

# Personnel

## Research expertise areas (REAs) with specific expertise and roles of key professors

In the RA, researchers representing three thematically connected REAs provide together the specific top-level expertise needed to fulfill the strategic goals of the RA and implement successfully the research in four work packages (WPs), which are connected to each other. The specific expertise, roles of key professors working in different REAs are described below:

### REA 1: Responses and acclimation mechanisms of terrestrial plants to changing environment

Prof. Riitta Julkunen-Tiitto, Department of Environmental and Biological Sciences, is expert on responses and acclimation mechanisms of coniferous species (Norway spruce and Scots pine) to changing environment (contribute to WPs 1 and 2, coordinator of WP2). Prof. Elina Oksanen, Department of Environmental and Biological Sciences, is expert on responses and acclimation mechanisms of Betula species to warming climate with increasing multiple abiotic and biotic stresses (WPs 1-3). Prof. Jarmo Holopainen, Department of Environmental and Biological Sciences, is expert on biogenic volatile organic compound (BVOC) responses of boreal tree species to changing abiotic environment and herbivore stress (WP2).

### REA 2: Dynamics and management of boreal forest ecosystems

Prof. Heli Peltola, School of Forest Sciences, is expert on forest ecosystem and risk modelling and sustainable management of boreal forests (upland mineral soils) under changing operative environment (contribute to WPs 1, 2 and 4, coordinator of WP1). Prof. Jari Kouki, School of Forest Sciences, is expert on patterns and processes related to ecosystem changes and services, in particular forest biodiversity (WPs 1 and 2). Prof. Eeva-Stiina Tuittila, School of Forest Sciences, is expert on plant soil interactions and vegetation and carbon dynamics of boreal forests (peatlands) under changing environment (WPs 1, 2 and 4). Prof. Jyrki Kangas is expert on methods and applications of multiple-criteria decision support and on management of multi-functional forestry (WPs 1 and 4).

### REA 3: Forest Inventory and Forest Management Planning

Prof. Matti Maltamo, School of Forest Sciences, is expert on forestry applications of airborne laser scanning (contribute to WPs 1 and 3, coordinator of WP3). Prof. Timo Pukkala, School of Forest Sciences, is expert on development of tools for adaptive multifunctional optimization and forest management under changing operative environment (WPs 1, 3 and 4, coordinator of WP4). Prof. Timo Tokola, School of Forest Sciences, is expert on development of new methods and techniques for forest information management and monitoring of bioeconomy activities (WPs 1 and 3).

## Research personnel of RA in 2015

**Table.** Personnel structure of RA in different research expertise areas (REAs) in 2015

REAs	Professors	Other senior researchres	Post Docs	PhD students
RA1	Riitta Julkunen-Tiitto, Elina Oksanen, Jarmo Holopainen	Markku Keinänen, Sari Kontunen-Soppela, Minna Kivimäenpää, James Blande, Anne Kasurinen, Tommi Nyman, Teemu Tahvanainen, Antti Haapala	Sarita Keski-Saari, Laure Fauch, Virpi Virjamo, Anneli Salonen, Tao Li, Päivi Tiiva	Katri Nissinen, Unni Krishan, Norul Sobuj, Minna Kosonen, Jenna Lihavainen, Lars Granlund, Maya Deepak, Yaodan Zhang, Antti Tenkanen, Paula Thitz, Mengistu Maja, Rajendra Ghimire, Eliezer Khaling, Adedayo Mofikoya, Muhammad Usman Rasheed
RA2	Heli Peltola, Jari Kouki, Eeva-Stiina Tuittila, Jyrki Kangas	Zhenming Ge, Veli-Pekka Ikonen, Antti Kilpeläinen, Matti Koivula, Katri Luostarinen, Harri Strandman, Olli-Pekka Tikkainen, Hannu Väisänen	Ashraful Alam, Jinnan Gong, Ane Zubizarreta Gerendiain (50%)	Laith Alrahahleh, Tarit Baul, Xin Jia, Eino Levkoev, Pirkka Torssonen, Ben Wang, Terhi Vilen, Osmo Heikkala, Aino Hämäläinen, Antonio Rodriguez, Panu Kunttu, Parvathy Venugopal, Hannes Pasanen, Mihailis Cugunovs, Aino Korrensalo, Dmirty Lepilii, Jari Jokela
RA3	Matti Maltamo, Timo Pukkala, Timo Tokola	Petteri Packalen, Jari Vauhkonen	Lauri Korhonen, Ane Zubizarreta Gerendiain (50%), Ruben Valbuena	Daniela Ala-Sisto, Anton Kuzmin, Markus Melin, Inka Pippuri, Katlin Kiss, Parvez Rana, Hou Zhengyang, Mari Selkimäki, Adrian Pascual, Olalla Diaz Yanez, Juha Keränen, Syed Adnan, Rita Heiskanen

Additionally, UEF supporting staff of RG1: Sinikka Sorsa, Hannele Hakulinen, Riitta Pietarinen, Ilkka Porali; and of RG2: Juha Vattulainen, Maini Mononen, Leena Kuusisto, Jarmo Pennala.

