Curriculum Vitae

Lucia Albano

Personal Information

Address: Via Gambardella 78, 80058 Torre Annunziata, Naples, Italy
Phone: +39 [redacted]
Email: albano@ceinge.unina.it / [redacted] / lucia.albano@biologo.onb.it
Gender: Female
Date of Birth: 30/07/1986
Nationality: Italian

Work Experience

From April 2018 – Present
Permanent employment at CEINGE – Advanced Biotechnology s.c.a r.l., Via Gaetano Salvatore 486, 80145 Naples.
Level: 'Quadro' as per Confcommercio national contract since January 2022.

From October 2017 to March 2018
Coordinated and continuous collaboration contract as a 'Graduated Laboratory Technician, expert level', for extended newborn screening activities on metabolic diseases and result verification, in accordance with technical and regulatory requirements at CEINGE – Advanced Biotechnology.

From April 2016 to December 2016
Research grant to participate in training project in the field of design, development, and production of functional and/or enriched foods at CEINGE – Advanced Biotechnology.

From January 2015 to December 2015
Collaboration contract for the project 'Evaluation of genetic variants in the study of hereditary diseases through large-scale genome sequencing analysis' at CEINGE – Advanced Biotechnology.

From 9 January 2012 to 30 June 2012
Voluntary internship at Ehrlich Clinical Analysis Laboratory, Mercato San Severino (SA).
Main activities performed:
- Execution and interpretation of complete blood counts
- HPLC testing for glycated hemoglobin and hemoglobinopathies
- Coagulation tests, hormone assays, tumor and hepatitis markers using automated systems
- Urine physical-chemical analysis and sediment examination by microscopy
- Immunochromatographic tests for Bence-Jones protein and drugs in urine
- Microbiological screening and antibiograms for swabs and biological fluids

- Immunological tests (Coombs, Waaler-Rose, Widal)
- Stool tests: occult blood, Parvovirus, Rotavirus, H. Pylori, fecal calprotectin

Education and Training

October 2012 – July 2017
Specialization School in Clinical Biochemistry
Faculty of Medicine and Surgery, University of Naples "Federico II"
Final degree awarded on July 10, 2017 with honors (50/50 cum laude).
Thesis title: 'Extended newborn screening for inherited metabolic diseases in the Campania Region (Italy)'.
Aim: Early neonatal identification of inborn errors of metabolism by quantification of amino acids and acylcarnitines on heel-prick dried blood spots collected at 48–72 hours of life.

Professional training activities included:

- High-throughput automated laboratories: Tandem mass spectrometry (MS/MS) for amino acids and acylcarnitines on dried blood spot and serum
- Full execution of the expanded newborn screening laboratory process: sample intake and suitability assessment, screening and second-tier MS/MS tests, quality control programs, analytical session validation
- Laboratory Hematology
- Clinical Chemistry (separative techniques)
- Microscopy and Clinical Cytology
- Biochemistry, Clinical Molecular Biology, Genetic Biochemistry laboratories
- Microbiology, Parasitology, Virology labs at Monaldi and Cotugno Hospitals
- Immuno-hematology Laboratory – Transfusion Medicine Unit, Monaldi Hospital

Year 2011
Professional qualification to practice as Biologist obtained at the University of Sannio, Benevento.
Registered in the Professional Register, Section A, no. AA_067494.

March 2009 – June 2011
Master's Degree in Biological Sciences, Molecular Diagnostics Track
University of Naples "Federico II", awarded June 24, 2011
Final grade: 110/110 cum laude
Thesis: 'Effect of selective T3 receptor β agonist (GC-1) on mitochondrial oxidative metabolism'.
Activities included measurements of:
- Mitochondrial oxygen consumption (Clark-type electrode)
- Respiratory chain complex activities (spectrophotometry)
- Lipid and protein oxidative damage (hydroperoxides, carbonyls)
- Mitochondrial H2O2 release (spectrofluorimetry)
- Antioxidants (glutathione, coenzyme Q9/Q10, vitamin E – HPLC and spectrophotometry)

September 2005 – March 2009
Bachelor's Degree in Biological Sciences
University of Naples "Federico II", awarded March 25, 2009
Final grade: 108/110
Thesis: 'Preparation of a histological sample for optical microscopy', developed at the Department of Biological Sciences – Histology Section

Personal Skills

Mother tongue: Italian

Other language: English

Understanding – Listening: Good | Reading: Good
Speaking – Spoken interaction: Good | Spoken production: Good
Writing: Good

Digital competences:

- Good command of Microsoft Office tools
- Fluent use of Windows XP, Vista, Seven, and Mac OS operating systems
- EIPASS 7 MODULES certification (obtained 29/05/2014)
- EIPASS LIM (Advanced Level) certification (obtained 10/06/2014)

Driving license: Category B

Own means of transport

Scientific Publications, Abstracts, Congresses and Courses

Peer-reviewed Publications:

• Long-term monitoring for short/branched-chain acyl-CoA dehydrogenase deficiency: A single-center 4-year experience and open issues. Front Pediatr. 2022; 10:895921. doi:10.3389/fped.2022.895921.

