EUROPEAN CURRICULUM VITAE FORMAT

PERSONAL INFORMATION

Name	**ELISA TAVIANI**
Address	**UNIVERSITA' DEGLI STUDI DI GENOVA** **CORSO EUROPA 26 GENOVA 26 - 16132**
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E-mail	**elisa.taviani@unige.it**
Nationality	Italian
Date of Birth	06/01/1978
Gender	female

WORK EXPERIENCE

• Dates (from - to)	2021 -
• Name ad address of the employer	Italian Agency for Cooperation and Development, project AID Universidade Eduardo Mondlane - Center for Biotechnology Maputo, Mozambique
• Type of business or sector	International Cooperation
• Occupation or position held	**Scientific Coordinator**

• Dates (from - to)	2020-
• Name ad address of the employer	Università degli Studi di Genova – Department of Earth, Environmental and Life Sciences
• Type of business or sector	Academic
• Occupation or position held	**Researcher RTDa – Microbiology (BIO/19)**

• Dates (from - to)	2017 – 2020
• Name ad address of the employer	DUPC2 project SMALL IHE -Delft Institute for Water Educatio, Delft, The Netherlands Maputo, Mozambique
• Type of business or sector	International Cooperation
• Occupation or position held	**Local Project Manager**

• Dates (from - to)	2017 – 2020
• Name ad address of the employer	Università degli Studi di Sassari - Department of Biomedical Sciences
• Type of business or sector	Academic
• Occupation or position held	**Post-doctoral fellow**

• Dates (from - to)	2012 – 2017
• Name ad address of the employer	Università degli Studi di Sassari - Department of Biomedical Sciences Universidade Eduardo Mondlane - Center for Biotechnology Maputo, Mozambique
• Type of business or sector	Academic
• Occupation or position held	**Post-doctoral fellow**
• Dates (from - to)	2012 – 2020
• Name ad address of the employer	Italian Agency for Cooperation and Development, projects AID10524, AID11096. Universidade Eduardo Mondlane - Center for Biotechnology Maputo, Mozambique
• Type of business or sector	International Cooperation
• Occupation or position held	**Project Manager**
• Dates (from - to)	2012 – 2017
• Name ad address of the employer	Università degli Studi di Sassari - Department of Biomedical Sciences Universidade Eduardo Mondlane - Center for Biotechnology Maputo, Mozambique
• Type of business or sector	Academic
• Occupation or position held	**Post-doctoral fellow**
• Dates (from - to)	2010 – 2012
• Name ad address of the employer	Maryland Pathogen Research Institute, University of Maryland College Park, MD, USA
• Type of business or sector	Academic
• Occupation or position held	**Post-doctoral fellow**

EDUCATION AND TRAINING

• Dates (from - to)	2006-2010
• Name and type of organisation providing education and training	University of Maryland College Park - Maryland Pathogen Research Institute
• Principal subjects/occupational skills covered	Genomics and molecular epidemiology of mobile genetic elements in *Vibrio cholerae*
• Title of qualification awarded	**PhD**
• Dates (from - to)	2005-2006
• Name and type of organisation providing education and training	University of Maryland - Center for Marine Biotechnology
• Principal subjects/occupational skills covered	Ecology, genomics and evolution of *Vibrios*
• Title of qualification awarded	
• Dates (from - to)	1997 - 2004
• Name and type of organisation providing education and training	Università degli Studi di Roma - Sapienza
• Principal subjects/occupational skills covered	Mobile genetic elements in *Vibrio cholerae*
• Title of qualification awarded	**B.S. in Biology**

TEACHING

2020 -	University of Genoa. Lecturer. Courses: Molecular microbiology; Microbiology; Microbiology applied to the conservation and restoration of cultural heritage, Fundamentals of Bioinformatics.
2014-2020	University E. Mondlane. Master in Biotechnology, lecturer. Courses: Introduction to biotechnology, biotechnology laboratory, molecular biology, host-pathogen interaction, Fundamentals of Bioinformatics.
2012-2020	University E. Mondlane. Supervisor of 6 Master thesis and one Doctoral dissertation
2003-2004	Sapienza University of Rome. Teaching assistant. General Microbiology class.

