



Adele Cutignano is a Senior Researcher at the Institute of Biomolecular Chemistry (ICB) of the National Research Council (CNR) in Pozzuoli (NA), Italy.

She graduated *summa cum laude* in 1993 in Pharmaceutical Chemistry and Technology at University of Naples 'Federico II' where she obtained also her PhD in 1997. She moved at University of Salerno for post-doctoral studies and in 1999 received the Specialization Degree in Hospital Pharmacy, with highest marks and honor. In 2001 she obtained a permanent position as Researcher at ICB where she has been the person in charge for the ICB Mass Spectrometry Facility until 2020. She participated to two PNRA Antarctica expeditions in 2005 and 2010.

She obtained the National Scientific Habilitation in Organic Chemistry 03/C1 at MIUR (Ministry of Education, University and Research) as Associate Professor in 2017 and as Full Professor in 2020.

Partner of the Biotech Company BioSearch dedicated to research on pharmaceuticals and innovative products from marine microalgae.

Specialty Chief Editor of *Frontiers in Marine Science/Marine Biotechnology and Bioproducts*; Editorial Board Member and Guest Editor of *Marine Drugs*; Editorial Board Member and Guest Editor of *Phycology*; Editorial Board member of *Frontiers in Ecology and Evolution*.

Her research interests include:

- Chemistry of bioactive natural products. Exploration of the chemical diversity in marine invertebrates, microalgae and plants with a focus on secondary metabolites for pharmaceutical, cosmeceutical and nutraceutical applications; isolation and stereo-structural elucidation of natural products by advanced chemical, spectroscopic (2D-NMR) and spectrometric (HRMS/MS) methodologies;
- Development and application of targeted and untargeted MS-based lipidomics/metabolomics approaches in biological tissues, cells and fluids in (chemo)ecological and biomedical studies;
- Biosynthetic studies on secondary metabolites in marine invertebrates and microalgae.

Author of **95** peer reviewed original papers/reviews/book chapters ([ORCID 0000-0003-3035-9252](https://orcid.org/0000-0003-3035-9252); [ResearchGate profile](#); [GoogleScholar AdeleCutignano](#)).

Selected Papers

1. Cutignano, A.; Conte, M.; Tirino, V.; Del Vecchio, V.; De Angelis, R.; Nebbioso, A.; Altucci, L.; Romano, G. Cytotoxic Potential of the Marine Diatom *Thalassiosira rotula*: Insights into Bioactivity of 24-Methylene Cholesterol. *Mar. Drugs* 2022, 20, 595. <https://doi.org/10.3390/md20100595>.
2. Manzo, E.; Gallo, C.; Sartorius, R.; Nuzzo, G.; Sardo, A.; De Berardinis, P.; Fontana, A.; Cutignano, A. Immunostimulatory Phosphatidylmonogalactosyldiacylglycerols (PGDG) from the Marine Diatom *Thalassiosira weissflogii*: Inspiration for a Novel Synthetic Toll-Like Receptor 4 Agonist. *Mar. Drugs* 2019, 17, 103. <https://doi.org/10.3390/md17020103>.
3. Ben Haj Yahia, I.; Zaouali, Y.; Ciavatta, M. L.; Ligresti, A.; Jaouadi, R.; Boussaid M.; and Cutignano A. Polyphenolic Profiling, Quantitative Assessment and Biological Activities of Tunisian Native *Mentha rotundifolia* (L.) Huds. *Molecules*, 2019, 24, 2351. <https://doi.org/10.3390/molecules24132351>.
4. Cutignano, A.; Nuzzo, G.; Sardo, A.; Fontana, A. The Missing Piece in Biosynthesis of Amphidinols: First Evidence of Glycolate as a Starter Unit in New Polyketides from *Amphidinium carterae*. *Mar. Drugs* 2017, 15, 157. <https://doi.org/10.3390/md15060157>.
5. Cutignano, A.; Luongo, E.; Nuzzo, G.; Pagano, D.; Manzo, E.; Sardo, A.; Fontana, A. "Profiling of complex lipids in marine microalgae by UHPLC/tandem mass spectrometry", *Algal Res.* 2016, 17, 348-358. <https://doi.org/10.1016/j.algal.2016.05.016>.

