

# CURRICULUM VITAE

## Christophe F. Randin

### 1. Personal Details

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Name: Randin  
First name: Christophe, François, William  
Sex: Male  
Date of birth: 17.11.1977  
Nationality: Swiss / French  
Canton of origin: Vaud (VD)  
Title: *Privat Docent* (PD), Dr. Sci. Nat., MSc in Biology  
Languages: French, English, German

**ORCID iD :** <https://orcid.org/0000-0002-4171-0178>

**ResearcherID:** K-6969-2016; <http://www.researcherid.com/rid/K-6969-2016>

Prof. address:	Route de l'Adray 27  CH-1938 Champex-Lac	Academic address:	Dept. of Ecology & Evolution DEE University of Lausanne UNIL  CH-1015 Dorigny
Tel.:	+41 (0)27 783 12 17		
E-mail:	<a href="mailto:christophe.randin@flore-alpe.ch">christophe.randin@flore-alpe.ch</a>		<a href="mailto:christophe.randin@unil.ch">christophe.randin@unil.ch</a>

### 2. Current institutional function

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2016 -	<i>Privat Docent</i> University of Lausanne, Switzerland	
	<i>Executive director</i> Fondation J.-M. Aubert: Jardin Flore-alpe & Centre alpin de phytogéographie (CAP) Champex-Lac, Valais, Switzerland	<a href="https://www.flore-alpe.ch/fr/equipe/">https://www.flore-alpe.ch/fr/equipe/</a>
2020 -	<i>Lecturer</i> Ecole Polytechnique Fédérale Lausanne EPFL Collège des Humanités CDH	<a href="https://edu.epfl.ch/coursebook/en/global-issues-climate-b-HUM-121-B">https://edu.epfl.ch/coursebook/en/global-issues-climate-b-HUM-121-B</a>

### 3. Academic titles

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2019	<i>Certificate of advanced studies (CAS)</i> Politiques publiques comparées	IDHEAP, University of Lausanne, Switzerland
2019	<i>Certificate of advanced studies (CAS)</i> Evaluation des politiques publiques	IDHEAP, University of Lausanne, Switzerland
2018	<i>Certificate of advanced studies (CAS)</i> Management des organisations publiques	IDHEAP, University of Lausanne, Switzerland
	<i>Diploma of advanced studies (DAS)</i> <i>DAS en administration publique</i>	
2017	Courses: Economie publique, Politique et institutions, Droit et législation, Politiques publiques, Management public, Systèmes d'information et statistique publique.	IDHEAP, University of Lausanne, Switzerland
2016	<i>Privat Docent (PD)</i>	FBM, University of Lausanne, Switzerland
2007	<i>PhD in Life Sciences</i>	FBM, University of Lausanne, Switzerland
2002	<i>MSc diploma in Biology</i>	IE-BSG, University of Lausanne, Switzerland

#### 4. Previous professional positions\*

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2014 – 2019	Curator	Musée et Jardins botaniques cantonaux, Lausanne, Switzerland
2012 - 2014	Oberassistent (Senior lecturer)	Dept. of Environmental Sciences, University of Basel, Switzerland
2012	Substitute professor	Dept. of Ecology and Evolution (DEE), University of Lausanne, Switzerland
2007	Maître d'enseignement et de recherche (MER-II)	Dept. of Ecology and Evolution (DEE), University of Lausanne, Switzerland
2001 - 2007	Teaching assistant	Dept. of Ecology and Evolution (DEE), University of Lausanne, Switzerland

#### 5. Post-graduate education\*

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##### Post-doctorate employment

2009 - 2012	Postdoctoral fellowship <i>FP7-IDEAS-ERC Treelimit project</i>	Dept. of Environmental Sciences, University of Basel, Switzerland
2009-2014	Guest scientist	Landscape dynamics unit, WSL, Birmensdorf, Switzerland
2009	Postdoctoral fellowship <i>SNSF starting grant</i>	INSTAAR, University of Colorado at Boulder, Colorado, USA
2008	Postdoctoral fellowship <i>European FP6 ECOCHANGE project</i>	Dept. of Arctic and Marine Biology, University of Tromsø, Norway
2007 - 2008	Postdoctoral fellowship <i>SNSF starting grant</i>	INSTAAR, University of Colorado at Boulder, Colorado, USA

\*No career breaks and no interruption between 2001 and 2024.

#### 6. Main research areas

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Using iterative loops of **adaptive monitoring**, which combine **long-term monitoring** and **modelling**, to better understand and predict the distribution and range dynamics of plant species at the treeline ecotone and in the alpine zone;

Using **space-for-time substitution** over large elevation gradients, **comparisons between elevation and latitude** and **model transferability** to test and validate biogeographical hypotheses and to improve ecological modelling frameworks.

Using ecological models as both predictive and explanatory tools.

- Diachronical vegetation surveys;
- RS- and GIS-assisted landscape monitoring and change detection;
- Data-mining with statistical tools and multivariate analyses;
- Correlative and process-based species distribution modelling.

#### 7. Academic activities

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- Conducting research projects: proposal-writing and fund raising, scientific coordination, valorizing and publishing results;
- Supervising and assisting trainees, master and PhD students and postdoctoral researchers in vegetation ecology, ecological modeling, and environmental monitoring / assessments;
- Scientific communication;
- Developing and promoting transdisciplinary initiatives: e.g. project ODILE and the BlueMount science-policy interface:

## 8. Prizes or awards received

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- 2020      *Bluark Challenge*  
             Award winner : 3<sup>rd</sup> / 59 for ODILE: Optimisation de l'eau dans l'Entremont.  
             Prize money : CHF 10'000. <https://www.blueark-challenge.ch/cinq-solutions-innovantes-recompensees/>  
             See interview in Terre & Nature: "ODILE, un avant-goût de l'irrigation de demain dans le Val de Bagnes". Blaise Guignard. October 27 2022. <https://www.terrenature.ch/odile-un-avant-gout-de-l-irrigation-de-demain-dans-le-val-de-bagnes/>
- 2016      Thompson Reuters Highly Cited Researchers 2016, "Ecology/Environment";  
<https://clarivate.com/hcr/researchers-list/archived-lists/>
- 2016      Prix Elisabeth et Oscar Beugger 2016 Pro Natura, Switzerland  
             Scientific coordinator of « La protection en milieu urbain du rougequeue à front blanc ».  
             See also Droz *et al.* (2019) in the publication list, which served as guidelines for the conservation planning of the redstart in the Jura mountains and the city of La Chaux-de-Fonds.  
             Prize money : CHF 50'000.  
             See interview on RSR: CQFD - "Rougequeue à front blanc, un exode rural". June 9 2016:  
<http://www.rts.ch/play/radio/cqfd/audio/rougequeue-a-front-blanc-un-exode-rural?id=7751702>
- 2009      Francesco di Castri Young Scientist Award :  
             Best oral presentations by a young scientist  
             DIVERSITAS Open Science Conference (DIVERSITAS OSC2)  
             13-16 October 2009, Cape Town, South Africa.
- 2009      Winner of the Swiss Global Change Day Poster Award 2009 with Robin Engler.  
             Swiss Global Change Day, March 31 2009; Bern, Switzerland  
             Prize money: CHF 1'000.

## 9. Teaching

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From 2001 to 2007 I have been teaching practical and theoretical lessons on an annual basis as a teaching assistant, mainly in the domain of vegetation ecology, predictive modelling and biogeography at the University of Lausanne. Since 2009, I develop my own courses and labs and teach at various universities, mostly in the domain of mountain ecology, biogeography and modelling.

2021-	<i>Cours interdisciplinaire sur le paysage - Paysage et nature</i> External lecturer; BSc 3 <sup>rd</sup> year. Faculté des lettres & Faculté des géosciences et de l'environnement (FGSE). French.	UNIL
2020 -	<i>Global issues: climate</i> Lecturer; Humanities and Social Sciences SHS Program, BSc 2 <sup>nd</sup> semester. 28 h (lessons + practical); French.	EPFL
2018	<i>General Ecology – Ecologie Générale</i> Lecturer; Credit: 2 ECTS; 28 h; 2 <sup>nd</sup> -year BSc in Biology; French.	UNIL - FBM-BIO
2018	<i>Introduction to ecological niche modelling</i> Lecturer and organizer; Credit: 1.0 ECTS; 14 h; Doctoral program in organismal biology; English.	UniNE - CUSO
2018 -	<i>Mountain ecosystems: patterns and processes – MEPP</i> Lecturer and co-coordinator; Credit: TBA; 4-h class + 2+5-day fieldwork; MSc; English.	UNIL - FBM-FGSE
2016 -2019	<i>Plant range dynamic and global change - PRD</i> Lecturer; Credit: 1.5 ECTS; 17 h; MSc BEC; English.	UNIL - FBM-BIO
2015	<i>Déprise agricole : conséquences sur les écosystèmes</i> Lecturer: Formation continue universitaire en écologie et en sciences de l'environnement ECOFOC – Programme Environnement rural; Lecturer; 3 h; French.	UniNE
2014	<i>Biodiversité alpine et changement climatique</i> Ecole Nationale des Travaux Publics de l'Etat ENTPE Lecturer: 2-day field trip in Chamonix (class and labs) for 2 <sup>nd</sup> -year BSc; French.	ENTPE
2014 - 2016	<i>L'écosystème alpin</i>	UniNE

	Formation continue universitaire en écologie et en sciences de l'environnement ECOFOC – Programme Environnement Naturel; Lecturer; French; 3 -h class + 1-day field trip; French.	
2012	<i>Biogeography</i> Lecturer; 8h class; Credit : 0 (mandatory class); for 2nd- and 3rd-year BSc students; French.	UNIL - FBM-BIO
2012	<i>Principles of Ecology</i> Lecturer; 28 h; Credits: 3 ECTS; French.	UNIL - FGSE
2012	<i>Spatial modelisation of natural data - Multivariate analyses</i> Lecturer; 12-h class + 12-h exercises; Credits: 2 ECTS; for MSc students; French.	UNIL - FGSE
2012	<i>Predictive models of species' distribution</i> Lecturer; 12-h class + 12-h exercises; Credits: 2.5 ECTS; MSc students; English.	UNIL - FBM-BIO
2011 - 2013	<i>Spatio-temporal biodiversity modeling</i> Lecturer; Language: English; 16-h class + 16-h exercises; for Msc students and PhD students; English.	UNIBAS
2011 / 2013	<i>Blockkurs Ökologie Teil Pflanzenökologie</i> Lecturer with Dr. T. Wohlgemuth (WSL); 5-day field trip; 3rd-year BSc; German.	UNIBAS

