HORIZON EUROPE CALLS 2023/2024

CLUSTER 6 FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT



NTNU in Europe: List of calls with their respective interested NTNU researchers

TABLE OF **CONTENTS**

03	Introduction	15	Collaborating with NTNU
04	About NTNU and NTNU Brussels Office	16	Destination 1 - Biodiversity and ecosystem services
07	NTNU Oceans	45	Destination 2 - Fair, healthy and environment-friendly food systems from primary production to consumption
09	NTNU Sustainability	67	Destination 3 - Circular economy and bioeconomy sectors
11	NTNU Nano	88	Destination 4 - Clean environment and zero pollution
12	NTNU Food Forum	98	Destination 5 - Land, ocean and water for climate action
13	NV Faculty	104	Destination 6 - Resilient, inclusive, healthy and green rural, coastal and urban communities
14	NTNU University Museum	109	Destination 7 - Innovative governance, environmental observations and digital solutions in support of the Green Deal

INTRODUCTION



Dear Reader,

Are you looking for the best researchers with whom to collaborate on Horizon Europe cluster 6 calls? Then please, read on.

At NTNU, the Norwegian University of Science and Technology, we have matched our researchers to the upcoming Horizon Europe 2023/2024 calls, based on both their expertise and the industry relations they can bring to the table.

As the largest university in Norway, we can be a powerful partner and collaborator. With more than 85 funded projects, of which 53 are already signed (accounting for more than € 32 million in funding) at the time of writing, we are setting even more ambitious targets for Horizon Europe 2023/2024 and going forward.

This document is one of six prospectuses that outline areas of expertise for - and of interest to - NTNU researchers, for each of the upcoming six clusters of Horizon Europe.

They are living documents. Even if you do not find an exact match, our research community would be thrilled to open a collaborative dialogue with you. Just ping a message to one of our institutional contact points, like NTNU's Brussels Office.

Together, we can create true "knowledge for a better world"

Tor Grande Pro-rector of Research





KNOWLEDGE FOR A BETTER WORLD

Knowledge provides people with opportunities and influence, as well as a foundation for making wise choices. Knowledge inspires and challenges. It changes attitudes, mindsets, and how we perceive the world around us. Informed debate strengthens our democracy. NTNU's activities should benefit society as a whole and society can trust that our findings comply with best scientific practice.

Knowledge and technology development create opportunities for increasing sustainable value creation and finding answers to major challenges. Through the United Nations, the world has agreed on 17 Sustainable Development Goals. NTNU will contribute actively towards achieving the Sustainable Development Goals.

NTNU's strength is our competence in science and technology combined with academic breadth and interdisciplinarity.

ABOUT NTNU

Knowledge for a better world

NTNU is a university with an international focus, with headquarters in Trondheim and campuses in Ålesund and Gjøvik. NTNU has a main profile in science and technology, a variety of programmes of professional study, and great academic breadth, including medicine, architecture, and entrepreneurship.

KEY NUMBERS FOR 2022

NOK 10 billion annual budget

44 170 students

7761 person-years

412 doctoral degrees

NTNU offers 397 programmes of study (2022), as well as continuing and further education. The university has the main responsibility for higher education in technology in Norway, and largest in engineering, teacher education and architecture. NTNU aims to be a national hub in programmes of professional study.

NTNU is the institution awarded the most funding from the Research Council in Norway, as well as being granted with 255 signed projects and a total funding of more than €141 million from Horizon 2020. Moreover, NTNU is a host or partner for 46 major research centers (SFF, SFI, and FME), and has internal initiatives to develop and recruit top researchers.

In Horizon Europe (HEU) - as of March 2023 - NTNU has 97 funded projects, of which 77 are already signed (accounting for more than € 46 million in funding), positioning NTNU among the top HEU Norwegian actors, and among the top 10 actors within the European Higher Education Sector in HEU.

Beyond its science and technology profile, NTNU covers a broad range of social science and humanities (SSH) disciplines including sociology, political science, education, psychology, economics, history, cultural sciences and the arts. Researchers from SSH disciplines have successfully addressed societal issues and contributed to social innovation through involvement in more than 30 HEU projects so far, presenting NTNU as promising and strong partner in future European collaborations in all Global Challenge clusters under Horizon Europe.

From 2014-2023, NTNU has identified several strategic research areas and enabling technologies:





NTNU Oceans









BIOTECHNOLOGY

NTNU BRUSSELS OFFICE



The NTNU Brussels Office represents NTNU in Brussels, provides strategic advice on European policies, promotes NTNU positions, manages or participates in strategic networks and initiatives in Brussels, and provides professional services to the NTNU community based on its Brussels presence.

The office represents both «the door to NTNU» for organizations that want to collaborate and create synergies with NTNU, and «the door to Europe» for colleague active in or willing to enter the European Arena.

NTNU opened the doors to its Brussels Office in 2015 and today the staff consists of four people, Director Massimo Busuoli, one Senior Adviser and two trainees.

The office activities and services include the following:

- Promotion and representation of NTNU in Brussels
- Positioning of NTNU in relevant Brussels-based initiatives and bodies
- Contribution to improve NTNU's EU project portfolio
- Provide internship opportunities for NTNU employees and students
- Provision of logistic support and services in Brussels

NTNU OCEANS

NTNU's thematic research area on oceans has as its overarching vision to contribute to solving complex sustainability challenges in the ocean space. The aim is to promote ocean related research, education, innovation and outreach within technology, natural and social sciences, humanities and the arts, and specifically to facilitate interdisciplinary activity cutting across these areas.



Our research activities are centered on the following six areas:

Sustainable use of ocean resources – seafood and marine bioresources.

- Salmon farming, with a special focus on the environmental factors.
- Aquaculture technology.
- Improved utilization of bio-marine resources

Sustainable use of ocean resources – energy and minerals

- Exploring the possibility of sustainable extraction of marine minerals.
- The possibility for sustainable development of ocean wind and potential other renewable energy sources at sea

Mapping and monitoring of the ocean space

- Consequences of climate change and pollution.
- The Arctic and northern ocean areas.
- Autonomous systems.

Blue art and the humanities

- Historic and cultural studies of technology and management of natural resources.
- Research ethics, technology ethics, and environmental ethics.
- Art and media, what is the role of artists and the media in addressing global challenges connected to the oceans.

Sustainable coastal communities, administration and economy

- Administration of the ocean and ocean resources locally, nationally and internationally.
- Circular ocean and coastal economy

Green maritime transport and infrastructure

- Energy efficiency
- Autonomous systems

Contact information



Siri Granum Carson

Director NTNU Oceans Phone: +47 92254705 Mail: siri-granum.carson@ntnu.no



Maria Azucena Gutierrez Gongzalez NTNU Oceans Research & Education Coordinator Phone: +47 91897745 Mail: mariaazucena.guiterrez@ntnu.no



Alexandra Neyts Project Manager Aquaculture Phone: +47 73591596 Mail: alexandra.neyts@ntnu.no



NTNU Sustainability

Overcoming the grand challenges of our time will require new thinking and new knowledge. This is the motivation of <u>NTNU Sustainability</u>, which is one of four strategic research areas at NTNU. The programme brings together the best minds from a range of disciplines to create the knowledge needed by society to understand and change unsustainable patterns of behaviour and development.

NTNU's research includes environmental, economic and social aspects of sustainability in the broadest sense, however, NTNU Sustainability works with some 20 core research units at the university that excel in the field of environmental sustainability, and with focus on four main areas of research:

- Area A Sustainable use and conservation of biodiversity and ecosystem services
- Area B Circular economy and resource efficiency
- Area C Climate change mitigation and adaptation
- Area D Transition towards smart sustainable cities and built environment

To secure strategic interdisciplinary collaboration, these main areas combine elements of research across three interlinked dimensions:

- i) Research on innovative, methods solutions and technologies,
- ii) Research on modelling, analysis and environmental impact assessment,
- iii) Research on behavior and governance for realizing improvement potential.



