Curriculum Vitae

Valeria Vitelli

Personal Data:

Name: Valeria
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Gender: Female
Date of birth: December 22^{nd}, 1984
Place of birth: Lodi, Italy
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Positions

Sep2018–present	**Associate Professor** at the Biostatistics Department, Oslo Centre for Biostatistics and Epidemiology (OCBE), University of Oslo, Norway.
Jun2013–Aug2018	**Post-doctoral Researcher** at the Biostatistics Department, Oslo Centre for Biostatistics and Epidemiology (OCBE), University of Oslo, Norway.
Feb2012–May2013	**Post-doctoral Researcher** within the Chair on Systems Science and the Energetic challenge (SSEC Chair), École Centrale Paris and Supélec, France.
2009–2011	**PhD candidate**, Politecnico di Milano, Italy.

University Education

May 2012	**PhD in Statistics**, Politecnico di Milano, Italy.
Dec 2008	**M.S. in Mathematical Engineering**, cum laude, Politecnico di Milano, Italy.
Jul 2006	**B.S. in Mathematical Engineering**, cum laude, Politecnico di Milano, Italy.

Career Breaks

Jan2016–Sep2016	Maternity leave, first child
Sep2017–Jun2018	Maternity leave, second child
Jan2021–Sep2021	Maternity leave, third child

Selected Recent Publications (full list on: https://scholar.google.it/valeriavitelli)

[* indicates joint first authorship, ** indicates that the authors are in alphabetical order]

1. M. Yazdani, J. Fiskådal, X. Chen, Ø.A. Utheim, S. Ræder, **V. Vitelli**, and T.P. Utheim (2021). Tear Film Break-Up Time and Dry Eye Disease Severity in a Large Norwegian Cohort. *Journal of Clinical Medicine*, **10**(4), 884.
2. I. S. Brorson, A. M. Eriksson, I. S. Leikfoss, **V. Vitelli**, E. G. Celius, T. Luders, [...] and S.D. Bos (2020). CD8+ T cell gene expression analysis identifies differentially expressed genes between multiple sclerosis patients and healthy controls. *Multiple Sclerosis Journal*, **6**(4), 1–9.
3. G.A. Chernyakov, **V. Vitelli**, M.Y. Alexandrin, A.M. Grachev, V.N. Mikhalenko, A.V. Kozachek, [...] and V.V. Matskovsky (2020). Dynamics Of Seasonal Patterns In Geochemical, Isotopic, And Meteorological Records Of The Elbrus Region Derived From Functional Data Clustering. *Geography, Environment, Sustainability*, **13**(3), 110–116.
4. S. Engebretsen, S.T. Bogstrand, D. Jacobsen, **V. Vitelli** and R. Rimstad (2020). NEWS2 versus a single-parameter system to identify critically ill medical patients in the emergency department. *Resuscitation Plus*, **3**, 100020.
5. Ø. Sørensen, M. Crispino, Q. Liu, and **V. Vitelli** (2020): BayesMallows: An R Package for the Bayesian Mallows Model. *The R Journal*, **12**(1), 324–342.
6. B. Tashbayev, T. Paaske Utheim, Ø. Aass Utheim, S. Ræder, J. Liaaen Jensen, M. Yazdani, N. Lagali, **V. Vitelli**, D.A. Dartt, and X. Chen (2020). Utility of tear osmolarity Measurement in Diagnosis of Dry eye Disease. *Scientific Reports*, 10(1), 1-7.
7. A.V. Pladsen, G. Nilsen, O.M. Rueda, M.R. Aure, Ø. Borgan, K. Liestøl, **V. Vitelli**, [...] and O.C. Lingjærde (2020). DNA copy number motifs are strong and independent predictors of survival in breast cancer. *Communications biology*, 3(1), 1–9.
8. M. Crispino, E. Arjas, **V. Vitelli**, N. Barrett and A. Frigessi (2019): A Bayesian Mallows approach to non-transitive pair comparison data: how human are sounds? *The Annals of Applied Statistics*, **13**(1), 492–519.
9. Q. Liu, M. Crispino, I. Scheel, **V. Vitelli** and A. Frigessi (2019): Model-based learning from preference data. *Annual Review of Statistics and Its Application*, **6**, 329–354.

