

Enterprise	University	EPR			
☐ Management Level	☐ Full professor	Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator			
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist			
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator			

#### **WORK EXPERIENCE**

# 2023 Program Director

CIMA Research Foundation

• Research and operative experience in civil protection planning, at different territorial levels, with reference to participatory planning techniques for the development of the awareness of technicians, administrators, and citizens. Integrated land management for risk mitigation. Local institutional support. Risk communication. Operating Procedures for the management of alert systems. Liability in civil protection. Project manager of many national and international research projects

<u>Business or sector:</u> Disaster Risk Reduction, Climate Change Adaptation , Prevention and preparedness in disaster management

# 2017 - 2022 Head of "Planning and Procedure" Department

CIMA Research Foundation

- Research and operative experience in civil protection planning
- Local institutional support. Risk communication. Operating Procedures for the management of alert systems. Liability in civil protection
- Project manager of national and international research projects

Business or sector: DRR, CCA, Prevention and preparedness in disaster management

## 2009 – 2017 **Project Leader**

CIMA Research Foundation

- Preparation and management of national and international research projects.
- Expert on civil protection planning
- Development and management of early warning systems for severe hydro-meteorology events

Business or sector: Prevention and preparedness in disaster management

# 2001 – 2011 Head of Operational Room

CIMA Research Foundation

Forecast and monitoring flood and forest fire. The aim of this activities was to manage and control
the daily data flow (rain gauges, remote sensing observations, meteorological models' outputs), to
estimate the flood risk and to issue a hydro-meteorological report for national and regional civil
protection agencies

Business or sector: Forecast and monitoring of Natural Hazard

# 2006 – 2009 Technical position

University of Genoa

 Research and operative experience in hydrology and flash flood forecasting with particular emphasis on defining rainfall and hydrologic thresholds. Development of operational systems for civil protection purposes aiming to the reduction of natural hazard effects, flooding and intense precipitation events.

Business or sector: Applied research

## 2003 Research position

Italian National Research Council - National group for the defence of hydrogeological disasters

Analysis of high resolution DEM

Business or sector: Applied research

#### **EDUCATION AND TRAINING**

# 2002 Graduated in Environmental Engineer

Thesis title: "Pluviometric threshold for early warning"

110/110

University of Genova

Hydrology, hydraulics, Watershed management,

#### LANGUAGE SKILLS

Mother tongue(s)

Italian

Other language(s)

English French

	Understanding			Speaking				Writing		
		Listening	Reading		Spoken interaction		Spoken production			
	C1	Proficient user	C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user
	В1	Independent user	В1	Independent user	A2	Basic user	A2	Basic user	A2	Basic user

<sup>(\*)</sup> Common European Framework of Reference for Languages

## **WORK ACTIVITIES**

Job-related skills

Marina graduated in 2002 in Environmental Engineering from the University of Genova, and in the same year joined CIMA Research Foundation as head of the Operational Room which is in charge of the forecast and monitoring of flood and forest fire for Italy. Today Marina, a senior researcher, is the head of "Planning and Procedures" department with a focus on development of standard operating procedures for the management of Early Warning Systems for severe hydro - meteorology events. She has a broad expertise in disaster flood risk reduction through the implementation of non-structural prevention measures, including preparedness and expertise on civil protection planning. Over the years, Marina has specialized in the study and analysis of legal and institutional systems of civil protection, management and drafting of European and international projects and development of training curricula in the area of disaster risk management. This experience has grown in the context of international and national projects in different countries such as Italy, France, Spain, Balkans and the Caribbean. From 2013 to 2015 she was board member of the Consortium TICASS (Tecnologie Innovative per il Controllo Ambientale e lo Sviluppo Sostenibile). TICASS is the Managing Body of the Ligury Research and Innovation Hub "Energy, Environment, Sustainable Development. From June 2021 she is member of the working group of the Italian Civil Protection Department for the definition of the "Operational indications concerning the information organisation of territorial data necessary for the implementation of an integrated IT platform called "national catalogue of civil protection plans".

### Main projects

2022-Present: co-Spoke Leader TS3. Communities' resilience to risks: social, economic, legal and cultural dimensions. RETURN (Multi-Risk Science for Resilient Communities under a Changing Climate) is a project funded under the Italian PNRR (Piano Nazionale Ripresa e Resilienza – National Recovery and Resilience Plan) and lasting five years (December 2022 – November 2025); specifically, it is an extended partnership funded under Mission 4, Component 2: From Research to Enterprise.