## 10. Supervision of PhD students

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2014 - 2018	Ms. Daphné Asse Grant CIFRE 2014/0348 (France) + Bourse SAV (Switzerland), PhD student at the University of Lausanne and the University of Montpellier, France. <i>Comprendre et prédire la réponse des écosystèmes forestiers d'altitude aux changements climatiques.</i> <i>Apports d'un programme de science participative.</i> <b>Co-supervisor</b> with Dr. Isabelle Chuine
2011 - 2015	Ms.Theofania Patsiou Grant No. PDFMP3_132471/1 PhD student at University of Basel, Inst. of Botany, Switzerland. <i>Role of islands in the sky in the persistence of plant species under past and future climate change.</i> <b>Main supervisor.</b> Co-supervisor: Prof. Elena Conti
2011 - 2015	Mr. Spyros Theodoridis Grant No. PDFMP3_132471/1 PhD student at University of Zürich, Inst. of Systematic Botany, Switzerland. <i>Effects of climate change on speciation and reproductive biology in the alpine/arctic Primula sect. Aleuritia</i> <b>Co-supervisor.</b> Main supervisor: Prof. Elena Conti
2009 - 2013	Mr. Chris Kollas University of Basel and European Research Council - ERC grant 233399 <i>Bioclimate and reproductive potential at the cold limit of European deciduous tree species.</i> <b>Co-supervisor</b> with Dr. Yann Vitasse. Main supervisor: Prof. Christian Körner
2010 - 2012	Ms. Katrien Quisthoudt Vrije Universiteit Brussel <i>Disentangling climate drivers of mangrove distribution worldwide.</i> <b>Co-supervisor</b> with Prof. Nico Koedam.
2008 - 2012	Ms. Joana Raquel Silva Vicente PhD student at Porto University – CIBIO, Portugal <i>Forecasting the Synergic Impact of Climate and Land Use Changes on the Functions and Services of Landscapes: Implications for Landscape Planning and Management.</i> <b>Co-supervisor</b> with Prof. Antoine Guisan and Prof. João Honrado.

## 11. Supervision of MSc students

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- 2024-2025 Russiello Laura. *The role of the seed bank in providing colonizers on the GLORIA summits in the Arctic and in the Alps. A multisite and a dichronical approach.* Master BEC program, University of Lausanne. Co-supervision with Dr. Pascal Vittoz.
- 2024 Puoti Alexandre. *How are the functional traits of plants influenced by elevation? An arctic-alpine comparison.* Master in Biogeoscience BGS, University of Lausanne. Co-supervision with Dr. Pascal Vittoz.
- 2024 Mayoraz Chloé. *The response of alpine vegetation after 30 years of a warming experiment with open-top chambers.* Master in Biology, University of Neuchâtel. Co-supervision with Prof. Sergio Rasman & Prof. Jérémie Forney.
- 2023-2024 El Sangedy Aida. *Assessing N2O emissions of irrigated mountain grasslands in the Alps.* Co-supervision with Prof. Rizlan Bernier-Latmani, EML, EPFL.
- 2023 Robadey Aurélien. *Assessing the impacts of climate change on alpine plants using diachronic analysis.* Master BEC program, University of Lausanne.
- 2022 Rut Mayo de la Iglesia. Divergent response of bryophytes and lichens to climate change in the Alps. First-step project. Master BEC program, University of Lausanne. Co-supervision with Dr. Pascal Vittoz.
- 2022 Levivier Sacha. *A process-based model to simulate the dispersal of stone pine (*Pinus cembra L.*) by the nutcracker (*Nucifraga caryocatactes L.*) and to better understand and predict the colonization of the alpine vegetation zone by trees.* Master BEC program, University of Lausanne.
- 2021 Calore Red. *Understanding the patterns and the driving factors of plant leaf C:N stoichiometry along an elevational gradient in Greenland.* First-step project. Master BEC program, University of Lausanne. Co-supervision with Dr. Sabine Rumpf and Dr. Konstantin Gavazov (WSL).
- 2021 Orejula Yustes Angie. *How can changes in habitat suitability of cultivated plants explain human settlements and regional food trade during the Prehistoric and Antic era in Wallis?* Master BEC program, University of Lausanne.
- 2021 Manzocchi Silvana. *Unravelling the origins of Edelweiss (*Leontopodium alpinum*) populations from the Jura mountains.* Master BEC program, University of Lausanne.
- 2020 Brodard Anouck. *Climatic determinants of the apical growth of Stone pine (*Pinus cembra L.*) at the limit of the life form tree.* First-step project. Master BEC program, University of Lausanne.
- 2018 Schuseil Donovan. *Disentangling the effects of global-change components on the distribution of plant species in the Western Prealps of Switzerland using herbarium, archive and paleoclimate data.* Master BEC program, University of Lausanne.
- 2018 Bonzon Nicolas. *Characterizing the ecological niche of three oak species (*Quercus robur*, *Quercus petraea* and *Quercus pubescens*) in Switzerland using herbarium specimens, topo-climatic factors and in situ measurements.* Master BEC program, University of Lausanne.
- 2016 Gaille Aurore. *Tackling niche evolution of alien plant species during invasions from an alpine botanic garden.* Master BEC program, University of Lausanne.
- 2008 Dubuis Anne. *Spatial variation in functional traits along environmental gradients: a case study with alpine plants.* Master BEC program, University of Lausanne.
- 2005 Vuissoz Grégoire. *Introducing process-based variables in predictive models of plant distribution.* Master BEC program, University of Lausanne.
- 2005 Jaccard Hélène. *Importance of land use in predictive habitat modelling of plant species distribution in the Swiss Alps.* Master BEC program, University of Lausanne.
- 2004 Milleret Roxane. *Impact of climate change on the distribution of plant species.* Master BEC program, University of Lausanne.
- 2004 Favre Virginie. *Evolution of the Maggia floodplain – Analysis of aerial photographs time series from 1962 to 2001.* Master BEC program, University of Lausanne.
- 2004 Lassueur Thierry. *Modélisation spatiale de l'habitat d'espèce végétales – Apports du modèle numérique d'altitude à très haute résolution.* MSc in Environmental Science and Engineering, EPFL. Co-supervision with Dr. Stéphane Joost.

## 12. Peer-reviewed publications from supervised PhD and MSs students

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<sup>(1)</sup> (Co-)First author; <sup>(2)</sup> (Co-)Leading.

### Publications from PhD projects:

19. Asse D, **Randin CF<sup>(1)</sup>**, Bonhomme M, Delestrade A & **Chuine I**. 2020. Process-based models outcompete correlative models in projecting spring phenology of trees in a future warmer climate. *Agricultural and Forest Meteorology* **285–286** 107931. doi:10.1016/j.agrformet.2020.107931 (IF=6.2)
18. Asse D, Chuine I, Vitasse Y, Yoccoz NG, Delpierre N, Badeau V, Delestrade A & **Randin CF<sup>(2)</sup>**. 2018. Warmer winters reduce the advance of tree Spring phenology induced by warmer Springs in the Alps. *Agricultural and Forest Meteorology* **252**: 220–30. doi:10.1016/j.agrformet.2018.01.030. (IF=6.2)
17. Theodoridis S, Patsiou TS, **Randin CF** and Conti E. 2018. Forecasting range shifts of a cold-adapted species under climate change: are genomic and ecological diversity within species crucial for future resilience? *Ecography*, **41** (8), 1357-1369. doi:[10.1111/ecog.03346](https://doi.org/10.1111/ecog.03346) (IF=4.52)
16. Theodoridis S, **Randin CF**, Peter Szovenyi P, Boucher FC, Patsiou TS, and Conti E. 2017. How do cold-adapted plants respond to climatic cycles? Interglacial expansion explains current distribution and genomic diversity in *Primula farinosa* L. *Systematic Biology* **66** (5): 715–36. doi:10.1093/sysbio/syw114. (IF=8.917)
15. Patsiou TS, Conti E, Theodoridis S, and **Randin CF<sup>(2)</sup>**. 2017. The contribution of cold air pooling to the distribution of a rare and endemic plant of the Alps. *Plant Ecology & Diversity* **10** (1): 29–42. doi:10.1080/17550874.2017.1302997. (IF=2.349)
13. Carlson BZ, George D, Rabaté A, **Randin CF**, Renaud J, Delestrade A, Zimmerman NE, Choler P and Thuiller W. 2014. Accounting for treeline shift, glacier retreat and primary succession in mountain plant distribution models. *Diversity and Distributions* **20** (12) : 1379-1391 (IF=6.122).
12. Vicente J, Pereira HM, **Randin CF**, Gonçalves J, Lomba A, Alves P, Metzger, M. Cezar J, Guisan A and Honrado J. 2014. Environment and dispersal paths override life strategies and residence time in determining regional patterns of invasion by alien plants. *Perspectives in Plant Ecology, Evolution and Systematics* **16** (1) : 1-10 (IF=4.488)
11. Patsiou TS, Theodoridis S, Conti E & **Randin CF<sup>(2)</sup>**. 2014. Topo-climatic microrefugia explain the persistence of a rare endemic plant in the Alps during the last 21 millennia. *Global Change Biology* **20** (7) : 2286-2300 (IF=6.91)
10. Kollas C, Körner C & **Randin CF<sup>(2)</sup>**. 2014. Spring frost and growing season length co-control the cold range limits of broad-leaved trees. *Journal of Biogeography* **41** (4) 773-783. (IF=4.544)
9. Kollas C, **Randin CF<sup>(1)</sup>**, Vitasse Y & Körner C. 2014. How accurate can weather stations predict temperatures at tree species limits? *Agricultural and Forest Meteorology* **184** 257-266 (IF=3.991)
8. Carlson BZ, **Randin CF**, Boulangeat I, Lavergne S, Thuiller W & Choler P. 2013. Working toward integrated models of alpine plant distribution. *Alpine Botany* **123** 41-53. (IF=1.769)
7. Vicente JR, Araújo MB, Verburg P, Pereira HM, **Randin CF**, Guisan A & Honrado JP. 2013. Using life strategies to explore the vulnerability of ecosystem services to invasion by alien plants. *Ecosystems*. **16** 678-693 (IF=3.495)
6. Vicente J, Fernandes R, Broennimann O, Poças I, Marcos B, **Randin CF**, Guisan A & Honrado J. 2013. Will climate change drive alien invasive plants into high nature value areas? An improved model-based regional assessment in the North of Portugal. *Journal of Management and Environment* **131** 185-195 (IF=3.161)
5. Quisthoudt K, Adams J, Rajkaran A, Dahdouh-Guebas F, Koedam N & **Randin CF<sup>(2)</sup>**. 2013. Disentangling the effects of climate and land-use change on the current and future distribution of mangroves in South Africa? *Biodiversity and Conservation* **22** 1369-1390 (IF=2.238)
4. Theodoridis S, **Randin CF**, Broennimann O, Patsiou T & Conti E. 2013. Divergent and narrower climatic niches characterize polyploid species of European primroses in *Primula* sect. *Aleuritia*. *Journal of Biogeography* **40** 1278-1289 doi: 10.1111/jbi.12085 (IF=4.544)
3. Quisthoudt K, Schmitz N, **Randin CF**, Dahdouh-Guebas F, Robert E & Koedam N. 2012. Temperature variation among mangrove latitudinal range limits worldwide. *Trees - structure and function*. **26** 1919–1931 (IF=1.687)
2. Kollas, C, **Randin CF**, Vitasse, Y, Hoch, G & Körner, C. 2012. Unrestricted quality of seeds in European broad-leaved tree species growing at the cold boundary of their distribution *Annals of Botany* **109** 473-480 (IF=3.501)
1. Vicente J, Alves P, **Randin CF**, Guisan A & Honrado J. 2010. What drives invasibility? A multi-model inference test of alien plant species richness patterns in Northern Portugal. *Ecography* **33** 1081-1092. (IF=5.9)