10. **V. Vitelli***, Ø. Sørensen*, M. Crispino, A. Frigessi and E. Arjas (2018): Probabilistic preference learning with the Mallows rank model. *Journal of Machine Learning Research*, **18**(158), 1–49.
11. R. Ak, Y. Li, **V. Vitelli** and E. Zio (2018): Adequacy assessment of a wind-integrated system using neural network-based interval predictions of wind power generation and load. *International Journal of Electrical Power & Energy Systems*, **95**, 213–226.
12. M. Ragle Aure*, **V. Vitelli***, E.U. Due, S. Jernstöm, M. Krohn, T. Husby Haukaas, H.K. Moen Vollan, S. Kumar, L.R. Euceda, T. Lüders, T. Frost Bathen, Oslo Breast Cancer Research Consortium (OSBREAC), and K.K. Sahlberg (2017): Integrative clustering reveals a novel split in the luminal A subtype of breast cancer. *Breast Cancer Research*, **19**(1), 44.
13. M.K. Brix, E. Westman, A. Simmons, K. Wagner-Larsen, C. Page, **V. Vitelli**, M.K. Beyer and AddNeuroMed consortium (2017): The Evans' Index revisited: New cut-off levels for use in radiological assessment of ventricular enlargement in the elderly. *European Journal of Radiology*. **95**, 28–32.
14. D. Floriello and **V. Vitelli** (2017): Sparse Clustering of Functional Data. *Journal of Multivariate Analysis*, **154**, 1–18.
15. R. Lesurf, M. Ragle Aure, H. Håberg Mørk, **V. Vitelli**, Oslo Breast Cancer Research Consortium (OSBREAC), S. Lundgren, A.-L. Børresen-Dale, V. Kristensen, F. Wärnbergh, M. Hallett and T. Sørlie (2016): Molecular features of subtype-specific progression from ductal carcinoma in situ to invasive breast cancer. *Cell Reports*, **16**(4), 1166–1179.
16. J. Liu, **V. Vitelli**, E. Zio and R. Seraoui (2015): A Novel Dynamic-Weighted Probabilistic Support Vector Regression-Based Ensemble for Prognostics of Time Series Data. *IEEE Transactions on Reliability*, **64**, 1203–1213.
17. L. Pihlstrøm, K.R. Morset, E. Grimstad, **V. Vitelli** and M. Toft (2016): A cumulative genetic risk score predicts progression in Parkinson's disease. *Movement Disorders*, **31**(4), 487–490.

Experience in Dissemination of Research (recent talks)

Jun28–Jul2, 2021	"A novel Variational Bayes approach to Preference Learning with the Mallows rank model", *contributed talk. Virtual ISBA,* worldwide.
Jun 21–25, 2021	"Lower-dimensional Bayes Mallows model with application to cancer genomics", *invited talk. 50^{th} Virtual Meeting of the Italian Statistical Society*, Universities of Pisa and Cagliari (Italy).
Jun 7–9, 2021	"Rank-based Bayesian inference for transcriptomic analyses in cancer", *invited talk. 8^{th} Nordic-Baltic Biometrics Virtual Conference*, University of Helsinki (Finland).
Mar 18th, 2021	"The Bayesian Mallows model from preference learning to rank-based genomic data integration, with some recent advances". Statistics webinar series at the Department of Mathematics, King's College London, UK.
Nov 5th, 2020	"Bayesian rank-based models for genomic data integration: some recent advances". Webinar at the CeFH Biostatistical Meetings, Norwegian Publich Health Institute (FHI), Norway.
Jan 8–10, 2020	"Probabilistic Preference Learning via the Mallows rank model: advances and case studies", *invited plenary talk. STOR-i Annual Conference 2020*, University of Lancaster (UK).
Dec 14–16, 2019	"A unified framework for joint sparse clustering and alignment of functional data", *invited talk* (invited session on *Modelling Functional Data*). *ERCIM 2019*, Senate House University of London (UK).
Sep 11–13, 2019	"Probabilistic Preference Learning via the Mallows rank model: recent advances", *invited talk* (invited session on *Preference Ranking*). *CLADAG 2019*, University of Cassino (Italy).
Apr 14–16, 2019	"Joint sparse clustering and alignment of functional data: theory and case studies", *invited talk* (invited session on *Functional/High-dimensional Statistics*). *CRONOS final meeting & MDA workshop 2019*, Limassol (Cyprus).
Dec 14–16, 2018	"A novel approach to joint sparse functional clustering and alignment", *invited talk* (invited session on *Functional data analysis and biological applications*). *ERCIM 2018*, University of Pisa, Pisa (Italy).
Oct 24–26, 2018	"Sparse Clustering and Alignment of Functional Data", *plenary talk. Workshop on Advances in Functional Data Analysis: Cluster, Location and Shape*, Université de Rennes 2, Rennes (France).
Oct 10th, 2018	"Bayesian recommender systems in health: the beauty and power of statistical modeling". Invited seminar at the University of Oslo Data Science Day 2018, UiO Realfagsbiblioteket, Oslo (Norway).
Jul 13th, 2018	"Bayesian Preference Learning: from genomics to recommendation systems". Invited by Antonio Canale, Department of Statistics, University of Padova, Padova (Italy).
Jun 25–29, 2018	"Bayesian Preference Learning: from genomics to recommendation systems", *invited talk* (invited session on *Bayesian Approaches to Ranking Models*). *ISBA 2018*, Edinburgh (UK).

