


# CURRICULUM VITAE WITH TRACK RECORD

## PERSONAL INFORMATION

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First name, Surname:	Melissa Hamner Magerøy			
Date of birth:	01.11.84	Sex:	F	
Nationality:	Norwegian/American			
ORCID	0000-0001-7801-1007			
URL for personal website:	<a href="https://www.nibio.no/en/employees/melissa-mageroy">https://www.nibio.no/en/employees/melissa-mageroy</a> <a href="https://publons.com/researcher/1003529/melissa-mageroy/">https://publons.com/researcher/1003529/melissa-mageroy/</a> <a href="https://app.cristin.no/persons/show.jsf?id=782844">https://app.cristin.no/persons/show.jsf?id=782844</a>			

## EDUCATION

Year	Faculty/department - University/institution - Country
2011	PhD - Plant Molecular and Cellular Biology - University of Florida -USA Advisor: Harry J. Klee Thesis: "Tomato flavor molecules: A story of guaiacol and glycosylation"
2007	Bachelors of Science -Department of Biology - Trinity University -USA Advisor: James Shinkle Project: "Cross Protection Response Induced by UV-B Exposure and Oxidative Stress in Spinach Seedlings and Mature Plants"

## POSITIONS - CURRENT AND PREVIOUS

Year	Job title - Employer - Country
2016 -	Researcher - Molecular Plant Biology - Norwegian Institute for Bioeconomy Research (NIBIO) - Norway
2012 - 2016	Post-doctoral fellow - Michael Smith Laboratories - University of British Columbia - Canada Lab: Joerg Bohlmann

## CAREER BREAKS

Year	Reason
08.2020 - 07.2021	Maternity leave
07.2017 - 06.2018	Maternity leave

## PROJECT MANAGEMENT EXPERIENCE

Year	Project owner - Project - Role - Funder
2025	NIBIO- Norway spruce somatic embryogenesis - Project leader - FS-Pilot NIBIO
2024 - 2025	AgriBiotix AS - BioProtect: Microorganisms as biostimulants and biological control - Work package leader - Regional research fund (RFF) Viken: Innovation in industry
2024-2025	NIBIO - Can treatment of spruce seedlings with methyl jasmonate and "good" bacteria contribute to reduced pesticide use forest nurseries? - Project leader - The Norwegian Agriculture Agency: Action plan for pesticide use
2023-2026	NIBIO - Weeds vs Crops: effects of climate change - Work package leader - Internal priority research fund
2022-2023	AgriBiotix AS - BioGran: Mikroorganismer for bærekraftig biologisk bekjemping av sopp på granplanter - NIBIO project leader - Regional kvalifiseringsstøtte fra RFF Viken

2021-2024	NIBIO - PROTECT: needles - Project leader - Nordic Forest Research
2021-2025	NIBIO - PROTECT (Pr.Nr: 324129) - Project leader - Norwegian Research Council
2016 - 2020	NIBIO - EpiSpruce (Pr.Nr: 249920) - Project leader - Norwegian Research Council

#### OTHER RELEVANT PROFESSIONAL EXPERIENCES

Year	Description - Role
2022-2025	TolerantTree: Genetics and management for stress tolerant trees for the future climate - Nordic Forest Research Network Project - Assisting national coordinator
2021-2023	COST action: Epigenetic mechanisms of Crop Adaptation To Climate change - Norway representative in management committee
2020 -	Priming in trees consortium - Member
2016 -	Scandinavian Plant Physiology Society - Member
2016 -	European Plant Science Organisation - Member
2014 - 2016	A Rocha: Environmental Stewardship, Canada - Scientific Advisory Board

#### TRACK RECORD

##### PUBLICATIONS

Total published: 30 Google scholar h-index: 18 Total citations: 1601 (as of 06.08.2025)