**Publications from MSc projects:***In preparation*

**Randin CF<sup>(1)</sup>**, Robson B<sup>(1)</sup> and Theurillat JP. A climate-based growth model for the Stone pine (*Pinus cembra* L.) at the treeline ecotone. *Frontiers in Forests and Global Change* (IF = 3.2)

**Randin CF<sup>(1)</sup>**, Asse, D, Guisan, A, Urbach, D, Reynard E et al. Mountain monitoring in Switzerland – challenges and opportunities. *Mountain Research and Development mrd* (IF = 2.4).

*To be submitted (manuscripts available)*

Robadey A, Bütkofer L, Dullinger S, Theurillat, JP, Vittoz P, Mariethoz G and **Randin CF<sup>(2)</sup>**. Remote sensing combined with a diachronical survey reveals a link between micro-topography and alpine vegetation migration dynamics. *Diversity & Distributions* (IF=4.6)

Manzocchi S, Descombes P, Dullinger S, Zimmermann NE, P, Felber F<sup>(2)</sup> Parisod C<sup>(2)</sup>, **Randin CF<sup>(2)</sup>**. Unravelling the origins of edelweiss (*Leontopodium alpinum* Cass.) populations from the jura mountains. *Ecography* (IF=5.9).

*Published*

7. Moos C, Khelidj N, Guisan A, Lischke H<sup>(2)</sup>, **Randin CF<sup>(2)</sup>**. 2021. A quantitative assessment of rockfall influence on forest structure in the Swiss Alps. *European Journal of Forest Research* 140 (1) 91-104 doi.org/10.1007/s10342-020-01317-0. (IF=2.581)
6. Droz B, Arnoux R, Bohnenstengel T, Laesser J, Spaar R, Ayé R & **Randin CF<sup>(2)</sup>**. 2019. Moderately urbanized areas as a conservation opportunity for an endangered songbird. *Landscape and Urban Planning*, **181**, 1-9. (IF=5.957)
5. Thuiller W, Albert CH, Dubuis A, **Randin CF**, and Guisan, A. 2010. Variation in habitat suitability does not always relate to variation in species' plant functional traits. *Biology Letters* **6**: 120-123. (IF=3.52)
4. **Randin CF<sup>(1)</sup>**, Vuissoz G, Liston G, Vittoz P and Guisan A. 2009. Introducing snow and geomorphic disturbance variables into predictive models of alpine plant distribution in the Western Alps. *Arctic, Antarctic, and Alpine Research* **41**(3) 347-361. (IF 1.429)
3. **Randin CF<sup>(1)</sup>**, Jaccard H, Vittoz P, Yoccoz NG & Guisan A. 2009. Land use improves spatial predictions of plant abundances but not occurrences in a mountain landscape. *Journal of Vegetation Science* **20**(6) 996-1008. (IF 2.38)
2. Molnar P, Favre V, Perona P, Burlando P, **Randin CF<sup>(2)</sup>** & Ruf W.<sup>(2)</sup> 2008. Floodplain forest dynamics in a hydrologically altered mountain river. *Peckiana* **5** 17-24.
1. Lassueur T, Joost S<sup>(2)</sup> and **Randin CF<sup>(2)</sup>**. 2006. Very high resolution digital elevation models: do they improve models of plant species distribution? *Ecological Modelling* **198** 139-153. (IF 2.17)

**13. CONTRIBUTIONS TO INTERNATIONAL CONFERENCES**

*Policy-relevant mountain biodiversity monitoring*. Focus session, International Mountain Conference IMC, 14-18 September 2022, Innsbruck, Austria. **Chair and co-organizer**.

*Ecological changes in the mountain environment and migrating ecotones*. GEO-GNOME Workshop “Essential Climate Variables for Observations in Mountains”, 24-26 June 2019, Bern, Switzerland. **Solicited speaker**.

*Challenges of using land-use dynamics in biodiversity modelling*. Workshop “Using remote sensing data to inform species distribution models”. February 5-7 2018, Zürich, Switzerland. **Solicited speaker**.

*Challenges and future avenues when reconstructing the past and predicting the future geographic distribution of rare plants in the Mediterranean Alps under changing climates*. International MISTRALS workshop. Climate Change impacts in the Mediterranean region. October 16-18 2017, Montpellier, France. **Invited and solicited speaker**.

*Assessing the declining effect of warm temperature on spring phenology of tree species at low elevation in the Alps using long-term observations from a citizen science program*. September 29 – October 3 2017, University Centre Obergurgl, Austria. **Invited and solicited speaker**.

*Une montagne de changement : le Mont-blanc sous surveillance*. COP21, Paris, December 3 2015, Espace Générations climat. **Invited speaker**. <http://www.cop21.gouv.fr/wp-content/uploads/2015/11/progEGC-FR-version-30.11.20151.pdf>

*What can we learn from the past and current geographic distribution of a rare and endemic alpine plant when making future projections under climate change?* Paleo perspectives for guiding future scenarios, Perth III: Mountains of our Future Earth, October 5 2015, Perth, Scotland.

*Range dynamic and niche unfilling at the upper elevational and latitudinal limits of European deciduous tree species*. INTECOL, 18-22 August 2013, London, England / U.K.

*Thermal equilibrium with climate? Implications for climate change projections*. Riederalp Range Dynamic Workshop. 20 - 24 August 2012, Riederalp, Switzerland. **Invited speaker**.

*Environmental data for landscape genetic analysis: what data should I get, how can I get them (and sometimes how can I get there)?* Adaptative Landscape Genetics 7 - 8 February 2012, Neuchâtel, Switzerland. **Keynote speaker.**

*European deciduous tree species are currently filling their thermal niche: implications for climate change projections.* 12th EEF Congress, September 25-29 2011, Ávila, Spain. **Solicited speaker.**

*Predicting the fate of plant species in a changing world.* SPSW Summer School: Terrestrial Ecosystem Dynamics in a Changing World, June 21-24 2011, Mürren, Switzerland. **Invited speaker.**

*Modelling the effect of changing snow cover regimes on alpine plant species distribution.* Global Change and the World's Mountains. 26-30 September 2010, Perth, Scotland.

*Climatic change impacts on natural ecosystems.* 10<sup>th</sup> Edition of the International Summer School on Atmospheric and Oceanic Sciences (ISSAOS): Climatic change and impacts on natural and protected areas. CETEMPS Center of Excellence for the Forecast of Severe Weather by Remote Sensing and Numerical Modelling, University of L'Aquila, 26-30 September 2010, Italy. **Invited lecturer.**

*Climate change threatens mountain flora unequally across Europe.* Global Change and the World's Mountains. 26-30 September 2010, Perth, Scotland.

*Using georeferenced databases to assess the effect of climate change on alpine plant species and diversity.* DIVERSITAS Open Science Conference (DIVERSITAS OSC2), 13-16 October 2009, Cape Town, South Africa. **Solicited speaker and award of "best oral presentations by a young scientist".**

*Providing more informative projections of climate change impact on plant distribution in a mountain environment.* 93<sup>rd</sup> ESA Annual Meeting. 3-8 August 2008, Milwaukee, WI, USA.

*Past and future changes in alpine tundra in the Rocky Mountains.* MTNCLIM Conference. 9-12 June 2008, Silverton, CO, USA.

*Plant species in a changing climate: a habitat modeling study in the Swiss Alps.* Perth I: Open Science Conference - Global Change in Mountain Regions GLOCHAMORE. 2-6 October 2005, Perth, Scotland.

*Projecting climate change impact on species distribution: the challenge of elevation gradient.* GLOCHAMORE workshop on altitudinal gradients studies, 27-30 July 2005, Samedan, Switzerland. **Invited speaker.**

## 14. SCIENTIFIC COLLABORATIONS

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### International

- Dr. Isabelle Chuine, Research, Director at CNRS, Centre d'Ecologie Fonctionnelle et Evolutive (CEFE), Montpellier, France.
- Prof. Dr. Nigel G. Yoccoz, Department of Biology, University of Tromsø, Norway.
- Prof. Dr. Stefan Dullinger, Department of Botany and Biodiversity Research, University of Vienna , Vienna, Austria.
- Dr. Wilfried Thuiller and Philipe Choler, Laboratoire d'Ecologie Alpine (LECA), Université Grenoble Alpes, France.
- Prof. Dr. Signe Normand, Department of Bioscience - Ecoinformatics and Biodiversity, Aarhus University, Denmark.
- Dr. Starri Heiðmarsson, Iceland Institute of Natural History, Akureyri, Iceland.
- Dr. Anaïs Zimmer, University of Texas at Austin, USA.