NTNU Sustainability

Contact information



Helge Brattebø Director NTNU Sustainability Phone: +47 73594744 Mail: helge.brattebo@ntnu.no



Stig A. Larssæther Research Coordinator Phone: +47 47819181 Mail: stig.larssather@ntnu.no



Anders G. Finstad Research Leader Area A: Biodiversity Phone: +47 90018546 Mail: anders.finstad@ntnu.no



Edgar Hertwich Research Leader Area B: Circular Economy Phone: +47 97512109 Mail: edgar.hertwich@ntnu.no



Tomas Moe Skjølsvold Research Leader Area C: Climate Change Phone: +47 73550189 Mail: tomas.skjolsvold@ntnu.no



Annemie Wyckmans Research Leader Area D: Sustainable Cities Phone: +47 40871863 Mail: annemie.wyckmans@ntnu.no





NTNU Nano

NTNU is home to the largest centre for nanoscience and nanotechnology in Norway. The aim of the strategic initiative NTNU Nano is to coordinate and promote research within nanotechnology, nanoscience and functional materials at NTNU.

Nanotechnology and nanoscience is to a large extent of fundamental nature. However, the potential for future applications is large. NTNU NanoLab aims to be a promoter in the process of establishing new industrial initiatives.

Active research areas within nanoscience and nanotechnology are:

- Nanotechnology for energy and environment
- Nanostructured materials
- Nanoelectronics, nanomagetism and nanophotonics
- Bionanotechnology

NTNU Food Forum

With a vision to effectively contribute to the European efforts in this important thematic area, the University have created the NTNU Food Forum.

The forum mobilizes around 100 scientific and administrative staff from 8 faculties and 25 departments working with food research, innovation and education, guaranteeing a wide multidisciplinary approach.

The NTNU Food Forum joins social science and humanities expertise with technological, medical and natural science expertise to create collaborative arenas and reach out to industry and civic sectors addressing grand challenges around food.

Through this, NTNU expects also maximize the contribution in knowledge and research capabilities that the biggest Norwegian University can provide to the European System in this important area.





Eva Falch Head of NTNU Food Forum Phone:+47-93098888 Mail: eva.falch@ntnu.no



Faculty of Natural Sciences (NV)



In line with its vision "*Natural sciences and technology for a better future*", the research at the Faculty of Natural Sciences addresses global challenges in energy, climate, environment, food, water, health and welfare. Our research activities range from basic research within biology, physics and chemistry, to enabling technologies such as biotechnology, materials technology and nanotechnology.

The faculty hosts three Norwegian Centres of Excellence, within conservation biology, physics of porous media and quantum spintronics respectively, and takes part in several others.

Four Centres for Research-based Innovation are also lead from the faculty, they cover the areas of industrial innovation within the areas of subsea production and processing, industrial catalysis, and metal production.

The faculty is characterized by extensive laboratory infrastructure and field work in education and research, and hosts both university-wide and national research infrastructures.

Among others, these include:

- NTNU's Centre of Fisheries and Aquaculture (SeaLab)
- The Research Vessel Gunnerus is equipped with state-of-the-art technology for a variety of research activities within biology, technology, geology, archaeology, oceanography and fisheries research.
- Digital Life Norway national research centre for biotechnological education, research and innovation

NTNU University Museum



The Department of Natural History at NTNU University Museum conducts research in biosystematics and evolutionary genomics, ecological processes and species distribution. It contains well-equipped DNA-laboratories, and the natural history collection dates to the 1760s. The collection holds approximately 1 040 000 physical objects.

The department works within the fields of integrative biosystematics, by description of species and their distribution, analysis of evolutionary relationships and processes leading to speciation. We use novel genomic tools to answer questions concerning evolutionary processes. We apply diverse approaches from paleo-genomics, metagenomics, population genomics, phylogenomics, and multiomics to non-model organisms, including plants and animals, as well as their microbial communities.

By utilizing genetic material in natural history collections, we can track these processes in both space and time. We utilize natural history collections, ecological data and metadata to research three dimensions of biodiversity (species, phylogenetic and functional diversity) across space, time and trophic levels. We study effects of land use and climate change on biodiversity and ecosystem services.

The department also combines basic and applied research that contributes to knowledge-based management of species and habitat types with focus on mire and freshwater ecosystems.

Our researchers are involved in a wide range of nationally and EU-funded projects. Currently, we are partnering and coordinating Horizon Europe and EU RTD framework program projects, including an ERC Consolidator Grant (EXPLOAD). We also host the Norwegian node (**NorBOL**) of the International Barcode of Life Project (**iBOL**).

COLLABORATING WITH NTNU

As the largest Norwegian university with high multidisciplinary nature, NTNU offers a wide range of expertise and competences. Specific mapping of available researchers willing to collaborate on Horizon Europe have been performed for all clusters, producing documents similar to this brochure.

Make sure you have the latest version avaible by downloading it from this website.

Should you be interested to explore collaboration opportunities in areas not present in any of these brochures, you can get in touch with the institutional entry points of the university.

ENTRY POINTS

NTNU Brussels Office

Faculty EU advisors:

AD - Faculty of Architecture and Design

Tone Woie Alstadheim and Srutarshi Pradhan

- HF Faculty of Humanities
 - <u>Chamila Thushari Attanapola</u>
- IE Faculty of Information Technology and Electrical Engineering <u>Nathalie Søyseth</u> and <u>Filip Jessen</u>
- IV Faculty of Engineering Ingunn Syrstad Bøgeberg and Miriam K. Khider
- MH Faculty of Medicine and Health Sciences Emma Louise Walton
- NV Faculty of Natural Sciences <u>Thais Mothe-Diniz</u> and <u>Eugen Gravningen Sørmo</u>
- SU Faculty of Social and Educational Sciences <u>Bård Li</u> and <u>Jens Rohloff</u>
- ØK Faculty of Economics and Management <u>Thomas Aarnseth</u>
- VM NTNU University Museum Astrid Johansen
- NTNU in Gjøvik Anne Hilde Ruen Nymoen
- NTNU in Ålesund <u>Medya Temelli Fenerci</u>

ASSOCIATED RESEARCHERS

Destination 1: Biodiversity and ecosystem services

Here you can find potential NTNU professors and employees that are interested in collaborations on destination 1.

The following pages are sorted into the calls for the destination presented in the draft for cluster 6. To simplify your navigation among available expertise per topic, the list of topics have been made clickable.

DESTINATION 1 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Biodiversity and ecosystem services.

Understanding and addressing the main drivers of biodiversity loss.

HORIZON-CL6-2024-BIODIV-01-1: Invasive alien species.

Biodiversity protection and restoration.

HORIZON-CL6-2024-BIODIV-01-2: Digital for nature.

Mainstreaming biodiversity in society and the economy.

HORIZON-CL6-2024-BIODIV-01-3: Dependence of society and the economy on pollinators

HORIZON-CL6-2024-BIODIV-01-4: Biodiversity, economics and finance: Understanding macrofinancial risks associated with biodiversity loss.

HORIZON-CL6-2024-BIODIV-01-5: Transformative action of policy mixes, governance and digitalisation addressing biodiversity loss.

Biodiversity friendly practices in agriculture, forestry and aquaculture.

HORIZON-CL6-2024-BIODIV-01-6: Promoting pollinator friendly farming systems.

HORIZON-CL6-2024-BIODIV-01-7: Reintroduction of landscape features in intensive agricultural areas

HORIZON-CL6-2024-BIODIV-01-8: Conservation and protection of carbon-rich and biodiversityrich forest ecosystems.

HORIZON-CL6-2024-BIODIV-01-9: Selective breeding programme for organic aquaculture

DESTINATION 1 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Biodiversity and ecosystem services.

Mainstreaming biodiversity in society and the economy.

HORIZON-CL6-2024-BIODIV-02-1-two-stage: Demonstrating Nature-based Solutions for the sustainable management of water resources in a changing climate, with special attention to reducing the impacts of extreme droughts.

HORIZON-CL6-2024-BIODIV-02-2-two-stage: Demonstrating the potential of Nature-based Solutions and the New European Bauhaus to contribute to sustainable, inclusive and resilient living spaces and communities.

