# **Curriculum Vitae**

### PERSONAL INFORMATION

Name and surname:	Luna Girolamini
Date of birth:	10/08/1992
Place of birth:	San Severino Marche (MC)
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**JOB POSITION**: Phd student at the Department of Biological, Geological and Environmental Sciences (Bigea) of the Alma Mater Studiorum University of Bologna - Laboratory of Environmental Microbiology and Molecular Biology (Mab), Responsible Dr. Sandra Cristino.

## **EDUCATION AND TRAINING**

29 January 2019	Admission to the profession of Biologist, University of Rome "Tor Vergata". State examination in the second session 2018;
October 2015 – December 2017	Master's degree in Health Biology at the Alma Mater Studiorum University of Bologna, with vote 110/110 and honours. Thesis entitled: "Prevalence of bacterial infections associated with infertility in women positive to screening tests for the prevention of cervical cancer";
October 2011 - February 2015	Bachelor's degree in Biological Sciences at the University of Urbino "Carlo Bo". Health- molecular curriculum, with vote 95/110. Thesis entitled: "Physiological bases of falling in love";
a.s. 2010/2011	Scientific baccalaureate at the Liceo Scientifico "Vito Volterra" of Fabriano (AN), technological address, with vote 77/100.

## **PROFESSIONAL EXPERIENCE IN ACADEMIA**

January 2021	Tutoring contract for activities of support to the teaching of Hygiene [cod. 00498] for the Cds in Biological Sciences of the Academic Year 2020/2021 at the Department of Biological, Geological and Environmental Sciences (BiGeA), University of Bologna. Head of the course: Prof. Sandra Cristino;
4 November	Doctoral student representative in the STVA board of teachers for the three-year period 2019-
2019 – to today	2022 at Alma Mater Studiorum University of Bologna, Coordinator: Prof. Giulio Viola.
1 November – to today	<ul> <li>Phd – 35° Cycle, Course in Earth Sciences, Life and Environment - STVA - BiGeA Department.</li> <li>Curriculum BIO.</li> <li>Research line entitled "Developing a Whole-Genome Sequence Approach (WGS)</li> <li>for the characterization of environmental isolates of <i>Legionella</i> in water systems".</li> <li>Tutor: Dr. Sandra Cristino.</li> </ul>
1 April 2018 – 31 October 2019	Research Fellow (2nd Semester Renewal) at the Department of Biological, Geological and Environmental Sciences (BiGeA) of the Alma Mater Studiorum University of Bologna - Laboratory of Environmental Microbiology and Molecular Biology (MAb), Head Dr. Sandra Cristino. Project entitled: "Evaluation of sanitization protocols in dental unit circuits: study of contamination dynamics". Scientific Responsible Dr. Sandra Cristino.
February 2019	Tutoring contract for support activities for the National Program "Piano Lauree Scientifiche" (PLS) Science Area (30 hours), project entitled: "Water, a precious resource: let's learn to know