RESEARCH

2021 -	Genomic evolution of *Vibrio cholerae* in the aquatic environment in areas affected by Cyclone IDAI in Mozambique. University of Genoa, Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique; Italian Agency for Cooperation and Development.
2020 -	Antibiotic resistance in marine microorganisms. University of Genoa
2020 -	CIRCLEs Controlling mIcRobiomes CircuLations for bEtter food Systems. H2020
2018-2021	SMALL Water supply and sanitation in small towns: the urban-rural intersection. Mozambique UNESCO-IHE Institute for Water Education, Delft, The Netherlands
2016-2020	Molecular characterization and antiobiotic resistance of *E. coli* isolated from children in Mozambique. National Institute of health of Mozambique; Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique; Italian Agency for Cooperation and Development
2016-2019	Antibiotic resitance in *E. coli* isolated from cattle in Mozambique. Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique; USDA, USA, Italian Agency for Cooperation and Development.
2015-2020	The occurrence and distribution of Rickettsia of zoonotic importance at Limpopo National Park in ticks, domestic animals, rodents and humans, using molecular and serological approaches. Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique; I Italian Agency for Cooperation and Development.
2012-2014	Molecular characterization of pathogenic *E. coli* isolated from patients admitted to the Pediatric wards of the Central Hospital of Maputo. Department of Microbiology, School of Medicine; Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique; Italian Agency for Cooperation and Development.
2012-2014	Epidemiology of *Vibrio cholerae* in Mozambique. National Institute of health of Mozambique; Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique; Italian Cooperation and Development Agency.
2012-2014	White spot syndrome virus detection and molecular characterization in shrimps. Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique.
2012-2014	Human ricketziosis. Center of Biotechnology, University Eduardo Mondlane, Maputo, Italian Agency for Cooperation and Development.
2009-2012	Ecology of *Vibrio cholerae* in Bangladesh. NIH, USA; University of Maryland College Park, Maryland; Johns Hopkins University, Baltimore, Maryland, US and the ICDDRB, Dhaka, Bangladesh.
2006-2011	Evaluation of Ballast water treatment systems. University of Maryland, State of Maryland and US Maritime Administration, Maryland, US.
2006-2008	Validation of Insigna bioinformatic platform. University of Maryland Center for Bioinformatics and Computational Biology, College Park, Maryland, US.
2002-2004	Environmental monitoring of a cholera endemic area in Mozambique. Sapienza University of Rome, AICS.

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE	**ITALIAN**
OTHER LANGUAGES	**ENGLISH,** C1 WRITTEN AND SPOKEN; TOEFL (2006); GRE (2006); ACADEMIC WRITTEN ENGLISH CERTIFICATION, UNIVERSITY OF MARYLAND (2008) **PORTUGUESE,** INTERMEDIATE (LEVEL B) WRITTEN AND SPOKEN
SCIENTIFIC SKILLS AND COMPETENCES .	Molecular microbiologist with 20 years of experience in research focused on microbial genomics, HGT in microbial evolution, molecular epidemiology of enteric pathogens, genetic mechanisms underlying AMR, international public health.
RELEVANT ROLES AND COMPETENCES	Ten years experience in managing and supervising international scientific cooperation projects in Mozambique funded by the Italian Agency for Development Cooperation (AICS) promoting higher education, training and research in bioscience in Mozambique. Participation to international research projects as principal investigator: SMALL Water supply and sanitation in small towns: the urban-rural intersection. Center of Biotechnology, University Eduardo Mondlane, UNESCO-IHE Institute for Water Education, Delft, The Netherlands. Antibiotic resitance in *E. coli* isolated in Mozambique. Center of Biotechnology, University Eduardo Mondlane, Maputo, Mozambique; USDA, Beltsville, USA,
PUBLICATION INDEXES (SCOPUS)	NUMBER OF PUBLICATIONS: 53 TOTAL NUMBER OF CITATIONS: 1724 H-INDEX: 19

PUBLICATIONS

Taviani E, van den Berg H, Nhassengo F, Nguluve, Paulo J, Pedro O, Ferrero G, Occurrence of waterborne pathogens and antibiotic resistance in water supply systems in a small town in Mozambique. BMC microbiology 2022, 22(1) pp. 1-11

Santona A, Sumbana JJ, Fiamma M, Deligios M, Taviani E, Simbine SE, Zimba T, Sacarlal J, Rubino S, Paglietti B. High-risk lineages among extended-spectrum β-lactamase-producing Escherichia coli from extraintestinal infections in Maputo Central Hospital, Mozambique. International Journal of Antimicrobial Agents. 2022 Oct 1;60(4):106649.