Biodiversity friendly practices in agriculture, forestry and aquaculture.

HORIZON-CL6-2024-BIODIV-02-3-two-stage: Promoting minor crops in farming systems.



Contact information

mike.martin@ntnu.no +47 90151850

Relevant links outside academia

- Industry salmon aquaculture in Norway
- NGOs the International Potato Center in Lima, Peru

Expertise

- Population genomics
- Evolutionary genomics
- Phylogenomics
- Metagenomics
- Ancient DNA

Michael Martin

Department of Natural History Faculty of NTNU University Museum

Relevant projects

- **ColdRein:** Palaeo-genomics to reconstruct the evolutionary responses of endemic high-arctic reindeer to past environmental change. Norwegian Research Council. Project manager.
- **DarwinPlants:** Probing the genomic basis of rapid evolutionary diversification in the Galápagos daisy trees (genus Scalesia). Norwegian Research Council. Project manager.
- **BiGTREE:** Biodiversity Genomics Training, Research, Education, and Exchanges. Norwegian Directorate for Higher Education. Project manager.
- **HoloFood:** Holistic solution to improve animal food production through deconstructing the biomolecular interactions between feed, gut microorganisms and animals in relation to performance parameters. EU Horizon 2020. Beneficiary leader.
- **HoloFish:** Use of microbiome-genome co-optimisation to improve gut health and growth in farmed salmon (HoloFish). Norwegian Seafood Health Fund. Work package leader: population genomics and genotype-microbiome association testing.
- The origin of the **Scandinavian Grey Wolf.** Norwegian Environment Agency. Work package leader: population genomics.



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the higharctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1. **The** impact of vertebrate herbivores on ecological and ecosystem dynamics
- 2. **The** functional and phylogenetic biogeography of trophic guilds
- 3. Biodiversity analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the higharctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1. **The** impact of vertebrate herbivores on
- ecological and ecosystem dynamics 2. **The** functional and phylogenetic
- biogeography of trophic guilds **Biodiversity** analytics
- 3. Biodiversity analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.



Contact information arron.w.tippett@ntnu.no +4748653770

Arron Tippett

Department of International Business Faculty of Economics and Management

Expertise Ecosystem Accounting

Relevant projects

Twin Fjord Ecomaps Blue Circular Economy Prowad



Bob O'Hara

Department of Mathematical Sciences Faculty of Information Technology and Electrical Engineering

Contact information bob.ohara@ntu.no +47 91554416

Expertise

Statistical modelling, particularly of ecological and evolutionary problems

Relevant projects Leading "Transforming citizen science for biodiversity Transforming citizen science for biodiversity" <u>LINK</u>

HORIZON-CL6-2024-BIODIV-01-3: DEPENDENCE OF SOCIETY AND THE ECONOMY ON POLLINATORS



Arron Tippett

Department of International Business Faculty of Economics and Management

Contact information arron.w.tippett@ntnu.no +4748653770

Expertise Ecosystem Accounting

Relevant projects

Twin Fjord Ecomaps Blue Circular Economy Prowad

HORIZON-CL6-2024-BIODIV-01-4: BIODIVERSITY, ECONOMICS AND FINANCE: UNDERSTANDING MACROFINANCIAL RISKS ASSOCIATED WITH BIODIVERSITY LOSS



Arron Tippett

Department of International Business Faculty of Economics and Management

Contact information arron.w.tippett@ntnu.no +4748653770

Expertise Ecosystem Accounting

Relevant projects

Twin Fjord Ecomaps Blue Circular Economy Prowad



Ottar Michelsen

Department of Industrial Economics and Technology Management

Faculty of Economics and Management

Expertise

Land use impacts on biodiversity, how to companies can assess and report, e.g. with LCA

Relevant projects

Ongoing project on "Nature-based solutions for land use transitions towards more sustainable societies", working on reporting schemes for companies.

Contact information ottar.michelsen@ntnu.no

Relevant links outside academia

Board member in a waste handling company

HORIZON-CL6-2024-BIODIV-01-5: TRANSFORMATIVE ACTION OF POLICY MIXES, GOVERNANCE AND DIGITALISATION ADDRESSING BIODIVERSITY LOSS



Arron Tippett

Department of International Business Faculty of Economics and Management

Contact information arron.w.tippett@ntnu.no +4748653770

Expertise Ecosystem Accounting

Relevant projects

Twin Fjord Ecomaps Blue Circular Economy Prowad

HORIZON-CL6-2024-BIODIV-01-8: CONSERVATION AND PROTECTION OF CARBON-RICH AND BIODIVERSITYRICH FOREST ECOSYSTEMS



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the higharctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1. **The** impact of vertebrate herbivores on ecological and ecosystem dynamics
- 2. **The** functional and phylogenetic biogeography of trophic guilds
- 3. **Biodiversity** analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.



Contact information

mike.martin@ntnu.no +47 90151850

Relevant links outside academia

- Industry salmon aquaculture in Norway
- NGOs the International Potato Center in Lima, Peru

Expertise

- Population genomics
- Evolutionary genomics
- Phylogenomics
- Metagenomics
- Ancient DNA

Michael Martin

Department of Natural History Faculty of NTNU University Museum

Relevant projects

- **ColdRein:** Palaeo-genomics to reconstruct the evolutionary responses of endemic high-arctic reindeer to past environmental change. Norwegian Research Council. Project manager.
- **DarwinPlants:** Probing the genomic basis of rapid evolutionary diversification in the Galápagos daisy trees (genus Scalesia). Norwegian Research Council. Project manager.
- **BiGTREE:** Biodiversity Genomics Training, Research, Education, and Exchanges. Norwegian Directorate for Higher Education. Project manager.
- **HoloFood:** Holistic solution to improve animal food production through deconstructing the biomolecular interactions between feed, gut microorganisms and animals in relation to performance parameters. EU Horizon 2020. Beneficiary leader.
- **HoloFish:** Use of microbiome-genome co-optimisation to improve gut health and growth in farmed salmon (HoloFish). Norwegian Seafood Health Fund. Work package leader: population genomics and genotype-microbiome association testing.
- The origin of the **Scandinavian Grey Wolf.** Norwegian Environment Agency. Work package leader: population genomics.



Bente Philippser

National Laboratory for Age Determination University Museum

Expertise

The National Laboratory for Age Determination provides research collaboration and services within the fields of radiocarbon dating, dendrochronology and stable isotope analysis. We provide chronologies to archaeologists and historians, reconstruct past life and environment, or study the life history of modern plants and animals. We use radiocarbon concentrations as proxies to measure the sustainability of different carboncontaining compounds, such as fuels. Our absolute chronologies from radiocarbon and dendrochronology link developments in climate, environment and culture, thus allowing us to disentagle causes and effects.

Relevant projects

40CEANS ClimateCultures FuturePast

Contact information bente.philippsen@ntnu.no +4792092496

HORIZON-CL6-2024-BIODIV-01-9: SELECTIVE BREEDING PROGRAMME FOR ORGANIC AQUACULTURE



Contact information sarah.martin@ntnu.no +47 90195029

Relevant links outside academia

Previously worked in private sector (Guardant Health - a cancer diagnostic start-up company in USA. Worked in technology development to detect cfDNA).

Sarah Martin

Department of Natural History Faculty of NTNU University Museum

Expertise

Genomic, transcriptomic and epigenomic methods - both in terms of laboratory and bioinformatic analyses.

Experience with various plant and animal species of varying quality (e.g. ancient DNA, herbarium collections, modern plant and animal tissue, and forensic specimens)

Relevant projects

Currently involved in a NORPART funded training network (<u>BiGTREE</u>) for biodiversity genomics.

Currently running EverGreen project exploring the ageing process (radiocarbon dating and somatic mutation analyses) and population genomics of Welwitschia mirabilis from Namibia.

Epigenomic studies in humans and cell cultures.

Transcriptomics of neurodegeneration.

Transcriptomics of ancient maize kernels.



