Flavia Villani

Curriculum Vitae

Personal Data

Place and Date of Birth: Salerno | 14 November 1995
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page GitHub: https://github.com/Flavia95

Education

Oct 2018-July 2020 **Master's degree in Medical Biotechnology (LM-9)** University of Naples Federico II (NA)
"Population genomics analyses on pangenome graphs"

Oct 2014-Feb 2018 **Bachelor's degree in Biological Sciences (L-13)** University of Salerno (SA)
"L'enzima glucochinasi e la cura del diabete di tipo II"

Training activity

Apri 2020 **COVID-19 Biohackathon/Pangenome**
https://github.com/virtual-biohackathons/covid-19-bh20/wiki/Pangenome Course
Virtual

Nov 2019 **Analysis of scRNA-seq using R** Course
NETTABB-University of Salerno, Italy

July 2019 **Linux Shell, Git and Python** Course
Software Carpentry Workshop and Elixir-ITA / National Research Council, Napoli, Italy

Dec 2017 **EndNote Web, citation and bibliography program** Course
University of Salerno, Italy

Research activity

2019-2020 **Master's degree** in a laboratory of computational biology at National Research Council Institute of Genetics and Biophysics, IGB-CNR (NA).
Thesis title"Population genomics analyses on pangenome graphs"

- Study and application of programming languages (python, bash, awk, R).
- Use of high-performance machines with associated queuing systems (condor).
- Elaboration of a library in Python for the analysis of population genetics on pangenomic data (https://github.com/Flavia95/VGpop).

2017 **Training for Bachelor in Biological Science** at Clinical analysis laboratory Biolabor-SRL (SA)

- Knowledge of laboratory equipment and analytical methods. Use of clinical medicine machinery based on the Lambert-Beer law to determine clinical parameters.
- Determination of blood count, chemical-physical and parasitological examinations of faeces, glycated hemoglobin, ESR, antibiogram, urin analysis, microscopic observation of urinary sediments, tests for the determination of blood group, HIV tests, HPV, hormonal tests and observation of serum protein.

Congress Seminar

Sep 2020	**T2T-HPRC** Scalable variant detection in pangenome models, Virtual	Poster
Sep 2020	**T2T-HPRC** Easy and Efficient Variation Graphs, Virtual	Poster
Apr 2020	**Graphical pangenomics in the time of COVID19** Virtual, Helsinky	Seminar
Feb 2020	**Modeling neurogenesis with human-derived cerebral organoids** Seminar National Research Council, Naples, Italy	
Oct 2019	**Ginecologia e Donna Un viaggio di tutta una vita** SIGO-Naples, Italy	Congress
Nov 2019	**NETTAB/BBCC2019** University of Salerno, Italy	Congress
Apr 2016	**OGM: fatti, misfatti e prospettive** University of Salerno, Italy	Seminar

Publications

Jordan M Eizenga, Adam M Novak, Emily Kobayashi, *Flavia Villani*, Cecilia Cisar, Simon Heumos, Glenn Hickey, Vincenza Colonna, Benedict Paten, Erik Garrison (16 July 2020). Efficient dynamic variation graphs. Bioinformatics. https://doi.org/10.1093/bioinformatics/btaa640

Certificates

21 Apr 2018	**ESB Level 1 Certificate in ESOL International All Modes (B2 CEFR)** English language certification Candidate Number: IT-0042278	
28 Mar 2015	**Primo soccorso B.L.S.D (Basic Life Support with defibrillation) e disostruzione delle vie aeree** Salerno, Italy	Certificate BLSD

Languages

English - (B2)

Computer Skills

Programming: Python, R, Bash, LaTeX.
Computer Software: Linux, Windows.

Other information

September-October 2020	Helper in "Corso di Genomica e Proteomica computazionale per biologi sperimentali"
June-August 2020	Helper in GSOC - Parallel Graph Traversal for Variation Graphs project: `https://gsocgraph.blogspot.com/2020/08/final-week-recap-of-my-gsoc-experience.html`
April 2020	Quote in the newspaper "Le Monde": (`https://www.lemonde.fr/blog/binaire/2020/05/06/sars-cov-2-et-covid-19-on-va-jouer-sur-les-mots/`)