Corrado Lanera

Curriculum Vitæ

Dep. Cardiac- Thoracic- Vascular Science and Public Health —University of Padova
Via Leonardo Loredan 18 - 35121 Padova —Italy
Phone : +39.0432.827.5385
Cel : +39.340.9241365
Skype : corrado.lanera@outlook.com
Telegram : @CorradoLanera
WEB site : www.CorradoLanera.it
ORCiD : orcid.org/0000-0002-0520-7428
Publons : publons.com/a/1502304/
e-mail : `corrado.lanera@unipd.it`

Personal information

Date of birth : 1981/04/13
Place of birth : Gorizia (GO) —Italy
Nationality : Italian
Address : Via Cosattini 20, 33100 Padova (PD) —Italy
Fiscal code : LNRCRD81D13E098C

Education

For post-graduate courses it is indicated the academic year, **type**, venue **title**, lecturer(s) (affiliation) *topic*. *Title of the final project*, advisor.

2020/03/17: **Ph.D.** (excellent *cum laude*) in Translational Specialistic Medicine "G.B. Morgagni" (XXXII), University of Padova (head of Ph.D. school: Prof. G. Thiene). Curriculm in Biostatistics and Clinical Epidemiology. Topic: **Development and application of Machine Learning and Phenomapping techniques in Clinical Research**, supervisor: Prof. D. Gregori;

2016/12/03:**II degree Master** (EQF8) at the Department of Cardiac, Thoracic and Vascular Science (University of Padova - IT), **Advanced Biostatistics for Clinical Research**, I. Baldi (Univ. of Padova) *Design and analysis of adaptive designs*, P. Berchialla (Univ. of Torino) *Bayesian designs for drug and device clinical trials*, E. Pagano (Univ. of Torino) *Cost analysis in clinical trials and observational studies* , D. Gregori (Univ. of Padova) *Methods for evaluating heterogeneity of treatment effects in clinical trials*, L. Finos (Univ. of Padova) *Multiplicity testing in clinical trials*. Title of the final project: *Use of Machine Learning Techniques to predict outcome in Clinical Trials*, Prof. D. Gregori (Univ. of Padova).

2014/10/16: **M.Sc.** (full marks) in Mathematics, University of Udine, title of the thesis: *Quasi-Polish spaces*, advisor: Prof. A. Marcone;

2010/03/24: **B.Sc.** in Mathematics, University of Udine, title of the thesis: *Teoria degli Insiemi Ereditariamente Disgiunti*, advisor: Prof. F. Parlamento.

Research fellow positions

The research activity has been supported with funds of the following research fellow positions and projects, for each of which it is indicated the period, type, **title** (original title), coordinator (coordinator affiliation).

4. 2020/07 - current, Grant at the Department of Cardiac, Thoracic and Vascular Science (Univ. of Padova), **Development of a monitoring, forecasting and decision support system for the post-pandemic phase of the COVID-19 epidemic in the Veneto Region** (Sviluppo di un

sistema di monitoraggio, previsione e supporto decisionale per la fase post-pandemica dell'epidemia di COVID-19 in Regione Veneto), D. Gregori (Univ. of Padova).

3. 2019/10 - 2020/06, Grant at the Department of Cardiac, Thoracic and Vascular Science (Univ. of Padova), **Review and development of Machine Learning techniques applied in risk assessment related to food safety** (Rassegna e sviluppo di tecniche di intelligenza artificiale per l'analisi del rischio in ambito alimentare), D. Gregori (Univ. of Padova).

2. 2015/02 - 2016/09, Grant at the Department of Cardiac, Thoracic and Vascular Science (Univ. of Padova), **Review and development of Machine Learning techniques applied in risk assessment related to food safety** (Rassegna e sviluppo di tecniche di intelligenza artificiale per l'analisi del rischio in ambito alimentare), D. Gregori (Univ. of Padova).

1. 2015/01, Fellowship with finantial aid provided by ProChild, Associazione Protecting Chindren Onlus, **Evaluation of the risk of suffocation incident in Brazil** (Valutazione del rischio di incidente da soffocamento in Brasile), D. Gregori (Univ. of Padova)

Training

Worksops and Schools

For every workshop it is indicated period, lecturer(s) (affiliation): **title** (venue).