2018-Present: CIMA Foundation – Italian Civil Protection Department Contract: Applied research contract for advances in flood and forest fire forecast procedures and action of international cooperation. Coordinator of WP 8 "Civil protection planning" and WP11 "Observatory of good practices". In particular the WP8 deal with Promotion of civil protection planning models able of coordinating and integrating socio-economic and risk management aspects through participatory decision-making processes, in order to develop a more effective and efficient governance and strengthening community resilience

2019—Present: CIMA Foundation - Italian Civil Protection Department "IT-Alert, national alert O" Contract. Main project features Developing of The Italian Public Warning System sends notifications to citizens' smartphones and cell phones in areas at risk of being impacted by hazardous events or when an emergency is in progress, promoting safe behaviors and supporting civil protection activities. Related to this system will be realized a catalogue of civil protection plans at all level in order to allow to citizen present in affected (or prone) areas to risk, to know the specific protection measures to adopt. Coordinator of WPs related to the development of a national catalogue of Civil Protection Plans, and of the WP on testing the IT-Alert system with the involvement of the population.

2020: Project Manager of the training course on Disaster Risk Reduction and emergency planning for WeWorld-GVC in the framework of the project "RESILIACT: Resilience-strengthening of local communities through a transnational EU Aid Volunteers capacity building action"

2017 - Present: Project Manager of Project RISK-GEST in the framework of the strategic program PITEM-RISK. European Regional Development Fund. Interreg Maritime Italy-France 2014-2020.

2016-2020: Project Manager of strategic Project PROTERINA-3Évolution. European Regional Development Fund. Interreg Maritime Italy-France 2014-2020. The Project aims at improving the capacity of institutions to prevent and better manage flood risk, by improving early warning systems and forecasting networks, by strengthening cross border cooperation and by developing an integrated risk mitigation chain. The main challenge of the project is creating resilient communities by involving local stakeholders and institutions in co-building DRR policies and local civil protection plans so strengthening local risk governance. Activities performed: involvement of communities and administrators to define DRR policies, improving of monitoring and forecast of floods, risk awareness-building process of institutions and communities to strengthening the coping capacity

2019-2020 CIMA Foundation – Autonomous Province of Bolzano - South Tyrol Contract: Technical support to the development of Directive for early warning system of the Prov. of Bolzano

2013-2020: Project Manager of agreement with the municipality of Genoa for the support on the developing of the local civil protection plan.

2008-2018: CIMA Foundation - Italian Civil Protection Department Contract: Applied research contract for advances in flood and forest fire forecast procedures and action of international cooperation.

2013-2015: Project Proterina-Due European Regional Development Fund. Maritime Italy-France 2007-2013.

for Hyd

2013-2015: Project Manager - DG ECHO. EVRECA. European Volunteers for Response of Emergencies in the Caribbean.

2011-2015: FP7: DRHIM: Distributed Research Infrastructure ro-Meteorology.

2010: Project Manager of CIMA Foundation and Italian Prime Minister's Office, Department of Regional Affairs Contract: "Operational Guidelines for development of the organization of local authorities (Regions, Provinces, Municipalities) in preventing and managing natural disasters, under the framework of the different institutional roles" as part of the National Operational Program - Governance and System Actions (PON-GAS), specific objective 5.2. The project aims to disseminate guidelines useful to support and train all actors, both at central and local level, involved in decision-making processes on the subject of natural disasters. Another objective is to bring to the attention of the same key actors, any duplication of roles, both in the prevention phase and in the management of natural disasters.

2009-2011: FP7. DRHIMS: Distributed Research Infrastructure for Hydro-Meteorology Study.

2009: CIMA Foundation and Venezuela Government contract: CENAPRAD – Activities of preparedness and training for Civil Protection Managers.

2007-2011: CIMA Foundation ASI (Italian Space Agency) Contract: PILOT PROJECT "OPERA – Civil Protection from Floods.

2005-2008: CIMA - National Civil Protection Department Contract: PROSCENIO – research contract for advances in flood forecast procedures.

2005-2008: CIMA and Valle D'Aosta Region contract for the regionalization of rainfall and maximum discharges and the hydrologic-hydraulic modelling for hydro-geologic risk mitigation.

2001-2004: CIMA—Basilicata Region contract. Project of Italian system of "Centri Funzionali" for national meteo-hydro-pluviometric monitoring aimed to issue meteorological warnings for civil protection scope (ex I. no.267/98 and no.365/00).

2003-2004: CIMA - National Civil Protection contract. Technical and scientific assistance for weather radar data collecting and compositing to monitor small-scale events. Development and improvement of information elaboration and visualization systems for forecast purposes.

2002-2005: P.O.N. project Programma Operativo Nazionale – Development of Industrial Districts for Earth Observation.

2001-2004: CIMA and National Civil Protection. Project of the Italian Meteorological Radar Network.

2002-2007: CIMA - Liguria Region contract. Meteorological Radar Advancement. Management and supervision of the Settepani meteorological radar. Technical Assistance to the Civil Protection Service in case of intense meteorological events.

2002: CIMA - CNR (IRPI – GNDCI) research contract for the definition of rainfall thresholds based on probabilistic evaluation of annual maximum precipitation at national scale.