Clinical Advising Experience (projects)

[UiO = University of Oslo, OUS = Oslo University Hospital, AUS = Akershus University Hospital]

May2020–present	"Exploration of the first comprehensive Norwegian cohort of Covid-19 patients" (Erik Amundsen, OUS)
Feb2020–present	"Acute/sub-acute functional decline in elderly home care recipients in Eastern Agder" (Line Kildal Bragstad, UiO)

Feb2020–present	"Immune profiling of sentinel nodes from breast cancer patients" (Inga Hansine Rye, UiO & OUS)
Mar2019–present	"CD8+ T cell -omics analyses for characterization of Multiple Sclerosis patients" (Steffan Daniel Bos-Haugen, UiO)
Sep2019–Jul2020	"NEWS2 versus a single-parameter system to identify critically ill medical patients in the Emergency Department" (Stine Engebretsen, UiO & OUS)
Mar2017–present	"In Vivo Confocal Microscopy (IVCM) findings in Dry Eye Patients" (Tor Paaske Utheim, UiO).
Jun2013–present	"Integrative analyses of the OSLO2 breast cancer cohort" (Anne Lise Børresen Dale, Vessela Kristensen & Arnoldo Frigessi, UiO & OUS).
Aug2015–Dec2015	"Estimating Brain Volume using image summaring data" (Maiken Brix, UiB & Christian Page, UiO).
Feb2015–Dec2015	"Endocrine findings in NorCAPITAL project" (Vegard Bruun Wyller, UiO & AUS).

Educational Qualification

Supervising Experience

2019–2023	PhD supervisor: Emilie Ødegaard (University of Oslo, Norway).
2012–2017	PhD Co-supervisor: Derbachew Asfaw (University of Hawassa, Ethiopia), Jie Liu (École Centrale Paris, France), and Ronay Ak (École Centrale Paris and Supélec, France).
2010–2011	Master Thesis Co-supervisor: Davide Floriello, Paolo Zanini, and Alessia Pini (Politecnico di Milano, Italy).

Teaching Experience (as a lecturer)

Jan 2020 & 2021	University of Oslo, Norway. Introduction to Statistics, PhD in Medicine (8 credits, course leader).
Jan 2020 & 2021	University of Oslo, Norway. Statistical Genomics, degree in Medicine (elective, 2 credits, course leader).
Aug 2019 & 2020	University of Oslo, Norway. Introduction to Statistics, master in Nutrition (5 credits).
Jan & May 2019	University of Oslo, Norway. Introduction to Statistics, PhD in Medicine (8 credits).
Apr 2014	University of Oslo, Norway. Introduction to R, master in Nutrition (2 days).
Mar 2015 & 2014	University of Hawassa, Ethiopia. Linear Regression with R, MASTMO program (intensive course, 1 week).
Sep 2012	École Centrale Paris, France. Probabilistic Models of Failure Processes & Statistical Estimation of Failure Parameters, master in Nuclear Energy (8 hours).
Jun 2011	Politecnico di Milano, Italy. Spatial Data Analysis, master in Mathematical Engineering (8 hours).

Oslo, June 23, 2021.