11. 2020/07/14-16, Greg Willson (RStudio): **Instructor Training in the Tidyverse**, (Zoom);

10. 2018/05/04-08, (University of Padova): **PhD Educational week on Transferable skills**, (Padova (IT));

9. 2018/01/11-02/28, G. Davies: **Ph.D. Academic English**, (Padova (IT))

8. 2018/01/31-02/01, H. Wickham (RStudio): **Extending the Tidyverse** (*RStudio::conf*, San Diego (CA) - USA);

7. 2017/10/02-06, M. Resche-Rigon and S. Chevret: **Survival Data Analyses for Cancer Data** (Torino (IT));

6. 2017/09/18-22, I. Baldi, A. Rampazzo, G.P. Fadini, G. Valle, G.P. Rossi, L. Lenzini, A.C. Frigo, V. Cavallin, F. Patrese, P. Braghetta, P. Bonaldo, L. Bello, T. Zaglia, F. Calabrese, R. Manganelli, S. Indracollo and A. Rosato (University of Padova Ph.D courses on medical topics): **Summer School** (Padova (IT));

5. 2017/08/07-11, K. Rothman: **Conceptual Foundation of Epidemiologic Study Design** (*Erasmus Summer Program*, Rotterdam (NL));

4. 2017/07/30, F. Harrell Jr.: **Regression Modeling Strategies** (*JSM 2017*, Baltimore (MD) - USA);

3. 2016/09/12-13, H. Wickham (RStudio): **Master R Developer** (NYC (NY) - USA);

2. 2016/03/08, D. Steinberg, M. Golovnya (Salford Systems): **Evolution of Classification: From Logistic Regression and Decision Trees to Bagging/Boosting and Netlift Modeling** (*JSM 2016*, Chicago (IL) - USA);

1. 2016/03/08, D. Steinberg, M. Golovnya (Salford Systems): **Introduction to Data Mining with CART Classification and Regression Trees** (*JSM 2016*, Chicago (IL) - USA).

On-line certificated courses

For every course it is indicated period, lecturer(s) (affiliation): **title** - *platform*, grade.

17. 2020/09, Greg Willson (RStudio): **RStudio Certified Trainer in the Tidyverse** - (https://bit.ly/CL-RSCT-Tidyverse);

16. 2020/04, A. Ng, K. Katanforoosh, Y.B. Mourri (deeplearning.ai): **Deep Learning** - *Coursera Specialization* (https://bit.ly/2020-deepl-spec-c):

2020/20, **Sequential Models**, 100.0%;

2019/09, **Convolutional Neural Networks**, 100.0%;

2019/01, **Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization**, 100.0%;

2019/01, **Structuring Machine Learning Projects**, 100.0%;

2018/11, **Neural Networks and Deep Learning**, 100.0%;

15. 2019/08, Laurence Moroney (deeplearning.ai): **Natural Language Processing in TensorFlow** - *Coursera*, 100.0%;
14. 2019/08, Laurence Moroney (deeplearning.ai): **Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning** - *Coursera*, 100.0%;
13. 2019/04, R. D. Peng, B. Anderson (Johns Hopkins Univ.): **Mastering Software Development in R** - *Coursera Specialization* (https://bit.ly/2019-master-dev-R-spec-cl):

    2018/11, **Building Data Visualization Tools**, 99.2%;

    2018/10, **Building R Packages**, 100.0%;

    2018/09, **Advanced R Programming**, 98.3%;

    2018/08, **The R Programming Environment**, 100.0%;

12. 2018/06, A. Ng (Stanford Univ.): **Machine Learning** - *Coursera*, 100.0%;
11. 2017/12, H. Wickham (RStudio): **Writing Functions in R** - *DataCamp*, 100.0%;
10. 2017/12, G. Grolemund (RStudio): **Data Manipulation in R with dplyr** - *DataCamp*, 100.0%;
9. 2017/11, R. Scavetta (Science Craft): **Data Visualization with ggplot2** - *DataCamp*, 100.0%;
8. 2016/02, B. Caffo, R. D. Peng, J. Leek (Johns Hopkins Univ.): **Statistical Inference** - *Coursera*, 100.0%;
7. 2015/11, B. Caffo, R. D. Peng, J. Leek (Johns Hopkins Univ.): **Exploratory Data Analysis** - *Coursera*, 100.0%;
6. 2015/09, C. Severance (Michigan Univ.): **Programming for Everybody (Python)** - *Coursera*, 100.0%;
5. 2015/06, B. Caffo, R. D. Peng, J. Leek (Johns Hopkins Univ.): **Reproducible Research** - *Coursera*, 100.0%;
4. 2015/05, A. Ng (Stanford Univ.): **Machine Learning** - *Coursera*, 87.4%;
3. 2015/03, B. Caffo, R. D. Peng, J. Leek (Johns Hopkins Univ.): **Getting and Cleaning Data** - *Coursera*, 100.0%;
2. 2015/03, B. Caffo, R. D. Peng, J. Leek (Johns Hopkins Univ.): **R Programming** - *Coursera*, 100.0%;
1. 2015/03, B. Caffo, R. D. Peng, J. Leek (Johns Hopkins Univ.): **The Data Scientist's Toolbox** - *Coursera*, 100.0%.

