

Europass Curriculum Vitae



Personal Informations

First name(s) / Surname(s) **Alessia Ametrano**

Address(es) [Redacted]

Telephone(s) [Redacted]

E-mail [Redacted]

Nationality **Italian**

Date of birth [Redacted]

Sex [Redacted]

Desired employment/
Occupational field [Redacted]

Work experience

Dates November 2017 – February 2021

Name and address of employer Comparative Immunology Lab - Institute of Protein Biochemistry, National Research Council of Italy
Via Pietro Castellino 111 - 80131 Naples (Italy)

Main activities and responsibilities PhD project: "Antarctized" antibody: an innovative engineered antibody by CRISPR/Cas9 system

Dates December 2016 – June 2017

Name and address of employer Comparative Immunology Lab - Institute of Protein Biochemistry, National Research Council of Italy
Via Pietro Castellino 111 - 80131 Naples (Italy)

Main activities and responsibilities Post-graduate training project: "The immune defences of the teleosts adapted to the polar environments"

Dates December 2015 – April 2016

Name and address of employer Molecular and Cellular Biology Lab - Department of Biology, University of Naples "Federico II"
Via Vicinale Cupa Cintia - 80126 Naples (Italy)

Main activities and responsibilities Master thesis project: "CRISPR/Cas9 technology mediates Genome Editing of the transcriptional factor FoxE1, involved in Basal Cell Carcinoma"

Dates	March 2013 – June 2013
Name and address of employer	Molecular Phylogenetics Lab - Department of Biology, University of Naples "Federico II" Via Vicinale Cupa Cintia - 80126 Naples (Italy)
Main activities and responsibilities	Bachelor thesis project: " The use of the method qRT-PCR for the validation of differential gene expression, involved in sexual differentiation of <i>Drosophila melanogaster</i> "
Education and training	
Dates	18 February 2021
Title of qualification awarded	PhD in Molecular Life Science Supervisor: Dr. Maria Rosaria Coscia
Principal subjects/occupational skills covered	Bioinformatics; Cell biology; Stem Cells; Regenerative Medicine; Structural biology and protein function; Physiopathology and drug design; Molecular bases of Human diseases; Immunology and Microbiology; Cancer development and Molecular Therapy
Name and type of organisation providing education and training	Comparative Immunology Lab - Institute of Protein Biochemistry, National Research Council of Italy Via Pietro Castellino 111 - 80131 Naples (Italy) University of Campania "Luigi Vanvitelli" Via Vivaldi 43 - 81100 Caserta (Italy)
Level in national or international classification	PhD
Dates	December 2016 - June 2017
Title of qualification awarded	Postgraduated training Supervisor: Dr. Maria Rosaria Coscia
Principal subjects/occupational skills covered	Bioinformatics; Biochemistry; Immunology; Molecular Phylogenetics
Name and type of organisation providing education and training	Comparative Immunology Lab - Institute of Protein Biochemistry, National Research Council of Italy Via Pietro Castellino 111 - 80131 Naples (Italy)
Level in national or international classification	Post-graduate trainee
Dates	23 March 2016
Title of qualification awarded	Master's Degree in Biology (Biomolecular Curriculum) Subject: Molecular and Cellular Biology Supervisor: Prof. Caterina Missero Final mark: 108/110

Principal subjects/occupational skills covered	Immunology; Molecular Biology Laboratory; Advanced Genetics; Molecular Microbiology; Advanced Biochemistry; Applied Biochemistry and Protein Engineering; Biophysical Chemistry and Laboratory; Molecular Evolution; Biochemistry Laboratory; Molecular Biology and Bioinformatics; Human Molecular Genetics
Name and type of organisation providing education and training	School of Mathematics, Physics and Natural Sciences – University of Naples “Federico II” Via Vicinale Cupa Cintia - 80126 Naples (Italy)
Level in national or international classification	Second degree class in Biology (6/S)
Dates	14 November 2013
Title of qualification awarded	Bachelor's degree in General and Applied Biology (Molecular and Cellular Curriculum) Subject: Developmental Biology Supervisor: Prof. Teresa Capriglione Final mark: 96/110
Principal subjects/occupational skills covered	Mathematics; Inorganic Chemistry and Laboratory; Vegetal Biology and Laboratory; Organic Chemistry and Laboratory; Cytology and Histology and Laboratory; Zoology and Laboratory; Biochemistry and Laboratory; Physics and Informatics e Laboratory; Molecular Biology and Laboratory; Genetics and Genetic Engineering and Laboratory; Physiology and Laboratory; Microbiology and Laboratory; Ecology and Laboratory; Plant Physiology and Laboratory; Evolutional and Developmental Biology and Laboratory; Hygiene and Laboratory; Biomolecular Techniques and Laboratory; Application in Cellular Biology.
Name and type of organisation providing education and training	School of Mathematics, Physics and Natural Sciences – University of Naples “Federico II” Via Vicinale Cupa Cintia - 80126 Naples (Italy)
Level in national or international classification	First degree class in Biology (L13)
Dates	July 2009
Title of qualification awarded	Scientific High School Diploma Final mark: 96/100
Principal subjects/occupational skills covered	Latin, Mathematics, Physics, Chemistry, Italian Lecture, Philosophy, Geology, Art, History, Biology
Name and type of organisation providing education and training	Scientific High School “Filippo Silvestri” Via Giovanni Paladino 35 – 80055 Portici (Naples)
Level in national or International classification	Secondary School Diploma
Personal skills and competences	
Mother tongue(s)	Italian
Other language(s)	English

Self-assessment
European level (*)

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	B2	Independent user	B1	Independent user	B1	Independent user	B2	Independent user

(*) Common European Framework of Reference for Languages

Social skills and competences

I have a great propensity for group work and interpersonal relationships.
Good skills and tools for communication and information management.

