## ISSNAF – An Interview with Antonio Giordano

In the last months the dramatic situation concerning La terra dei fuochi "The land of fires" in Southern Italy seems to be getting more and more attention by the Italian public opinion. It is not only a local problem.

In a way it can be considered a symbol of how the indiscriminate industrialization made by men becomes a boomerang against men themselves. The health effects of widespread toxic dumping are dramatically increasing around our planet.

Professor Giordano, you have been very active in denouncing mistakes and responsibilities. On your opinion how can we stop this vicious cycle, orienting development toward solutions of sustainable living?

First, awareness is the key. Citizens must become aware that their health status is strongly affected by the surrounding environment. Our life expectancy depends not only on our life style habits but also on where we live and to what we are exposed, which is often hard to control. Once such awareness is raised, people need to pretend that rigid laws are issued (and respected!) against environmental crimes, including pollution and toxic waste disposal. Also, citizens altogether, for their own long-term safety, need to dismantle the corrupted network behind environmental crimes, a network that, unfortunately, acts at every level and involves not only criminals but also people within the institutions.

Working together with local associations, we started denouncing mistakes and responsibilities and to advice on the health effects of hazardous practices. We were accused of creating a social alarm but at least now the problem of 'Terra dei fuochi' cannot be denied and our message from local went global. I am grateful to the Italian president Napolitano who wrote to thank me for my efforts highlighting the importance of conducting an independent research. Recently, also the Nature journal in the editorial entitled 'A toxic legacy' dealt with the 'Terra dei fuochi' issue using my own definition of Campania as a large open-air laboratory of environmental carcinogenesis wherein the citizens themselves act as test subjects. In the article it was mentioned the need to dedicate European funds for a biomonitoring research programme.

So, although it is good that now everyone is aware of the problem, we need to avoid any kind of economic (or other) speculation about what became a trendy topic. Fortunately the quality of scientific communication improved and the number of scientific journals increased so that also uncomfortable studies and not only trendy topics can find proper space.

Prof. Giordano, you are the President and Founder of the Sbarro Health Research Organization and Professor of Molecular Biology at Temple University in Philadelphia. At the same time you are Professor in the Department of Pathology & Oncology at the University of Siena, Italy.

Your successful activity brings you to work both in Italy and in the States. So you are in the best position to give an opinion about the differences between the 2 countries in the educational and making carrier systems. Can you tell us also about the actual status of exchanges and interaction between the 2 scientific communities? Do you have any suggestions to improve them with a special attention to the young generation?

With the Sbarro Institute we created a successful model for the education of researchers in the biomedical field. We established a solid virtual bridge connecting Italy with the US. We believe that our job requires not only a limited-in-time experience abroad, rather, we work to define a path for researchers and help them to establish successful collaborations within a wide network of scientists with different expertise, operating in different structures (including Italian Universities) and mastering various techniques.

Being part of a long-term collaborative network guarantees the continuity necessary to develop successful research programs. So far about 20 researchers who worked with me in the Sbarro facilities obtained in Italy the National Scientific Qualification to serve as Full or Associate Professors in the Italian Universities. This means that our researchers gain a high scientific profile, above the median values set by the Italian Ministry.

Is it any way to make the Italian community living in the States more aware of Italian problems in order to give a push and help to solve them in a concrete way? (for example regarding problems of la terra dei fuochi). What kind of approach do you suggest in this direction?

I am often contacted by American and other International reporters we are interested in the Land of Fires story. I usually work with them side-by-side providing contacts with local institutions, such as the 'Corpo Forestale' (Italian rangers, led by Generale Sergio Costa), patients, doctors, No profit Associations and activists, including Church representatives such as don Maurizio Patriciello, so that they can see the whole picture and tell the story from all the different angles. I am also presenting my book "Campania, Terra di Veleni" (Campania Land of Poison), across the country and people from the Italian community are very interested.

Environmental crimes are not confined by borders therefore they need to be tackled through a joint effort. The identification of high-risk areas and criminal groups is crucial to tailor joint operations with the ultimate goal of territory recovery, development and health care and prevention strategies.

What is your point of view regarding the phenomenon of brain drain in Italy? Do you see any possibility to slow down this process or to convert it in a 'brain gain' or 'brain circulation' stimulating exchanges and new opportunities for Italy?

The phenomenon of brain drain consists in an intellectual immigration of people with a high potential who cannot find qualifying job opportunities. Such immigration has been present for decades but is ever increasing because Italy does not succeed in attracting workers. The government needs to invest in technological transfer, it needs to promote the development of patents that can be exploited commercially to create and offer new employment opportunities.

Moreover, the Italian system is not meritocratic — they need specialized servants and not independent minds able to develop their own programmes. So, while there are no investments to promote technological development, the reservoirs are continuously emptied of the intellectual fuel, which is necessary to drive new developmental strategies, something that cannot be done by the current working class often hired without meritocratic criteria.

Unfortunately the phenomenon of brain drain is often used to shift the attention from the real problem, which is the inability to create job opportunities.

What do you think about the ISSNAF activity as a bridge between Italy and North America? Can you give any advice to make it gain ground in reaching its goal?

The concepts at the base of the ISSNAF project are potentially winning and ISSNAF could indeed represent an important bridging structure filling in the oceanic gap. What is crucial according to me is that ISSNAF has to struggle to maintain its organizational independence and make quality choices. They need to enroll successful Italians willing to help constructively to develop and build up programs able to tackle the well known criticalities of the system. Successful characters who are just able to criticize without taking serious commitments and help to improve are just worthless.

See also: https://www.issnaf.org/italians/intervista-con-antonio-giordano.html