- Rwizi MT, Česna V, Krokene P & **Mageroy MH**. (2025). Ectomycorrhizal fungi inoculation of conifers increases growth, but not stress resistance: A meta-analysis. *Forest Ecology and Management*, 595, <https://doi.org/10.1016/j.foreco.2025.122982>
- Bitarafan Z, **Mageroy MH**, De Andrade Moral R, Salehan N, Nielsen KS, & Andreassen C. (2025). The effect of climate change on glyphosate control of *Avena fatua*, *Brassica napus*, and *Echinochloa crus-galli*. *Science of the Total Environment*, 983, <https://doi.org/10.1016/j.scitotenv.2025.179682>
- Mageroy MH**, Krokene P & Viejo M. (2025). Climatic and stress memory in trees - and how to study it. Elsevier EBooks, 4, 399-418. <https://doi.org/10.1016/b978-0-443-21903-0.00024-2>
- Huynh NB, Krokene P, Nybakken L, Česna V, **Mageroy MH**. (2024) B-aminobutyric acid does not induce defenses or increase Norway spruce resistance to the bluestain fungus *Grosmannia penicillata*. *Physiologia Plantarum*, <https://doi.org/10.1111/ppl.70009>
- Huynh NB, Krokene P, Puentes A, **Mageroy MH** (2024) Over 20 years of treating conifers with methyl jasmonate: Meta-analysis of effects on growth and resistance. *Forest Ecology and Management*, 561, <https://doi.org/10.1016/j.foreco.2024.121893>
- Fossdal CG, Krokene P, Olsen JE, Strimbeck R, Viejo M, Yakovlev I, **Mageroy MH**. (2024) Epigenetic stress memory in gymnosperms. *Plant Physiology*, kiae051. <https://doi.org/10.1093/plphys/kiae051>
- Elameen A, Maduna SN, **Mageroy MH**, van Eerde A, Knudsen G, Hagen SB, Eiken HG. (2024) Novel insight into lepidopteran phylogenetics from the mitochondrial genome of the apple fruit moth of the family Argyrorethiidae. *BMC Genomics* 25, 21. <https://doi.org/10.1186/s12864-023-09905-1>
- Mageroy MH**, Nagy NE, Steffenrem A, Krokene P, Hietala AM. (2023) Conifer Defenses against Pathogens and Pests - Mechanisms, Breeding, and Management. *Current Forestry Reports*. In press. <https://doi.org/10.1007/s40725-023-00201-5>
- Nybakken L, Lee Y, Brede DA, **Mageroy MH**, Lind OC, Salbu B, Kashparov V, Olsen JE. (2023) Long term effects of ionising radiation in the Chernobyl Exclusion zone on DNA integrity and chemical defence systems of Scots pine (*Pinus sylvestris*). *Science of The Total Environment*. 9:166844. <https://doi.org/10.1016/j.scitotenv.2023.166844>
- Krokene P, Kohmann K, Huynh NB, **Mageroy MH**. Methyl jasmonate, salicylic acid, and oxalic acid affects growth, inducible defenses, and pine weevil resistance in Norway spruce. (2023) *Front Plant Sci*. 14:1155170. <https://doi.org/10.3389/fpls.2023.1155170>.