Partecipation of the project Helianthus for the protection of culture: "La scuola adotta un monumento: "La reggia di Portici" of the Scientific High School "Filippo Silvestri" - Portici (Naples) 2005/2006

Volunteer at the Italian Red Cross – Local Committee of Portici (Naples)

Volunteer at the Association "NutriAfrica" – www.nutriafrica.org

Organisational skills and competences

Self-motivated person
Good sense of organization
Team participation
End-oriented work capacity
Leadership competences
High leveled communication skills
Problem-solving attitude
Responsibility, self-respect and self-reliance
Pro-activity in seeking solutions, new ways of facing different scenarios

Technical skills and competences

Primary cultures (keratinocytes) and immortalized cell (HEK293, Hybridoma Cell Line)
Immunofluorescence and immunohistochemical techniques
Western Blotting
ELISA assay
Transfection methods in mammalian cells
Protein purification methodologies
Good knowledge of bioinformatics tool (Blast, NCBI, Expasy, Genome Browser, ClustalW, LALIGN, WebLogo)
Acid nucleic extraction from cells and tissues
Cloning of DNA fragments
PCR (Real Time PCR, RT-PCR, Race-PCR, Nested PCR)
CRISPR/Cas9 system and Genome Editing
Manipulation of lentiviral and retroviral vectors
Cellular biology techniques (Migration Assay, Wound Healing Assay, BrdU Cell Proliferation Assay)
Microscopy

Computer skills and competences

Knowledge of informatics in the optic user:
Microsoft Excel, Word, PowerPoint, Adobe Photoshop, ImageJ

Artistic skills and competences

Digital drawing
Drawing up stories and poems
Theatrical acting

Driving licence B

Referees

Caterina Missero

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Maria Rosaria Coscia

CNR First Researcher
Institute of Biochemistry and Cell Biology, National Research Council of Italy (IBBC-CNR)
Naples - Italy
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Additional information

Communications to congress

Ametrano A, Greco S., Oreste U., Gerdol M., Coscia M.R.
Investigations on IgT genes of sub-Antarctic fish shed light on the CH2 exon loss
XXI Meeting Italian Association of Developmental and Comparative Immunobiology
Varese, Italy, 12th - 14th February 2020 (Oral presentation)

Ametrano A., Vitale M., Greco S., Gerdol M., Coscia M.R.
The evolutionary puzzle of IgT genes in Antarctic fishes
Third International Conference on Fish & Shellfish Immunology
Las Palmas de Gran Canaria, Spain, 16th - 20th June 2019 (Oral presentation)

Ametrano A, Mancia A, Ballarin S, Benkhalqui A, Calderoni G, Pavani G, Coscia MR, Abelli L
Immunodetection of IgM, IgT and plgR in mucosal tissues of Antarctic teleost
XX Meeting Italian Association of Developmental and Comparative Immunobiology
Rende, Italy, 13th - 15th February 2019 (Oral presentation)

Ametrano A, Vitale M, Coscia MR
Evolutionary analysis of Immunoglobulin T genes from Antarctic fish
XIX Meeting Italian Association of Developmental and Comparative Immunobiology
Genoa, Italy, 7th - 9th February 2018 (Oral presentation)

Ametrano A, Vitale M, Coscia MR
Evolutionary analysis of Immunoglobulin T genes from Antarctic fish
Poster Presentation on the site visit by the Scientific Advisory Board
Institute of Protein Biochemistry National Research Council, Naples (Italy)
8th - 10th October 2017

Ametrano A, Vitale M, Oreste U, Coscia MR
More insights into evolution of IgT genes from Antarctic fish
XVIII Meeting Italian Association of Developmental and Comparative Immunobiology
Viterbo, Italy, 8th - 10th February 2017 (Abstract)

Ametrano A, Vitale M, Coscia MR
More insights into evolution of IgT genes from Antarctic fish
Poster Presentation on IBP Retreat
Stazione Zoologica Anton Dohrn, Naples (Italy) 1st - 2nd December 2016

Seminar and Workshop

Covid-19 studies at the DSB-CNR National Research Council of Italy (CNR), Virtual Meeting - 18th December 2020

Fifth Meeting of CNR Immunology Network - CIN National Research Council of Italy (CNR), Virtual Meeting - 16th November 2020

SIICA School of Immunology Webinar series **"Viral Immunology and Vaccinology"** - 14th April - 4th May 2020