Research Activity

Abstract

The research activity is driven in the area of Machine Learning (ML) and Phenomapping techniques applied to clinical science, with special attention to text mining Electronic Health Record (EHR) both from clinical and computational point of view (preprocessing, dimensionality reduction, management of class unbalance and languages). It also reach the study and the development of ML algorithms applied to sensor data retrieved by wearable. Particular attention is addressed on the following topics:

Text-mining ✎ Detection and classification of infection diseases from free-text in EHR;

- ✎ Classify free-text diagnosis of admittance reported in an Emergency Department database from developing countries;
- ✎ Application of early ML analyses on EHR to improve infection surveillance;
- ✎ Estraction of citation and clinical registries' entries automatically driven by the researcher interest, to support the Systematic Review and Meta-Analysis processes;
- ✎ Use of social-media free-text by ML to detect and model the dynamics behind spontaneous population-based signals on Adverse Events Reaction to drugs and food-related events;
- ✎ Study the impact, consequencies and strategies to preproces, reduct the dimensionality, manage class unbalance and different languages in clinical free text classification.

Data-minig
- ✎ Application of ML to evaluate the rate of quantity and quality of moviment for surgical patient from pre- to post-surgical hospitalizatin using wearable devices;
- ✎ Application of ML to evaluate the caloric intake using wearable devices;
- ✎ Embed ML procedure in cross-sectional clinical trial design.

Other
- ✎ Development of an R-based graphical and interactive tool to select, identify, and synthesize the *Equations of Energy Requirements in Elderly Patients* based on each patient's specific characteristics (`https://r-ubesp.dctv.unipd.it/shiny/equationer/`).
- ✎ Development of an R-based graphical and interactive tool to model the dynamics deriving from the italian *National Protocol for the Management of Surpluses of all Transplantation Programs* (`https://r-ubesp.dctv.unipd.it/shiny/clumpr/`).
- ✎ Development of an R-package and two related modules companions in collaboration with ARPAV for the REMEDIO (REgenerating mixed-use MED urban communities congested by traffic through Innovative low carbon mobility sOlutions.) *Integrated Modeling Tools* used to estimate health and cost outcomes when inputed with pollutants and climate historical and simulated data for some reagion (`https://github.com/UBESP-DCTV/imthcm`).

Visits, scientific collaborations and seminars

For every activity it is indicated period: venue, collaborator(s), (subject), **title** possible seminar.

1. 2019/05-2019/09: Health Language Processing Lab, University of Pennsylvania, G. Gonzalez (University of Pennsylvania), (Automatic identification and classification of different types of otitis from free-text pediatric medical notes in the Italian language: a deep-learning approach).

Teaching Activities

For every activities it is indicated period, description with **title**, society/institution (duration).

2020/09: **Introduction to R, RStudio and Jamovi** lesson for the *Scuola di Specializzazione in Scienze dell'Alimentazione*, Univ. of Padova (1 h);

2020/04: **Deep Sequential Models** module for the II level master post graduate course in *Machine Learning for the clinical and surgical research and practice*, Department of Cardiac, Thoracic and Vascular Science, Univ. of Padova (6 h);

2019/09: **Introduction to Survival Analyses** lesson for the II level master post graduate course in *Pharmacoepidemiology and evaluation of integrated care*, Department of Cardiac, Thoracic and Vascular Science, Univ. of Padova (2 h);

2019/01: **RStudio** tutorial for the II level master post graduate courses in i) *Machine Learning for the clinical and surgical research and practice*, ii) *Advanced Biostatistics for Clinical Research*, and iii) *Pharmacoepidemiology and evaluation of integrated care*, Department of Cardiac, Thoracic and Vascular Science, Univ. of Padova (2 h);

