

ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n.1 posto/i di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera b) della Legge 240/2010 per il settore concorsuale 07/B2 , settore scientifico-disciplinare AGR/05 presso il Dipartimento di Scienze Agrarie e Ambientali (avviso bando pubblicato sulla G.U. n. 3521/2022 del 21/07/2022) Codice concorso 5059

Marco Mina CURRICULUM VITAE

(N.B. IL CURRICULUM NON DEVE ECCEDERE LE 30 PAGINE E DEVE CONTENERE GLI ELEMENTI CHE IL CANDIDATO RITIENE UTILI AI FINI DELLA VALUTAZIONE.)

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

| | |
|-----------------|------------|
| COGNOME | MINA |
| NOME | MARCO |
| DATA DI NASCITA | 02/12/1984 |

TITOLI

TITOLO DI STUDIO

(indicare la Laurea conseguita inserendo titolo, Ateneo, data di conseguimento, ecc.)

Laurea Magistrale in Scienze Forestali e Ambientali, Università degli Studi di Padova, conseguimento: 18/02/2010

Laurea Triennale in Tecnologie Forestali e Ambientali, Università degli Studi di Padova, conseguimento: 22/02/2007

TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI, OVVERO, PER I SETTORI INTERESSATI, DEL DIPLOMA DI SPECIALIZZAZIONE MEDICA O EQUIVALENTE, CONSEGUITO IN ITALIA O ALL'ESTERO

(inserire titolo, ente, data di conseguimento, ecc.)

Dottore in Scienze, Politecnico Federale di Zurigo ETH, Svizzera. Data conseguimento: 18/12/2015.
Titolo tesi: "Forest dynamics, management and ecosystem services: the future of European mountain forests in an era of climate change"

CONTRATTI DI RICERCA, ASSEGNI DI RICERCA O EQUIVALENTI

(per ciascun contratto stipulato, inserire università/ente, data di inizio e fine, ecc.)

Ricercatore a tempo determinato (con borsa di ricerca Marie Skłodowska-Curie fellowship) presso Eurac Research, Istituto per l'Ambiente Alpino, Bolzano/Bozen, Italia. Dal 14/06/2021.

Ricercatore post-dottorato (con borsa di ricerca Fondo Nazionale di Ricerca Svizzero), Université du Québec à Montréal, Centre for Forest Research CEF, Montreal, Canada. Dal 01/04/2018 al 31/05/2021

Ricercatore post-dottorato, Istituto di Ricerca per la Foresta, la Neve e il Paesaggio WSL, Birmensdorf, Svizzera. Dal 01/04/2016 al 31/12/2017

Assistente di ricerca/Candidato PhD, Politecnico federale di Zurigo ETH, Zurigo, Svizzera. Dal 01/04/2012 al 31/12/2015.

Tirocinante di ricerca, Paul Scherrer Institute PSI, Villigen, Svizzera. Dal 01/03/2011 al 31/03/2012.

Assistente tecnico presso studio forestale Paulownia Italia s.r.l. Bolzano vic.no/Venezia Mestre, Italia. Dal 03/2007 al 03/2009.

ATTIVITÀ DIDATTICA A LIVELLO UNIVERSITARIO IN ITALIA O ALL'ESTERO

(inserire periodo [gg/mm/aa inizio e fine], anno accademico, ateneo, corso laurea, numero ore, ecc.)

08/03/2021. Corso Écologie et environnement à l'international (ECO5053), Corso di laurea triennale Ecology and Environment, Université du Québec en Outaouais, Canada. Due lezioni di 6 ore.

12/2018 e 12/2019. Corso di laurea magistrale European Forestry Erasmus Mundus, Università di Lleida, Spagna. Corso: Multi-scale forest dynamics models. Due lezioni di 4 ore.

25/09/2019. Corso di laurea magistrale "Gestion durable des écosystèmes forestiers". Université du Québec à Montréal, Canada. Ciclo di seminari in "Gestione sostenibile degli ecosistemi forestali". Una lezione di 2 ore.

DOCUMENTATA ATTIVITÀ DI FORMAZIONE O DI RICERCA PRESSO QUALIFICATI ISTITUTI ITALIANI O STRANIERI;

(inserire anno accademico, ente, corso, periodo, ecc.)

04-05/2022. Corso di formazione "Assisting in PhD Supervision". Eurac Research, Bolzano, Italy. 2 giorni.