Ferrari C, Tovela E, Taviani E, Nonnis Marzano F. DNA barcoding to assess species identification in museum samples of Amphiliidae and natural samples of Cichlidae from Southern Mozambique. Rendiconti Lincei. Scienze Fisiche e Naturali. 2022 Sep 6:1-8

Manhique-Coutinho L, Chiani P, Michelacci V, Taviani E, Bauhofer AF, Chissaque A, Cossa-Moiane I, Sambo J, Chilaúle J, Guimarães EL, Salência J. Molecular characterization of diarrheagenic Escherichia coli isolates from children with diarrhea: A cross-sectional study in four provinces of Mozambique: Diarrheagenic Escherichia coli in Mozambique. International Journal of Infectious Diseases. 2022 Aug 1;121:190-4.

Mondlane-Milisse A, Pedro O, Brito DR, Mulandane FC, De-Araújo L, Leão-Buchir J, Falique J, Monjane-Mabuié A, Penina E, Omar MI, Ibraimo SV. White spot syndrome virus (WSSV) prevalence in wild and aquaculture crustacean populations from Mozambique, assessed by molecular diagnosis. Rendiconti Lincei. Scienze Fisiche e Naturali. 2022 Apr 16:1-1.

Sumbana J, Santona A, Fiamma M, Taviani E, Deligios M, Chongo V, Sacarlal J, Rubino S, Paglietti B. Polyclonal emergence of MDR Enterobacter cloacae complex isolates producing multiple extended spectrum beta-lactamases at Maputo Central Hospital, Mozambique. Rendiconti Lincei. Scienze Fisiche e Naturali. 2022 Mar;33(1):39-45.

Taviani, E., Pedro, O. Impact of the aquatic pathobiome in low-income and middle-income countries (LMICs) quest for safe water and sanitation practices. Current Opinion in Biotechnology 2022, 73, pp. 220–224

Taviani, E., Muchongo, A., Kim, S.W., Van Kessel, J.A.S., Haley, B.J. Genomic Analysis of Antibiotic-Resistant and-Susceptible Escherichia coli Isolated from Bovine Sources in Maputo, Mozambique. Foodborne Pathogens and Disease 2021, 18(6), pp. 426–435

Lasa A, Auguste M, Lema A, Oliveri C, Borello A, Taviani E, Bonello G, Doni L, Millard AD, Bruto M, Romalde JL, Yakimov M, Balbi T, Pruzzo C, Canesi L, Vezzulli L. A deep-sea bacterium related to coastal marine pathogens. Environmental Microbiology 2021

Magaia, V., Taviani, E., Cangi, N., Neves, L. Molecular detection of Rickettsia africae in Amblyomma ticks collected in cattle from Southern and Central Mozambique. Journal of Infection in Developing Countries 2020, 14(6), pp. 614–622

Santona A, Taviani E, Hoang HM, Fiamma M, Deligios M, Ngo TVQ, Van Le A, Cappuccinelli P, Rubino S, Paglietti B. Emergence of unusual vanA/vanB(2) genotype in a highly mutated vanB(2)-vancomycin-resistant hospital-associated E. faecium background in Vietnam. Int J Antimicrob Agents. 2018 Oct 10. pii:S0924-8579(18)30197-3. doi: 10.1016/j.ijantimicag.2018.07.006.

Mazivele, M.O.M., Nuaila, V., Durante, M., Colombo M. M., Taviani E. Promising primers for detection of phytoplasma causing coconut lethal yellowing disease in Mozambique. Phytoparasitica. 2018 6: 301. https://doi.org/10.1007/s12600-018-0675-5

Chen AJ, Hasan NA, Haley BJ, Taviani E, Tarnowski M, Brohawn K, Johnson CN, Colwell RR, Huq A. Characterization of Pathogenic Vibrio parahaemolyticus from the Chesapeake Bay, Maryland. Front Microbiol. 2017 Dec 15;8:2460. doi: 10.3389/fmicb.2017.02460. eCollection 2017. PubMed PMID: 29375492; PubMed Central PMCID: PMC5770735.

Santona A, Taviani E, Deligios M, Al-Qahtani AA, Al-Ahdal MN, Rubino S, Paglietti B. Vancomycin-resistant Enterococcus faecium high-resolution typing by core genome multilocus sequence typing. J Infect Dev Ctries. 2016 Oct 31;10(10):1159-1161. doi: 10.3855/jidc.9223. PubMed PMID: 27801383.