- Wilkinson SW, Muench A, Wilson RS, Hooshmand K, Henderson MA, Moffat EK, Stassen JHM, López Sánchez A, Fomsgaard IS, Krokene P, **Mageroy MH** and Ton J (2023). Long-lasting memory of jasmonic acid-dependent immunity requires DNA demethylation and ARGONAUTE1. *Nature Plant*. <https://doi.org/10.1038/s41477-022-01313-9>
- Wilkinson SW, Dalen LS, Skrautvol TO, Ton J, Krokene P and **Mageroy MH**. (2022). Transcriptomic changes during the establishment of long-term methyl jasmonate-induced resistance in Norway spruce. *Plant, Cell and Environment*, 1- 23. <https://doi.org/10.1111/pce.14320>
- Wilkinson SW, Vivian-Smith A, Krokene P, and **Mageroy MH**. (2021). The microRNA response associated with methyl jasmonate-induced resistance in Norway spruce bark. *Plant Gene* 27, 100301. <https://doi.org/10.1016/j.plgene.2021.100301>
- Nybakken L, Fløistad IS, **Mageroy M**, Lomsdal M, Strålberg S, Krokene P, and Asplund J. (2021). Constitutive and inducible chemical defences in nursery-grown and naturally regenerated Norway spruce (*Picea abies*) plants. *For. Ecol. Manage.* 491, 119180. <https://doi.org/10.1016/j.foreco.2021.119180>
- De Kesel J, Conrath U, Flors V, Luna E, **Mageroy MH**, Mauch-Mani B, Pastor V, Pozo MJ, Pieterse CMJ, Ton J, and Kynndt T. (2021) The induced resistance lexicon: do's and don'ts. *Trends in Plant Science*. <https://doi.org/10.1016/j.tplants.2021.01.001>
- Mageroy MH**, Wilkinson SW, Tengs T, Cross H, Almvik M, Pétriacq P, Vivian-Smith A, Zhao T, Fossdal CG and Krokene P. (2020). Molecular underpinnings of methyl jasmonate-induced resistance in Norway spruce. *Plant Cell and Environment*. 43, 1827-1843. <https://doi.org/10.1016/j.plgene.2021.100301>
- Mageroy MH**, Christiansen E, Langström B, Borg-Karlson A-K, Solheim H, Björklund N, Schmidt A, Fossdal CG and Krokene P. (2020) Priming of inducible defenses protects Norway spruce against tree-killing bark beetles. *Plant Cell and Environment*, 43, 420-430. <https://doi.org/10.1111/pce.13661>
- Wilkinson SW, **Mageroy MH**, Sánchez AL, Smith LM, Furci L, Cotton TEA, Krokene P and Ton J. (2019) Surviving in a hostile world: plant strategies to resist pests and diseases. *Annual Review of Phytopathology*, 57. <https://doi.org/10.1146/annurev-phyto-082718-095959>
- Parent GJ, Méndez-Espinoza C, Giguère I, **Mageroy MH**, Charest M, Bauce E, Bohlmann J, and MacKay JJ. (2019) Hydroxyacetophenone defenses in white spruce against spruce budworm. *Evolutionary Applications*. 13, 62-75. <https://doi.org/10.1111/eva.12885>
- Annacondia ML, **Mageroy MH**, and Martinez G. (2018) Stress response regulation by epigenetic mechanisms: changing of the guards. *Physiologia plantarum*. 162, 239-250. <https://doi.org/10.1111/ppl.12662>
- Parent GJ, Giguère I, **Mageroy MH**, Bohlmann J and MacKay JJ. (2018) Evolution of the Biosynthesis of Two Hydroxyacetophenones in Plants. *Plant Cell and Environment*, 41, 620-629. <https://doi.org/10.1111/pce.13134>
- Mageroy MH**, Jancsik S, Yuen MMS, Fischer M, Paetz C, Schneider B, MacKay JJ, and Bohlmann J (2017) A conifer UDP-sugar dependent glycosyltransferase contributes to acetophenone metabolism and defense against insects. *Plant Physiology* 175, 641-651. <https://doi.org/10.1104/pp.17.00611>
- Mageroy MH**, Lachance D, Jancsik S, Parent GJ, Séguin A, MacKay JJ, and Bohlmann J (2017) *In vivo* function of *Pgβglu-1* in the release of acetophenones in white spruce. *PeerJ*, 5, e3535. <https://doi.org/10.7717/peerj.3535>
- Mageroy MH**, Parent GJ, Germanos G, Giguère I, Delvas N, Maaroufi H, Baucé É, Bohlmann J, MacKay JJ (2015) Expression of the beta-glucosidase gene *Pgβglu-1* underpins natural resistance of white spruce against spruce budworm. *Plant Journal*, 81, 68-80. <https://doi.org/10.1111/tpj.12699>
- Goulet C, **Mageroy MH**, Lam N, Floystad A, Tieman DM, Klee HJ (2012) The role of an esterase in flavor volatile variation within the tomato clade. *Proceedings of the National Academy of Science*, 109, 19009-19014. <https://doi.org/10.1073/pnas.1216515109>
- Tieman D, Bliss P, McIntyre LM, Blandon-Ubeda A, Bies D, Odabasi AZ, Rodríguez GR, van der Knaap E, Taylor MG, Goulet C, **Mageroy MH**, Snyder CJ, Colquhoun T, Moskowitz H, Clark DG, Sims C, Bartoshuk L, Klee HJ (2012) The chemical interactions underlying tomato flavor preferences. *Current Biology*, 22, 1035-1039. <https://doi.org/10.1016/j.cub.2012.04.016>

- Wang Y, Maruhnich SA, **Mageroy MH**, Justice JR, Folta KM (2012) Phototropin 1 and cryptochrome action in response to green light in combination with other wavelengths. *Planta*, 237, 225-237. <https://doi.org/10.1007/s00425-012-1767-y>
- Mageroy MH**, Floystad A, Tieman DM, and Klee HJ (2011) A *Solanum lycopersicum* catechol-O-methyltransferase involved in synthesis of the flavor molecule guaiacol. *Plant Journal*, 69, 1043-1051. <https://doi.org/10.1111/j.1365-313X.2011.04854.x>
- Mageroy MH**, Kowalik EH, Folta KM, and Shinkle J. (2010) Evidence of physiological phototropin1 (phot1) action in response to UV-C illumination. *Plant signaling and behavior*, 5, 1204-1210. <https://doi.org/10.4161/psb.5.10.12413>
- Jeanguenin L, Lara-Núñez A, Pribat A, **Mageroy MH**, Gregory JF, Rice KC, de Crécy-Lagard V and Hanson AD (2010) Moonlighting glutamate formiminotransferases: can functionally replace 5-formyltetrahydrofolate cycloligase. *Journal of Biological Chemistry*, 285, 41557-41566. <https://doi.org/10.1074/jbc.M110.190504>