### National

- GLORIA network: Prof. Dr. Sabine Rumpf, DUW, UNIBAS, Dr. Sonja Wipf; Swiss National Parc, Zernez & Dr. Christian Rixen, WSL, Davos.
- Dr. Davnah Payne (Global Mountain Biodiversity Assessment GMBA), University of Bern.
- Prof. Dr. Niklaus E. Zimmermann, Dr. Silvia Tobias & Massimiliano Zappa, WSL, Birmensdorf.
- Prof. Rizlan Bernier-Latmani, Dr. Stéphane Joost & Dr. Jan Skaloud, EPFL.
- Prof. Dr. Elena Conti, Institut für Systematische und Evolutionäre Botanik, University of Zürich.
- Prof. Dr. Christian Parisod, Dept. of Biology, University of Fribourg.

## 15. Research Projects

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- 2023-2024 ClimAct Starting grant: *Mitigating N<sub>2</sub>O emissions of irrigated mountain grasslands in the Alps*  
Co-PI with Prof. Rizlan Bernier-Latmani, EPFL. Total budget: CHF 50'000  
<https://climact.ch/fr/project/irrigation-prairies-de-montagne-emissions-oxyde-nitreux-N2O>
- 2021- *ODILE: Optimisation De l'Irrigation dans l'Entremont.*  
Co-PI avec Eric Girardin (Hydrolina) et Dr. Davnah Urbach (GMBA)  
<https://wp.unil.ch/bluemount/projets/odile/>
- 2022- *Global Observation Research Initiative In Alpine Environments GLORIA*  
Function: Co-PI with Dr. Pacal Vittoz of target region Western Switzerland.
- 2021-2022 ClimAct Starting grant: *Upscaling modelisation of climate-induced stone pine colonization into the alpine zone via airborne remote sensing and deep learning.* Co-PI with Dr. Jan Skaloud and Prof. Devis Tuia, EPFL.  
<https://climact.ch/fr/project/upscaling-modelisation-of-climate-induced-stone-pine-colonization-into-the-alpine-zone-via-airborne-remote-sensing-and-deep-learning-1>
- 2022- *Microclim*  
Prof. Stefan Dullinger  
ERC Horizon 2020 research and innovation programme  
Function : Collaborator  
<https://www.mountainresearch.at/microclim/>
- 2020 - *CIRM seed funding for project "BlueMount phase 1-3: An integrated environmental observatory of the Western Swiss mountains"*  
Function: Co-PI with Dr. Davnah Urbach  
<https://wp.unil.ch/bluemount/>
- 2021 - 2022 *+4°C et plus: les paysages suisses face au changement climatique*  
Function: Co-PI with Dr. Silvia Tobias.  
<https://wp.unil.ch/bluemount/projets/4c-ou-quels-paysages-aux-horizons-2050-et-2100/>
- 2021 *SUMITER: SUrveying and MonItoring mounTain vEgetation in the arctic. A resurvey of GLORIA sites in Zackenberg/Greenland.*  
Function: Co-PI with Prof. Sabine Rumpf.  
<https://swisspolar.ch/2022/05/sumiter-surveying-and-monitoring-mountain-vegetation-in-the-arctic-christophe-randin/>
- 2019-2021 *Arborisation urbaine lausannoise et changements climatiques*  
Function: Co-PI with Dr. Jérôme Pellet (UNIL + N&P).  
<https://nplusp.ch/wp-content/uploads/2022/01/Pellet-et-al.-2021a-Bulletin-SVSN.pdf>
- 2014 - 2018 *Comprendre et prédire la réponse des écosystèmes forestiers d'altitude aux changements climatiques. Apports d'un programme de science participative.*  
Function: Co-applicant and co-director with Dr. Anne Delestrade and Dr. Isabelle Chuine
- 2011 - 2015 *Effects of climate change on past, recent, and future biodiversity of alpine/arctic plants: Integrative evidence from phylogenies, population genetics, ecological niche modeling and new insights for conservation.*  
Function: Co-PI with Prof. Elena Conti (PI)
- 2011 - 2013 *Atlas Scientifique du Mont Blanc*  
Function: Co-PI with Dr. Anne Delestrade, Dr. Wilfried Thuiller and Prof. Niklaus Zimmermann  
<https://atlasmontblanc.org>
- 2009 - 2014 *TREELIM: Climatic limits of European broad-leaved tree taxa*  
Functions: Postdoc in charge of the workpackage « Biogeography and climatology » and supervision of PhD projects.  
<https://duw.unibas.ch/de/koerner/forschung/treelim/>
- 2007 - 2011 *ECOCHANGE : Challenges in assessing and forecasting biodiversity and ecosystem changes in Europe*  
EU-FP6 Integrated Project (IP)  
Function: Postdoc in the workpackage 6.1 *Projections of global change impact on biodiversity in Europe*

## 16. Grant and External funding

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As main or Co-PI or WP/Activity leader in large cluster projects (**Total CHF ~1.460 Mio.**).

Innocheck	<i>Smart irrigation for sustainable agriculture in mountain areas</i> Received: CHF 15'000
EPFL-UNIL ClimAct starting grant	<i>Mitigating N2O emissions of irrigated mountain grasslands in the Alps.</i> Received: CHF 50'000.
Federal Office of Environment FOEN	<i>+4°C et plus: les paysages suisses face au changement climatique</i> Received: CHF 200'000
BlueArk + Canton du Valais	<i>ODILE: Optimisation De l'Irrigation dans l'Entremont.</i> Received: CHF 70'000
Federal Office of Environment FOEN	<i>Global Observation Research Initiative In Alpine Environments GLORIA</i> 2022 Resurvey of GLORIA summits in Switzerland Total budget: 260'000
EPFL-UNIL ClimAct starting grant	<i>Upscaling modelisation of climate-induced stone pine colonization into the alpine zone via airborne remote sensing and deep learning.”</i> Received: CHF 50'000
Swiss Polar Institute SPI	<i>Sumiter: SURveying and MonItoring mounTain vEgation in the aRctic</i> Received: CHF 43'000
Centre interdisciplinaire de recherche sur la montagne CIRM , Lausanne.	<i>A blueprint for a social-ecological Observatory of Switzerland's Mountains (BlueMount)</i> Received: CHF 24'000 + CHF 10'000
SNSF + Mountain Research Initiative MRI	<i>Contribution of Long-Term Social Ecological Research Programs in mountains to global policy agendas and UN conventions</i> Received: CHF 24'000
Direction générale de l'Environnement DGE, Lausanne, CH.	<i>Atlas de la flore vaudoise</i> Modeling the evolution of the flora of Canton Wadt. Received: CHF 60'000.
Etat de Vaud; DFJC	<i>L'herbier 2.0 (Herbarium 2.0)</i> A digital and georeferenced herbarium. Received: CHF 230'000.
CIFRE France + Société Académique vaudoise SAV	<i>Comprendre et prédire la réponse des écosystèmes forestiers d'altitude aux changements climatiques. Apports d'un programme de science participative.</i> Received: € 42'000 + CHF 8'000
SNSF International Exploratory Workshops	<i>Implementing mechanisms of resilience and persistence of plants under climate change into niche-based models</i> Received: CHF 30'000
SNSF	<i>Effects of climate change on past, recent, and future biodiversity of alpine/arctic plants: Integrative evidence from phylogenies, population genetics, ecological niche modeling and new insights for conservation.</i> Received: CHF 480'000
SNSF Prospective researchers	<i>Towards mechanistic models to predict the distributions of alpine plant species under climate change</i> Received: CHF 70'000

## 17. Other academic activities

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### Boards and advisory boards

- Plan d'action climat et biodiversité, Cantons du Valais et de Fribourg. 2020-2023;
- Member of the working groups “Mountain Essential Climate Variables” and “Mountain Essential Biological Variables” of the Mountain Research Initiative MRI;
- Coordinator of the working groups « Promoting Long-Term Social-Ecological Research in mountains » and « Species distribution modeling and remote sensing » for the Global Biodiversity Assessment GMBA platform;
- Member of the Centre for Mountain Research (CIRM) at the University of Lausanne;
- Centre de Recherche sur les Ecosystèmes d’Altitudes (CREA); Member of the Scientific committee, Chamonix, France;
- RechAlp: research platform of the Faculty of Geosciences and Environment (FGSE). Member of the piloting Scientific committee. 2014 – 2016. University of Lausanne. <http://rechalp.unil.ch>,

### Activities as an organizer of conferences

- *Policy-relevant mountain biodiversity monitoring.* Focus session, International Mountain Conference IMC, 14-18 September 2022, Innsbruck, Austria. Function: Chair and co-organizer with Davnah Payne and Iago Otero.
- MRI synthesis workshop “Contribution of Long-Term Social-Ecological Research Programs in mountains to global policy agendas and UN Conventions”. Function: Organizers: Christoph Randin, Davnah Payne. 1-4 October, 2019, Champex-Lac, Switzerland.
- Workshop “Using remote sensing data to inform species distribution models”. February 5-7 2018, Zürich, Switzerland. Function: Co-organizer with Dr. Davnah Payne and Prof. Nigel Yoccoz;
- 6<sup>th</sup> Arctic and Alpine Botanical Garden (AABG) conference. September 1-4 2016 – Pont-de-Nant, Switzerland. Function: Function: Organizer with François Bonnet.
- Peyresq Range Dynamic Workshop II. 29 April – 5 May 2013, Peyresq, France. Function: Co-organizer with Prof. Signe Normand and Prof Niklaus Zimmermann.
- Les Rendez-vous du CREA, 14-5 Juin 2012 & 27-28 Mai 2013, Chamonix. Function : Co-organizer with Dr. Anne Delestrade.
- Workshop "Alpine ecology modeling: European meet American researchers", October 6 – 10 2008, UNIL, Lausanne, Switzerland. Function: Organizer.
- Second EUROMONT workshop, December 19-21 2006, UNIL, Lausanne, Switzerland. Function: Organizing committee, co-leader.
- First EUROMONT workshop, April 10-13 2006, UNIL, Lausanne, Switzerland. Function: Organizing committee, co-leader.
- Second Riederalp workshop on Spatial Modelling in Conservation Ecology, August 14-21 2004, Centre Pro Natura Aletsch Riederalp, Switzerland. Function: Organizing staff.

