



Simone Barani

Fixed-term assistant professor

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Education and training

2007

Ph.D. in Geophysics

Probabilistic Seismic Hazard Analysis (PSHA) Declustering Logic Tree
Sensitivity and Treatment of Uncertainties

University of Genoa - Genoa - IT

2003

Master Degree

Pericolosità Sismica e Fenomeni di Amplificazione Locale in Toscana il caso
della Garfagnana - 110/110 e lode

University of Genoa - Genoa - IT

Academic experience

2017 - ONGOING

Researcher

University of Genoa - Genoa - IT

Lecturer in charge of Seismic Hazard and Risk and 'Dinamica dei Terremoti'

2007 - 2016

Research fellow

University of Genoa - Genoa - IT

Task and research unit coordinator within the framework of the S2-2012 and
S2-2014 DPC-INGV project Constraining OBServations into Seismic hazard
(COBAS)

2004 - 2006

PhD Student

University of Genoa - Genoa - IT

Work experience

2009 - ONGOING

CEO and consultant of the spin-off company GEAmb SRL

GEAmb SRL - Genoa - IT

2006 - 2008

Consultant for D'Appolonia SpA

D'Appolonia SpA - Genoa - IT

Language skills

English

Independent

Teaching activity

Currently, I am lecturer in charge of the “Seismic Hazard and Risk” course within the framework of the master degree course (Laurea Magistrale) of “Engineering for Natural Risk Management”, and co-lecturer of “Dinamica dei Terremoti” within the framework of the bachelor degree course (Laurea Triennale) in Geologic Sciences.

In 2009, I was teaching assistant of Prof. Christopher H. Scholz (Columbia University, NY) during the MSc/PhD degree course “The Mechanics of Earthquakes and Faulting”, Rose School – Centre for Post Graduate Training and Research in Earthquake Engineering and Engineering Seismology (Pavia, Italy), April 20 – May 15, 2009.

Moreover, I was supervisor of one bachelor degree thesis and one master degree thesis.

Postgraduate research and teaching activity

Supervision of PhD students, residents and post-doctoral fellows

I am currently supervisor of a Ph.D. student of the University of Pisa (Claudia Mascandola).

Postgraduate (PhD) teaching activity

On March 2018 I was appointed by the DISTAV director (Prof. M. Mariotti) as lecturer of “Elementi di Probabilità e Statistica” within the framework of the “Scienze e Tecnologie per l'Ambiente e il Territorio” (Ciclo XXXII e XXXIII) Ph.D. course.

Research interests

Major research interests are: Probabilistic Seismic Hazard Analysis, Earthquake Forecasting, Site Effects and Ground Response, Earthquake Dynamics, and Seismotectonics

Grants

2014 - 2015

DPC-INGV S2-2014 project Constraining OBservations into

Seismic hazard (COBAS)

Istituto Nazionale di Geofisica e Vulcanologia - IT
33.000 euro - Participant

2012 - 2013

DPC-INGV S2-2012 project Constraining OBServations into Seismic hazard (COBAS)

Istituto Nazionale di Geofisica e Vulcanologia - IT
10.000 euro - Participant

Editorial activity

I am reviewer for *Bulletin of the Seismological Society of America*, *Tectonophysics*, *Bulletin of Earthquake Engineering*, *Earthquake Spectra*, *Journal of Risk and Uncertainty in Engineering Systems*, *Scientific Research and Essays*, and *Annals of Geophysics*.

Assignments abroad

In 2016, I received a grant (2.000 €) by the University of Genoa to carry out a one-month research (17 Oct. – 17 Nov. 2016) at the German Research Centre for Geosciences (GFZ), Potsdam. He received the grant within the framework of the D.R. n. 1924 concerning the funding of short research periods in foreign institutes. The research proposal submitted by Dr. Barani concerned the computation of site-specific probabilistic seismic hazard in the Abruzzo region by integration of soil amplification functions determined through the generalized inversion technique.

In 2009, I was teaching assistant of Prof. Christopher H. Scholz (Columbia University, NY) during the international MSc/PhD degree course “The Mechanics of Earthquakes and Faulting”, Rose School – Centre for Post Graduate Training and Research in Earthquake Engineering and Engineering Seismology (Pavia, Italy), April 20 – May 15, 2009.

Other professional activities

I am the co-founder and managing director of GEAmb S.r.l., a spin-off company born at the University of Genoa (October 2009) from the scientific and professional experience of Dr. Barani and other researchers. Major projects are:

- Analisi delle Condizioni Limite per L’Emergenza (CLE) e definizione dell’Indice di Operatività Strutturale (IOPS) per alcuni Comuni ed edifici strategici del ponente Ligure nell’ambito delle “attività di prevenzione del rischio sismico in applicazione dei disposti dell’OCDPC 171 del 19 giugno 2014” (2017-2018).
- Seismic monitoring of the San Alberto gas field (Po Valley Operations PTY LTD), San Pietro in Casale (Bo) (2016-2018).
- Seismic monitoring of the historical building sited in Ponte dei Mille, Genoa (2016-2018).

Seismic monitoring of structures during the dredging activities in the Genoa

harbor (2012).