## POPULAR SCIENCE

- Krokene P & **Mageroy MH** (2024) Tree Memories: How Can Trees Remember Without a Brain? *Front. Young Minds*. 12:1400253. doi: 10.3389/frym.2024.1400253
- «Framtida for frisk skog duftar av sjasmin» by Silje Kvist Simonsen, *Nationen*, 26 March 2024. <https://www.nationen.no/framtida-for-frisk-skog-duftar-av-sjasmin/s/5-148-520181>
- «TolerantTree - Melissa Magerøy on spruce defense» (2023) <https://www.youtube.com/watch?v=7xDZXjmV-bc>
- “Trees Fighting Back Through Chemical Warfare with Dr. Melissa Mageroy» (2023) <https://www.youtube.com/watch?v=64VwAamUn0g>
- «Forsker på vaksinerer av granplanter» by Bjørn H. Pettersen, *Viken Skog Newsletter*, 20 July 2022. <https://www.viken.skog.no/aktuelt/artikler/forsker-pa-vaksinering-av-granplanter>
- “Mikrobiomets betydning for granas helse og motstandskraft» organizer: Melissa Magerøy, Seminar on Integrated Plant Protection in Forest Plant production, 13 June 2023, Gardemoen, Norway
- Mageroy MH** & Krokene P. «Barkbillekrig – en kamp på liv og død!» (2021) Norsk skogmuseum digital exhibit for on forest research. <https://forskning.skogmus.no/barkbillekrig/forskerne>
- Mageroy MH** & Krokene P. (2020) A battle in the forest: spruce castles and bark beetle attacks. *Frontiers for Young Minds*. <https://doi.org/10.3389/frym.2020.00121>
- «Fra gift til vaksine mot juletrebillen» by Inger Sundheim Fløistad, Paal Krokene, and Melissa Magerøy, *Dagens Næringsliv*, 23 Decemeber 2018.
- “Metyl-jasmonat og plantenes forsvar» by Melissa Magerøy, Lecture for Winter school for forest plant nurseries, 6 February 2019, Ås, Norway
- «Researchers discover natural resistance gene against spruce budworm” by Jean-François Huppé, *EurekaAlert!*, 21 November 2014. [http://www.eurekaalert.org/pub\\_releases/2014-11/ul-rdn112114.php](http://www.eurekaalert.org/pub_releases/2014-11/ul-rdn112114.php)

## FELLOWSHIPS, PRIZES, AND GRANTS

- 2022-2024 Research Project, Nordic Forest Research, 1 000 kNOK
- 2021-2025 Research Project for Renewal, Norwegian Research Council, 12 000 kNOK
- 2019-2020 Nordic Forest Research, Master student project, 15 kNOK
- 2017-2018 Borregaard Research Fund, Master student project, 35 kNOK
- 2016-2019 Young Researcher Talent Grant, FRIPRO, Norwegian Research Council, 7000 kNOK
- 2015 Post-doctoral Travel Grant, Faculty of Science, University of British Columbia
- 2009 Best student presentation, Plant Molecular and Cellular Biology, University of Florida, USA
- 2007-2011 Alumni Fellowship, Plant Molecular and Cellular Biology, University of Florida, USA

2006 Summer Undergraduate Research Fellowship, American Society of Plant Biology, USA

2003-2007 President's Scholarship, Trinity University, USA

#### GRANTED PATENT

**Mageroy MH**, Tieman DM and Klee HJ (2013) Tomato catechol-O-methyltransferase sequences and methods of use. US patent WO2013043666.

