

## Announcement of Training Event E

on "wastewater treatment by advanced technologies and risk assessment framework",  
and

### 1<sup>st</sup> ANSWER Workshop

on "risk prognosis of environmental and public health aspects of antibiotics and antibiotic-resistant bacteria and antibiotic resistance genes (A&ARB&ARGs)"

**September 4-6, 2017, Fisciano (SA), Italy**

The Università degli Studi di Salerno (UNISA) and the Istituto Superiore di Sanità (ISS) organize a Training Event (TE) on "Wastewater treatment by advanced technologies and risk assessment framework" and the 1<sup>st</sup> workshop on "risk prognosis of environmental and public health aspects of A&ARB&ARGs" in the framework of ANSWER/H2020-MSCA-ITN-2015/675530 project, which will be held in Salerno, Italy on 4 - 6 of September, 2017. This event will be hosted by Prof. Luigi Rizzo at the UNISA (Fisciano (SA), Italy). Ten (10) Early-Stage Researchers (ESRs) will participate in this event.

The aim of the combined TE-E and 1<sup>st</sup> ANSWER workshop is to provide ANSWER ESRs with professional and personal development opportunities beyond what they are generally exposed to in the course of their Ph.D. training. The TE-E will provide to ESRs a multidisciplinary overview on new technologies/processes for tertiary/advanced treatment of urban wastewater and microcontaminants removal. New treatment technologies/processes used for purification and disinfection of urban wastewater, including adsorption, oxidation/disinfection, homogeneous and heterogeneous photocatalytic processes will be presented. In addition, new materials (e.g. catalysts, adsorbents, etc.) specifically designed to improve the efficiency of advanced treatment technologies/processes and their possible applications will be introduced. The 1<sup>st</sup> ANSWER workshop will address direct/indirect human health risk associated to the presence of microcontaminants in wastewater.

This training will involve **lectures** and **technical visit at a wastewater treatment plant**.



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Genomix4Life S.r.l. (<http://www.genomix4life.com>) is an innovative start-up, spin-off of the University of Salerno (Laboratory of Molecular Medicine and Genomics) founded in July 2013 with the aim of biomarker discovery and development towards the use in clinical practice. It is a leading provider of genomics services and solutions, with cutting edge next generation sequencing (NGS), microarray and bioinformatics equipment and expertise.

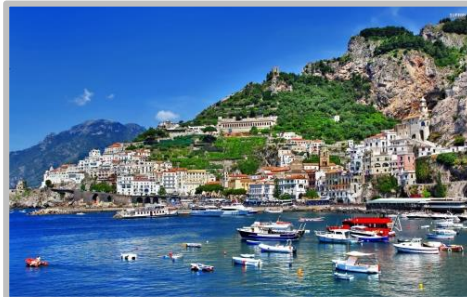
#### Other information:

- ✓ A number of vacancies (10) is available in this training event for **Ph.D. students in the field of Chemical/Environmental Engineering and Environmental Sciences**, not integrated in the ANSWER project.
- ✓ Applicants for the vacancies should submit their application to Prof. Luigi Rizzo by email ([l.rizzo@unisa.it](mailto:l.rizzo@unisa.it)). If admitted they are expected to cover they travel and stay costs. The participation to the event is free of charge and coffee-breaks and lunches during the 3 days will be provided by the organization for free. **All applications should be submitted no later than July 30, 2017.**
- ✓ Successful applicants will be contacted directly by e-mail by **August 4, 2017.**
- ✓ **Travel and accommodation must be arranged and covered by each participant after the receipt of the acceptance email.**

### Training Event E / 1<sup>st</sup> ANSWER workshop topics

Through TE-E/ 1<sup>st</sup> ANSWER workshop the following aspects will be tackled:

- Tertiary/advanced treatment technologies (e.g. adsorption, oxidation, disinfection, photocatalytic processes, etc.);
- Development and potential application of new materials (e.g. catalysts, absorbents, etc.) for water/wastewater treatment applications;
- Chemical and microbiological risk assessment approaches;
- Characterization of target and non-target organic contaminants of emerging concern;
- Risk assessment related to wastewater microcontaminants;
- Applications of Next Generation Sequencing in Metagenomics Studies;
- Molecular methods for the detection of Antibiotic Resistance in environmental matrices;
- *In vitro* assays on cell lines to investigate toxicity of environmental contaminants;
- Life Cycle Assessment application to urban wastewater treatment.



In addition to studying, the students will have the opportunity to explore the city in their free time.