

Name:	Paola Reichenbach Mail: Tel.
Nationality	Italian
Company:	CNR IRPI
Education:	March - November 1991: visiting scientist at U.S. Geological Survey, Menlo Park, California February 1987: Professional geology licensure April 1986: Master Degree in Geology. Facoltà di Geologia dell'Università degli Studi di Perugia (Level in national classification: 110/110 cum laude)
Current position: Senior Researcher at IRPI-CNR	
Professional experience	<p>January 2010 to present: Senior Research scientist at IRPI-CNR (Research Institute for Geo-Hydrological Protection of the National Research Council),</p> <ul style="list-style-type: none"> • Landslide identification and mapping; • methods for landslide susceptibility and hazard assessment, exploiting GIS technology and statistical tools; • geomorphometry analysis; • qualitative and quantitative methods for landslide risk evaluation; • spatially distributed rock fall modelling for hazard assessment and risk evaluation. <p>October 2001 - December 2009: Research scientist at IRPI-CNR June 1990 - September 2001: Grants and Research scientist (Temporary positions) at IRPI-CNR May 1983 - May 1989: Technical assistant at British Petroleum Dev. Italy, Assago (Milano).</p>
Master Teaching	<ul style="list-style-type: none"> • (2016) Teaching on "Dagli archivi sugli eventi storici alle carte inventario sui fenomeni di dissesto idrogeologico". Master di II livello in Analisi e Mitigazione del Rischio Idrogeologico, anno 2016, organized by Centro di Ricerca CERi Previsione, Prevenzione e Controllo dei Rischi Geologici e Facoltà di Scienze Matematiche, Fisiche e Naturali, Università La Sapienza (3.5 hours). • (2015) Lesson on "Dagli archivi sugli eventi storici alle carte inventario sui fenomeni di dissesto idrogeologico". Master di II livello in Analisi e Mitigazione del Rischio Idrogeologico, organized by Centro di Ricerca CERi Previsione, Prevenzione e Controllo dei Rischi Geologici e Facoltà di Scienze Matematiche, Fisiche e Naturali, Università La Sapienza (3.5 hours). • (2014) Lesson on "Struttura e utilizzo degli archivi sugli eventi storici". Master di II livello in Analisi e Mitigazione del Rischio Idrogeologico, organized by Centro di Ricerca CERi Previsione, Prevenzione e Controllo dei Rischi Geologici e Facoltà di Scienze Matematiche, Fisiche e Naturali, Università La Sapienza (3.5 hours). • (2013) Lesson on "Struttura e utilizzo degli archivi sugli eventi storici". Master di II livello in Analisi e Mitigazione del Rischio Idrogeologico, organized by Centro di Ricerca CERi Previsione, Prevenzione e Controllo dei Rischi Geologici e Facoltà di Scienze Matematiche, Fisiche e Naturali, Università La Sapienza (3.5 hours).

Participation to the following projects activity:

Responsible of task E: Geohazard impact assessment of the project Safety: (Sentinel for Geohazards regional monitoring and forecasting) funded by European Commission, Directorate-General Humanitarian Aid and Civil Protection - ECHO (Ref No: ECHO/SUB/2015/718679/PREV02).

Participant to the project "Multi Scale and Multi Hazard Mapping Space based Solutions - MEMPHIS" funded by ESA (Response to ITT N° AO/1-8130/14/F/MOS)

Response to ITT N° AO/1-8130/14/F/MOSEuropean Project LAMPRE "Landslide Modelling and tools for vulnerability assessment Preparedness and REcovery management": Responsible of Task 5.4 "Standards for landslide mapping and quality assessment" and task 6.3 "Standards for landslide susceptibility modelling and zonations"; Participating to WP3 "Site characterization & geo-databases", WP7 "Tools & product validation", and WP9 "Dissemination".

Responsible of WP5 "Assessment maps delivery and design of risk scenarios" of the European FP7 Project DORIS (Space Call 2 FP7-SPACE-2009-1). The project is an advanced downstream service for the detection, mapping, monitoring and forecasting of ground deformations, including landslides and ground subsidence, at different temporal and spatial scales and in various physiographic and environmental settings.