### Editorial board

- *Plant Ecology and Diversity*. Associate editor since January 2017.
- *Regional Environmental Change*. Invited editor for the special issue *Climate change impacts in the Mediterranean region*.
- Co-coordinator of the section “*La compétition interspécifique et le concept de la niche environnementale d'Hutchinson*” in chapter 14 “*Évolution des interactions des espèces*” of the following reference book in evolutionary biology published by De Boeck:  
Thomas F, Lefèvre T & Raymond M. (2010) *Biologie evolutive*. De Boeck, pp.533-616 1<sup>st</sup> ed.; (2016) pp 555-652 2<sup>nd</sup> ed. <https://www.deboecksuperieur.com/ouvrage/9782807302969-biologie-evolutive>

### Referee

Journal (number of manuscripts reviewed):

*Arctic, Antarctic and Alpine Research* (AAAR) (5); *Agricultural and Forest Meteorology* (2); *Alpine Botany* (2); *Annals of Botany* (1); *Biological Conservation* (2); *Biological Invasions* (2); *Biology Letters* (2); *Diversity and Distribution* (10); *Ecography* (11); *Ecological Application* (1); *Ecology Letters* (2); *Ecological Modelling* (2); *Ecological Monographs* (1); *Estuarine, Coastal and Shelf Science* (1); *Environmental Management* (1); *Environmental Research Letters* (2); *Global Change Biology* (6); *Global Ecology and Biogeography* (5); *Hydrobiologia* (1); *Journal of Biogeography* (10); *Journal of Plant Ecology* (1); *Journal of Vegetation Science* (1); *Methods in Ecology and Evolution* (2); *Oecologia* (1); *Physical Geography* (1); *PlosOne* (1); *Regional Environmental Change* (2); *Plant Ecology and Diversity* (5); *Science* (1); *Wildlife Biology* (1)

## 18. Media

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### Documentary films

- TV5 Monde, A la vie à la terre: *L'adieu aux glaciers*. October 2023. 112 min.  
<https://www.tv5mondeplus.com/fr/environnement/developpement-durable/a-la-vie-a-la-terre-suisse-l-adieu-auxglaciers>
- France 3, Des Racines & des Ailes, : *Le tour du Mont-Blanc*. February 2017. 120 min.  
<https://www.france.tv/france-3/des-racines-et-des-ailes/38995-le-tour-du-mont-blanc.html>
- RTS, Passe-moi les jumelles,: La visite d'un Jardin alpestre. March 17 2017. 61 min.  
<https://www.rts.ch/play/tv/passe-moi-les-jumelles/video/lelevage-de-vers-a-soie-la-visite-dun-jardin-alpeste?urn=urn:rts:video:8458411>
- ARTE TV: *Objectif Mont Blanc, sur les traces d'un géant*. 2015. 93 min.  
Vincent Perazio. ARTE France, Grand Angle Productions & Ethic Prod  
[https://boutique.arte.tv/detail/objectif\\_mont\\_blanck\\_sur\\_traces\\_un\\_geant](https://boutique.arte.tv/detail/objectif_mont_blanck_sur_traces_un_geant)

### Specific projects highlighted in the media

#### *+4°C et plus: les paysages suisses face au changement climatique*

- Le Nouvelliste, Sophie Dorsaz: *Changement climatique: à quoi ressemblera l'Entremont en 2085?* January 3 2024  
<https://www.lenouvelliste.ch/valais/bas-valais/entremont-district/changement-climatique-a-quoi-ressemblera-lentremont-en-2085-une-etude-devoile-deux-scenarios-1348051>
- Le Temps, Isabelle Aeschlimann: *A quoi ressembleront nos montagnes et nos plaines avec 4°C supplémentaires?*  
<https://www.letemps.ch/videos/actualite/les-paysages-suisses-face-au-changement-climatique>
- Canal 9, Marion Police: *L'avenir de nos paysages*. December 28 2023.  
<https://canal9.ch/fr/jeudi-28-12-2023/>

### *GLORIA*

- RTS CQFD: *Le recul des glaciers crée de nouveaux écosystèmes*. September 26 2023.  
<https://avisdexperts.ch/videos/view/16513>
- RTS, La Matinale: *Le recul des glaciers crée de nouveaux écosystèmes*. August 26 2023  
<https://avisdexperts.ch/videos/view/16368>
- Canal 9, Marion Police: *L'avenir de la flore alpine se lit à Champex-Lac*. August 18 2023.  
<https://canal9.ch/fr/avenir-de-la-flore-alpine-se-lit-a-champex-lac/>
- Terre & Nature, Camille Saladin: *Quelles sont les réponses de la flore alpine au réchauffement?* August 10 2023.  
<https://www.terrenature.ch/au-mont-brule-on-etudie-les-reponses-de-la-flore-alpine-au-rechauffement/>
- Le Nouvelliste, Sophie Dorsaz: *Réchauffement: comment en 20 ans la flore alpine de l'Entremont s'est modifiée.* September 12 2022.  
<https://www.lenouvelliste.ch/valais/bas-valais/entremont-district/rechauffement-comment-en-20-ans-la-flore-alpine-de-lentremont-sest-modifiee-1212436>
- Canal 9, Marion Police: *Climat: des scientifiques au sommet pour étudier la flore alpine*. July 22 2022.  
<https://canal9.ch/fr/climat-des-scientifiques-au-sommet-pour-etudier-la-flore-alpine/>
- Couleurs locales. June 10 2022. <https://www.rts.ch/play/tv/couleurs-locales/video/entretien-avec-christophe-randin-directeur-du-jardin-botanique-flore-alpe?urn=urn:rts:video:13164090>

### *ODILE*

- RSI, *Falò Siamo a secco!* Oscar Acciari, Marzio Pescia and Michele Trefogli. Mai 4 2023. 80 min.  
<https://www.rsi.ch/play/tv/falo/video/siamo-a-secco?urn=urn:rsi:video:1569010>
- Terre & Nature. ODILE, un avant-goût de l'irrigation de demain dans le Val de Bagnes. Blaise Guignard. October 27 2022.  
<https://www.terrenature.ch/odile-un-avant-gout-de-lirrigation-de-demain-dans-le-val-de-bagnes/>  
<https://wp.unil.ch/bluemount/files/2022/11/TerreNature.pdf>
- Rhône FM: *L'irrigation à distance des prairies, bientôt une réalité*. September 27 2022.  
<https://www.rhonefm.ch/economie/l-irrigation-a-distance-des-prairies-bientot-une-realite-56010>
- L'Illustré, Jade Albasini *L'or bleu de l'Entremont*. October 27 2021.  
<https://www.illustre.ch/magazine/lor-bleu-de-lentremont-351137>
- Aggri, Point fort. September 17 2021  
[https://wp.unil.ch/bluemount/files/2022/06/AGRI\\_2021\\_37\\_p3.pdf](https://wp.unil.ch/bluemount/files/2022/06/AGRI_2021_37_p3.pdf)

- Le Nouvelliste, Olivier Rausis: *Entremont: agriculteurs et ingénieurs font appel à un satellite pour gérer l'arrosage des prés.* April 4 2021.  
<https://www.lenouvelliste.ch/articles/valais/martigny-region/entremont-agriculteurs-et-ingenieurs-font-appel-a-un-satellite-pour-gerer-l-arrosage-des-pres-1067558>  
<https://wp.unil.ch/bluemount/files/2022/06/Nouvelliste.pdf>
- RSR, On va vers le beau, Jonas Schneiter and Tristan Miquel: Montagne en transition (5/5) - Quels enjeux pour l'agriculture ? February 12 2021.  
<https://www.rts.ch/audio-podcast/2021/audio/montagne-en-transition-5-5-quels-enjeux-pour-l-agriculture-25182638.html>

#### *Swiss stone pine and treeline in Val d'Arpette*

- Allez savoir! *Le Val d'Arpette sous la loupe des scientifiques.* February 2023.  
<https://wp.unil.ch/allezsavoir/le-val-darpette-sous-la-loupe-des-biologistes/>
- Couleurs locales. October 10 2022.  
<https://www.rts.ch/play/tv/couleurs-locales/video/entretien-avec-christophe-randin-directeur-jardin-botanique-alpin-flore-alpe?urn=urn:rts:video:13444679>
- Rhône FM – le journal, **Changement climatique: l'arole, arbre de tous les records**, July 6 2022.  
<https://www.rhonefm.ch/actualites/changement-climatique-larole-arbre-de-tous-les-records>
- CQFD. *La vie en montagne en période de changement climatique.* October 11 2021.  
<https://www.rts.ch/audio-podcast/2021/audio/la-vie-en-montagne-en-periode-de-changement-climatique-25769424.html>

#### *Arborisation en Ville de Lausanne*

- CQFD, RTS: *Coup de chaud sur la ville.* July 12 2018.  
<https://avisdexperts.ch/videos/view/8635>

#### *Herbarium 2.0*

- CQFD, RTS. *Numérissons nos herbiers! Des plantes séchées au big data.* March 14 2018.  
<https://avisdexperts.ch/videos/view/8138>
- Le 12h45, RTS: *L'herbier 2.0.* March 31 2018.  
<https://www.rts.ch/play/tv/emission/12h45?id=548307&station=a9e7621504c6959e35c3ecbe7f6bed0446cdf8da>
- 24heures: *L'herbier vaudois franchit la frontière du big data.* March 17 2018.  
<https://www.24heures.ch/savoirs/environnement/herbier-vaudois-franchit-frontiere-big-data/story/24374347>

#### *TREELIM*

- Le Temps "Les arbres cobayes du réchauffement" August 5 2010:  
[http://www.letemps.ch/Facet/print/Uuid/1372fe74-a008-11df-845e-28a465fdb5bf/Les\\_arbrescobayes\\_du\\_r%C3%A9chauffement](http://www.letemps.ch/Facet/print/Uuid/1372fe74-a008-11df-845e-28a465fdb5bf/Les_arbrescobayes_du_r%C3%A9chauffement)
- Le Nouvelliste "Quand les arbres sont transplantés" June 17 2010:  
<http://www.lenouvelliste.ch/pdf/20100617/pagesda927e68c8/NO-17-06.pdf>