	it" [cod. 85691] at the Cds in Biological Sciences, Department of Biological, Geological and Environmental Sciences - BiGeA, Scientific Responsible Dr. Sandra Cristino.
March 2018 – June 2018	Tutoring contract for teaching support activities in the field of Applied Hygiene - Epidemiology Module (30 hours), Master of Science in Health Biology (LM-6) at Alma Mater Studiorum University of Bologna. Course director: Prof. Sandra Cristino;
February 2018	Tutoring contract for support activities for the National Program "Piano Lauree Scientifiche" (PLS) Science Area (30 hours), project entitled: "Water, a precious resource: let's learn to know it" [cod. 85691] at the Cds in Biological Sciences, Department of Biological, Geological and Environmental Sciences - BiGeA, Scientific Responsible Dr. Sandra Cristino.
Dicember 2017 – January 2018	Post-graduate attendance at AUSL di Bologna Dipartimento di Sanità Pubblica, UOC Epidemiologia, Promozione della salute, Responsabile: Dott. Paolo Pandolfi;
March 2017 - Dicember 2017	Internship within the curricular university Cdl Master Degree in Health Biology (LM-6) at the laboratory of Microbiology and Clinical Microbiology, Policlinico Sant'Orsola-Malpighi, Responsible: Prof.ssa Tiziana Lazzarotto;
October 2016 - October 2017	Academic Tutor within the Cdl Master Degree in Biology of Health (LM-6) at the University of Bologna, Coordinator Prof.ssa Annalisa Pession;
October 2017 October 2016 -	University part time at the Laboratory of Pharmaceutical Chemistry, Department of Pharmacy
Dicember 2016	and Biotechnology (FaBiT), University of Bologna, Head: Prof. Roberto Gotti;
May 2016 - Dicember 2017	Student representative for the Master Degree in Science in Health Biology (LM-6) at the University of Bologna, Coordinator Prof.ssa Annalisa Pession;
October 2015 – Dicember 2017	Class representative for the Master Degree in Science in Health Biology (LM-6) at the University of Bologna, Coordinator Prof.ssa Annalisa Pession;
May 2016 - August 2016	Internship within the curricular training provided by the Master Degree in Biology of Health (LM-6) at the AUSL of Bologna Department of Public Health, UOC Epidemiology, Health Promotion, responsible: Dr. Paolo Pandolfi;
April 2015	Post-graduate attendance at the Profili Hospital Laboratory of Fabriano (AN). Eye bank and laboratory of: Pathology, Analytical Chemistry, Hematology, Microbiology and Urine, Head: Dr. Roberto Vannucci;
May 2013 – May 2014	Student representative of the School of Biological Sciences (L-13) at the University of Urbino "Carlo Bo", Coordinator: Prof. Maria Balsamo;
2012/2015	Member of the Joint Commission of the Degree Course in Biological Sciences (L-13) at the University of Urbino "Carlo Bo", Referee of the Joint Commission: Prof. Stefano Sartini;
2012/2015	Class representative for the degree course in Biological Sciences (L-13) at the University of Urbino "Carlo Bo", Coordinator: Prof.ssa Maria Balsamo.

# PROFESSIONAL QUALIFICATION

10 November 2020	E-learning course "Excel dashboards in an hour" of 1 hour, taught by Mynda Treacy on Udemy.
7-10 January 2020	Participation in the course "Winter school: English for academic writing", organized by the Department of Sociology and Law of Economics - SDE, Forlì
06 December 2019	<ul> <li>Training course "Ion TorrentTMSoftware", Trainer FABIO RAFFALDI, Field Application</li> <li>Scientist, Thermo Fisher Scientific, Bologna.</li> <li>Generalities of sequencing with Ion Torrent approach;</li> <li>Library typology and generalities of their construction with particular focus on bacterial genomic libraries (gDNA) and 16S Metagenomics;</li> <li>Analysis strategies for Legionella bacterial isolates;</li> <li>Possible approaches to 16S metagenomic analysis of water samples.</li> </ul>
07 April 2019	E-learning course "SPSS for research" of 14 hours, taught by Bogdan Anastasiei on Udemy, with final certificate (Certificate number: UC-COLHZ741).
02 April 2019	E-learning course "SPSS Beginners: Master SPSS" of 7 hours, held by SPSS Statisticians MyProjects on Udemy, with final certificate (Certificate Number: UC-UA9M4G9W).

11 February 2019	E-learning course "Intermediate Microsoft Excel Using Conditional Formatting" of 1 hour, taught by Jed Guinto on Udemy, with final certificate (Certificate Number: UC-LN7RX0D4).
24 February 2018	Course of qualification to the use of the defibrillator with release of suitable BLSD certification;
18 February 2018	E-learning course "Complete STATA Workflow + Tips" of 9.5 hours, taught by Mauricio Maroto on Udemy, with final certificate (Certificate Number: UC-NQ6DA6LX);
10 October 2017	Course module 3 "Specific training - medium risk - for figures equivalent to workers" of the total duration of 4 hours pursuant to Legislative Decree 81/08 and the State-Regions Agreements of 21/12/2011 and 7/7/16;
22 August 2017	Training course module 2 "Specific Training Safety and Health (part I)" pursuant to ART. 37 of Legislative Decree 81/08, provided in e-learning mode, lasting a total of 4 hours and passed the final online test on 22/8/17.
12 July 2016	Training course provided in e-learning "Safety and Health at Work - General Training" for a total duration of 4 hours. The above course and the test meet the requirements of Legislative Decree 81/2008 and agreement G. U. N. 8 of 11/01/2012 for the general training of workers on safety and health in the workplace;
25 May – 26 June 2015	Intensive English course level B1 (Intermediate) at Alpha College Dublin (Ireland);
6 October – 12 December 2014	English language course for scientific area level B1/B2 (40 hours);
6 October – 12 December 2014	German language course level A1 (30 hours);
3 December 2014	Participation in the course "Basic Course of Lie Detection: Lie Detection Techniques" of 3 hours, held by Igor Vitale, Clinical and Occupational Psychologist, with final certificate (n.72);
31 May 2013	ECDL certification (European Computer Driving Licence).

