

FRANCESCO BEGHINI

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CURRENT POSITION MSc INTERNSHIP AT THE LABORATORY OF COMPUTATIONAL METAGENOMICS – CIBIO

I am collaborating with Prof. Levi Waldron, PhD (CUNY School of Public Health) analyzing the oral microbiome of subjects enrolled in the NYC-HANES II project to assess the effect of smoking on the oral microbiome.

I also collaborated with Yadira Galeano Castañeda (Universidad de Antioquia) on her PhD project “Characterization of the intestinal microbiome of Colombian *Anopheles albimanus*” and on another project related with *Anopheles gambiae*.

P.I. Dr. Nicola Segata.

CURRENT POSITION TUTOR AT CIBIO

I am involved in tutoring activities for BSc students attending the “Computer Science” and “Computational Biology” courses in the Biotechnology Degree program.

02/2017 – 03/2017 INTERNSHIP AT THE WALDRON LAB

During my one-month internship I visited prof. Levi Waldron laboratory and collaborated with prof. Heidi Jones on the NYC-HANES II oral microbiome smoking project. I also had the opportunity to give several talks with subject the oral microbiome of smokers and a small lesson for PhDs in Epidemiology

11/2014 – 09/2015 BSc INTERNSHIP AT THE LABORATORY OF COMPUTATIONAL METAGENOMICS – CIBIO

For my bachelor thesis, I investigated the presence, genetics and abundance of the *Blastocystis* parasite in the human gut microbiome from shotgun metagenomic data.

P.I. Dr. Nicola Segata.

11/2011 AND 11/2012 VOLUNTEER AT ITIS G. MARCONI, VERONA

Orientation volunteer for incoming middle school students.

06/2010 AND 06/2011 INTERNSHIP AT LOGIN S.R.L. - VERONA

Development of a project management software for a warehouse using the Microsoft .NET framework.

EDUCATION

- 2015 - 2017 MSc IN CELLULAR AND MOLECULAR BIOTECHNOLOGY – NEUROBIOLOGY
Centre for Integrative Biology (CIBIO), University of Trento, Trento (Italy).
- 2012 - 2015 BSc IN COMPUTER SCIENCE WITH SPECIALIZATION IN BIOMOLECULAR SCIENCES
Department of Information Engineering and Computer Science (DISI) joint with
Centre for Integrative Biology (CIBIO), University of Trento, Trento (Italy).
- 2007 - 2012 HIGH SCHOOL DIPLOMA: INDUSTRIAL ENGINEER IN COMPUTER SCIENCE
Industrial Technical School Guglielmo Marconi, Verona (Italy).

PUBLICATIONS

- 2017 Edoardo Pasolli, Lucas Schiffer, Audrey Renson, Valerie Obenchain, Paolo Manghi, Duy Tin Truong, [Francesco Beghini](#), Faizan Malik, Marcel Ramos, Jennifer B Dowd, Curtis Huttenhower, Martin Morgan, Nicola Segata, Levi Waldron.
Accessible, curated metagenomic data through ExperimentHub. Nature Methods
- 2017 Adrian Tett, Edoardo Pasolli, Stefania Farina, Tin Duy Truong, Francesco Asnicar, Moreno Zolfo, [Francesco Beghini](#), Federica Armanini, Olivier Jousson, Veronica De Sanctis, Roberto Bertorelli, Giampiero Girolomoni, Mario Cristofolini, Nicola Segata.
Unexplored diversity and strain-level structure of the skin microbiome associated with psoriasis. Nature Biofilms and Microbiomes
- 2017 [Francesco Beghini](#), Edoardo Pasolli, Duy Tin Truong, Lorenza Putignani, Simone M. Cacciò, Nicola Segata.
Large-scale comparative metagenomics of Blastocystis, a common member of the human gut microbiome. ISME Journal

TALKS

- 13/02/2017 Smoking and the oral microbiome in the New York City Health and Nutrition Examination Study (NYC-HANES II) – New York University, NY, USA
- 14/02/2017 Smoking and the oral microbiome in the New York City Health and Nutrition Examination Study (NYC-HANES II) – Albert Einstein Medical College of Medicine, NY, USA
- 22/02/2017 Smoking and the oral microbiome in the New York City Health and Nutrition Examination Study (NYC-HANES II) – City University of New York, NY, USA
- 23/02/2017 Smoking and the oral microbiome in the New York City Health and Nutrition Examination Study (NYC-HANES II) – Columbia University, USA
- 02/03/2017 Brief lesson given to Epidemiology PhD students about metagenomics, oral microbiome and the NYC-HANES II project at the City University of New York, NY, USA

AWARDS

02/2017 MICROBIOME IN HEALTH AND DISEASE – KEYSTONE SYMPOSIA, COLORADO, USA

I was awarded a Keystone Symposia “Future of Science” scholarship and selected for a poster entitled “**Large-scale metagenomic analysis of Blastocystis in the human gut revealed high prevalence and association with BMI and archaeal abundance**”.

POSTERS

02/2017 MICROBIOME IN HEALTH AND DISEASE – KEYSTONE SYMPOSIA, COLORADO, USA

Francesco Beghini, Edoardo Pasolli, Duy Tin Truong, Lorenza Putignani, Simone M. Cacciò, Nicola Segata

Large-scale metagenomic analysis of Blastocystis in the human gut revealed association with Body Mass Index and archaeal abundance

04/2017 ECCMID – WIEN, AUSTRIA

Serena Manara, Edoardo Pasolli, Daniela Dolce, Federica Armanini, Francesco Beghini, Novella Ravenni, Erica Camera, Grazia Dinnella, Paola Gualdi, Michele Schinella, Silvia Campana, Ermanno Baldo, Giovanni Taccetti, Nicola Segata

Genomic and metagenomic-based epidemiology and transmission networks of MRSA in two Italian hospitals

07/2017 CAMDA2017 – PRAGUE, CZECH REPUBLIC

Moreno Zolfo, Federica Pinto, Francesco Asnicar, Francesco Beghini, Paolo Manghi, Edoardo Pasolli, Adrian Tett and Nicola Segata

Strain-level bacterial and viral diversity in the MetaSUB dataset

CONFERENCES

02/2017 MICROBIOME IN HEALTH AND DISEASE – KEYSTONE SYMPOSIA, COLORADO, USA

02/2017 SECOND WORKSHOP ON CHALLENGES IN MICROBIOME DATA ANALYSIS – THE BROAD INSTITUTE, BOSTON, USA

LANGUAGES

Italian: Mother tongue

Spanish: Bilingual proficiency

English: Professional working proficiency

SKILLS

I have a very good experience with Linux and Windows OS' with a good knowledge of bioinformatic and computational biology tools. I use Bash, R and Python every day. Other known programming languages are Java, C/C++/C#, JavaScript, PHP, HTML, SQL and .NET framework.

During the laboratory trainee activities in my BSc and MSc I acquired some molecular biology related skills and during my internship at the Waldron Lab I acquired statistical and basic epidemiology skills.

OTHER ACTIVITIES

I am co-founder and web-editor of **RagionevolMente**, an Italian no-profit association devoted to science communication.

In collaboration with Alessio Gorla I developed "**Aule Libere UNITN**", an Android application for University of Trento students. The app lists rooms in which lectures are not currently being held and are therefore available as study rooms. Available on Google Play Store.

LINKS

Laboratory of Computational Metagenomics – <http://cibiocm.bitbucket.org/>

Linkedin Profile – www.linkedin.com/in/fbeghini

RagionevolMente – www.ragionevolmente.it