Sumbana J, Taviani E, Manjate A, Paglietti B, Santona A, Colombo MM. Genetic determinants of pathogenicity of Escherichia coli isolated from children with acute diarrhea in Maputo, Mozambique. J Infect Dev Ctries. 2015 Jul 4;9(6):661-4. doi: 10.3855/jidc.6122. PubMed PMID: 26142678.

Langa JP, Sema C, De Deus N, Colombo MM, Taviani E. Epidemic waves of cholera in the last two decades in Mozambique. J Infect Dev Ctries. 2015 Jul 4;9(6):635-41. doi: 10.3855/jidc.6943. PubMed PMID: 26142674.

Sumbana J, Taviani E, Manjate A, Paglietti B, Santona A, Colombo MM. Genetic determinants of pathogenicity of Escherichia coli isolated from children with acute diarrhea in Maputo, Mozambique. J Infect Dev Ctries. 2015 Jul 4;9(6):661-4. doi: 10.3855/jidc.6122. PubMed PMID: 26142678.

Nur A. Hasan, Christopher J. Grim, Erin K. Lipp, Irma N. G. Rivera, Jongsik Chun, Bradd J. Haley, Taviani E, Seon Young Choi, Mozammel Hoq, A. Christine Munk, Thomas S. Brettin, David Bruce, Jean F. Challacombe, J. Chris Detter, Cliff S. Han, Jonathan A. Eisen, Anwar Huq, and Rita R. Colwell Deep-sea hydrothermal vent bacteria related to human pathogenic Vibrio species 2015 112 (21) E2813-E2819;\\

Spagnoletti M, Ceccarelli D, Rieux A, Fondi M, Taviani E, Fani R, Colombo MM, Colwell RR, Balloux F. Acquisition and Evolution of SXT-R391 Integrative Conjugative Elements in the Seventh-Pandemic Vibrio cholerae Lineage. MBio. 2014 Aug 19;5(4). pii: e01356-14. doi: 10.1128/mBio.01356-14. PubMed PMID: 25139901; PubMed Central PMCID: PMC4147863.

Haley BJ, Choi SY, Grim CJ, Onifade TJ, Cinar HN, Tall BD, Taviani E, Hasan NA, Abdullah AH, Carter L, Sahu SN, Kothary MH, Chen A, Baker R, Hutchinson R, Blackmore C, Cebula TA, Huq A, Colwell RR. Genomic and phenotypic characterization of Vibrio cholerae non-O1 isolates from a US Gulf Coast cholera outbreak. PLoS One. 2014 Apr 3;9(4):e86264. doi: 10.1371/journal.pone.0086264. eCollection 2014. PubMed PMID: 24699521; PubMed Central PMCID: PMC3974666.

Haley BJ, Kokashvili T, Tskshvediani A, Janelidze N, Mitaishvili N, Grim CJ, Constantin de Magny G, Chen AJ, Taviani E, Eliashvili T, Tediashvili M, Whitehouse CA, Colwell RR, Huq A. (2014) Molecular diversity and predictability of Vibrio parahaemolyticus along the Georgian coastal zone of the Black Sea. Front Microbiol 10;5:45. doi: 10.3389/fmicb.2014.00045. ECollection 2014. PubMed PMID: 24575085.

Valia R*, Taviani E*, Spagnoletti M, Ceccarelli D, Cappuccinelli P, Colombo MM. (2013) Vibrio cholerae O1 epidemic variants in Angola: a retrospective study between 1992 and 2006. Front Microbiol 28;4:354. doi: 10.3389/fmicb.2013.00354. eCollection 2013. PubMed PMID: 24348465; PubMed Central PMCID: PMC3842873.

Hasan NA, Ceccarelli D, Grim CJ, Taviani E, Choi J, Sadique A, Alam M, Siddique AK, Sack RB, Huq A, Colwell RR. (2013) Distribution of virulence genes in clinical and environmental Vibrio cholerae strains in Bangladesh. Appl Environ Microbiol 79(18):5782-5. doi: 10.1128/AEM.01113-13. Epub 2013 Jul 19. PubMed PMID: 23872570; PubMed Central PMCID: PMC3754173.