# CONFERENCE

19 Maggio 2021	Participation in the seminar "Getting it right: Building hospital water systems safely", organized by RSPH
14 April 2021	Participation in the seminar "Considerations for returning plumbing to safe use after its been chemically contaminated ", organized by RSPH
17 March 2021	Participation in the seminar "Methods for diagnostic Legionnaires' disease and typing of clinical and environmental Legionella spp. Isolates", organized by RSPH
9 February 2021	Participation in the seminar "Enabling High-Throughput genomic surveillance of emerging SARS-Cov-2 strains B.1.1.7 (UK) and B.1.351 (South Africa)" organized by QIAGEN Webinar Team
17 November 2020	Participation in the seminar "Online Panel Discussion: Advancing Research and Detection of SARS-CoV-2 in Wastewater", organized by QIAGEN Webinar Team
October 2020	Participation in the distance learning course: "The protection of personal data - Training course for teachers, researchers, doctoral students, research assistants and collaborators", lasting 5 hours, organized by the University of Bologna
9 September 2020	Participation in the seminar "Waterborne infections in the accommodation sector: the quest for the elusive control", organized by RSPH
12 May 2020	Participation in the seminar "A modern approach to traditional virology research", organized by GoToWebinar, Nexcelom
23 April 2020	Participation in the seminar "How to ensure your building water system is safe during and post COVID-19", organized by RSPH

17 April 2020	Participation to the seminar "Remote sensing for eco and geological applications: potential and challenges", organized by Prof. Duccio Rocchini, University of Bologna
08 April 2020	Participation in the seminar "Water in Hospitals: Balance between infrastructure and behavioural infection prevention and control", organized by RSPH
30 March 2020	Participation in the seminar "Infectious Disease Outbreak Research: Insights and Trends", organized by BrightTALK
18 March 2020	Participation in the seminar "Elements of Bibliometry and Scientometry", organized by Prof. Chiarucci, University of Bologna
3-4 Febbruary 2020	Participation in the seminar "Conservation Paleobiology: Mini-symposium", at the University of Bologna, organized by: Prof. Aaron O'Dea, Prof.ssa Laura Airoldi and Prof. Daniele Scarponi
27-31 January 2020	Participation to the course "Data analysis and statistics", held by Prof. Luchetti and Prof. Boattini, University of Bologna
10-12 September 2019	Participation to the VI meeting of ESGLI - ESCMID Study Group for <i>Legionella</i> Infections - Athens, Greece.
6 May 2019	Participation in the seminar "The INNUENDO Platform: Tools for genomic epidemiology of infectious diseases" by Prof. João Andrè Carriço. Organized by the Department of Infectious Diseases of the Istituto Superiore di Sanità. Responsible: Dr. Marialuisa Ricci;
22 March 2019	Participation in the conference " <i>Legionella</i> : tasks and skills", at the Congress Center Hotel Savoy Regent, Bologna, organized by the Hospital Hygiene Service of the Policlinico Sant'Orsola-Malpighi, Scientific Responsible Dr. Nazareno Mannoni;
4 Dicember 2018	Attendance of the Cycle of Seminars "Health Environment: Prevention, Safety and Research" of the seminar entitled "The sources of regulations in the field of health protection: Vaccines, obligations, cases of exemption and damage to health; labeling systems and traceability of food; responsibility in the profession of biologist", speaker Lawyer Pasquale Morelli, at the Department of Biological, Geological and Environmental Sciences, University of Bologna. Duration 2 hours;
15 October 2018	Participation in the conference "Anti-aging dentistry: how to keep your mouth healthy for a hundred years";
24 May 2018	Attendance of the Cycle of Seminars "Environmental Health: Prevention, Safety and Research" of the seminars entitled "Legionella: general aspects and national guidelines for the prevention and control of legionellosis" and "Genotyping techniques applied to epidemiological investigations", speakers Dr. Maria Luisa Ricci and Dr. Maria Scaturro (Istituto Superiore di Sanità, ISS, Rome), at the Department of Biological, Geological and Environmental Sciences, University of Bologna. Duration 4 hours.
20-23 April 2017	Participation in the Festival of Medical Science, third edition - Between innovation and tradition;
10 November 2016	Participation to the conference "Scientific investigations and research in the trial field: from the inspection to the laboratory", organized by Alma Mater Studiorum University of Bologna, at Aula Absidale - Aula Magna Santa Lucia, Bologna.
19-22 May 2016	Participation in the Festival of Medical Science, second edition - The Ages of Life.