Responsible of the WP3 (Development of a probabilistic risk assessment platform) and supervisor of one PhD student in the CHANGES project. The project is a Marie Curie Initial Training Network, that will develop an advanced understanding of how global changes, related to environmental and climate change as well as socio-economical change, will affect the temporal and spatial patterns of hydro-meteorological hazards and associated risks in Europe; how these changes can be assessed, modeled, and incorporated in sustainable risk management strategies, focusing on spatial planning, emergency preparedness and risk communication.

IRPI-CNR R&D activities for the Umbria Regional Government for the landslide risk assessment in selected areas in Umbria and for the preparation of a landslide susceptibility assessment at regional scale (2008-2014). Scientific responsible for the research activity.

Progetto Pilota Protezione Civile dalle Frane MORFEO, Monitoraggio del rischio da frana con tecnologie EO (Pilot Project MORFEO: MONitoring and Landslide Risk by using EO data), Italian Space Agency (2005 - 2010).

CNR Team Leader (IRPI, IMAA e IREA), Progetto Europeo Eurorisk PREVIEW, Prevention, Information and Early Warning pre-operational services to support the management risks. Project Leader EADS ASTRIUM SAS, Toulouse, France (45 months from 1 April 2005).

IRPI-CNR R&D activities for the Italian National Department for Civil Protection for the prediction of rainfall-induced landslides and associated risk in Italy (2007 - present). Responsible of the scientific activities. The activities are focused mainly to: the development of rainfall thresholds for the triggering of landslides and for the assessment of landslide susceptibility, hazard and risk on the Italian

	territory at national scale; evaluation of the landslide risk for the population on the Italian territory.
	E2-C2 "Extreme Events: Causes and Consequences", European FP6 project (2005 - 2008).
	INTERREG IIIB RISK-AWARE, RISK-Advanced Weather forecasting system to Advice on Risk Events and management (2004 - 2006).