2018/07/18: Course on Basic R programming for statisticians: **Fondamenti di R per Statistici**, Società Italiana di Medicina Farmaceutica (16h);

2017/11/27: Advanced course on R programming for statisticians: **Corso Avanzto di R per Statistici**, Società di Scienze Farmacologiche Applicate (8h);

2017/04/03: Course on Basic R programming for statisticians: **Fondamenti di R per Statistici**, Società di Scienze Farmacologiche Applicate (8h);

2017/02-03: Hands-on for the **Machine learning for outcome prediction** moduli of the II level master post graduate course in *Machine Learning for the clinical and surgical research and practice*, Department of Cardiac, Thoracic and Vascular Science, Univ. of Padova (4.5 h);

2017/01: Hands-on for the **Machine Learning overview** moduli of the II level master post graduate course in *Machine Learning for the clinical and surgical research and practice*, Department of Cardiac, Thoracic and Vascular Science, Univ. of Padova (2.5 h);

2017/01/12-13: Workshop on **Machine Learning Techniques usign R for R programmers, statisticians and quantitative epidemiologists**, European Food Safety Autority, Parma (6h).

Publications

Journal articles

For every publication it is indicated autors, **title**, *(*journal), volume, issue, pages (date of publication).

22. F. Garzotto, E. Ceresola, S.Panagiotakopoulou, G. Spina, F. Menotto, M. Menozzi, M. Casarotto, C. Lanera, M. G. Bonavina, D. Gregori, G. Meneghesso, G. Opocher **COVID-19: ensuring our medical equipment can meet the challenge.** *JMIR Medical Informatics* Vol. 8, Issue 5 (Jun 2020)

21. C. Lanera, P. Berchialla, I. Baldi, G. Lorenzoni, L. Tramontan, A. Scamarcia, L. Cantarutti, C. Giaquinto, D. Gregori **Use of Machine Learning Techniques for Case-Detection of Varicella Zoster Using Routinely Collected Textual Ambulatory Records: Pilot Observational Study .** *JMIR Medical Informatics* Vol. 8, Issue 5 (May 2020)

20. D. Gregori, D. Azzolina, C. Lanera, I. Prosepe, N. Destro, G. Lorenzoni, P. Berchialla **A first estimation of the impact of public health actions against COVID-19 in Veneto (Italy)** *BMJ Journal of Epidemiology and Community Health* Online-first (May 2020)

19. G. Lorenzoni, C. Lanera, D. Azzolina, P. Berchialla, D. Gregori **Is a more aggressive COVID-19 case detection approach mitigating the burden on ICUs? Some reflections from Italy** *BMC Critical Care* Vol. 24, Article number 175 (April 2020)

18. C. Lanera, P. Berchialla, A. Sharma, C. Minto, D. Gregori, I. Baldi **Screening PubMed abstracts: is class imbalance always a challenge to machine learning?** *BMC Systematic Reviews* Vol. XXX, Issue XXX (November 2019)

17. G. Lorenzoni, D. Azzolina, S. Baldas, G. Messi, C. Lanera, M. A. French, L. Da Dalt, D. Gregori **Increasing awareness of food-choking and nutrition in children through education of caregivers: the CHOP community intervention trial study protocol** *BMC Public Health* Vol. 19, Issue 1 (August 2019)

16. G. Lorenzoni, S. S. Sabato, C. Lanera, D. Bottigliengo, C. Minto, H. Ocagli, P. De Paolis, D. Gregori, S. Iliceto, F. Pisanò **Comparison of machine learning techniques for prediction of hospitalization in heart failure patients** *J. of Clinical Medicine*, Vol. 8, Issue 9 (August 2019)

15. S. Poli, G. Boriani, M. Zecchin, D. Facchin, M. Gasparini, M. Landolina, R. P. Ricci, C. Lanera, D. Gregori, A. Proclemer **Favorable Trend of Implantable Cardioverter-Defibrillator Service Life in a Large Single-Nation Population: Insights From 10-Year Analysis of the Italian Implantable Cardioverter-Defibrillator Registry** *J. of the American heart Association*, Vol. 8, Issue 15 (July 2019)

14. D. Bottigliengo, P. Berchialla, C. Lanera, D. Azzolina, G. Lorenzoni, M. Martinato, D. Giachino, I. Baldi, D. Gregori **The role of genetic factors in characterizing extra-intestinal manifestations in Crohn's disease patients: are bayesian machine learning methods improving outcome predictions?** *J. of Clinical Medicine*, Vol. 8, Issue 6 (June 2019)