# PERSONAL SKILLS

May 2021 – to today	Member of the Board of Directors of the Municipal AVIS of Zola Predosa (BO), President: Rachele Uliani.
March 2021 – to today	Member of Study Group for <i>Legionella</i> Infections (ESGLI);
March 2021 - to today	Member of European Society of Clinical Microbiology and Infectious Diseases (ESCMID);

February 2012 –	Secretary of the Board of Directors of the Municipal AVIS of Cerreto d'Esi (AN),
March 2017:	President: Fabio Spuri Nisi;

#### LANGUAGES

•	Italian:	native speaker;
•	English:	fluent (written and oral);

#### COMMUNICATION, ORGANISATIONAL AND MANAGEMENT SKILLS

Excellent communication, organizational, and management skills acquired and developed during my various years at the University, as a class and course representative, as an Academic and Educational Tutor, and during my years as an AVIS advisor as a secretary.

#### PROFESSIONAL SKILLS

• Preparation of risk assessment plans (DVR) and sanitation protocols on matrix: water-air;

• Specific techniques for the analysis of potability of water intended for human consumption according to the directives D.lgs. 31/2001, DM 14/06/17 and ISO specifications (UNI EN ISO 19458:2006, UNI EN ISO 6222:2001, ISO 7899-2:2003, UNI EN ISO 16266:2008, UNI EN ISO 9308-1:2017, ISO 16140-2:2016): study of water distribution systems, elaboration of sampling plans, risk assessment plans in industrial, health, social welfare, community and dental sites;

• Specific techniques for isolation, culture and typing of Legionella spp. according to specific regulations: National Guidelines 2015, Regional Guidelines - Emilia-Romagna Region 2018 and specific ISO ISO 11731:2017: study of distribution systems of hot and cold sanitary water systems for the prevention of Legionella spp., elaboration of sampling plans, risk assessment plans (DVR) in industrial sites, health, socio-assistance, community and dental offices;

• Risk assessment and management in the human water supply chain using the Water Safety Plan (WPS) model;

- Standard media preparation techniques and phenotyping tests using biochemical tunnels (API BBL Crystal Remel RapID).
- Setting up culture media for growth of prokaryotic cells and cell lines;
- Extraction of prokaryotic, eukaryotic and viral DNA using standard methods or specific kits;
- Sequencing techniques, Genotyping (mip, rpoB, SBT) and serogroup detection of *Legionella* spp.
- Standard PCR, Real Time PCR and ddPCR techniques;
- Nucleic acids quantification (spectrophotometric methods and Qubit/nanodrop technology);

• Routine maintenance of the main instruments present in the laboratory (distiller, autoclave, CO2 incubators, biohazard hood, thermostat bath, etc.);

- Waste storage and disposal according to current regulations;
- ICD10 coding of causes of death reported on the ISTAT mortality certificate.

