

CURRICULUM VITAE

PERSONAL INFORMATIONS

Name Luca Vedovelli
Birthdate 13.05.1983
Address
E-Mail
Mobile

JOB EXPERIENCES

- July 2019 - current **Post-doc Researcher** at the Unit of Biostatistics, Epidemiology and Public Health, Department of Cardiac, Thoracic, Vascular Sciences and Public Health - University of Padova
- Nov 2018 - June 2019 **Research Associate** at the Unit of Biostatistics, Epidemiology and Public Health, Department of Cardiac, Thoracic, Vascular Sciences and Public Health - University of Padova
- March 2014 – May 2019 **Researcher and PI** at the Pcare and Critical Care Biology Lab, Pediatric Research Institute "Città della Speranza" (Padova, Italy).
- June 2012 – August 2013 **Chief Scientist** of Hydro Technical Engineering Srl and Hi-Met Srl, supervising the R&D Lab working on hydrometallurgy (metals purification, micrometric and nanometric powder production), renewable energies management, and hydrogen fuel cell design and realization.
- June 2008 – December 2009 Pharmacist by "Parafarmacia la Fontana" at Villafranca Veronese and Lazise (VR).

TRAINING COURSES

- AY 2018/2019 Bayesian designs for drug and device clinical trials (Prof. Paola Berchiolla)
- AY 2018/2019 Propensity Scores for non-randomized clinical trials (Prof. Dario Gregori)
- AY 2018/2019 Biostatistics and Epidemiology (Prof. Ileana Baldi)
- January 2018 Pediatric and Adult Basic Life Support and Defibrillation
- September 2015 **Python Programming**, 11 weeks online course – University of Michigan
- February 2010 Course in Scanning **Electron Microscopy** and Environmental scanning electron microscope (SEM-ESEM). Univeristy of Padua
- May 2009 National School of Analytical Methodologies in Mass Spectrometry. University of Parma
- Lab Safety RLS ("Rappresentante dei lavoratori per la sicurezza"), Preposti, Fire Hazard (high risk training), Use and Safety of Laboratory Gas, Biological Lab Safety, Chemical Lab Safety

TEACHING ACTIVITIES

- AY 2019/2020 **Lecturer** of the Clustering and Power Analysis lesson, PhD course in Pharmacology - Università of Padova
- AY 2019/2020 **Lecturer** of the Statistics course (40 hours), master's degree in Laboratory Technican - Università of Padova

- AY 2013/2014 **Lecturer** of the Pharmacology course, master's degree in Medicine – University of Padova
- AY 2013/2014 **Lecturer** of the Biology course, master's degree in Nursing – University of Padova, Portogruaro
- AY 2013/2014 **Lecturer** of the Applied Biology course, master's degree in Laboratory Technician - Università of Padova, Vicenza

EDUCATION

- April 2012 **PhD in "Molecular and Cellular Pharmacology"**, University of Padua. With the thesis *"Alveolar surfactant phosphatidylglycerol, disaturated phosphatidylcholine, and SP-B kinetics in infants and adults with stable isotopes tracers, and H+V-ATPase activity in B1 subunit knockout mice."* Prof. Pietro Giusti and Paola E. Cogo, MD, PhD.
- September 2010 – December 2011 PhD student at the Program in Membrane Biology Lab, Division of Nephrology, Massachusetts General Hospital, **Harvard Medical School**, Boston MA, USA. Prof. Dennis Brown.
- January 2009 – September 2010 PhD student at the "Rare Diseases– Pediatric Critical Care Laboratory" at the department of Pediatrics, University Hospital of Padua. Directors of the division: Prof. Paola Cogo and Prof. Virgilio P. Carnielli.
- January 2009 **First classified** (98/100) for the education grant of the PhD course in "Molecular and Cellular Pharmacology" of the University of Padua.
- June 2008 Passed the Italian/European State examination for the qualification to practice the profession of Pharmacist
- March 2008 Master's Degree in **Pharmaceutical Chemistry and Technology** (5 years course) by University of Padua (99/110) with the thesis "Realization , Characterization and Delivery of the lyophilized amniotic membrane AMX " (11/11) Prof. Maria Teresa Conconi, Emiliano Ghinelli, MD and Ken R. Kenyon, MD.
- July 2002 High School degree by liceo scientifico "A. Messedaglia" , Verona - Italy (100/100).

GRANTS & AWARDS

- October 2018 Winner of the Best poster at the Italian Society for Pediatric Neurology meeting
- October 2018 Winner of the European Society of Pediatric Research Pos-doc Research Grant 2018 (25k euro)
- September 2017 Recipient of a research grant of Chiesi Farmaceutici - Institut Pasteur (20k euro)
- December 2016 Winner of the Fondazione Veronesi Annual Fellowship (30k euro)
- May 2016 Ghost Writer and Winner of the Fondazione Just grant (300k euro)
- December 2013 Winner of the "Grant Program for Young Investigator on Pediatric Research" (200k euro) of the Fondazione Cassa di Risparmio di Padova e Rovigo.

