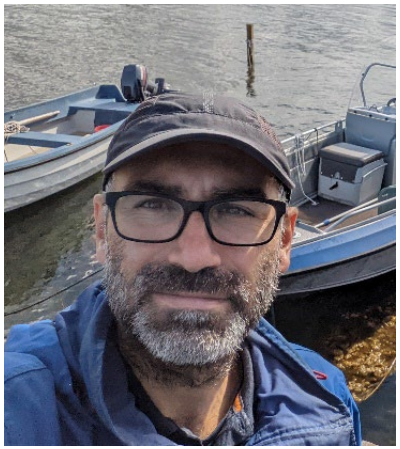

Dr Luca Mirimin graduated in 2002 with a BSc in Natural Sciences at the University of Ferrara, Italy. Following a scholarship at the Zoological Society of London, UK, in 2007 he completed a PhD in Zoology at University College Cork, Ireland. Dr Mirimin is a geneticist and molecular ecologist, with 20 years of experience in applying DNA-based approaches to study and manage aquatic organisms; including many marine fish (e.g. cod, salmon), as well as shellfish (e.g. oysters, mussels) and marine mammals (e.g. seals, dolphins). Since 2015, Dr Mirimin has been a Lecturer in Aquatic Ecology at the Atlantic Technological University (ATU), Galway, Ireland. Dr Mirimin has established a very active research programme at the Marine and Freshwater Research Centre (MFRC), where he is a Principal Investigator and Project Coordinator in conservation genetics and applied molecular biology research. Besides teaching at both undergraduate and postgraduate levels in national and international marine science programmes, Dr Mirimin supervises numerous BSc, MSc and PhD students, encompassing projects aimed at managing declining and protected marine organisms, as well as enabling sustainable seafood production/harvesting. Among other areas of expertise, Dr Mirimin is an emerging expert in developing and applying environmental DNA (eDNA) approaches in a wide range of marine and freshwater habitats.

Selected publications

Aguzzi J, Flögel S, Marini S, Thomsen L, Albiez J, Weiss P, Picardi G, Calisti M, Stefanni S, **Mirimin L**, Vecchi F, Laschi C, Branch A, Clark EB, Foing B, Wedler A, Chatzievangelou D, Tangherlini M, Purser A, Dartnell L, Danovaro R (2022) Developing technological synergies between deep-sea and space research. *Elementa: Science of the Anthropocene*, 10: 1. DOI: https://doi.org/10.1525/elementa.2021.00064

Stefanni S, **Mirimin L**, Stanković D, Chatzievangelou D, Bongiorni L, Marini S, Modica MV, Manea E, Bonofiglio F, del Rio J, Cukrov N, Gavrilović A, De Leo F, Aguzzit J (2022) Framing cutting-edge integrative deep-sea biodiversity monitoring via eDNA and optoacoustic augmented infrastructures. *Frontiers in Marine Science* 8:797140. https://doi.org/10.3389/fmars.2021.797140

Fernandez S., Miller D.L., Holman L.E., Gittenberger A., Ardura A., Rius M., and **Mirimin L.** (2021) Environmental DNA sampling protocols for the surveillance of marine non-indigenous species in Irish coastal waters. *Marine Pollution Bulletin* 172: 112893 https://doi.org/10.1016/j.marpolbul.2021.112893

Mirimin L., Desmet S., López Romero D., Fernandez Fernandez S., Miller D.L., Mynott S., Gonzalez Brincau A., Stefanni S., Berry A., Gaughan P., Aguzzi J. (2021) Don't catch me if you can – Using cabled observatories as multidisciplinary platforms for marine fish community monitoring: an *in situ* case study combining Underwater Video and environmental DNA data. *Science of the Total Environment* 773: 145351. https://doi.org/10.1016/j.scitotenv.2021.145351

Pinfield, R., Dillane, E., Runge A.K.W., Evans, A., **Mirimin, L.,** Niemann, J., Reed, T.E., Reid, D.G., Rogan, E., Samarra, F.I.P., Sisgaard, E.E., Foote, A.D. (2019) False-negative detections from environmental DNA collected in the presence of large numbers of killer whales (*Orcinus orca*). *Environmental DNA*, 1, 316-328. https://doi.org/10.1002/edn3.32