Haley BJ, Chen A, Grim CJ, Clark P, Diaz CM, Taviani E, Hasan NA, Sancomb E, Elnemr WM, Islam MA, Huq A, Colwell RR, Benediktsdóttir E. (2012) Vibrio cholerae in an Historically Cholera-Free Country. Environ Microbiol Rep 4(4):381-389.

Huq A, Haley BJ, Taviani E, Chen A, Hasan NA, Colwell RR. (2012) Detection, isolation, and identification of Vibrio cholerae from the environment. Curr Protoc Microbiol. Aug;Chapter 6:Unit6A.5.

Hasan NA, Choi SY, Eppinger M, Clark PW, Chen A, Alam M, Haley BJ, Taviani E, Hine E, Su Q, Tallon LJ, Prosper JB, Furth K, Hoq MM, Li H, Fraser-Liggett CM, Cravioto A, Huq A, Ravel J, Cebula TA, Colwell RR. (2012) Genomic diversity of 2010 Haitian cholera outbreak strains. Proc Natl Acad Sci U S A 109(29):E2010-7.

Taviani E, Spagnoletti M, Ceccarelli D, Haley BJ, Hasan NA, Chen A, Colombo MM, Huq A, Colwell RR.(2012) Genomic analysis of ICEVchBan8: An atypical genetic element in Vibrio cholerae. FEBS Lett 586(11):1617-21.

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Taviani, E., C. J. Grim, J. Choi, J. Chun, B. Haley, N. A. Hasan, A. Huq and R. R. Colwell (2010). "Discovery of novel Vibrio cholerae VSP-II genomic islands using comparative genomic analysis." FEMS Microbiology Letters 308(2): 130-137.

Grim CJ, Hasan NA, Taviani E, Haley B, Chun J, Brettin TS, Bruce DC, Detter JC, Han CS, Chertkov O, Challacombe J, Huq A, Nair GB, Colwell RR (2010). “Genome sequence of hybrid Vibrio cholerae O1 MJ-1236, B-33, and CIRS101 and comparative genomics with V. cholerae.” J Bacteriol 192(13):3524-33.

Grim, C. J., J. Choi, J. Chun, Y.-S. Jeon, Taviani E, N. A. Hasan, B. Haley, A. Huq and R. R. Colwell (2010). "Occurrence of the Vibrio cholerae Seventh Pandemic VSP-I Island and a New Variant." OMICS: A Journal of Integrative Biology 14(1): 1-7.

B. Haley, C.J. Grim, N.A. Hasan, Taviani E, J. Chun, T. Brettin, D. Bruce, et al. 2010. The Pre-7th Pandemic Vibrio cholerae BX 330286 El Tor Genome; Evidence for the Environment as a Genome Reservoir. Environmental Microbiology Reports. 2(1): 208-216.

Chun, J., C. J. Grim, N. A. Hasan, J. H. Lee, S. Y. Choi, B. J. Haley, Taviani E, Y.-S. Jeon, D. W. Kim, J.-H. Lee, T. S. Brettin, D. C. Bruce, J. F. Challacombe, J. C. Detter, C. S. Han, A. C. Munk, O. Chertkov, L. Meincke, E. Saunders, R. A. Walters, A. Huq, G. B. Nair and R. R. Colwell (2009). "Comparative genomics reveals mechanism for short-term and long-term clonal transitions in pandemic Vibrio cholerae." Proceedings of the National Academy of Sciences 106(36): 15442-15447.

Taviani, E., C. J. Grim, J. Chun, A. Huq and R. R. Colwell (2009). "Genomic analysis of a novel integrative

conjugative element in Vibrio cholerae." FEBS Letters 583(22): 3630-3636

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Grim CJ., Taviani E., Alam M., Huq A. Sack R.B., Colwell R.R. 2008. Occurrence and Expression of Luminescence in Vibrio cholerae. Appl. Environ. Microbiol. 74: 708715

Phillippy AM, Mason JA, Ayanbule K, Sommer DD, Taviani E, et al. 2007. Comprehensive DNA Signature Discovery and Validation. PLoS Computational Biology 3(5): e98 doi: 10.1371/journal.pcbi.0030098.

Lazaro N., Taviani E., Silva C., Sidat M. Borgnolo G.,.Colombo M. M, Falcone F. (2005) A colera no ambiente: um problema global que afecta Moçambique. I Quaderni della Cooperazione Italiana 2005. Vol 8.

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Genova, 28.10.2022

Signature