06/2018. LANDIS-II Training Workshop. University of Wisconsin, Madison USA. 2 giorni.

06-09/2018. Landscape Ecology (edX course). ETH Zurich Switzerland. 1 semestre.

12/2018 Complex Network Winter Workshop. University of Vermont e Quebec, Canada. 1 settimana.

01-05/2017 Visiting di ricerca e collaborazione scientifica svolto all'Istituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA-CSIC), Madrid, Spagna. 3 settimane.

06/2016 Nonlinear Regression. Politecnico federale di Zurigo, ETH Zurich Advanced Studies in Applied Statistics, Switzerland. 1 semestre.

2012-2015 Corsi opzionali ed esami qualificatori durante il dottorato di ricerca. 1) Applied Statistical Regression, 2) Robust Statistics, 3) R programming and graphics, 4) Introduction to ArcGIS, 5) Landscape Ecology, 6) Dendroecology, 7) Project Management for research, 8) Scientific Writing for

Research, 9) German language. Institution: Politecnico federale di Zurigo ETH Zurich, Switzerland.
Durate varie (1 semestre - 1 settimana)

2010 Corso tecnico pratico di dendrocronologia e dendroecologia. Università di Padova e WSL
Birmensdorf. S. Vito di Cadore, Italia. 1 settimana

04-05/2009 Visiting di ricerca alla Chinese Academy of Forestry, Pechino, Cina. 2 mesi.

REALIZZAZIONE DI ATTIVITÀ PROGETTUALE

(indicare, data, progetto, ecc.)

2021-2023 Progetto REINFORCE “Integrated landscape management for resilient mountain forests under global changes”. Fondo: Marie Skłodowska-Curie Individual Fellowship, granted by ERC H2020-MSCA-IF- 2019. Ruolo: PI

2018-2019 Progetto “Resilience-based forest management: Coupling spatially explicit tree-community and landscape models with functional diversity science using network theory”. Fondo: Swiss National Science Foundation - Early Postdoc.Mobility. Ruolo: PI

2012 - 2015 Progetto collaborativo ARANGE “Advanced multifunctional management of European mountain forest ranges”. Fondi: EU FP7. Membro attivo del consorzio di progetto, attività editoriali di project deliverables, contributo con dati e risultati, co-responsabile di task, partecipazione e co-organizzazione a meeting progettuali. Ruolo: project partner

2016 - 2017 Progetto Swiss-SpeMixMod (Fondo: Swiss Secretariat for Research and Innovation under the COST Action EuMIXFOR). Membro attivo del consorzio di progetto e stesura di reports e deliverables. Ruolo: internal project member

ATTIVITÀ DI RELATORE A CONGRESSI E CONVEGNI NAZIONALI E INTERNAZIONALI

(inserire titolo congresso/convegno, data, ecc.)

Contributions to congresses and conferences (only when first presenter - all contributions in form of talk unless indicated as poster)

Mina M, Aquilué N, Duveneck M, Fortin MJ, Messier C. Managing for the unexpected - Building resilient forest landscapes to cope with global change. Ecological Society of America (ESA) Annual Meeting 2022. 16-19 August 2022. Montreal, Canada.

Mina M, Aquilué N, Messier C. Managing forests as functional networks - preparing our landscapes for the unexpected. XIII Congresso Nazionale SISEF “Alberi Foreste Biodiversità - Dal New Green Deal alla Farm to Fork Strategy”. Orvieto, Italy. 30 May - 1 June 2022.

Mina M, Aquilué N, Duveneck M, Fortin MJ, Messier C. Managing the Unexpected - Resilient Forest Landscapes to Novel Climate and Insect Outbreak Disturbance Regimes. 12 April 2021. IALE-North America Annual Meeting, Reno, NV [virtual conference]

Mina M, Aquilué N, Duveneck M, Fortin MJ, Messier C. Coupling simulation modelling with network theory to evaluate resilience to global change in fragmented forest landscapes. 11 May 2020. IALE-North America Annual Meeting, Toronto [virtual conference].

Mina M, Aquilué N, Duveneck M, Fortin MJ, Messier C. Future trajectories in fragmented forest landscapes: linking simulation modelling with the functional complex network approach. Conference:

Governing and managing forests for multiple ecosystem services across the globe. February 2020. Bonn, Germany.