COLLABORATIONS

- January 2014 –Present Collaboration with the Fondazione Istituto di Ricerca Pediatrica "Città della Speranza" (Padova, Italy) for research projects, data analysis, and teaching activities

- September 2007 –Present

Collaboration with the “**Schepens Eye Research Institute**” (Harvard Medical School , Boston, USA – Prof. Kenneth R. Kenyon), **Keera S.r.l.** (Arcugnago, VI, Italy), and **Treviso Eye Tissue Bank** (Fondazione Banca degli Occhi del Veneto) for the italian **clinical trial** and scientific papers about the lyophilized amnion membrane AMX and Human Amniotic Membrane Transplant Elemental Units.

PUBLICATIONS

24 total, H-index 6, 147 citations (See attached file)

ABSTRACTS

(25 total, 10 as presenter/first author)

- May 2019 AATS Baltimore, USA
- Oct 2018 SINP Bologna, Italy
- Jan 2018 STS Fort Lauderdale, FL, USA
- 2017, 2019 jENS Venice, Maastricht.
- May 2016, 2019 Informal Meeting on Mass Spectrometry, Fiera di Primiero, Italy.
- September 2013, 2014, 2015 Eucornea 2013, 2014, 2015, Amsterdam, Holland.
- May 2013 WA, USA.
- October 2010, 2012 EAPS (European Association of Paediatric Societies) annual meeting, Istanbul, Turkey.
- May 2012 SOI (Italian Society of Ophthalmology) international symposium, Milan, Italy. **Oral Communication presenter.**
- April 2012 EB 2012 : APS (Experimental biology, American Physiological Society) annual meeting, San Diego, CA, USA. **Oral Communication presenter.**
- 2010, 2011, 2012, 2013, 2015, 2018 PAS (Pediatric Academic Society) annual meeting, Vancouver (Canada), Denver CO, Boston MA, Washington DC, San Diego, CA, USA, Toronto (Canada). **Poster presenter.**
- June 2010 ISI (The Fifth International Symposium on Isotopomers), Amsterdam, Netherlands. **Two posters presenter.**
- December 2009 ISOPT (International Symposium on Ocular Pharmacology and Therapeutics), Rome, Italy.
- June 2009 Italian Society of Phamacology annual PhD students Seminar, Pontignano, Italy. **Poster and oral communication presenter.**
- June 2008, 2009 SICSSO (Italian Society of Stem Cells and Ocular Surface) annual meeting, Sorrento, Italy.

PERSONAL COMPETENCES

Clinical trials set-up and evaluation (experiences: AMX open label clinical trial, Biovitrum (lipase addition to human milk for preterm infants, Ventilation in CEC, VENICE trial) clinical trial.

Industrial processes set-up and methods validation.

Statistical data analysis (IBM SPSS, Prism, R).

STATISTICAL COMPETENCES

Techniques used and published in peer-reviewed papers

- Small prototypes (Arduino) design, assembly, and programming (Java/Python) for various sensors integration
- Laboratory and clinical studies set-up and data analysis (sample size, experimental design)
- Clinical trials set-up and outcome evaluation
- ANOVA (parametric, non-parametric, repeated-measures)
- Multiple linear regression
- Logistic regression
- ROC curves
- Propensity score matching and inverse probability of treatment weighting (multicentric study)
- Non-parametric tests
- Correlations
- Principal components analysis (metabolomics)
- Partial least square discriminant analysis

LABORATORY TECHNIQUES

Mass Spectrometry

- Isotopic Ratio Mass Spectrometer (IRMS, "DeltaPlus XL", Thermo Scientific). Clinical protocols, sample management & preparation, data analysis. In particular kinetics of lipids and small proteins of the alveolar surfactant.
- Gas Chromatographer - Single Quadrupole Mass Spectrometer (Agilent). Clinical protocols, sample management & preparation.
- High Resolution Mass Spectrometer (Q Exactive, Thermo Scientific). Lipidomics and proteins quantification. Methods development and sample preparation

Chromatography

- Gas Chromatographer - FID (Agilent). Clinical protocols, sample management & preparation. Fatty acids analysis of phospholipids classes.
- Solid Phase Extraction
- Thin Layer Chromatography (lipids and proteins)

Immunohistochemistry

- Western Blot surfactant's specific protein B and C).
- Tissues preparation and slides immunostaining
- FACS (Fluorescence-activated cell sorting)
- ELISA and EIA techniques

Microscopy

- Electronic: sample preparation and basic utilization (JEOL)
- Confocal: multiple antibodies tagging and utilization (Nikon)
- Optical: normal and inverted, fluorescent antibodies tagging (Nikon, Leica)

Genetics

- PCR
- Real-Time PCR
- Plasmid transfections, RNAi

Cell Culture

- Kidney intercalated, principal (primary), HEK cells
- Pulmonary cells
- Brain cells (LUHMES)

General Chemistry & Industrial Technology

- Electrolysis/purification processes setup

- Hydrogen fuel cells design, production, troubleshooting, and operation.

LANGUAGES

Italian Mother tongue

English: Writing and Speaking: C1 - Advanced (TOEFL certified)

German Writing and Speaking: A1 Basic (school)

Spanish Writing and Speaking: A1 Basic (certified)

INFORMATICS

Windows: Advanced Level

MacOS X: Advanced Level

Linux : Base Level

Programs: MS Office, Scientific databases, EndNote, Photoshop, ChemStation, Excalibur, Isodat, SPSS, GraphPad Prism, and basic programming skills.

LV authorizes the use of this curriculum data, according to local regulations (i.e. DL 196, June 2003, for Italy).