#### DIGITAL SKILLS

- Excellent knowledge of the Office package (particularly Word, PowerPoint, Outlook and Excel programs);
- Excellent knowledge and ability to use the Web, email services and Social Media;
- Excellent proficiency in the use of PubMed as a scientific literature search engine;
- Good knowledge of STATA and SPSS software;
- Good knowledge of Adobe Photoshop photo editing software;
- Good knowledge of Windows XP, Vista, 7, 8, 8.1, 10 operating systems;
- Basic knowledge of Office program (Access);
- Basic knowledge of the MEPA portal (Public Administration Electronic Marketplace);
- Basic knowledge of LateX software;
- Basic knowledge of R software;

- Scholastic knowledge of programming languages: C++ and pascal;
- Scholastic knowledge of SQL language and database management.

# SCIENTIFIC PUBLISHING

May 2021	Draft Genome Sequences of <i>Legionella</i> Presumptive Novel Species Isolated during Environmental Surveillance in Artificial Water Systems. Girolamini L., Salaris S., Orsini M., Pascale M.R., Mazzotta M., Grottola A., Cristino S. Microbiology Resource Announcements May 2021, 10 (19) e00307-21; DOI: 10.1128/MRA.00307-21
May 2021	Occurrence of <i>Legionella</i> spp. In Man-Made Water Sources: Isolates Distribution and Phylogenetic Characterization in the Emilia-Romagna Region. Mazzotta, M.; Salaris, S.; Pascale, M.R.; <b>Girolamini, L</b> .; Cristino, S. Pathogens 2021, 10, 552. https://doi.org/10.3390/pathogens10050552
December 2020	<ul> <li>Evaluation of MALDI-TOF Mass Spectrometry in Diagnostic and Environmental Surveillance of <i>Legionella</i> Species: A Comparison With Culture and Mip-Gene Sequencing Technique</li> <li>Pascale M.R., Mazzotta M., Salaris S., <b>Girolamini L</b>., Grottola A., Simone M.L., Cordovana M.,</li> <li>Bisognin F., Dal Monte P., Bucci Sabattini M.A., Viggiani M., Cristino S.</li> <li>Front Microbiol. 2020 Dec 15;11:589369. doi: 10.3389/fmicb.2020.589369. PMID: 33384668;</li> <li>PMCID: PMC7771186.</li> </ul>
November 2020	<ul> <li>How Molecular Typing Can Support <i>Legionella</i> Environmental Surveillance in Hot Water</li> <li>Distribution System: A Hospital Experience</li> <li>Girolamini L., Salaris S., Lizzadro J., Mazzotta M., Pascale M.R., Pellati T. and Cristino S.</li> <li>Int J Environ Res Public Health. 2020 Nov 21;17(22):8662. doi: 10.3390/ijerph17228662. PMID: 33233464; PMCID: PMC7700474.</li> </ul>
September 2020	Sit bath systems: A new source of <i>Legionella</i> infection. <b>Girolamini L.,</b> Mazzotta M., Lizzadro J., Pascale M.R., Dormi A., Salaris S., Cristino S. PLoS One. 2020 Nov 4;15(11):e0241756. doi: 10.1371/journal.pone.0241756. PMID: 33147266.
August 2020	<ul> <li>Performance of Legiolert Test vs. ISO 11731 to Confirm Legionella pneumophila Contamination in Potable Water Samples</li> <li>Scaturro M., Buffoni M., Girolamo A., Cristino S., Girolamini L., Mazzotta M., Bucci Sabattini M.A., Zaccaro C. M., Chetti L., Microbiology Arpa Novara Laboratory, Bella A., Rota M. C., Ricci M. L.</li> <li>Pathogens. 2020 Aug 23;9(9):690. doi: 10.3390/pathogens9090690.</li> </ul>
June 2020	The Role of Sensor-Activated Faucets in Surgical Handwashing Environment as a Reservoir of <i>Legionella</i> . Mazzotta M., <b>Girolamini L.</b> , Pascale M.R., Lizzadro J., Salaris S., Dormi A., Cristino S. Pathogens. 2020, 9(6), E446. doi:10.3390/pathogens9060446.
October 2019	<ul> <li>Advances in <i>Legionella</i> Control by a New Formulation of Hydrogen Peroxide and Silver Salts in a Hospital Hot Water Network.</li> <li>Girolamini L., Dormi A., Pellati T., Somaroli P., Montanari D., Costa A., Savelli F., Martelli A., Grottola A., Fregni Serpini G., Cristino S.</li> <li>Pathogens 2019, 8(4), 209; https://doi.org/10.3390/pathogens8040209.</li> </ul>
January 2019	Comparison between Two Types of Dental Unit Waterlines: How Evaluation of Microbiological Contamination Can Support Risk Containment. Lizzadro J., Mazzotta M., <b>Girolamini L.</b> , Dormi A., Pellati T., Cristino S. Int J Environ Res Public Health. 2019 Jan 24;16(3). pii: E328. doi: 10.3390/ijerph16030328;
January 2019	<ul> <li>Different Trends in Microbial Contamination between Two Types of Microfiltered Water</li> <li>Dispensers: From Risk Analysis to Consumer Health Preservation.</li> <li>Girolamini L., Lizzadro J., Mazzotta M., Iervolino M., Dormi A., Cristino S.</li> <li>Int J Environ Res Public Health. 2019 Jan 18;16(2). pii: E272. doi: 10.3390/ijerph16020272;</li> </ul>