Mina M, Aquilué N, Duveneck M, Fortin MJ, Messier C. Seeing forest landscapes as functional complex networks: a way to enhance resilience to climate change and disturbances. Conference: Managing forests in the 21st century. March 2020. Potsdam, Germany.

Mina M, Duveneck M, Aquilué N, Fortin MJ, Messier C. Managing forest landscapes as functional complex networks to increase resilience: a simulation study. IALE World Congress. July 2019. Milan, Italy

Mina M, Aquilué N, Fortin MJ, Messier C. Coupling tree-community and landscape models with functional diversity and network theories for resilience-based forest management. ESA Annual Meeting. August 2018. New Orleans, USA

Mina M, Huber MO, Thürig E, Rohner B. Representation of species mixing in growth functions for forest development models. Cost PROFOUND Final Conference. October 2017. Potsdam, Germany

Mina M, Huber MO, Thürig E, Rohner B. Disentangling species mixture effects on individual-tree growth using Swiss national forest inventory data. IUFRO 125th Anniversary Congress. September 2017. Freiburg, Germany <poster>

Mina M, Huber MO, Thürig E, Rohner B. Integrating effects of species mixture into individual-tree growth models based on national forest inventory data. EUMIXFOR Final Conference. October 2016. Prague, Czech Republic <poster>

Mina M, Cailleret M, Bugmann H. Can adapted forest management sustain the provision of multiple ecosystem services in different European mountain regions? Mountains of Our Future Earth. September 2015. Perth, UK

Mina M, Martin-Benito D, Bugmann H, Cailleret M. Tree-ring forward modelling improves growth response to drought for simulating long-term forest dynamics. EuroDendro 2015. October 2015. Antalya, Turkey <poster>

Mina M, Cailleret M, Bugmann H. Adaptive forest management is necessary to maintain ecosystem services in different European mountain regions. ARANGE Final Conference. July 2015. High Tatra Mts., Slovakia

Mina M, Bugmann H, Klopčič M, Cailleret M. Which management under climate change? An assessment of the provisioning of ecosystem services in mountain forests. IUFRO Congress. October 2014. Salt Lake City, USA <poster>

Mina M, Bugmann H, Klopčič M, Cailleret M. Does management of Slovenian Silver fir-European beech mountain forests need to be adapted to climate change? GfÖ Annual Meeting. September 2014. Hildesheim, Germany

Mina M, Cailleret M, Bugmann H. A modeling approach for evaluating the sustainability of Business-As-Usual management in uneven-aged Dinaric mountain forests. 9th IUFRO Conference on Uneven-aged Silviculture. June 2014. Birmensdorf, Switzerland <poster>

Mina M, Cailleret M, Bugmann H. Testing the applicability of a forest succession model in Mediterranean mountains. ClimTree Conference Zurich. September 2013. Switzerland <poster>

CONSEGUIMENTO DI PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA
(inserire premio, data, ente organizzatore, ecc.)

Borse di ricerca

- Marie Skłodowska-Curie Individual Fellowship, granted by ERC H2020-MSCA-IF- 2019. Durata: 24 mesi. Totale fondi: 183.473 euro. Grant number 891671

- Early Postdoc.Mobility Fellowship, granted by the Swiss National Science Foundation. Durata: 18 mesi. Totale fondi: 94.500 CAD. Grant number 75101

PRODUZIONE SCIENTIFICA

PUBBLICAZIONI SCIENTIFICHE

(per ciascuna pubblicazione indicare: nomi degli autori, titolo completo, casa editrice, data e luogo di pubblicazione, codice ISBN, ISSN, DOI o altro equivalente)

Mina M, Messier C, Duveneck M, Fortin MJ, Aquilué N. 2022. Managing for the unexpected: building resilient forest landscapes to cope with global change. *Global Change Biology* 28, 4323- 4341

Searle EB, Bell WF, Laroque GR, Fortin M, Dacosta J, Sousa-Silva R, Mina M, Deighton HD 2021. Simulating the Effects of Intensifying Silviculture on Desired Species Yields across a Broad Environmental Gradient. *Forests*. 12(6).

Suárez-Muñoz M, Mina M, Salazar PC, Navarro-Cerrillo RM, Quero JL, Bonet-García FJ. 2021. A step-by-step guide to initialize and calibrate landscape models: a case study in the Mediterranean mountains. *Frontiers in Ecology and Evolution*. 9, 209.