13. D. Gregori, D. Azzolina, C. Lanera, M. Ghidina, C. E. Gafare, G. Lorenzoni **Consumers' attitudes before and after the introduction of the Chilean regulation on food labelling** *Journal International Journal of Food Sciences and Nutrition*, Vol. 70 (June 2019)

12. G. Lorenzoni, S. Swain, C. Lanera, M. Florin, I. Baldi, S. Iliceto, D. Gregori **High- and low-inpatients' serum magnesium levels are associated with in-hospital mortality in elderly patients: a neglected marker?** *Aging Clinical and Experimental Research* (May, 2019)

11. G. Lorenzoni, S. Bressan, C. Lanera, D. Azzolina, L. Da Dalt, D. Gregori **Analysis of unstructured test-bases data using machine learning techniques: the case of pediatric emergency department records in Nicaragua** *Medical Care Research and Review* (April 2019)

10. S. Poli, D. Facchin, F. Rizzetto, L. Rebellato, E. Daleffe, M. Toniolo, A. Miconi, A. Altinier, C. Lanera, S. Indrigo, J. Comisso, A. Proclemer **Prognostic role of non-sustained ventricular tachycardia detected with remote interrogation in a pacemaker population** *IJC Hearth and Vasculature*, Vol. 22 (March 2019)

9. M. Carrozzini, J. Bejko, A. Gambino, V. Tarzia, C. Lanera, D. Gregori, G. Gerosa, T. Bottio **Results of new-generation intrapericardial continuous flow left ventricular assist devices as a bridge-to-transplant**, *Journal of cardiovascular medicine*, Vol. 19, Issue 12 (December 2018)

8. C. Lanera, C. Minto, A. Sharma, D. Gregori, P. Berchialla, I. Baldi **Extending PubMed Searches to ClinicalTrials.gov Through a Machine Learning Approach for Systematic Reviews** *Journal of Clinical Epidemiology*, Vol. 103 (November 2018)

7. G. Lorenzoni, D. Azzolina, C. Lanera, G. Brianti, D. Gregori, D. Vanuzzo, I. Baldi **Time trends in first hospitalization for heart failure in a community-based population** *International Journal of Cardiology*, Vol. 271 (November 2018)

6. E. Surkova, L.P. Badano, D. Genovese, G. Cavalli, C. Lanera, J. Bidviene, P. Aruta, C. palermo, S. Iliceto, D. Muraru **Clinical and Prognostic Implications of Methods and Partition Values Used to Assess Left Atrial Volume by Two-Dimensional Echocardiography.** *J. of the American Society of Echocardiography.*, Vol. 30, Issue 11, 1119-1129 (November 2017)

5. I. Baldi, C. Lanera, P. Berchialla, D. Gregori, **Early termination of cardiovascular trials as a consequence of poor accrual: Analysis of ClinicalTrials.gov 2006-2015**, *BMJ Open*, Vol. 6, Issue 6, e013482 (June 2017)

4. G. Ru, M. I. Crescio, F. Ingravalle, C. Maurella, D. Gregori, C. Lanera, D. Azzolina, G. Lorenzoni, N. Soriani, S. Zec, P. Berchialla, S. Mercadante, F. Zobec, M. Ghidina, S. Baldas, B. Bonifacio, A. Kinkopf, D. Kozina, L. Nicolandi, L. Rosati, **Machine Learning Techniques applied in risk assessment related to food safety**, *EFSA Supporting Publications*, 14.7 (May 2017)

3. F. Folino, G. Buja, G. Zanotto, E. Marras, G. Allocca, D. Vaccari, G. Gasparini, E. Bertaglia, F. Zoppo, V. Calzolari, R.N. Suh, B. Ignatiuk, C. Lanera, A. Benassi, D. Gregori, S. Iliceto, **Association between air pollution and ventricular arrhythmias in high-risk patients (ARIA study): a multicentre longitudinal study.**, *The Lancet Planetary Health*, Vol. 1, Issue 2, e58-e64 (May 2017);

2. D. Gregori, C. Minto, C. Lanera, G. Lorenzoni, **Feasibility and Reliability of Wearable Devices in Measuring Caloric Intake: Results from a Pilot Study**, *The FASEB Journal*, Vol. 31, Issue 1 Supplement, 302.6 (April 2017)

1. E. Menti, C. Lanera, G. Lorenzoni, D.F. Giachino, M. de Marchi, D. Gregori, P. Berchialla, **Bayesian Machine Learning Techniques for revealing complex interactions among genetic and clinical factors in association with extra-intestinal Manifestations in IBD patients**, *AMIA 2016 Annual Symposium proceedings*, 884-893 (February 2017). 46:101–121, 2014.