European Advanced Course **"Bridging basic and clinical immunology"** held by SIICA-FOCIS Florence, Italy - 19th- 21st May 2019

"Horizon 2020 - ERC" (European Research Council) held by Agenzia per la Promozione della Ricerca Europea (APRE) and University of Campania "Luigi Vanvitelli" Caserta – November 28th 2018

Third Meeting of CNR Immunology Network - CIN, CNR, Rome - November 15th, 2018

Joint short course for transferable training **"Scientific communication and grant writing skills"** CNR, Naples - May 8th-10th 2018

Minisymposium **"Cancer Drug Discovery, Development and Delivery" Mechanisms and Targets in Tumor and Stromal Cells** – Institute of Genetics and Biophysics "Adriano Buzzati-Traverso" (IGB-ABT) - Naples, 30th June 2017

Workshop **"The CRISPR/Cas9 system: from bacterial genome watchdog to molecular wand for genome engineering"** - University of Campania "Luigi Vanvitelli" - 14th November 2017

List Publications

Oreste U, **Ametrano A**, Coscia MR. On Origin and Evolution of the Antibody Molecule. *Biology*, 2021,10:140

Science divulgation activity

Participation in the event **"European Biotech Week - FARE BIOTECH: LA SALUTE CHE VERRA"** Online event - 1st October 2020

Participation in the 33rd Edition of the event **"Futuro Remoto ESSERE 4.0"** Fondazione Idis - Città della Scienza Naples - 21st - 24th November 2019

Participation in the events **"La Scuola Incontra la Ricerca"** at IBBC-CNR, October 2018- October 2019

Participation in the event **"Sharper, Notte Europea dei Ricercatori"**, 27th September 2019, Naples

Participation in the event **"European Biotech Week"** at IBBC-CNR, 27th September 2019, Naples

Participation in the 32nd Edition of the event **"Futuro Remoto RI-GENERAZIONI"** Fondazione Idis- Città della Scienza, Naples - November 8th-11th, 2018

Participation in the event **"Giornata Mondiale dell'Immunologia - "Malattie Infettive: Prevenire, Proteggere, Immunizzare"**, at IBP-CNR, Naples (Aprile 27th, 2018). Object lesson for Lyceum students entitled: "L'utilizzo della reazione a catena della polimerasi (PCR) nell'ambito dell'immunologia".

Participation in the event **"European Biotech Week – La vaccinAZIONE: quanto la salute dell'uomo ha beneficiato e beneficerà dell'AZIONE dei vaccini"**, at IBP-CNR, Naples (Aprile 28th,2017). Object lesson for Lyceum students entitled: "La storia della reazione a catena della polimerasi (PCR) e la duplicazione del DNA in laboratorio"

PhD Program activity

PhDays Retreat 2020

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system - Microsoft Teams Platform, 21st September 2020 (Oral presentation)

IBBC PhD Program - Third Six Monthly Report

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system

Evaluation panel : Dr. Diana Boraschi; Dr. Luciana D'Apice

Naples, 30th September 2019 (Oral presentation)

IBBC PhD Program - Meeting 2019

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system - IGB seminar room, Naples, 26th September 2019 (Oral presentation)

PhDays Retreat 2019

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system - IGB seminar room, 16th September 2019, Naples (Oral presentation)

IBBC internal seminar 2019

"Antarctic fish IgT: a "cold" option for immunoglobulins" - CNR conference room, 24th July 2019, Naples (Oral presentation)

IBP PhD Program - Second Six Monthly Report

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system

Evaluation panel : Dr. Diana Boraschi; Dr. Luciana D'Apice

Naples, 25th January 2018 (Oral presentation)

IBP PhD Program - Meeting 2018

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system - IGB seminar room, 11th October 2018, Naples (Oral presentation)

PhDays Retreat 2018

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system - Aula Magna, Università degli Studi della Campania "Luigi Vanvitelli" - Caserta, 26th September 2019 (Oral presentation)

IBP PhD Program - First Six Monthly Report

"Antarctized" antibody: an innovative engineered antibody by the CRISPR/Cas9 system

Evaluation panel : Dr. Diana Boraschi; Dr. Luciana D'Apice

Naples, 18th May 2018 (Oral presentation)

Awards **SIICS Young Member Award - Best Oral Presentation** - University of Insubria - 13th February 2020, Varese

"MyResearch in Three Minutes" - Research Project for Innovation and Translational Technology - 1st place, University of Campania "Luigi Vanvitelli", 30th January 2020, Naples

Paolo Altucci and Giulia Guarino Award for Scientific Merit - 1st place, University of Campania "Luigi Vanvitelli", 30th January 2020, Naples

Projects **PNRA18_00071: "Impact of the Antarctic environment on human homeostasis, psychology, physiology and immunity"** - Participant researcher

PNRA18_00077: "Antarctic Marine and Freshwater Eukaryotic Biodiversity as a promising source of bioactive substances" - Participant researcher

Other Member of Italian Association of Developmental and Comparative Immunobiology (SIICS)