Contact information emre.yaksi@ntnu.no +4790738961

Emre Yaksi

Department of Kavli Institute for Systems Neuroscience Faculty of Medicine and Health Sciences

Expertise

Animal behavior, brain functional imaging, zebrafish, teleost fish, stress, feeding

Relevant projects

- Function of Chemosensory Circuits (#335561), Coordinator, ERC Starting Grant (1,5M Euros)
- **Modulation** of brain activity and sensory computations by habenula-dorsal raphe circuitry (#314212)Coordinator, NFR FRIPRO BIOMED research grant (12M NOK)
- **Investigating** the role of Gonadotropin-releasing hormone and Neuropeptide Y in modulation of brain circuits and animal behavior (#239973), Coordinator, NFR FRIPRO BIOMED young talent grant (8M NOK)
- Exploring Frontal Lobe Epilepsy, Coordinator, Helse Midt-Norge (8M NOK)

HORIZON-CL6-2024-BIODIV-02-1-TWO STAGE: DEMONSTRATING NATURE-BASED SOLUTIONS FOR THE SUSTAINABLE MANAGEMENT OF WATER RESOURCES IN A CHANGING CLIMATE, WITH SPECIAL ATTENTION TO REDUCING THE IMPACTS OF EXTREME DROUGHTS



Sveinung Sægrov

Department of Civil and Environmental Engineering Faculty of Engineering

Contact information sveinung.sagrov@ntnu.no 4793096277

Relevant links outside academia

Norsk Vann Norwegian Church Aid Expertise

Water engineering

Relevant projects

- EU projects
- BINGOTRUST
- TRUST
 TECHNEAU
- CITYNET
- CARE-S
- CARE-W

HORIZON-CL6-2024-BIODIV-02-2-TWO STAGE: DEMONSTRATING NATURE-BASED SOLUTIONS FOR THE SUSTAINABLE MANAGEMENT OF WATER RESOURCES IN A CHANGING CLIMATE, WITH SPECIAL ATTENTION TO REDUCING THE IMPACTS OF EXTREME DROUGHTS



Sveinung Sægrov

Department of Civil and Environmental Engineering Faculty of Engineering

Contact information sveinung.sagrov@ntnu.no 4793096277

Relevant links outside academia Norsk Vann Norwegian Church Aid

Expertise

Water engineering

Relevant projects

- EU projects
- BINGO
- TRUSTTECHNEAU
- TECHNEA
 CITYNET
- CARE-S
- CARE-W



Contact information thomas.meyn@ntnu.no

Relevant links outside academia

Water treatment engineering companies, Norwegian Public Road Authorities, Municipalities

Thomas Meyn

Department of Civil and Environmental Engineering Faculty of Engineering

Expertise

Water treatment: Coagulation / flocculation, filtration, membranes, adsorption, oxidation Water quality analysis

Relevant projects

TECHNEAU: Safe Drinking Water from Source to Tap

TRUST: Transitions to the Urban Water Services of Tomorrow

HORIZON-CL6-2024-BIODIV-02-3-two stage: Promoting minor crops in farming systems



Contact information

canas.bottos@ntnu.no

+4794974869

Lorenzo Cañás Bottos

Department of Social Anthropology Faculty of Social and Educational Sciences

Expertise

I am a social anthropologist with ethnographic experience in Argentina, Bolivia, Ireland, Northern Ireland and Spain. My research spans topics from future imagination, nation state formation, migration, borders and religious conflict and mobility. More recently I have been focusing on food, including ethnic cuisines, cultural authenticity, heritage, to pig production and multi-species ethnography.

Relevant projects

Imagination of the Future. Old Colony Mennonites in Argentina and Bolivia. Intergenerational Transmission of Identity in the (Irish) Border Area. Immigration 100 years later. Descendants of Syrian and Lebanese immigrants in Argentina. Pata Negra: The social and cultural life of the Iberian pig in Extremadura. ASSOCIATED RESEARCHERS

Destination 2:

Fair, healthy and environment-friendly food systems from primary production to consumption

Here you can find potential NTNU professors and employees that are interested in collaborations on destination 2.

The following pages are sorted into the calls for the destination presented in the draft for cluster 6. To simplify your navigation among available expertise per topic, the list of topics have been made clickable.

DESTINATION 2 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Fair, healthy and environmentally-friendly food systems from primary production to consumption.

Enabling sustainable farming systems.

HORIZON-CL6-2024-FARM2FORK-01-1: Agro-pastoral/outdoor livestock systems and wildlife management

Transforming food systems for health, sustainability and inclusion.

HORIZON-CL6-2024-FARM2FORK-01-2: New healthy and sustainable food products and processes

HORIZON-CL6-2024-FARM2FORK-01-3: Thematic network tackling food fraud by translating research and innovation into practice.

HORIZON-CL6-2024-FARM2FORK-01-4: Climate change and food safety: effects of climate change on food safety across food systems.

HORIZON-CL6-2024-FARM2FORK-01-5: Creating smart and attractive tools to enhance healthy and sustainable food provision, eating and treating of food at home.

HORIZON-CL6-2024-FARM2FORK-01-6: Citizens' science as an opportunity to foster the transition to sustainable food systems.

HORIZON-CL6-2024-FARM2FORK-01-7: Impact of the development of novel foods based on alternative sources of proteins.

HORIZON-CL6-2024-FARM2FORK-01-8: Preventing and reducing food waste to reduce environmental impacts and to help reach 2030 climate targets.

HORIZON-CL6-2024-FARM2FORK-01-9: Microbiome for flavour and texture in the organoleptic dietary shift

Targeted international cooperation.

HORIZON-CL6-2024-FARM2FORK-01-10: EU-African Union cooperation on agroforestry management for climate change adaptation and mitigation.

HORIZON-CL6-2024-FARM2FORK-01-11: EU-African Union – towards climate-neutral, social just fair trade food systems.

DESTINATION 2 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Fair, healthy and environmentally-friendly food systems from primary production to consumption.

Enabling sustainable farming.

HORIZON-CL6-2024-FARM2FORK-02-1-two-stage: Increasing the availability and use of noncontentious inputs in organic farming.

HORIZON-CL6-2024-FARM2FORK-02-2-two-stage: Sustainable organic food innovation labs: reinforcing the entire value chain.

HORIZON-CL6-2024-FARM2FORK-02-3-two-stage: Tools to increase the effectiveness of EU import controls for plant health.

HORIZON-CL6-2024-FARM2FORK-02-4-two-stage: Tackling outbreaks of plant pests.

HORIZON-CL6-2024-FARM2FORK-02-5-two-stage: Animal nutritional requirements and nutritional value of feed under different production management conditions.

Enabling sustainable fisheries and aquaculture.

HORIZON-CL6-2024-FARM2FORK-02-6-two-stage: Minimising climate impact on fisheries: mitigation and adaptation solutions for future climate regimes.

HORIZON-CL6-2024-FARM2FORK-02-7-two-stage: Minimising climate impact on aquaculture: mitigation and adaptation solutions for future climate regimes

HORIZON-CL6-2024-FARM2FORK-01-1: AGRO-PASTORAL/OUTDOOR LIVESTOCK SYSTEMS AND WILDLIFE MANAGEMENT



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the higharctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1.**The** impact of vertebrate herbivores on ecological and ecosystem dynamics
- 2.**The** functional and phylogenetic biogeography of trophic guilds
- 3. Biodiversity analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.



Lorenzo Cañás Bottos

Department of Social Anthropology Faculty of Social and Educational Sciences

Expertise

I am a social anthropologist with ethnographic experience in Argentina, Bolivia, Ireland, Northern Ireland and Spain. My research spans topics from future imagination, nation state formation, migration, borders and religious conflict and mobility. More recently I have been focusing on food, including ethnic cuisines, cultural authenticity, heritage, to pig production and multi-species ethnography.

Relevant projects

Imagination of the Future. Old Colony Mennonites in Argentina and Bolivia. Intergenerational Transmission of Identity in the (Irish) Border Area. Immigration 100 years later. Descendants of Syrian and Lebanese immigrants in Argentina. Pata Negra: The social and cultural life of the Iberian pig in Extremadura.