#### *Common Redstart*

- CQFD, RTS: *Rougequeue à front blanc, un exode rural.* June 9 2016.  
<http://www.rts.ch/play/radio/cqfd/audio/rougequeue-a-front-blanc-un-exode-rural?id=7751702>

#### *PhenoClim*

- RTS, CQFD: *Phénoclim: un exemple de science participative.* 1October 13 2014.  
<http://www.rts.ch/la-1ere/programmes/cqfd/6180993-phenoclim-un-exemple-de-science-participative-13-10-2014.html>

### *Atlas scientifique du Mont Blanc*

- Le Temps: L'Atlas du Mont Blanc. May 29 2013  
[http://www.letemps.ch/Facet/print/Uuid/aaf9f3fc-c7c8-11e2-ac35-8b264631d434/Le\\_massif\\_du\\_Mont-Blanc\\_en\\_quelques\\_clics](http://www.letemps.ch/Facet/print/Uuid/aaf9f3fc-c7c8-11e2-ac35-8b264631d434/Le_massif_du_Mont-Blanc_en_quelques_clics)
- France3: L'Atlas du Mont Blanc. May 28 2013  
<http://alpes.france3.fr/2013/05/28/le-futur-du-mont-blanc-mis-la-connaissance-de-tous-sur-un-site-internet-259283.html> About the same topic: <http://alpes.france3.fr/2013/05/18/l-ecosysteme-alpin-la-loupe-l-observatoire-vallot-253719.html>
- Journal Kael: L'Atlas du Mont Blanc. May 3 2013.  
[http://www.kaele-magazine.com/fr/articles\\_read.php?id\\_art=2889&PHPSESSID=8a780d8e463bf2a4b34286c6a664a477](http://www.kaele-magazine.com/fr/articles_read.php?id_art=2889&PHPSESSID=8a780d8e463bf2a4b34286c6a664a477)

### *Other topics*

- CQFD. *La fonte précoce des neiges alpines inquiète*. April 19 2021. <https://avisdexperts.ch/videos/view/13060>
- Le Temps. *La flore alpine face au changement climatique*. Bolis A. February 12 2021.  
<https://www.letemps.ch/sciences/flore-alpine-lepreuve-changement-climatique>
- Le Matin Dimanche. *Les extraordinaires pouvoirs des plantes en coussins*. Hoffmeyer V. September 13 2020.
- Le Monde. Les sommets alpins, berceaux d'une diversité florale insoupçonnée. Bolis A. August 10 2020.  
[https://www.lemonde.fr/sciences/article/2020/08/10/les-sommets-alpins-berceaux-d'une-diversite-florale-insoupconnee\\_6048562\\_1650684.html](https://www.lemonde.fr/sciences/article/2020/08/10/les-sommets-alpins-berceaux-d'une-diversite-florale-insoupconnee_6048562_1650684.html)
- Prise de Terre, RTS. *A la poursuite du froid. Avec le froid va tout s'en va?* February 1 2020. Lausanne.  
<https://www.rts.ch/play/radio/prise-de-terre/audio/prise-de-terre?id=11023496>
- Podium BOTANICA. *Klimawandel im Pflanzenreich – Bäume der Zukunft*. May 8 2019. Round table organized by Tages-Anzeiger/SonntagsZeitung at the botanical garden of Zürich.  
Herbarium 2.0
- RTS La 1<sup>ère</sup>: “Devine qui vient dîner ?” July 10 2012: <http://www.rts.ch/la-1ere/programmes/devine-qui-vient-diner/?date=10-07-2012>
- Radio La Voix du Vietnam (VOV World) : “Changement climatique: certaines plantes souffrent, d'autres en profitent”. July 9 2012. Part 1 : <http://vovworld.vn/fr-CH/Magazine-Dimanche/Changement-climatique-certaines-plantes-souffrent-dautres-en-profitent/95882.vov>
- TV8 Mont-Blanc pour “Les rendez-vous du CREA” June 5 2012: [http://lejt.tv8montblanc.com/Le-Crea-propose-de-decouvrir-le-passe-le-present-et-l-avenir-de-la-flore-des-Alpes\\_v4577.html](http://lejt.tv8montblanc.com/Le-Crea-propose-de-decouvrir-le-passe-le-present-et-l-avenir-de-la-flore-des-Alpes_v4577.html)
- Migros Magazine “Quel impact aura le réchauffement climatique sur la flore?” February 27 2012:  
<http://www.migrosmagazine.ch/societe/environnement/article/quel-impact-aura-le-rechauffement-climatique-sur-la-flore>

# RESEARCH OUTPUTS

## Christophe F. Randin



### Citations and publication statistics

Total published: 75 peer-reviewed papers in international scientific journals (69 research papers and 5 reviews / synthesis, 1 editorial), 2 papers in proceedings of international conferences and 3 book chapters.

**ISI Web of Science:** 9'417 citations,  $H$ -index = 42; 6 highly cited papers;

**Google Scholar:** 14'129 citations, Google  $H$ -index = 46,  $i10$  = 68;

**Thompson Reuters Highly Cited Researchers 2016:** “Ecology/Environment”

**ResearcherID:** K-6969-2016 ; <http://www.researcherid.com/rid/K-6969-2016>

**ORCID iD :** <https://orcid.org/0000-0002-4171-0178>

### A. ISI RESEARCH PAPERS WITH PEER-REVIEW

<sup>(1)</sup> First author or first co-author

<sup>(2)</sup> Leading (or co-leading) author

#### In preparation

Lahaye J, **Randin CF<sup>(1)</sup>**, Scherrer D, Theurillat JP, Levivier S, Robson B, Lischke H, Skaloud J.. Enhancing projections of process-based species distribution model at the treeline ecotone with airborne remote sensing in the Swiss Alps. Target journal: *Remote Sensing of the Environment RSE* (IF = 13.5).

**Randin CF<sup>(1)</sup>**, Robson B<sup>(1)</sup> & Theurillat JP. A climate-based growth model for the Stone pine (*Pinus cembra* L.) at the treeline ecotone. Target journal: *Frontiers in Forests and Global Change* (IF = 3.2)

**Randin CF<sup>(1)</sup>**, Asse, D, Guisan, A, Urbach, D, Reynard E *et al.* Mountain monitoring in Switzerland – challenges and opportunities. Target journal: *Mountain Research and Development mrd* (IF = 2.4).

#### To be submitted (manuscripts available)

Bütikofer L, Chappuis E, Zimmer A, Huss M, Clavien Y, &**Randin CF<sup>(2)</sup>**. Estimating the ecological value of Swiss alpine proglacial zones. Target journal: *Landscape and Urban Planning* (IF=9.1)

Robadey A, Bütikofer L, Dullinger S, Theurillat, JP, Vittoz P, Mariethoz G &**Randin CF<sup>(2)</sup>**. Remote sensing combined with a diachronical survey reveals a link between micro-topography and alpine vegetation migration dynamics. Target journal: *Diversity & Distributions* (IF=4.6)

Manzocchi S, Descombes P, Dullinger S, Zimmermann NE, P, Felber F<sup>(2)</sup> Parisod C<sup>(2)</sup> & **Randin CF<sup>(2)</sup>**. Unravelling the origins of edelweiss (*Leontopodium alpinum* Cass.) populations from the jura mountains. Target journal: *Ecography* (IF=5.9).

**In revision**

69. Cristofari H, Asse D, Chanteloup L, Guisan A, Otero I, Reynard E, Urbach D<sup>(2)</sup> & **Randin CF<sup>(2)</sup>** A model of mountain socio-ecological systems to catalyze multi-actor collaborations towards sustainability. *Earth's Future*. (MS 2023EF003917). <https://doi.org/10.21203/rs.3.rs-3054238/v1> (IF=8.2)
68. Schmeller DS, Thornton JM, Alexander J, Walter JW, Kulonen A, Mills RTE, Notornicola C, Palazzi E, Harald PH, Randin CF, Sergey Rosbakh S11, Roger Sayre R12, Nasrin Amini Tehrani NA9, Davnah Urbach D13, William W. M. Verbiest WWM2, Tom Walker TWN, Wipf S & Adler C. Towards a set of Essential Biodiversity Variables for assessing change in mountains globally. *BioScience*. (BIOS-23-0106) (IF 10.8)

**Conditionally accepted**

67. Rumpf SB, Buri A, Grand S, **Randin CF**, Tesson S, Cianfrani C, & Guisan A. Independent trends of mountain vegetation and soil properties over 40 years of environmental change. *Journal of Vegetation Science*. (IF 2.8)
66. Rut Mayo de la Iglesia1, Luca Miserere2, Mathias Vust3, Jean-Paul Theurillat4,5, Christophe Randin4,6,7, Pascal Vittoz8 Divergent responses of alpine bryophytes and lichens to climate change in the Swiss Alps. *Journal of Vegetation Science*. (IF 2.8)

**2024**

65. Butikofer L, Adde A, Urbach D, Tobias S, Huss M, Guisan A, & **Randin CF<sup>(2)</sup>**. (2024). High-resolution land use/cover forecasts for Switzerland in the 21st century. *Scientific Data*, 11(1). <https://doi.org/10.1038/s41597-024-03055-z> (IF 10.8)

**2023**

64. Bayle A, Carlson BZ, Zimmer A, Vallée S, Rabatel A, Cremonese E, Filippa G, Dentant C, **Randin CF**, Mainetti A, Roussel E, Gascoin S, Corenblit D, & Choler P. 2023. Local environmental context drives heterogeneity of early succession dynamics in alpine glacier forefields, *Biogeosciences* **20** 1649–1669. <https://doi.org/10.5194/bg-20-1649-2023> (IF 4.8)