## Research personnel of RA in 2016

**Table.** Personnel structure of RA in different research expertise areas (REAs) in 2016

REAs	Professors	Other senior researchers	Post Docs	PhD students
RA1	Riitta Julkunen-Tiitto, Elina Oksanen, Jarmo Holopainen	Markku Keinänen, Sari Kontunen-Soppela, Minna Kivimäenpää, James Blande, Anne Kasurinen, Tommi Nyman, Teemu Tahvanainen, Antti Haapala	Sarita Keski-Saari, Laure Fauch, Virpi Virjamo, Anneli Salonen, Tao Li, Päivi Tiiva, Tendry Randriamanana (75%)	Katri Nissinen, Unni Krishan, Norul Sobuj, Minna Kosonen, Jenna Lihavainen, Lars Granlund, Maya Deepak, Yaodan Zhang, Antti Tenkanen, Paula Thitz, Mengistu Maja, Rajendra Ghimire, Eliezer Khaling, Adedayo Mofikoya, Muhammad Usman Rasheed, Juhani Marttila, Chenyang Cai, Qing Zhao, Aitor Barbero Lopez
RA2	Heli Peltola, Jari Kouki, Eeva-Stiina Tuittila, Jyrki Kangas	Zhenming Ge, Tero Heinonen (50%), Veli-Pekka Ikonen, Antti Kilpeläinen, Matti Koivula, Katri Luostarinen, Harri Strandman, Olli-Pekka Tikkanen, Hannu Väisänen, Pradipta Halder	Ashraful Alam, Jinnan Gong, Ane Zubizarreta Gerendiain (50%), Xiao Zhou, Tendry Randriamanana (25%)	Laith Alrahahleh, Tarit Baul, Xin Jia, Eino Levkoev, Ben Wang, Osmo Heikkala, Aino Hämäläinen, Antonio Rodriguez, Panu Kunttu, Parvathy Venugopal, Hannes Pasanen, Mihailis Cugunovs, Aino Korrensalo, Dmirty Lepilii, Elisa Männistö, Nicola Kokkonen, Jari Jokela, Mikko Tikkinen
RA3	Matti Maltamo, Timo Pukkala, Timo Tokola	Petteri Packalen, Jari Vauhkonen, Tero Heinonen (50%), Eetu Kotivuori	Lauri Korhonen, Ane Zubizarreta Gerendiain (50%), Ruben Valbuena, Markus Melin	Daniela Ala-Sisto, Anton Kuzmin, Katalin Kiss, Parvez Rana, Mari Selkimäki, Adrian Pascual, Olalla Diaz Yanez, Juha Keränen, Syed Adnan, Rita Heiskanen, Blanca Sanz, Mikko Kukkonen

Additionally, UEF supporting staff of RG1: Sinikka Sorsa and of RG2: Maini Mononen, Leena Kuusisto, Jarmo Pennala, Risto Ikonen.

## Research personnel of RA in 2017

Table. Personnel structure of RA in different research expertise areas (REAs) in 2017