Irauschek F, Barka I, Bugmann H, Courbaud B, Elkin C, Hlasny T, Klopčič M, Mina M, Rammer W, Lexer MJ. 2021. Evaluating five forest models using multi-decadal inventory data from mountain forests. *Ecological Modelling* 445, 109493

Aquilué N, Messier C, Martins K, Dumais-Lalonde V, Mina M. 2021. A simple-to-use management approach to boost adaptive capacity of forest to global uncertainty. *Forest Ecology and Management*. 481: 118692.

Mina M, Messier C, Duveneck M, Fortin MJ, Aquilué N. 2020. Network analysis can guide resilience-based management in forest landscapes under global change. *Ecological Applications*. 31(1):e02221.

Messier C, Bauhus J, Doyon F, Maure F, Sousa-Silva R, Nolet P, Mina M, Aquilué N, Puettmann K. 2019. The functional complex network approach to foster forest resilience to global changes. *Forest Ecosystems*. 6:21.

Mina M, Del Rio M, Huber MO, Thürig E, Rohner B. 2018. The symmetry of competitive interactions in mixed Norway spruce, silver fir and European beech forests. *Journal of Vegetation Science*. 29:775-87.

Houpert L, Rohner B, Forrester DI, Mina M, Huber MO. 2018. Mixing Effects in Norway Spruce-European Beech Stands Are Modulated by Site Quality, Stand Age and Moisture Availability. *Forests*. 9(2), 83.

Mina M, Huber MO, Forrester DI, Thürig E, Rohner B. 2018. Multiple factors modulate tree growth complementarity in central European mixed forests. *Journal of Ecology*: 106:1106-1119.

Klopčič M, Mina M, Bugmann H, Bončina A. 2017. The prospects of silver fir (*Abies alba* Mill.) and Norway spruce (*Picea abies* (L.) Karst) in mixed mountain forests under various management strategies, climate change and high browsing pressure. *European Journal of Forest Research* 136:1071-1090.

Mina M, Bugmann H, Klopčič M, Pardos M, Irauschek F, Cordonnier T, Cailleret M. 2017. Future ecosystem services from European mountain forests under climate change. *Journal of Applied Ecology*. 54:389-401.

Mina M, Bugmann H, Klopčič M, Cailleret M. 2017. Accurate modeling of harvesting is key for projecting future forest dynamics: a case study in the Slovenian mountains. *Regional Environmental Change* 17:49-64.

Mina M, Martin-Benito D, Bugmann H, Cailleret M. 2016. Forward modeling of tree-ring width improves simulation of forest growth responses to drought. *Agricultural and Forest Meteorology* 221:13-33.

Meyer N.K., Mina M. 2012. Wood energy fuel cycle optimization for beech and spruce forests. *Environmental Research Letters*, 2012, 7, 014001.

Altre pubblicazioni (capitoli di libro, reports, articoli in rivista, tesi di laurea)

Messier M, Maure F, Mina M, Aquilué N. 2022 Le futur de la foresterie au Canada dans un monde incertain - quelques pistes de solution. In *Une économie écologique pour le Québec* eds. Mendez A, Bissonette JF, Dupras J. ISBN 978-2-7605-5560-0. 384 pg.

Mina M, Cailleret M, Motta R, Bugmann H. 2019. Fruizione futura dei servizi ecosistemici. Prospettive in funzione dei cambiamenti climatici e della gestione nelle foreste montane. *Rivista Sherwood* 239:23-27.

Mina M. 2016. Forest dynamics, management and ecosystem services: the future of European mountain forests in an era of climate change. Ph.D. thesis. ETH Zürich. <https://doi.org/10.3929/ethz-a-010784315>

Mina M, Bugmann H. 2013. Improved and tested forest models for case study regions. Project Deliverable D2.1, FP7-289437-ARANGE, 44 pp, Institute of Terrestrial Ecosystems, ETH Zurich.

Mina M, Meyer N. 2011. Wood energy fuel cycle optimization. Technology Assessment, Paul Scherrer Institute. Villigen, Switzerland. Internship report.

Mina M. 2010. Policies, Institutions and Markets in the P.R.C. forestry sector. M.Sc. thesis. Available online in Italian. University of Padua, Italy. <http://hdl.handle.net/20.500.12608/13650>

Mina M. 2007. Evolution of ecto-mycorrhization in artificially inoculated *Quercus robur* seedlings. B.Sc. thesis. University of Padua, Italy. Advisor Prof. L. Montecchio.

Data

04/09/2022

Luogo

Bolzano