Preprints

For every publication it is indicated autors, **title**, *status* (year).

1. C. Lanera, E. Barbieri, G. Piras, G. Lorenzoni, A. Maggie, D. Weissenbacher, D. Dona, A. Scamarcia, L. Cantarutti, G. Gonzalex, C. Giaquinto, D. Gregori **Automatic identification and classification of different types of otitis from free-text pediatric medical notes in the Italian language: a deep-learning approach** *under review* (2020)

Contributions as a reviewer

For every contribution it is indicated period, number of review(s) (*topic(s)*), type (C = Congress, J = Journal): **congress/journal title** (venue, if pertinent).

6. 2020, three reviews (*biomedical informatics*), C: **AMIA 2020 Annual Symposium** (Chicago, IL - USA).
5. 2019, one review (*biomedical informatics*), J: **IEEE: Journal of Biomedical and Health Informatics**.
4. 2019, one review (*biomedical informatics*), C: **AMIA 2019 Annual Symposium** (Washington D.C. - USA).
3. 2018, four reviews (*biomedical informatics*), C: **AMIA 2018 Annual Symposium** (San Francisco, CA - USA).
2. 2018, one review (*food research*), J: **Elsevier: Food Policy**.
1. 2017, three reviews (*biomedical informatics*), C: **AMIA 2017 Annual Symposium** (Washington, DC - USA).

Conferences

Contributions

For every contribution it is indicated period, **congress title** (venue), contribution type (CT = Contributed Talk, IT = Invited Talk, PS = Poster Section, W = Workshop): *title*.

14. 2020/08/02 - 2020/08/06, **Joint Statistical Meeting** (virtual conference), CT: *Automatic identification and classification of different types of otitis from free-text pediatric medical notes: a deep-learning approach*;
13. 2019/12/08-12, textbf28th Annual Conference of the Society for Risk Analyses (Arlington, VA), 2xPS: *Use of Machine Learning techniques for case-detection of Varicella Zoster using routinely collected textual ambulatory records*; and *Incidence estimates of varicella zoster: a machine learning approach for routinely collected ambulatory records*;
12. 2019/03/27, **REMEDIO Circle 2019 + Smile 2019 event** (Nicosia, CY), W: *Health and Cost modules for IMT*;
11. 2018/07/09-11, **Data Science, Statistics and Visualizaiton** (Wien, A), CT + PS: *Current transpLant sUrplus Management Protocol in R: the CLUMPER interface*;
10. 2018/05/22-23, **REMEDIO forth partners meeting** (thessaloniki, GR), IT: *Health and Cost modules for IMT the imthcm R package*;
9. 2017/09/28, **IX Congresso nazionle BIAS** (Parma, IT), IT: *Statistical Relational Learning and uncertainty in trial data*;
8. 2017/09/13-16, **IX Congresso nazionle SISMEC** (Gargnano, IT), CT: *Building Comprehensive Searches Through a Machine Learning Approach for Systematic Reviews*;
7. 2017/07/29 - 2017/08/03, **Joint Statistical Meeting** (Baltimore (MD) - USA), CT + PS: *Building Comprehensive Searches Through a Machine Learning Approach for Systematic Reviews*;

6. 2016/11/12-16, **American Medical Informatics Association 2016 Annual Symposium** (Chicago (IL) - USA), CT: *Bayesian MLT for Revealing Complex Interactions Among Genetic and Clinical Factors in Association with Extra-Intestinal Manifestations in IBD Patients*;
5. 2016/11/4-6, **21st Young Statisticians Meeting** (Piran, Slovenia), CT: *Bayesian MLT for Revealing Complex Interactions Among Genetic and Clinical Factors in Association with Extra-Intestinal Manifestations in IBD Patients*;
4. 2016/10/20, **CDISC Italian User Network Day Data standard e loro applicazione** (Milano, Italy), IT: *Use of MLT to predict outcome in clinical trials*;
3. 2016/07/29 - 2016/08/04, **Joint Statistical Meeting** (Chicago (IL) - USA), CT + PS: *Maximizing Text Mining Performance: The Impact of Pre-Processing*;
2. 2015/10/16-18, **20th Young Statistician Meeting** (Vorau, Austria), CT: *Automated Text Classification in a Big-Data Context: Some Issues and Proposal Solutions*;
1. 2015/09/16-19, **VIII Congresso nazionle SISMEC** (Torino, Italy), CT: *A bibliometric analysis in food safety and nutrition.*

Participations

For every participation it is indicated period, **congress title** (venue).