REAs	Professors	Other senior researchers	Post Docs	PhD students
RA1	Riitta Julkunen-Tiitto, Elina Oksanen, Jarmo Holopainen	James Blande, Antti Haapala, Anne Kasurinen, Markku Keinänen, Minna Kivimäenpää, Sari Kontunen-Soppela, Lauri Mehtätalo, Tommi Nyman, Teemu Tahvanainen	Laure Fauch, Rajendra Ghimire, Sarita Keski-Saari, Anu Lavola, Tendry Randriamanana (50%), Anneli Salonen, Päivi Tiiva, Virpi Virjamo, Xiao Zhou (25%)	Agnès Brosset, Chenyang Cai, Maya Deepak, Tianran Ding, Lars Granlund, Eliezer Khaling, Aitor Barbero Lopez, Juhani Marttila, Adedayo Mofikoya, Katri Nissinen, Muhammad Usman Rasheed, Janne Räsänen, Amélie Saunier, Unni Sivadasan, Norul Sobuj, Antti Tenkanen, Paula Thitz, Mezbah Uddin, Yaodan Zhang, Qing Zhao
RA2	Heli Peltola, Jari Kouki, Eeva-Stiina Tuittila, Jyrki Kangas	Zhenming Ge, Tero Heinonen (50%), Teppo Hujala, Veli-Pekka Ikonen, Antti Kilpeläinen, Matti Koivula, Katri Luostarinen, Lauri Mehtätalo, Sari Pitkänen, Harri Strandman, Olli-Pekka Tikkanen, Hannu Väisänen	Ashraful Alam, Jinnan Gong, Osmo Heikkala, Tendry Randriamanana (25%), Harri Silvennoinen	Laith Alrahahleh, Hardenbol Alwin, Tarit Baul, Mihails Cugunovs, Xin Jia, Jari Jokela, Jaakko Karvonen, Nicola Kokkonen, Aino Korrensalo, Dmitrii Lepilin, Eino Levkoev, Elisa Männistö, Hannes Pasanen, Antonio Rodriguez, Mikko Tikkinen, Ben Wang
RA3	Matti Maltamo, Timo Pukkala, Timo Tokola	Tero Heinonen (50%), Lauri Korhonen, Lauri Mehtätalo, Petteri Packalen	Inka Bohlin (20%), Ranjith Gopalakrishnan	Syed Adnan, Daniela Ali-Sisto, Olalla Diaz Yanez, Helena Haakana, Rita Heiskanen, Zhengyang Hou, Kasper Kansanen, Juha Keränen, Eetu Kotivuori, Mikael Kukkonen, Mikko Kukkonen, Anton Kuzmin, Cheikh Mohamedou, Laura Mononen, Eero Muinonen, Adrian Pascual Arranz, Md. Parvez Rana, Roope Ruotsalainen, Janne Räty, Blanca Sanz Pareja, Mari Selkimäki, Maria Villikka, Katalin Waga

## Research personnel of RA in 2018

Table. Personnel structure of RA in different research expertise areas (REAs) in 2018

REAs	Professors	Other senior researchers	Post Docs	PhD students
RA1	Riitta Julkunen-Tiitto, Elina Oksanen, Jarmo Holopainen	James Blande, Antti Haapala, Markku Keinänen, Minna Kivimäenpää, Sari Kontunen-Soppela, Lauri Mehtätalo, Tommi Nyman, Teemu Tahvanainen	Rajendra Ghimire, Katri Nissinen (50%), Sarita Keski-Saari, Anu Lavola, Tendry Randriamanana, Anneli Salonen, Amélie Saunier, Virpi Virjamo (50%)	Agnès Brosset, Chenyang Cai, Maya Deepak, Lars Granlund, Eliezer Khaling, Aitor Barbero Lopez, Juhani Marttila, Adedayo Mofikoya, Muhammad Usman Rasheed, Unni Sivadasan, Norul Sobuj, Antti Tenkanen, Thyu Nga Thi Bui, Paula Thitz, Mezbah Uddin, Yaodan Zhang, Qing Zhao
RA2	Heli Peltola, Jari Kouki, Eeva-Stiina Tuittila, Jyrki Kangas	Zhenming Ge, Teppo Hujala, Veli-Pekka Ikonen, Antti Kilpeläinen, Matti Koivula, Ari Lauren, Katri Luostarinen, Lauri Mehtätalo, Sari Pitkänen, Harri Strandman, Olli-Pekka Tikkanen, Hannu Väisänen	Ashraful Alam, Olalla Diaz Yanez (30%), Ranjith Gopalakrishnan (50%), Jinnan Gong, Osmo Heikkala, Katri Nissinen (50%), Harri Silvennoinen, Virpi Virjamo (50%)	Laith Alrahahleh, Hardenbol Alwin, Tarit Baul, Mihails Cugunovs, Mika Hiltunen, Jari Jokela, Jaakko Karvonen, Nicola Kokkonen, Aino Korrensalo, Dmitrii Lepilin, Eino Levkoev, Elisa Männistö, Laura Pikkarainen, Antonio Rodriguez, Mikko Tikkinen
RA3	Matti Maltamo, Timo Pukkala, Timo Tokola	Tero Heinonen, Lauri Korhonen, Lauri Mehtätalo, Petteri Packalen, Mikko Vastaranta	Ranjith Gopalakrishnan (50%), Ville Kankare, Ninni Saarinen, Ruben Valbuena, Adil Yazigi	Syed Adnan, Daniela Ali-Sisto, Olalla Diaz Yanez (70%), Kasper Kansanen, Juho Kettunen, Eetu Kotivuori, Mikael Kukkonen, Mikko Kukkonen, Cheikh Mohamedou, Eero Muinonen, Adrian Pascual Arranz, Roope Ruotsalainen, Janne Räty, Blanca Sanz Pareja, Mari Selkimäki, Katalin Waga, Tuomas Yrttimaa