2002: CIMA - Calabria Region contract on the development of a forecasting and monitoring system aimed to establish the meteo-hydrologic Functional Centre of Calabria Region.

2001: EU project – INTERREG IIC (partners: Italy, France and Spain): Development of a real-time flood forecasting system for civil protection purposes.

**Tutoring activities** 

Several Thesis in various fields of hydro-meteorology and civil protection planning

#### ADDITIONAL INFORMATION

**Publications** 

Altamura M., Morando M., I Piani di protezione civile come laboratori di comunità. In LABSUS. ISSN: 2038-386X. <a href="https://www.labsus.org/2022/06/i-piani-di-protezione-civile-come-laboratori-di-comunita/">https://www.labsus.org/2022/06/i-piani-di-protezione-civile-come-laboratori-di-comunita/</a> 14 giugno 2022

L. Mortara, L. Ferraris, M. Morando, M. Giambelli, and E. Trasforini. A methodology for flood risk mapping at the local scale for Civil Protection purposes. EGU2020-1842, updated on 09 Mar 2020, <a href="https://doi.org/10.5194/egusphere-egu2020-1842">https://doi.org/10.5194/egusphere-egu2020-1842</a>, EGU General Assembly 2020

Morando M., Il Progetto Proterina3Évolution, in "Atti della Giornata di studio su partecipazione e pianificazione di protezione civile: riflessioni ed esperienze Pisa, 26 September 2018, Scuola Superiore Normale, (Available at https://www.cimafoundation.org/docs/reports)

Schiffers, M., D. Kranzlmüller, A. Clematis, D. D'Agostino, A. Galizia, A. Quarati, A. Parodi, M. Morando, N. Rebora, E. Trasforini, L. Molini, F. Siccardi, G. C. Craig and A. Tafferner, <u>Towards a Grid Infrastructure for Hydro-Meteorological Research</u>, Computer Science, 12. pp. 45-62. ISSN 1508-2806

Pagliara, P., Corina, A., Burastero, A., Campanella, P., Ferraris, L., Morando, M., Rebora, N., Versace, C., <u>Dewetra, Coping with Emergencies</u>, Proceedings of the 8th International ISCRAM Conference – Lisbon, Portugal, May 2011

L. Ferraris, P. Pagliara, A. Corina, A. Burastero, P. Campanella, M. Morando, N. Rebora and C. Versace, Dewetra, an ICT-based system for multi-risk forecasting, monitoring and prevention. Geophysical Research Abstracts, Vol. 13, EGU2011-13782, 2011. EGU General Assembly 2011

A. Parodi, M. Morando, N.Rebora, E. Trasforini, G. C. Craig, K. Keilb, D. Kranzlmueller, M. Schiffers, A. Clematis, D. D'Agostino. <u>DRIHMS: enhanced forecasting for a turbulent future</u>. Zero-In fifth Issue eMagazine of the BELIEF II project

Parodi, A., Morando, M., Rebora, N., Trasforini, E., Siccardi, F., Craig, G.C., Tafferner, A., Kranzlmüller, D., Schiffers, M., Clematis, A., D'Agostino, D., Galizia, A., Quarati, A. (2011). DRIHMS: The White Paper (available at https://www.cimafoundation.org/docs/reports/drihms.pdf). ISBN: 978-88-906068-0-9

Morando M. et al., Governance Multilivello per la Prevenzione e Gestione delle Calamità Naturali. Capire, comunicare, decidere, intervenire: come fare rete nel management dei rischi naturali. Una Guida interpretativa per Calabria, Campagna, Puglia e Sicilia. Presidenza del Consiglio dei Ministri - Dipartimento Affari Regionali, Organismo Intermedio PON "Governance e Azioni di Sistema 2007-2013", Asse E Obiettivo Specifico 5.2". Ottobre 2010. (avaible at <a href="https://www.cimafoundation.org/docs/reports/pon-gas.pdf">https://www.cimafoundation.org/docs/reports/pon-gas.pdf</a>)

Silvestro F., N. Rebora, L. Ferraris, M. Morando, P. Alberoni, and A. Fornasiero, Clutter and Rainfall Discrimination by Means of Doppler-Polarimetric Measurements and Vertical

Reflectivity Profile Analysis, 2005, Advances in Geosciences, Vol 2 , pp 135-138. SRef-ID: 1680-7359/adgeo/2005-2-135

Parodi, Antonio & Craig, G. & Clematis, Andrea & Kranzlmüller, Dieter & Schiffers, M. & Morando, M. & Rebora, Nicola & Trasforini, Eva & D'Agostino, Daniele & Keil, K.. (2010). ICT-infrastructures for hydrometeorology science and natural disaster societal impact assessment: the DRIHMS project. -1. 20.



