movement of migratory birds is closely linked to seasonal availability of resources. Tracking of three long-distance migrants shows that the birds are able to schedule their movements across continents to stay in areas when they are most profitable.

This might become more difficult in the future, as comparing the bird’s migration routes to climate projections show, that finding food may become a challenge to the birds by the end of this century.

The image shows the routes of the three migratory bird species; The Common Cuckoo (yellow), Thrush Nightingale (blue) and Red-backed Shrike (red).



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