CURRICULUM VITAE WITH TRACK RECORD

PERSONAL INFORMATION

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

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
2022-2027	NIBIO – A climate for spruce? New forest management to mitigate bark beetle risks under climate change – Work package leader – Norwegian Research Council
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 Manager – Nordic Forest Research
2021-2025	NIBIO - PROTECT (Pr.Nr: 324129) - Project Manager - Norwegian Research Council
2016 - 2020	NIBIO - EpiSpruce (Pr.Nr: 249920) - Project Manager - Norwegian Research Council

OTHER RELEVANT PROFESSIONAL EXPERIENCES

Year	Description - Role
2022-2025	TolerantTree: Genetics and management for stress tolerant tress for the future clime – 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: 23 Google scholar h-index: 14 Total citations: 1152 (as of 12.10.2023)

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, **Magerøy 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 Kyndt 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 *Pgßglu-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, Bauce É , Bohlmann J, MacKay JJ (2015) Expression of the beta-glucosidase gene Pgßglu-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-Nùñez 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

2023 «TolerantTree - Melissa Magerøy» https://www.youtube.com/watch?v=7xDZXjmV-bc

2023 «Trees Fighting Back Through Chemical Warfare with Dr. Melissa Mageroy» https://www.youtube.com/watch?v=64VwAamUn0g

2020 **Mageroy MH** & Krokene P. (2020) A battle in the forest: spruce castles and bark beetle attacks. *Frontiers for Young Minds*.

2018 News article: Dagens Næringsliv, Fra gift til vaksine mot juletrebillen, Mandag 24. desember

2014 Press Release: EurekaAlert!, < http://www.eurekalert.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

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*
Review Editor	*Frontiers in Plant Science*: *Plant Metabolism and Chemodiversity*
Associate Editor	*Frontiers for Young Minds*

SUPERVISION OF STUDENTS

Year	Name	Degree	University/institution - Country	Role
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)

Sensor for 3 master degrees at NMBU (Johanna Sætherø Steen, Even Vereide, Tor Martin Steine Lohne)