#### INVITED PRESENTATIONS

2025 *TolerantTree Priming and memory workshop*, Norway, workshop organizer

2024 *Sparking Curiosity: Writing popular science for kids*, Stockholm, The SNS booth in the exhibition at 2024 IUFRO World Congress

2023 Concurrent symposium leader: ASPB 2023, Savannah, Georgia

2022 Session leader: IUFRO Division 7 meeting: Defense priming in forest trees, Portugal

2022 Invited Talk: IOBC-WPRS PR-IR 2022: Priming the Future for Healthy Plants, UK

2018 Invited Talk: Forest Health Symposium, Norway

2017 Invited Talk: Norwegian Plant Biology Conference 2017, Norway

2017 Invited speaker: Swedish University of Agricultural Sciences Uppsala: Epigenetics workshop, Sweden

2017 Invited Talk: University of Sheffield, Animal and Plant Sciences Department seminar, England

2016 Invited Talk: Norwegian Plant Biology Conference 2016 Norway

2015 Invited Keynote Talk: International Society of Chemical Ecology 2015, Sweden

2014 Invited Talk: Banff Conference on Plant Metabolism, Canada

2014 Invited Talk: Forest Genetics Council Interior Technical Advisory Committee Meeting, Canada

2013 Invited Talk: Gordon Research Conference, Plant Metabolic Engineering, USA

#### REFEREE/EDITORIAL

Referee *Canadian Journal of Forest Research; eLife; Forest Pathology; New Phytologist; Plant Cell & Environment; Plant Journal; Plant Physiology; Plant Gene; Plant and Soil*

Associate Editor *Plant Cell & Environment; Frontiers for Young Minds*

#### SUPERVISION OF STUDENTS

Year	Name	Degree	University/institution - Country	Role
2025-2026	Lisa Marianne Berger	Master	NIBIO /Norwegian University of Life Sciences - Norway	Main advisor; involved in all aspects of the work
2025-2026	Frida Gjone-Ring	Master	NIBIO /Norwegian University of Life Sciences - Norway	Main advisor; involved in all aspects of the work
2024	Claudia Coromina Pla	Intern	University of Barcelona	Main advisor; involved in all aspects of the work
2024-2025	Ingeborg Sletten	Master	NIBIO /Norwegian University of Life Sciences - Norway	Main advisor; involved in all aspects of the work
2023	Frederik Friborg Nexø	Master	NIBIO / Technical university of Denmark - Norway/Denmark	Main advisor; involved in all aspects of the work

2023-2024	Veronica Quynh Thi Phan	Master	NIBIO /Norwegian University of Life Sciences - Norway	Main advisor; involved in all aspects of the work
2023	Thomas Vinatier	Master	NIBIO / University of Montpellier - Norway/France	Main advisor; involved in all aspects of the work
2023	Hannah Babel	Intern	NIBIO / University of Bergen - Norway	Main advisor; involved in all aspects of the work
2021-2023	Marrian Tendai Rwizi	Master	NIBIO /Norwegian University of Life Sciences - Norway	Main advisor with Paal Krokene; Oversaw work and writing of the thesis
2022-2025	Ngan Bao Huynh	PhD	NIBIO /Norwegian University of Life Sciences - Norway	Main advisor; involved in all aspects of the work; acquired funding for the project (Pr. Nr. 324129)
2021-2022	Femke Emma de Ruiter	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Line Nybakken and Johan Asplund; Oversaw molecular lab work
2020-2021	Ngan Bao Huynh	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Paal Krokene; Oversaw experimental work and writing of the thesis
2019-2020	Solveig Stålberg	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Line Nybakken and Paal Krokene; Helped with experimental design; Oversaw lab work
2019-2020	Maren Lomsdal	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Line Nybakken and Paal Krokene; Helped with experimental design
2019-2020	Hristo Hansen	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Paal Krokene; Oversaw experimental work and writing of the thesis
2019-2020	Claire Devos	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Paal Krokene; Oversaw experimental work and writing of the thesis; acquired funding for the project (Nordic Forest Research)
2019	Konrad Skåravik Bryhn	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Paal Krokene; Oversaw experimental work
2017-2018	Thomas Olafsen Skrautvol	Master	NIBIO /Norwegian University of Life Sciences - Norway	Co-advisor with Paal Krokene and Inger Sundheim Fløistad; Oversaw experimental work; acquired funding for the project (Borregaard Research Fund) *winner of master thesis in Forestry for 2018
2016-2020	Samuel W. Wilkinson	PhD	University of Sheffield/ NIBIO - UK/Norway	Co-advisor with Jurriaan Ton; oversaw experimental work done at NIBIO; acquired funding for the project (Pr. Nr. 249920)

NMBU Master degree Examiner: Johanna Sætherø Steen (MINA-2020), Even Vereide (MINA-2020), Tor Martin Steine Lohne (MINA-2023), Mathias Tupinier (BIOVIT-2024), Tonje Ekkeren Eim (KBM-2025)  
PhD opponent: Dr. Ieva Česnienė (LAMMC-2025)