ECCMID 2021 9-12 Luglio 2021	Abstract entitled: "Study of <i>Legionella</i> community interaction with temperature and disinfection treatment during hospital environmental surveillance" <b>Girolamini L.,</b> Salaris S., Pascale M.R., Mazzotta M., Cristino S. Accepted as e-poster presentation in 19/04/2021;
World Microbe Forum 2021 20-24 Giugno 2021	Abstract entitled: "Development of <i>Legionella</i> pneumophila Serogroups Classification by FT-IR Spectroscopy with IR – Biotyper system". Pascale M.R., Bisognin F., Cordovana M., Mazzotta M., <b>Girolamini L.,</b> Salaris S., Dal Monte P., Ricci M.L., Scaturro M., Cristino S., Accepted as e-poster presentation in 14/04/2021;
ECSA 2020	Abstract entitled: "CITIZENS AND LOCAL AUTHORITY WORKING TOGETHER FOR A SUSTAINABLE MANAGEMENT OF THEIR TERRITORY" Gumiero B., Jerusiack A.K., Di Grazia F., <b>Girolamini L.</b> , Mazzotta M., Cristino S. European conference for citizen and participatory science (ECSA) 2020 - Trieste, Italy
ESGLI 2019 Athens 10-12 September 2019	<ul> <li>Abstracts entitled:</li> <li>"A long-term study to assess <i>Legionella</i> risk in Sit Bath Systems: a serious problem of public healt" Girolamini L., Mazzotta M., Pascale M.R., Lizzadro J., Grottola A., Cristino S. ESGLI 2019</li> <li>"The dynamic of <i>Legionella</i> spp. contamination in the surgical hand washing environment" Mazzotta M., Girolamini L., Pascale M.R., Lizzadro J., Pellati T., Cristino S. ESGLI 2019. Accepted as e-poster presentation in 17/06/2019;</li> </ul>

### **PRIZES AND AWARDS**

ESGLI 2019	First prize for the best poster at the VI ESCMID Study Group for Legionella Infections (ESGLI
	2019) conference.
Athens 10-12 September	Poster entitled: "A long-term study to assess Legionella risk in Sit Bath Systems: a serious
2019	problem of public health" Girolamini L, Mazzotta M, Pascale MR, Lizzadro J, Grottola A, Cristino
	S. ESGLI 2019.

### **DRIVING LICENCE**

A2, B. With own car.

## ADDITIONAL INFORMATION MEMBERSHIP IN GROUPS/ASSOCIATIONS

	Blood donor,	full	member	of	the	association	AVIS	(Italian	Blood	Voluntee
2010 – to today	Association).									

#### **PROCESSING OF PERSONAL DATA**

I authorize the processing of my personal data in the CV, pursuant to Legislative Decree 30 June 2003, n. 196 "Code regarding the protection of personal data" and the GDPR (EU Regulation 2016/679).

Firma Luna Girolamini

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