Contact information canas.bottos@ntnu.no +4794974869

HORIZON-CL6-2024-FARM2FORK-01-4: CLIMATE CHANGE AND FOOD SAFETY: EFFECTS OF CLIMATE CHANGE ON FOOD SAFETY ACROSS FOOD SYSTEMS



Contact information sarah.martin@ntnu.no +47 90195029

Relevant links outside academia

Previously worked in private sector (Guardant Health - a cancer diagnostic start-up company in USA. Worked in technology development to detect cfDNA).

Sarah Martin

Department of Natural History Faculty of NTNU University Museum

Expertise

Genomic, transcriptomic and epigenomic methods - both in terms of laboratory and bioinformatic analyses.

Experience with various plant and animal species of varying quality (e.g. ancient DNA, herbarium collections, modern plant and animal tissue, and forensic specimens)

Relevant projects

Currently involved in a NORPART funded training network (<u>BiGTREE</u>) for biodiversity genomics.

Currently running EverGreen project exploring the ageing process (radiocarbon dating and somatic mutation analyses) and population genomics of Welwitschia mirabilis from Namibia.

Epigenomic studies in humans and cell cultures.

Transcriptomics of neurodegeneration.

Transcriptomics of ancient maize kernels.

HORIZON-CL6-2024-FARM2FORK-01-5: CREATING SMART AND ATTRACTIVE TOOLS TO ENHANCE HEALTHY AND SUSTAINABLE FOOD PROVISION, EATING AND TREATING OF FOOD AT HOME



Contact information canas.bottos@ntnu.no +4794974869

Lorenzo Cañás Bottos

Department of Social Anthropology Faculty of Social and Educational Sciences

Expertise

I am a social anthropologist with ethnographic experience in Argentina, Bolivia, Ireland, Northern Ireland and Spain. My research spans topics from future imagination, nation state formation, migration, borders and religious conflict and mobility. More recently I have been focusing on food, including ethnic cuisines, cultural authenticity, heritage, to pig production and multi-species ethnography.

Relevant projects

Imagination of the Future. Old Colony Mennonites in Argentina and Bolivia. Intergenerational Transmission of Identity in the (Irish) Border Area. Immigration 100 years later. Descendants of Syrian and Lebanese immigrants in Argentina. Pata Negra: The social and cultural life of the Iberian pig in Extremadura.
HORIZON-CL6-2024-FARM2FORK-01-6: CITIZENS' SCIENCE AS AN OPPORTUNITY TO FOSTER THE TRANSITION TO SUSTAINABLE FOOD SYSTEMS



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the higharctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1. **The** impact of vertebrate herbivores on ecological and ecosystem dynamics
- 2. **The** functional and phylogenetic biogeography of trophic guilds
- 3. Biodiversity analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.

HORIZON-CL6-2024-FARM2FORK-01-7: IMPACT OF THE DEVELOPMENT OF NOVEL FOODS BASED ON ALTERNATIVE SOURCES OF PROTEINS



Contact information canas.bottos@ntnu.no +4794974869

Lorenzo Cañás Bottos

Department of Social Anthropology Faculty of Social and Educational Sciences

Expertise

I am a social anthropologist with ethnographic experience in Argentina, Bolivia, Ireland, Northern Ireland and Spain. My research spans topics from future imagination, nation state formation, migration, borders and religious conflict and mobility. More recently I have been focusing on food, including ethnic cuisines, cultural authenticity, heritage, to pig production and multi-species ethnography.

Relevant projects

Imagination of the Future. Old Colony Mennonites in Argentina and Bolivia. Intergenerational Transmission of Identity in the (Irish) Border Area. Immigration 100 years later. Descendants of Syrian and Lebanese immigrants in Argentina. Pata Negra: The social and cultural life of the Iberian pig in Extremadura.

HORIZON-CL6-2024-FARM2FORK-02-4-TWO STAGE: TACKLING OUTBREAKS OF PLANT PESTS



Contact information cameron.ghalambor@ntnu.no +47 92055927

Relevant links outside academia

Smithsonian Institution

The Nature Conservancy

Cameron Ghalambor

Department of Biology Faculty of Natural Sciences

Expertise

Global Change Biology, Evolutionary Ecology, Ecophysiology

Expertise specific to this call: Ecological and evolutionary physiological responses of insects

Relevant projects

Current: Physiological basis of insect community responses to climate change

Current: Landscape Phenomics: Predicting vulnerability to climate variation by linking environmental heterogeneity to genetic and phenotypic variation

Past: An integrative approach to the ecological and evolutionary causes of range limits

Past: An integrative trait-based approach to predicting variation in vulnerability of tropical and temperate steam biodiversity



Contact information sarah.martin@ntnu.no +47 90195029

Relevant links outside academia

Previously worked in private sector (Guardant Health - a cancer diagnostic start-up company in USA. Worked in technology development to detect cfDNA).

Sarah Martin

Department of Natural History Faculty of NTNU University Museum

Expertise

Genomic, transcriptomic and epigenomic methods - both in terms of laboratory and bioinformatic analyses.

Experience with various plant and animal species of varying quality (e.g. ancient DNA, herbarium collections, modern plant and animal tissue, and forensic specimens)

Relevant projects

Currently involved in a NORPART funded training network (<u>BiGTREE</u>) for biodiversity genomics.

Currently running EverGreen project exploring the ageing process (radiocarbon dating and somatic mutation analyses) and population genomics of Welwitschia mirabilis from Namibia.

Epigenomic studies in humans and cell cultures.

Transcriptomics of neurodegeneration.

Transcriptomics of ancient maize kernels.

HORIZON-CL6-2024-FARM2FORK-02-5-TWO STAGE: ANIMAL NUTRITIONAL REQUIREMENTS AND NUTRITIONAL VALUE OF FEED UNDER DIFFERENT PRODUCTION MANAGEMENT CONDITIONS



Contact information emre.yaksi@ntnu.no +4790738961

Emre Yaksi

Department of Kavli Institute for Systems Neuroscience Faculty of Medicine and Health Sciences

Expertise

Animal behavior, brain functional imaging, zebrafish, teleost fish, stress, feeding

Relevant projects

- Function of Chemosensory Circuits (#335561), Coordinator, ERC Starting Grant (1,5M Euros)
- Modulation of brain activity and sensory computations by habenula-dorsal raphe circuitry (#314212)Coordinator, NFR FRIPRO BIOMED research grant (12M NOK)
- **Investigating** the role of Gonadotropin-releasing hormone and Neuropeptide Y in modulation of brain circuits and animal behavior (#239973), Coordinator, NFR FRIPRO BIOMED young talent grant (8M NOK)
- **Exploring** Frontal Lobe Epilepsy, Coordinator, Helse Midt-Norge (8M NOK)



ASSOCIATED RESEARCHERS

Destination 3: Circular economy and bioeconomy sectors

Here you can find potential NTNU professors and employees that are interested in collaborations on destination 3.

The following pages are sorted into the calls for the destination presented in the draft for cluster 6. To simplify your navigation among available expertise per topic, the list of topics have been made clickable.

DESTINATION 3 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Circular economy and bioeconomy sectors.

Enabling a circular economy transition.

HORIZON-CL6-2024-CircBio-01-1: Circular Cities and Regions Initiative's project development assistance (CCRI-PDA)

HORIZON-CL6-2024-CircBio-01-2: Circular solutions for textile value chains based on extended producer responsibility.

HORIZON-CL6-2024-CircBio-01-3: Innovative circular solutions for furniture.

HORIZON-CL6-2024-CircBio-01-4: Systemic circular solutions for a sustainable tourism.

Innovating for sustainable bio-based systems, biotechnology and the bioeconomy.

HORIZON-CL6-2024-CircBio-01-5: Programmed biodegradation capability of bio-based materials and products, validated in specific environments.

HORIZON-CL6-2024-CircBio-01-6: Digital information systems for bio-based products.

HORIZON-CL6-2024-CircBio-01-7: Demonstrating the fair and just transition from GHG-intensive economies facing challenges towards circular bioeconomy model regions.

HORIZON-CL6-2024-CircBio-01-8: Bioeconomy project development assistance.