7. 2019/10/10-11, **(**iBIG Forum 2019) (Milano, Italy)
6. 2019/03/28-19, **GOSUMP TechCamp: ICT tools for Sustainable Urban Mobility** (Nicosia, CY);
5. 2018/02/2-3, **RStudio::conf** (San Diego (CA), USA);
4. 2017/10/27, **e-Healt in cardiologia - Presente e Futuro tra Innovazione e Regole** (Vicenza, Italy);
3. 2016/09/28-30, **"Early phase adaptive trial" Tutorial and workshop** (Politecnico di Torino, Italy);
2. 2016/06/29 - 2016/07/01, **VIII CONGRESSO NAZIONALE BIAS** (Verona, Italy);
1. 2016/04/14, **Workshop Data Linkage** (Milano Bicocca, Italy).

Working Activity

For every working activity it is indicated period, description/project-title, society/institution.

7. 2020, *Data cleaning and Statistical Analyses*, Zetaresearch s.r.l.
6. 2019, *Data cleaning and Statistical Analyses*, Zetaresearch s.r.l.
5. 2018, *Course on Basic R programming for statisticians*, Società di Scienze Farmacologiche Applicate;
4. 2018, *Data cleaning and Statistical Analyses*, Zetaresearch s.r.l.
3. 2017, *Course on Advance R programming for statisticians*, Società di Scienze Farmacologiche Applicate;
2. 2017, *Data cleaning and Statistical Analyses*, Zetaresearch s.r.l.
1. 2017, *Course on Basic R programming for statisticians*, Società di Scienze Farmacologiche Applicate;

Language skills

Languages

For every language it is indicated **language** if (*Mother tongue(s)*) or else (*Listening, Reading, Spoken interaction, Spoken production, writing levels) (Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user* - Common European Framework of Reference for Languages).

- ✎ **Italian** (*Mother tongue*);
- ✎ **English** (*Listening: C1, Reading: C1, Spoken interaction: B1, Spoken production: B2, Writing levels: B2*);
- ✎ **Franch** (*Beginner*);

Digital skils

For every skill it is indicated **name**, (*Levels: Basic user - Independent user - Proficient user*: optional additional info)

General skills

- ✎ **Information processing** (*Proficient*: import, tiding, analyses of health data);
- ✎ **Comunication** (*Proficient*: production of static, dynamical and interactive R Markdown, R Shiny, and LaTeX documentations, dashboards and templates);
- ✎ **Content creation** (*Independent*);
- ✎ **Safety** (*Independent*);
- ✎ **Problem solving** (*Proficient*);

Program languages

- ✎ **R** (*Proficient*: Statistical and Machine Learning, Text and Data mining, package development, shiny app development);
- ✎ **Python** (*Independent*);
- ✎ **MatLab** (*Independent*);
- ✎ **LaTeX** (*Proficient*: package and class develop);
- ✎ **MonkeyC** (*Basic*);
- ✎ **C++** (*Basic*);

Operating Systems and softwares

- ✎ **Tidyverse R packages suite** (*Proficient*);
- ✎ **R interfaces to Keras and TensorFlow** (*Independent*);
- ✎ **RStudio IDE (open)** (*Proficient*);
- ✎ **RStudio Server (Pro)** (*Proficient user and Independent manager*);
- ✎ **RStudio Shiny server (open)** (*Independent user and manager*);
- ✎ **Git/GitHub** (*Proficient*);
- ✎ **MS Windows XP, 7, 8, 10** (*Proficient*);
- ✎ **OSX 10.5 - 10.12** (*Independent*);
- ✎ **Linux: dist. Ubuntu 16, 18; Debian 10** (*Independent*);
- ✎ **Suite MS Office** (*Proficient*);
- ✎ **GeoGebra** (*Independent*);

In compliance with the GDPR and Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned Decree. October 2, 2020

Corrado Lanera