**2021**

63. Choler P, Bayle A, Carlson BZ, **Randin CF**, Filippa G, Cremonese E. 2021. The tempo of greening in the European Alps: spatial variations on a common theme. *Global Change Biology*, 27(21), 5614–5628. <https://doi.org/10.1111/gcb.15820> (IF 11.6)
62. Thornton, J. M., Palazzi, E., Pepin, N. C., Cristofanelli, P., Essery, R., Kotlarski, S., Giuliani, G., Guigoz, Y., Kulonen, A., Pritchard, D., Li, X., Fowler, H. J., Randin, C. F., Shahgedanova, M., Steinbacher, M., Zebisch, M., & Adler, C. (2021). Toward a definition of Essential Mountain Climate Variables. *One Earth*, 4(6), 805–827. <https://doi.org/10.1016/j.oneear.2021.05.005>
61. Moos C, Guisan A, **Randin CF**, Lischke H. 2021. Climate change impacts the protective effect of forests: A case study in Switzerland. *Frontiers in Forests and Global Change, section Forest Management* **4** 682923. <https://doi.org/10.3389/ffgc.2021.791067> (IF=4.7)
60. Moos C, Khelidj N, Guisan A, Lischke H<sup>(2)</sup>, **Randin CF<sup>(2)</sup>**. 2021. A quantitative assessment of rockfall influence on forest structure in the Swiss Alps. *European Journal of Forest Research* **140** (1) 91–104. [doi.org/10.1007/s10342-020-01317-0](https://doi.org/10.1007/s10342-020-01317-0) (IF=2.581)
59. Pellet J, Sonnay V, **Randin CF**, Sigg P, Rosselet M. & Graz E. 2021. Urban arborization in Lausanne under climate changes. *Bulletin de la Société Vaudoise des Sciences Naturelles* **100** 73–89. <https://doi.org/10.5169/seals-953537>

**2020**

58. Asse D<sup>(1)</sup>, **Randin CF<sup>(1)</sup>**, Bonhomme M, Delestrade A & **Chuine I**. 2020. Process-based models outcompete correlative models in projecting spring phenology of trees in a future warmer climate. *Agricultural and Forest Meteorology* **285–286** 107931. <https://doi.org/10.1016/j.agrformet.2020.107931> (IF=4.753)

**2019**

57. Droz B, Arnoux R, Bohnenstengel T, Laesser J, Spaar R, Ayé R, **Randin CF<sup>(2)</sup>**. 2019. Moderately urbanized areas as a conservation opportunity for an endangered songbird. *Landscape and Urban Planning*, **181**, 1–9. <https://doi.org/10.1016/j.landurbplan.2018.09.011> (IF=5.957)

**2018**

56. Theodoridis S, Patsiou TS, **Randin CF<sup>(2)</sup>** & Conti E. 2018. Forecasting range shifts of a cold-adapted species under climate change: are genomic and ecological diversity within species crucial for future resilience? *Ecography*, **41** (8) 1357–1369. <https://doi.org/10.1111/ecog.03346> (IF=4.52)
55. Asse D, Chuine I, Vitasse Y, Yoccoz NG, Delpierre N, Badeau V, Delestrade A & **Randin CF<sup>(2)</sup>** 2018. Warmer winters reduce the advance of tree Spring phenology induced by warmer Springs in the Alps. *Agricultural and Forest Meteorology* **252** 220–30. <https://doi.org/10.1016/j.agrformet.2018.01.030> (IF=4.753)

**2017**

54. Theodoridis S, **Randin CF**, Peter Szovenyi P, Boucher FC, Patsiou TS, & Conti E. 2017. How do cold-adapted plants respond to climatic cycles? Interglacial expansion explains current distribution and genomic diversity in *Primula farinosa* L. *Systematic Biology* **66** (5) 715–36. (IF=8.917)
53. Patsiou TS, Conti E, Theodoridis S, & **Randin CF<sup>(2)</sup>**. 2017. The contribution of cold air pooling to the distribution of a rare and endemic plant of the Alps. *Plant Ecology & Diversity* **10** (1): 29–42. <https://doi.org/10.1093/sysbio/syw114> (IF=2.349)

52. Di Cola V, Broennimann O, Petitpierre B, Breiner, FT, D'Amen M, **Randin CF**, Engler R, Pottier J, Pio D, Dubuis A, Pellissier L, Mateo RG, Hordijk W, Salamin N, & Guisan A. 2017. ecospat: an R package for the support of spatial analyses and modelling of species niches and distributions. *Ecography* **40** (6) 774-787. <https://doi.org/10.1111/ecog.02671> (IF=4.52)
51. Casazza G, Boucher F, Minuto, L, **Randin CF<sup>(1)</sup>** & Conti E. 2016. The roles of floral and niche shifts in the establishment and persistence of polyploids in an Alpine primrose. *Annals of Botany*. **19** (1) 81-93. <https://doi.org/10.1093/aob/mcw221> (IF=4.088)

**2016**

50. Roulin A and Randin C.<sup>(1)</sup> 2016. Barn owls display larger black feather spots in cooler regions on the British Isles. *Biological Journal of the Linnean Society*. **119** (2) 445–54. <https://doi.org/10.1111/bij.12814> (IF = 2.28)

**2015**

49. Klein T, **Randin CF<sup>(1)</sup>**, Körner C. 2015. Water availability controls forest canopy height at the global scale. *Ecology Letters* **8** (12): 1311-1320. <https://doi.org/10.1111/ele.12525> (IF=10.772)
48. Cianfrani C, Satizábal HF, **Randin CF<sup>(2)</sup>** 2015. A spatial modeling framework for dealing with climate change on freshwater ecosystem: response of brown trout biomass seasonal variation to changing water temperature. *Ecological Modelling* **313** 1-12. <https://doi.org/10.1016/j.ecolmodel.2015.06.023> (IF=2.540)
47. **Randin CF<sup>(1)</sup>**, Dedieu J-P, Zappa M, Long L, and Dullinger S. 2015. Validation of a spatially-distributed snow-evolution model (SnowModel) and semi-distributed rainfall-runoff hydrological model (PREVAH) when predicting snow cover in a topographically-complex mountain environment. *Ecohydrology* **8** (7) 1181-1193. <https://doi.org/10.1002/eco.1570> (IF=2.75)
46. Roulin A, & **Randin<sup>(1)</sup> CF**. 2015. Gloger's rule may not work if melanogenic genes have pleiotropic effects: a study in North American barn owls. *The Auk* **132** 321-332 <https://doi.org/10.1642/AUK-14-167.1> (IF=2.627)

**2014**

45. Pradervand JN, Pellissier L, Randin CF and Guisan A. 2014. Functional homogenization of bumblebee communities in alpine landscape under climate change. *Climate Change Responses* **1** (1). <https://doi.org/10.1186/s40665-014-0001-5>
44. Maher SP, **Randin CF**, Guisan A and Drake JM. 2014. Patten recognition ecological niche models fit to presence-only and presence-absence data. *Methods in Ecology and Evolution* **5** (8) 761-770 <https://doi.org/10.1111/2041-210X.12222> (IF=5.093)
43. Vicente J, Gonçalves J, Honrado J, **Randin CF**, Pottier J, Lomba A, Broennimann O, and Guisan A. 2014. A framework for assessing the scale of influence of environmental factors on ecological patterns. *Ecological Complexity* **20**: 151-156. <https://dx.doi.org/10.1016/j.ecocom.2014.10.005> (IF=2.484)
42. Carlson BZ, George D, Rabatel A, **Randin CF**, Renaud J, Delestrade A, Zimmerman NE, Choler P and Thuiller W. 2014. Accounting for treeline shift, glacier retreat and primary succession in mountain plant distribution models. *Diversity and Distributions* **20** (12): 1379-1391 <https://doi.org/10.1111/ddi.12238> (IF=6.122)
41. van Ewijk K, **Randin CF**, Treitz PM & Scott NA. 2014. Predicting Fine-Scale Species Abundance Patterns using Biotic Variables derived from LiDAR and High Spatial. *Remote Sensing of Environment* **150** 120-131. <https://doi.org/10.1016/j.rse.2014.04.026> (IF=6.144)
40. Vicente J, Pereira HM, **Randin CF**, Gonçalves J, Lomba A, Alves P, Metzger, M. Cezar J, Guisan A & Honrado J. 2014. Environment and dispersal paths override life strategies and residence time in determining regional patterns of invasion by alien plants. *Perspectives in Plant Ecology, Evolution and Systematics*. **16** (1) 1-10. <https://doi.org/10.1016/j.ppees.2013.10.003> (IF=4.488)
39. Patsiou TS, Theodoridis S, Conti E & **Randin CF<sup>(2)</sup>** 2014. Topo-climatic microrefugia explain the persistence of a rare endemic plant in the Alps during the last 21 millennia. *Global Change Biology*. **20** (7): 2286-2300 <https://doi.org/10.1111/gcb.12515> (IF=8.997)
38. Pradervand J-N, Dubuis A, Pellissier L, Guisan A & **Randin CF<sup>(2)</sup>**. 2014. Very high-resolution environmental predictors in species distribution models: moving beyond topography? *Progress in Physical Geography* **38** (1) 79-96. <https://doi.org/10.1177/0309133313512667> (IF= 3.360)
37. Kollas C, Körner C & **Randin CF<sup>(2)</sup>** 2014. Spring frost and growing season length co-control the cold range limits of broad-leaved trees. *Journal of Biogeography*. **41** (4): 773-783. <https://doi.org/10.1111/jbi.12238> (IF=4.544)
36. Vitasse Y, Kollas C, Lenz A, **Randin CF**, Hoch G & Körner C. 2014. Genetic vs. non-genetic responses of leaf morphology and growth to elevation in temperate tree species. *Functional Ecology* **28** (1): 243-252. <https://doi.org/10.1111/1365-2435.12161> (IF=4.86)
35. Kollas C, **Randin CF<sup>(1)</sup>**, Vitasse Y & Körner C. 2014. How accurate can weather stations predict temperatures at tree species limits? *Agricultural and Forest Meteorology* **184**: 257-266. <https://doi.org/10.1016/j.agrformet.2013.10.001> (IF=3.991)

**2013**

34. **Randin CF<sup>(1)</sup>**, Paulsen J, Vitasse Y, Kollas C, Wolgemuth T, Zimmermann NE & Körner C. 2013. Do altitudinal limits of deciduous tree species match with their thermal latitudinal limits? *Global Ecology and Biogeography*. **22**: 913-923 <https://doi.org/10.1111/geb.12040> (IF=7.223)
33. Vicente JR, Araújo MB, Verburg P, Pereira HM, **Randin CF**, Guisan A & Honrado JP. 2013. Using life strategies to explore the vulnerability of ecosystem services to invasion by alien plants. *Ecosystems*. **16** 678-693. <https://doi.org/10.1007/s10021-013-9640-9> (IF=3.495)
32. Vicente J, Fernandes R, Broennimann O, Poças I, Marcos B, **Randin CF**, Guisan A & Honrado J. 2013. Will climate change drive alien invasive plants into high nature value areas? An improved model-based regional assessment in the North of Portugal. *Journal of Management and Environment*. **131** 185-195. <https://doi.org/10.1016/j.jenvman.2013.09.032> (IF=3.161)