HORIZON-CL6-2024-CircBio-01-9: Circular bioeconomy start-up villages.

Innovating for blue bioeconomy and biotechnology value chains.

HORIZON-CL6-2024-CircBio-01-10: Targeting aquatic extremophiles for sourcing novel enzymes, drugs, metabolites and chemicals

DESTINATION 3 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Circular economy and bioeconomy sectors.

Enabling a circular economy transition.

HORIZON-CL6-2024-CircBio-02-1-two-stage: Circular solutions for textile value chains through innovative sorting, recycling, and design for recycling.

HORIZON-CL6-2024-CircBio-02-2-two-stage: Increasing the circularity in plastics value chains

HORIZON-CL6-2024-CircBio-02-3-two-stage: Increasing the circularity in electronics value chains

HORIZON-CL6-2024-CircBio-02-4-two-stage: New circular solutions and decentralised approaches for water and wastewater management

Innovating for sustainable bio-based systems, biotechnology and the bioeconomy.

HORIZON-CL6-2024-CircBio-02-5-two-stage: Circular design of bio-based processes and products

HORIZON-CL6-2024-CircBio-02-6-two-stage: From silos to diversity – small-scale bio-based demonstration pilots.

HORIZON-CL6-2024-CIRCBIO-01-3: INNOVATIVE CIRCULAR SOLUTIONS FOR FURNITURE



Contact information

sotirios.grammatikos@ntnu.no +47 90577561

Relevant industry contacts

Several links in automotive, aerospace, marine, oil & gas and wind energy sectors.

Sotirios Grammatikos

Department of Manufacturing and Civil Engineering Faculty of Engineering

Expertise

- Polymer composites
- Sustainability
- Quality control
- Circularity
- Structural health monitoring
- Recycling
- Waste management
- Sensor development
- Smart functional materials
- Repair
- Additive manufacturing
- Process monitoring

Relevant projects

- APPEARS EU H2020-MSCA-ITN-2018, Project ID: 814158 [Appearance Printing - European Advanced Research School - 2019-2023]
- PACKOOL European Defence Agency [Ref: PACKOOL-TAV-16-007, PACKAGING AND COOLING ADVANCED TECHNOLOGIES – 2019-2021] (Main contact)
- imPURE, H2020, NMBP, Ref: 101016262 [Injection Moulding Repurposing for Medical Supplies enabled by Additive Manufacturing, **2020**, **2022**] Impure Project Logo
- AMULET, H2020, INNOSUP, Ref: 101005435 [Advanced Materials and Manufacturing Technologies united for Lightweight, 2021-2024]
- OVERLEAF, Horizon Europe, Ref: 101056818 [Novel low-pressure cryogenic liquid hydrogen storage for aviation, **2022-2025**]
- PRecycling, Horizon Europe, Ref: 101058670 [Plastics Recycling from and for home appliances, toys and textile, **2022-2026**]

HORIZON-CL6-2024-CIRCBIO-01-5: PROGRAMMED BIODEGRADATION CAPABILITY OF BIO-BASED MATERIALS AND PRODUCTS, VALIDATED IN SPECIFIC ENVIRONMENTS



Contact information

sotirios.grammatikos@ntnu.no +47 90577561

Relevant industry contacts

Several links in automotive, aerospace, marine, oil & gas and wind energy sectors.

Sotirios Grammatikos

Department of Manufacturing and Civil Engineering Faculty of Engineering

Expertise

- Polymer composites
- Sustainability
- Quality control
- Circularity
- Structural health monitoring
- Recycling
- Waste management
- Sensor development
- Smart functional materials
- Repair
- Additive manufacturing
- Process monitoring

Relevant projects

- APPEARS EU H2020-MSCA-ITN-2018, Project ID: 814158 [Appearance Printing - European Advanced Research School - 2019-2023]
- PACKOOL European Defence Agency [Ref: PACKOOL-TAV-16-007, PACKAGING AND COOLING ADVANCED TECHNOLOGIES – 2019-2021] (Main contact)
- imPURE, H2020, NMBP, Ref: 101016262 [Injection Moulding Repurposing for Medical Supplies enabled by Additive Manufacturing, **2020**, **2022**] Impure Project Logo
- AMULET, H2020, INNOSUP, Ref: 101005435 [Advanced Materials and Manufacturing Technologies united for Lightweight, 2021-2024]
- OVERLEAF, Horizon Europe, Ref: 101056818 [Novel low-pressure cryogenic liquid hydrogen storage for aviation, **2022-2025**]
- PRecycling, Horizon Europe, Ref: 101058670 [Plastics Recycling from and for home appliances, toys and textile, **2022-2026**]

HORIZON-CL6-2024-CIRCBIO-01-10: TARGETING AQUATIC EXTREMOPHILES FOR SOURCING NOVEL ENZYMES, DRUGS, METABOLITES AND CHEMICALS



Contact information sarah.martin@ntnu.no

+47 90195029

Relevant links outside academia

Previously worked in private sector (Guardant Health - a cancer diagnostic start-up company in USA. Worked in technology development to detect cfDNA).

Sarah Martin

Department of Natural History Faculty of NTNU University Museum

Expertise

Genomic, transcriptomic and epigenomic methods - both in terms of laboratory and bioinformatic analyses.

Experience with various plant and animal species of varying quality (e.g. ancient DNA, herbarium collections, modern plant and animal tissue, and forensic specimens)

Relevant projects

Currently involved in a NORPART funded training network (<u>BiGTREE</u>) for biodiversity genomics.

Currently running EverGreen project exploring the ageing process (radiocarbon dating and somatic mutation analyses) and population genomics of Welwitschia mirabilis from Namibia.

Epigenomic studies in humans and cell cultures.

Transcriptomics of neurodegeneration.

Transcriptomics of ancient maize kernels.



Contact information andreas.erbe@ntnu.no

andreas.erbe@ntnu.nc +47 73594048

Relevant industry contacts

Many industry partners (metal-producing industries in Norway and other parts of Europe; surface pretreatment producing industries); Public sectors (e.g., local museums).

Andreas Erbe

Department of Materials Science and Engineering Faculty of Natural Science

Expertise

- Materials degradation (corrosion) on a molecular, mesoscropic to macroscopic level
- Materials interaction with environment (incl. complex biological environments in the body)
- Vibrational spectroscopy (IR, Raman) in complex matrices, especially for materials surface analysis, study of solvation, and in combination with electrochemical techniques
- Surface treatment of metals and semiconductors (pretreatment, etching, etc.) incl. recycled aluminium
- Electrochemical techniques
- Data analysis and machine learning techniques in relation to the above

Relevant projects

Many fundamental and applied research projects, most of them via national funding initiative, but also including MSCA-ITN



Michael Martin

Department of Natural History

Faculty of NTNU University Museum

Contact information

mike.martin@ntnu.no +47 90151850

Relevant links outside academia

- Industry salmon aquaculture in Norway
- NGOs the International Potato Center in Lima, Peru

Expertise

- Population genomics
- Evolutionary genomics
- Phylogenomics
- Metagenomics
- Ancient DNA

Relevant projects

- **ColdRein:** Palaeo-genomics to reconstruct the evolutionary responses of endemic high-arctic reindeer to past environmental change. Norwegian Research Council. Project manager.
- **DarwinPlants:** Probing the genomic basis of rapid evolutionary diversification in the Galápagos daisy trees (genus Scalesia). Norwegian Research Council. Project manager.
- **BiGTREE:** Biodiversity Genomics Training, Research, Education, and Exchanges. Norwegian Directorate for Higher Education. Project manager.
- **HoloFood:** Holistic solution to improve animal food production through deconstructing the biomolecular interactions between feed, gut microorganisms and animals in relation to performance parameters. EU Horizon 2020. Beneficiary leader.
- **HoloFish:** Use of microbiome-genome co-optimisation to improve gut health and growth in farmed salmon (HoloFish). Norwegian Seafood Health Fund. Work package leader: population genomics and genotype-microbiome association testing.
- The origin of the **Scandinavian Grey Wolf.** Norwegian Environment Agency. Work package leader: population genomics.