Articles on JRC journals

GOOGLE SCHOLAR: Citazioni=10517; h-index=42; i-10index=66

- Reichenbach, P., Rossi, M., Malamud, B., Mihir, M., & Guzzetti, F. (2018). A review of statistically-based landslide susceptibility models. *Earth-Science Reviews*.
- Schlögel, R., Marchesini, I., Alvioli, M., Reichenbach, P., Rossi, M., & Malet, J. P. (2018). Optimizing landslide susceptibility zonation: Effects of DEM spatial resolution and slope unit delineation on logistic regression models. *Geomorphology*, 301, 10-20.
- Wilde, M., Günther, A., Reichenbach, P., Malet, J. P., & Hervás, J. (2018). Pan-European landslide susceptibility mapping: ELSUS Version 2. *Journal of Maps*, 14(2), 97-104.
- Alvioli, M., Marchesini, I., Reichenbach, P., Rossi, M., Ardizzone, F., Fiorucci, F., Guzzetti, F. (2016). Automatic delineation of geomorphological slope units with r. slopeunits v1.0 and their optimization for landslide susceptibility modeling. *Geoscientific Model Development*, 9(11), 3975.
- Rossi, M., Reichenbach, P. (2016). LAND-SE: a software for statistically based landslide susceptibility zonation, version 1.0. *Geoscientific Model Development*, 9(10), 3533.
- Schlögel R, Malet J-P, Remy A, Reichenbach P, Doube C (2015). Analysis of a landslide multi-date inventory in a complex mountain landscape: the Ubaye valley case study. *Natural Hazards and Earth System Sciences*, 15, 2369-2389, doi:10.5194/nhess-15-2369-2015
- Mateos Rosa María, García-Moreno Inmaculada, Reichenbach P, Herrera Gerardo, Sarro Roberto, Rius Joan, Aguiló Raúl, Fiorucci Federica (2015). Calibration and validation of rockfall modelling at regional scale: application along a roadway in Mallorca (Spain) and organization of its management. *LANDSLIDES*, vol. 13, p. 2169-2171, ISSN: 1612-5118
- Hussin H Y, Zumpano V, Reichenbach P, Sterlacchini S, Micu M, van Westen C, Bălteanu D (2015). Different landslide sampling strategies in a grid-based bi-variate statistical susceptibility model. *GEOMORPHOLOGY*, vol. 13, p. 2169-2171, ISSN: 0169-555X
- Reichenbach P., Busca C., Mondini A.C., Rossi M. (2014). The influence of land use change on landslide susceptibility zonation: the Briga catchment test site (Messina, Italy). *Environmental Management* 54: 1372. doi:10.1007/s00267-014-0357-0.
- Andreas Günther, Miet Van Den Eeckhaut, Jean-Philippe Malet, Paola Reichenbach, Javier Hervás. (2014) Climate-physiographically differentiated Pan-1 European landslide susceptibility assessment using spatial multi-criteria evaluation and transnational landslide information. *Geomorphology*, vol. 224, 69-85
- Sarro R., Rosa María Mateos, Inmaculada García-Moreno, Gerardo Herrera, Paola Reichenbach, Luís Laín, Carlos Paredes. (2014) The Son Poc rockfall (Mallorca, Spain) on the 6th of March 2013: 3D simulation. *Landslides* 11:493-503 DOI 10.1007/s10346-014-0487-8
- Günther A., Reichenbach P., Malet J.-P., Van Den Eeckhaut M., Hervás J., Dashwood C., Guzzetti F. (2012) Tier-based approaches for landslide susceptibility assessment in Europe. *Landslides*, DOI 10.1007/s10346-012-0349-1.
- Ardizzone F., Basile G., Cardinali M., Casagli N., Del Conte S., Del Ventisette C., Fiorucci F., Garfagnoli F., Gigli G., Guzzetti F., Iovine G., Mondini A.C., Moretti S., Panebianco M., Raspini F., Reichenbach P., Rossi M., Tanteri L. & Terranova O. (2012): Landslide inventory map for the Briga and the Giampileri catchments, NE Sicily, Italy, *Journal of Maps*, DOI:10.1080/17445647.2012.694271.
- Parise M., Iovine G.R., Reichenbach P., Guzzetti F., editors (2012) Introduction to special

- issue "Landslides: forecasting, hazard evaluation and risk mitigation". *Natural Hazards*, Vol. 61: 1-4, doi: 10.1007/s11069-011-9991-5.
- Harp E.L., Dart R.L., Reichenbach P. (2011) Rock fall simulation at Timpanogos Cave National Monument, American Fork Canyon, Utah, USA. *Landslides*, doi: 10.1007/s10346-010-0251-7.
- Katz O., Reichenbach P., Guzzetti F. (2011) Rock fall hazard along the railway corridor to Jerusalem, Israel, in the Soreq and Refaim valleys. *Natural Hazards*, Vol. 56, Issue 3, 649-665, doi: 10.1007/s11069-010-9580-z.
- Mondini A.C., Guzzetti F., Reichenbach P., Rossi M., Cardinali M., Ardizzone F. (2011) Semi-automatic recognition and mapping of rainfall induced shallow landslides using satellite optical images. *Remote Sensing of Environment*, Vol. 115, 1743-1757, doi:10.1016/j.rse.2011.03.006.
- Palma B., Parise M., Reichenbach P., Guzzetti F. (2011) Rock fall hazard assessment in a sample area of the Sorrento Peninsula (Campania, southern Italy). *Natural Hazards*, doi: 10.1007/s11069-011-9899-0.
- Rossi M., Guzzetti F., Reichenbach P., Mondini A.C., Peruccacci S. (2010) Optimal landslide susceptibility zonation based on multiple forecasts. *Geomorphology*, Vol. 114, 129-142, doi:10.1016/j.geomorph.2009.06.020.
- Reichenbach P. and Guenther A., editors (2010) Preface to special issue "Methods and strategies to evaluate landslide hazard and risk". *Nat. Hazards Earth Syst. Sci.*, 10: 2197-2198, doi: 10.5194/nhess-10-2197-2010.