31. Quisthoudt K, Adams J, Rajkaran A, Dahdouh-Guebas F, Koedam N & **Randin CF**<sup>(2)</sup> 2013. Disentangling the effects of climate and land-use change on the current and future distribution of mangroves in South Africa? *Biodiversity and Conservation*. **22** 1369-1390 <https://doi.org/10.1007/s10531-013-0478-4> (IF=2.238)
30. Theodoridis S, **Randin CF**, Broennimann O, Patsiou T and Conti E. 2013. Divergent and narrower climatic niches characterize polyploid species of European primroses in *Primula* sect. *Aleuritia*. *Journal of Biogeography* **40** 1278-1289. <https://doi.org/10.1111/jbi.12085> (IF=4.544)
29. Normand S, **Randin CF**<sup>(1)</sup>, Ohlemüller R, Bay C, Høye TT, Kjær, ED, Körner C, Lischke H, Maiorano L, Paulsen J, Pearman PB, Psomas, A, Treier UA, Zimmermann NE & Svenning J-C. 2013. A greener Greenland? Climatic potential and long-term constraints on the future expansion of trees and shrubs across a large Arctic region. *Philosophical Transactions B* **368**. <https://doi.org/10.1098/rstb.2012.0479> (IF=6.401)
28. Pellissier L, Bräthen KA, Vittoz P, Yoccoz NG, Dubuis A, Meier E, Zimmermann NE, **Randin CF**, Thuiller W & Guisan A. 2013. Thermal niches are more conserved at cold than warm limits in arctic-alpine plant species *Global Ecology and Biogeography*. **22** 933-941. <https://doi.org/10.1111/geb.12057> (IF=7.223)
27. Vitasse Y, Hoch G, **Randin CF**, Scheepens JF, Kollas C, Lenz A & Körner C. 2013. Elevational adaptation and plasticity of leaf unfolding and budset timing of seedlings of temperate deciduous tree species in the Swiss Alps. *Oecologia* **171** 663–678 <https://doi.org/10.1007/s00442-012-2580-9> (IF=3.412)

**2012**

26. Guisan A., Petitpierre B, Kueffer C, Broennimann O, **Randin CF** & Daehler C. 2012. Response to Comment (Webber *et al.*) on Climatic niche shifts are rare among terrestrial plant invaders. *Science* **12**: 193 (IF=31.36)
25. Vitasse Y, Hoch G, **Randin CF**, Lenz A, Kollas C & Körner C. 2012. Tree recruitment of European tree species at their current upper elevational limits in the Swiss Alps. *Journal of Biogeography*. **39** 1439-1449. <https://doi.org/10.1111/j.1365-2699.2012.02697.x> (IF=4.544)
24. Quisthoudt K, Schmitz N, **Randin CF**, Dahdouh-Guebas F, Robert E & Koedam N. 2012. Temperature variation among mangrove latitudinal range limits worldwide. *Trees - structure and function* **26** 1919–1931. <https://doi.org/10.1007/s00468-012-0760-1> (IF=1.687)
23. Pottier J, Dubuis A, Pellissier L, Maiorano L, Rossier L, **Randin CF**, Vittoz P & Guisan, A. 2012. The accuracy of plant assemblage prediction from species distribution models varies along environmental gradients. *Global Ecology and Biogeography*. **22** 52–63. <https://doi.org/10.1111/j.1466-8238.2012.00790.x> (IF=7.223)
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21. Kollas C, **Randin CF**, Vitasse Y, Hoch G & Körner, C. 2012. Unrestricted quality of seeds in European broad-leaved tree species growing at the cold boundary of their distribution *Annals of Botany* **109** 473-480. <https://doi.org/10.1093/aob/mcr299> (IF=3.501)

**2011**

20. Broennimann O, Fitzpatrick MC, Pearman PB, Petitpierre B, Pellissier L, Yoccoz NG, Thuiller W, Fortin M-J, **Randin CF**, Zimmermann NE, Graham CH & Guisan A. 2011. Measuring ecological niche overlap from occurrence and spatial environmental data. *Global Ecology and Biogeography* **21** 481-497. <https://doi.org/10.1111/j.1466-8238.2011.00698.x> (IF=7.223)
19. Vicente, J, **Randin, CF**, Gonçalves, J, Metzger, MJ, Lomba, A, Honrado, J & Guisan, A. 2011. Where will conflicts between alien and rare species occur after climate and land-use change? *Biological Invasion* **13** 1209-1227 <https://doi.org/10.1111/j.1600-0587.2010.6380.x> (IF=3.04)
18. Engler R, **Randin CF**<sup>(1)</sup>, Thuiller W, Dullinger S, Zimmermann NE, Araújo MB, Pearman PB, Le Lay G, Piédallu C, Albert CH, Choler P, Coldea G, de Lamo X, Dirnböck T, Gégout J-C, Gómez-García D, Grytnes J-A, Heegard E, Høistad F, Nogues-Bravo D, Puscas M, Sebasìà M-T, Stanisci A, Theurillat J-P, Trivedi MR, Vittoz P & Guisan, A. 2011. 21st century climate change threatens mountain flora unequally across Europe. *Global Change Biology* **17** 2230-2341. <https://doi.org/10.1111/j.1365-2486.2010.02393.x> (IF=8.997)

**2010**

17. Vicente J, Alves P, **Randin CF**, Guisan A and Honrado J 2010. What drives invasibility? A multi-model inference test of alien plant species richness patterns in Northern Portugal. *Ecography* **33**: 1081-1092. <https://doi.org/10.1111/j.1600-0587.2010.6380.x> (IF=4.39)
16. Thuiller W, Albert CH, Dubuis A, **Randin CF**, and Guisan, A. 2010. Variation in habitat suitability does not always relate to variation in species' plant functional traits. *Biology Letters* **6**: 120-123. <https://doi.org/10.1098/rsbl.2009.0669> (IF=3.52)
15. Pellissier L, Bräthen KA, Pottier J, **Randin CF**, Vittoz P, Dubuis A, Yoccoz NG, Alm T, Zimmerman NE and Guisan, A. 2010. Species distribution models reveal apparent competitive and facilitative effects of a dominant species on the distribution of tundra plants. *Ecography* **33** 1004-1014. <https://doi.org/10.1111/j.1600-0587.2010.06386.x> (IF=4.39)
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**2009**

13. Vittoz P<sup>(1)</sup>, **Randin CF**<sup>(1)</sup>, Dutoit A, Bonnet F and Hegg O. 2009. Low impact of climate change on subalpine grasslands in the Swiss Northern Alps. *Global Change Biology* **15**: 209-220. <https://doi.org/10.1111/j.1365-2486.2008.01707.x> (IF=8.997)

12. **Randin CF<sup>(1)</sup>**, Engler R, Normand S, Zappa M, Zimmermann NE, Pearman PB, Vittoz P, Thuiller W. and Guisan A. 2009. Climate change and plant distribution: local models predict high-elevation persistence. *Global Change Biology* **15** 1557-1569. <https://doi.org/10.1111/j.1365-2486.2008.01766.x> (IF 8.997)
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10. **Randin CF<sup>(1)</sup>**, Vuissoz G, Liston G, Vittoz P and Guisan A. 2009. Introducing snow and geomorphic disturbance variables into predictive models of alpine plant distribution in the Western Alps. *Arctic, Antarctic, and Alpine Research* **41** (3) 347-361. <https://doi.org/10.1657/1938-4246-41.3.347> (IF 1.429)
9. Normand S, Treier UA, **Randin CF**, Vittoz P, Guisan A & Svenning JC. 2009. Importance of abiotic stress as a range limit determinant for European plants: insights from species responses to climatic gradients. *Global Ecology and Biogeography* **18** (4) 437-449. <https://doi.org/10.1111/j.1466-8238.2009.00451.x> (IF=7.223)
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## 2008

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5. Molnar P, Favre V, Perona P, Burlando P, Randin CF<sup>(2)</sup> & Ruf W (2008). Floodplain forest dynamics in a hydrologically altered mountain river. *Peckiana*, **5** 17-24.

## 2006

4. **Randin CF<sup>(1)</sup>**, Dirnböck T, Düllinger S, Zimmermann NE, Zappa M & Guisan A. 2006. Are species distribution models transferable in space? *Journal of Biogeography* **33** 1689-1703. <https://doi.org/10.1111/j.1365-2699.2006.01466.x> (IF 4.544)
3. Lassueur T, Joost S &**Randin CF<sup>(2)</sup>**. 2006. Very high resolution digital elevation models: do they improve models of plant species distribution? *Ecological Modelling* **198** 139-153. <https://doi.org/10.1016/j.ecolmodel.2006.04.004> (IF 2.17)
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1. Drake J, **Randin CF** & Guisan A. 2006. Modelling ecological niches with support vector machines. *Journal of Applied Ecology* **43** 424-432. <https://doi.org/10.1111/j.1365-2664.2006.01141.x> (IF 4.56)

## B. ISI REVIEW ARTICLES AND SYNTHESIS WITH PEER-REVIEW

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## C. Editorial article

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1. Tramblay Y., Llasat MC, Randin CF and Coppola E. 2020. Climate change impacts on water resources in the Mediterranean. *Regional Environmental Change* **20**, 83. <https://doi.org/10.1007/s10113-020-01665-y> (IF 3.79)

## D. BOOK CHAPTERS

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3. **Randin CF<sup>(1)</sup>**, Pellissier L, Guisan A and Nakhutsrisvili G. 2017. A comparison of climatic niches of the same alpine plant species in the central Caucasus and the Alps. In G. Nakhutsrishvili, O. Abdaladze, K. Batsatsashvili, E. Spehn, & C. Körner (Eds.), *Plant diversity in the central great caucasus: a quantitative assessment* (p. 133-144). [https://doi.org/10.1007/978-3-319-55777-9\\_5](https://doi.org/10.1007/978-3-319-55777-9_5)
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## D. PROCEEDINGS

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## E. Reports

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