HORIZON-CL6-2024-CircBio-02-1-two-stage: Circular solutions for textile value chains through innovative sorting, recycling, and design for recycling



Contact information

sotirios.grammatikos@ntnu.no +47 90577561

Relevant industry contacts

Several links in automotive, aerospace, marine, oil & gas and wind energy sectors.

Sotirios Grammatikos

Department of Manufacturing and Civil Engineering Faculty of Engineering

- Polymer composites
- Sustainability
- Quality control
- Circularity
- Structural health monitoring
- Recycling
- Waste management
- Sensor development
- Smart functional materials
- Repair
- Additive manufacturing
- Process monitoring

- APPEARS EU H2020-MSCA-ITN-2018, Project ID: 814158 [Appearance Printing - European Advanced Research School - 2019-2023]
- PACKOOL European Defence Agency [Ref: PACKOOL-TAV-16-007, PACKAGING AND COOLING ADVANCED TECHNOLOGIES – 2019-2021] (Main contact)
- imPURE, H2020, NMBP, Ref: 101016262 [Injection Moulding Repurposing for Medical Supplies enabled by Additive Manufacturing, **2020**, **2022**] Impure Project Logo
- AMULET, H2020, INNOSUP, Ref: 101005435 [Advanced Materials and Manufacturing Technologies united for Lightweight, 2021-2024]
- OVERLEAF, Horizon Europe, Ref: 101056818 [Novel low-pressure cryogenic liquid hydrogen storage for aviation, 2022-2025]
- PRecycling, Horizon Europe, Ref: 101058670 [Plastics Recycling from and for home appliances, toys and textile, **2022-2026**]

HORIZON-CL6-2024-CircBio-02-2-two-stage: Increasing the circularity in plastics value chains



Contact information

sotirios.grammatikos@ntnu.no +47 90577561

Relevant industry contacts

Several links in automotive, aerospace, marine, oil & gas and wind energy sectors.

Sotirios Grammatikos

Department of Manufacturing and Civil Engineering Faculty of Engineering

- Polymer composites
- Sustainability
- Quality control
- Circularity
- Structural health monitoring
- Recycling
 - Waste management
 - Sensor development
 - Smart functional materials
 - Repair
 - Additive manufacturing
 - Process monitoring

- APPEARS EU H2020-MSCA-ITN-2018, Project ID: 814158 [Appearance Printing - European Advanced Research School - 2019-2023]
- PACKOOL European Defence Agency [Ref: PACKOOL-TAV-16-007, PACKAGING AND COOLING ADVANCED TECHNOLOGIES – 2019-2021] (Main contact)
- imPURE, H2020, NMBP, Ref: 101016262 [Injection Moulding Repurposing for Medical Supplies enabled by Additive Manufacturing, **2020**, **2022**] Impure Project Logo
- AMULET, H2020, INNOSUP, Ref: 101005435 [Advanced Materials and Manufacturing Technologies united for Lightweight, 2021-2024]
- OVERLEAF, Horizon Europe, Ref: 101056818 [Novel low-pressure cryogenic liquid hydrogen storage for aviation, 2022-2025]
- PRecycling, Horizon Europe, Ref: 101058670 [Plastics Recycling from and for home appliances, toys and textile, **2022-2026**]

HORIZON-CL6-2024-CircBio-02-3-two-stage: Increasing the circularity in electronics value chains



Contact information

sotirios.grammatikos@ntnu.no +47 90577561

Relevant industry contacts

Several links in automotive, aerospace, marine, oil & gas and wind energy sectors.

Sotirios Grammatikos

Department of Manufacturing and Civil Engineering Faculty of Engineering

- Polymer composites
- Sustainability
- Quality control
- Circularity
- Structural health monitoring
- Recycling
- Waste management
- Sensor development
- Smart functional materials
- Repair
- Additive manufacturing
- Process monitoring

- APPEARS EU H2020-MSCA-ITN-2018, Project ID: 814158 [Appearance Printing - European Advanced Research School - 2019-2023]
- PACKOOL European Defence Agency [Ref: PACKOOL-TAV-16-007, PACKAGING AND COOLING ADVANCED TECHNOLOGIES – 2019-2021] (Main contact)
- imPURE, H2020, NMBP, Ref: 101016262 [Injection Moulding Repurposing for Medical Supplies enabled by Additive Manufacturing, **2020**, **2022**] Impure Project Logo
- AMULET, H2020, INNOSUP, Ref: 101005435
 [Advanced Materials and Manufacturing Technologies united for Lightweight, 2021-2024]
- OVERLEAF, Horizon Europe, Ref: 101056818 [Novel low-pressure cryogenic liquid hydrogen storage for aviation, 2022-2025]
- PRecycling, Horizon Europe, Ref: 101058670 [Plastics Recycling from and for home appliances, toys and textile, **2022-2026**]

HORIZON-CL6-2024-CIRCBIO-02-4-TWO-STAGE: NEW CIRCULAR SOLUTIONS AND DECENTRALISED APPROACHES FOR WATER AND WASTEWATER MANAGEMENT



Contact information thomas.meyn@ntnu.no

Relevant links outside academia

Water treatment engineering companies, Norwegian Public Road Authorities, Municipalities

Thomas Meyn

Department of Civil and Environmental Engineering Faculty of Engineering

Expertise

Water treatment: Coagulation / flocculation, filtration, membranes, adsorption, oxidation Water quality analysis

Relevant projects

TECHNEAU: Safe Drinking Water from Source to Tap

TRUST: Transitions to the Urban Water Services of Tomorrow

HORIZON-CL6-2024-CircBio-02-5-two-stage: Circular design of bio-based processes and products



Contact information

sotirios.grammatikos@ntnu.no +47 90577561

Relevant industry contacts

Several links in automotive, aerospace, marine, oil & gas and wind energy sectors.

Sotirios Grammatikos

Department of Manufacturing and Civil Engineering Faculty of Engineering

- Polymer composites
- Sustainability
- Quality control
- Circularity
- Structural health monitoring
- Recycling
 - Waste management
 - Sensor development
 - Smart functional materials
 - Repair
 - Additive manufacturing
 - Process monitoring

- APPEARS EU H2020-MSCA-ITN-2018, Project ID: 814158 [Appearance Printing - European Advanced Research School - 2019-2023]
- PACKOOL European Defence Agency [Ref: PACKOOL-TAV-16-007, PACKAGING AND COOLING ADVANCED TECHNOLOGIES – 2019-2021] (Main contact)
- imPURE, H2020, NMBP, Ref: 101016262 [Injection Moulding Repurposing for Medical Supplies enabled by Additive Manufacturing, **2020**, **2022**] Impure Project Logo
- AMULET, H2020, INNOSUP, Ref: 101005435 [Advanced Materials and Manufacturing Technologies united for Lightweight, 2021-2024]
- OVERLEAF, Horizon Europe, Ref: 101056818 [Novel low-pressure cryogenic liquid hydrogen storage for aviation, 2022-2025]
- PRecycling, Horizon Europe, Ref: 101058670 [Plastics Recycling from and for home appliances, toys and textile, **2022-2026**]

HORIZON-CL6-2024-CIRCBIO-02-6-TWO-STAGE: FROM SILOS TO DIVERSITY – SMALL-SCALE BIO- BASED DEMONSTRATION PILOTS



Contact information sarah.martin@ntnu.no +47 90195029

Relevant links outside academia

Previously worked in private sector (Guardant Health - a cancer diagnostic start-up company in USA. Worked in technology development to detect cfDNA).

Sarah Martin

Department of Natural History Faculty of NTNU University Museum

Expertise

Genomic, transcriptomic and epigenomic methods - both in terms of laboratory and bioinformatic analyses.

Experience with various plant and animal species of varying quality (e.g. ancient DNA, herbarium collections, modern plant and animal tissue, and forensic specimens)

Relevant projects

Currently involved in a NORPART funded training network (<u>BiGTREE</u>) for biodiversity genomics.

Currently running EverGreen project exploring the ageing process (radiocarbon dating and somatic mutation analyses) and population genomics of Welwitschia mirabilis from Namibia.