• Biochemical and molecular characterization of 3-Methylcrotonylglycinuria in an Italian asymptomatic girl. Genet Mol Biol. 2018; 41(2):379–385. doi:10.1590/1678-4685-GMB-2017-0093.

• Targeted metabolomic profiling in rat tissues reveals sex differences. Sci Rep. 2018; 8(1):4663. doi:10.1038/s41598-018-22869.

• Maternal vitamin B12 deficiency detected in expanded newborn screening. Clin Biochem. 2014; 47(18):312–317. doi:10.1016/j.clinbiochem.2014.08.020.

• Targeted metabolomics in expanded newborn screening for inborn errors of metabolism. Mol BioSystems. DOI:10.1039/C4MB00729H.

Scientific Abstracts and Congress Presentations:

• Co-author of the abstract 'Dissecting molecular bases of human genetic diseases by proteomic and metabolomic approaches', presented at the Scientific Retreat in Naples.

• Co-author of multiple abstracts presented at national SIMMESN congresses (2013–2017), including:

- 'Maternal vitamin B12 deficiency diagnosed by expanded newborn screening'

- '3-Methylcrotonyl-CoA carboxylase deficiency: identification of two novel mutations'

- 'Metabolic disease diagnosis on clinical suspicion vs. metabolic screening data'

- 'Newborn screening as a tool to identify undiagnosed maternal conditions'

• Author of the abstract 'Expanded newborn screening: 10 years of experience in the Campania region', presented at the 2017 National SIMMESN Congress.

• Contributed to congress presentations on gender-related differences in metabolite profiles and targeted metabolomics in metabolic disease.

• Participation in the Annual SSIEM Symposium in Rome (2016) with work on mitochondrial dysfunction in glycogen storage disease type Ia.

Courses and Scientific Training:

• Permanent School of Expanded Newborn Screening – Florence, January 2018

• Bone Marrow Donor Recruiter Course – Naples, September 2018

• EVOware Standard Software Course for Tecan Freedom Evo Workstation – Naples, March 2016

• Basic Life Support and Early Defibrillation (BLS-D) Course – February 2015

• Pediatric care for rare diseases – Naples, January 2015

• Regional Conference on Dyslipidemias – SISA Campania, January 2015

• Conference on Mass Spectrometry in Pediatrics – Rome, May 2015

• Workshop on SIMMESN Quality Assurance Programs – Naples, November 2013

Training Courses and Conferences

Participated in the training course “Permanent School of Extended Newborn Screening” held in Florence in January 2018.

Participated in the training course “Bone Marrow Donor Recruiter: new IBMDR and WMDA standards – Meeting of donor centers and recruitment hubs in the Campania Region,” held in Naples from 11 to 18 September.

Participated in the training course - EVOware Standard Software - focused on the use of the Tecan Freedom Evo robotic workstation, held in Naples on 8–10 March 2016. The course provided information on software introduction, safety instructions, description of the EVOware Standard software, script execution, common error handling, and start/end-of-work maintenance.

Participated in the Theoretical-Practical Course on Early Cardiac Defibrillation (BLS-D) according to the American Heart Association and I.L.C.O.R 2010 Guidelines, held by the Educational Team of the “Federico II” University Hospital of Naples on 26 February 2015.

Participated in the SISA Campania Regional Conference - Dyslipidemias: new frontiers in diagnosis and therapy, held in Naples on 29 January 2015.

Participated in the training course “Pediatric care for rare diseases: the model of genetic syndromes and inherited metabolic disorders” held in Naples on 23–24 January 2015.

Participated in the congress held in Rome on 21 May 2015 “The use of mass spectrometry in pediatrics.”

Participated in the 5th National Joint Congress SIMMESN and SIMGePeD “Innovative therapies for genetic (metabolic and non-metabolic) diseases” held in Naples on 26–28 November 2013 and co-authored the following two abstracts:

- Maternal vitamin B12 deficiency diagnosed through expanded newborn screening

- 3-Methylcrotonyl-CoA carboxylase deficiency: Identification of two new mutations

Participated in the Workshop “SIMMESN Quality Assurance Programs” held in Naples on 26 November 2013.

Co-author of the abstract presented at the Scientific Retreat held in Naples on 18 October 2013 entitled:

- Dissecting molecular bases of human genetic diseases by proteomic and metabolomic approaches