Epigenomic studies in humans and cell cultures.

Transcriptomics of neurodegeneration.

Transcriptomics of ancient maize kernels.



ASSOCIATED RESEARCHERS

Destination 4: Clean environment and zero pollution

Here you can find potential NTNU professors and employees that are interested in collaborations on destination 4.

The following pages are sorted into the calls for the destination presented in the draft for cluster 6. To simplify your navigation among available expertise per topic, the list of topics have been made clickable.

DESTINATION 4 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Clean environment and zero pollution.

Halting pollution of air, soil and water

HORIZON-CL6-2024-ZEROPOLLUTION-01-1: Demonstrating how regions can operate within safe ecological and regional nitrogen and phosphorus boundaries.

HORIZON-CL6-2024-ZEROPOLLUTION-01-2: Best available techniques to recover or recycle fertilising products from secondary raw materials.

Reducing the environmental impact and pollution in food systems.

HORIZON-CL6-2024-ZEROPOLLUTION-01-3: Environmental impacts of food systems.

Call - Clean environment and zero pollution.

Protecting drinking water and managing urban water pollution.

HORIZON-CL6-2024-ZEROPOLLUTION-02-1-two-stage: Holistic approaches for effective monitoring of water quality in urban areas.

Increasing environmental performances and sustainability of bio-based processes and products

HORIZON-CL6-2024-ZEROPOLLUTION-02-2-two-stage: Innovative technologies for zero pollution, zero-waste biorefineries.

HORIZON-CL6-2024-ZEROPOLLUTION-02-1-TWO-STAGE: HOLISTIC APPROACHES FOR EFFECTIVE MONITORING OF WATER QUALITY IN URBAN AREAS



Contact information

thomas.meyn@ntnu.no +47 73550361

Relevant links outside academia

Water treatment engineering companies, Norwegian Public Road Authorities, Municipalities

Thomas Meyn

Department of Civil and Environmental Engineering Faculty of Engineering

Expertise

Water treatment: Coagulation / flocculation, filtration, membranes, adsorption, oxidation Water quality analysis

Expertise specific to this call:

Integrate bioanalytical tools to trace environmental effects in the monitoring strategy

Relevant projects

TECHNEAU: Safe Drinking Water from Source to Tap

TRUST: Transitions to the Urban Water Services of Tomorrow



Contact information emre.yaksi@ntnu.no +4790738961

Emre Yaksi

Department of Kavli Institute for Systems Neuroscience Faculty of Medicine and Health Sciences

Expertise

Animal behavior, brain functional imaging, zebrafish, teleost fish, stress, feeding

Relevant projects

- Function of Chemosensory Circuits (#335561), Coordinator, ERC Starting Grant (1,5M Euros)
- Modulation of brain activity and sensory computations by habenula-dorsal raphe circuitry (#314212)Coordinator, NFR FRIPRO BIOMED research grant (12M NOK)
- **Investigating** the role of Gonadotropin-releasing hormone and Neuropeptide Y in modulation of brain circuits and animal behavior (#239973), Coordinator, NFR FRIPRO BIOMED young talent grant (8M NOK)
- **Exploring** Frontal Lobe Epilepsy, Coordinator, Helse Midt-Norge (8M NOK)

HORIZON-CL6-2024-ZEROPOLLUTION-02-2-TWO-STAGE: INNOVATIVE TECHNOLOGIES FOR ZERO POLLUTION, ZERO-WASTE BIOREFINERIES



Contact information astrid.dewijn@ntnu.no

Astrid S. de Wijn

Department of Mechanical and Industrial Engineering Faculty of Engineering

Expertise

Theory and modelling - tribology, surface science, transport properties, nonlinear dynamics, condensed matter

We develop models for transport of matter, energy, and momentum, and relate it to microscopic nonlinear dynamics. We currently **focus** on two types of systems:

molecules and nanoscale objects, especially in the context of friction
 gases and liquids of various levels of complexity.

We employ computational (Molecular Dynamics and Monte-Carlo) as well as analytical methods to solve applied and fundamental problems.

We collaborate with experimental as well as theoretical researchers from a wide variety of fields, ranging from chemical engineering to mathematical physics. The materials we study the most at the moment are electrolytes, polymers, and 2d materials.



ASSOCIATED RESEARCHERS

Destination 5:

Land, ocean and water for climate action

Here you can find potential NTNU professors and employees that are interested in collaborations on destination 5.

The following pages are sorted into the calls for the destination presented in the draft for cluster 6. To simplify your navigation among available expertise per topic, the list of topics have been made clickable.

DESTINATION 5 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Land, oceans and water for climate action.

HORIZON-CL6-2024-CLIMATE-01-1: Improving irrigation practices and technologies in agriculture

HORIZON-CL6-2024-CLIMATE-01-2: Socio-economic, climate and environmental aspects of paludiculture.

HORIZON-CL6-2024-CLIMATE-01-3: Paludiculture: large-scale demonstrations.

HORIZON-CL6-2024-CLIMATE-01-4: Land use change and local / regional climate.

HORIZON-CL6-2024-CLIMATE-01-5: Climate-smart use of wood in the construction sector to support the New European Bauhaus.

HORIZON-CL6-2024-CLIMATE-01-6: Ocean models for seasonal to decadal regional climate impacts and feedbacks.

HORIZON-CL6-2024-CLIMATE-01-7: EU-China international cooperation on improving monitoring for better integrated climate and biodiversity approaches, using environmental and Earth observation

HORIZON-CL6-2024-CLIMATE-01-4: LAND USE CHANGE AND LOCAL / REGIONAL CLIMATE



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History

Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the high-arctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1.**The** impact of vertebrate herbivores on ecological and ecosystem dynamics
- 2.**The** functional and phylogenetic biogeography of trophic guilds
- 3. Biodiversity analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project:

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.

HORIZON-CL6-2024-CLIMATE-01-6: OCEAN MODELS FOR SEASONAL TO DECADEL REGIONAL CLIMATE IMPACTS



Contact information bente.philippsen@ntnu.no +4792092496

Bente Philippsen

National Laboratory for Age Determination University Museum

Expertise

The National Laboratory for Age Determination provides research collaboration and services within the fields of radiocarbon dating, dendrochronology and stable isotope analysis. We provide chronologies to archaeologists and historians, reconstruct past life and environment, or study the life history of modern plants and animals. We use radiocarbon concentrations as proxies to measure the sustainability of different carboncontaining compounds, such as fuels. Our absolute chronologies from radiocarbon and dendrochronology link developments in climate, environment and culture, thus allowing us to disentagle causes and effects.

Relevant projects

4OCEANS ClimateCultures FuturePast HORIZON-CL6-2024-CLIMATE-01-7: EU-CHINA INTERNATIONAL COOPERATION ON IMPROVING MONITORING FOR BETTER INTEGRATED CLIMATE AND BIODIVERSITY APPROACHES, USING ENVIRONMENTAL AND EARTH OBSERVATION



Contact information sarah.martin@ntnu.no +47 90195029

Relevant links outside academia

Previously worked in private sector (Guardant Health - a cancer diagnostic start-up company in USA. Worked in technology development to detect cfDNA).

Sarah Martin

Department of Natural History Faculty of NTNU University Museum

Expertise

Genomic, transcriptomic and epigenomic methods - both in terms of laboratory and bioinformatic analyses.

Experience with various plant and animal species of varying quality (e.g. ancient DNA, herbarium collections, modern plant and animal tissue, and forensic specimens)

Relevant projects

Currently involved in a NORPART funded training network (<u>BiGTREE</u>) for biodiversity genomics.

Currently running EverGreen project exploring the ageing process (radiocarbon dating and somatic mutation analyses) and population genomics of Welwitschia mirabilis from Namibia.

Epigenomic studies in humans and cell cultures.

Transcriptomics of neurodegeneration.

Transcriptomics of ancient maize kernels.



Contact information sveinung.sagrov@ntnu.no 4793096277

Relevant links outside academia Norsk Vann

Norwegian Church Aid

Sveinung Sægrov

Department of Civil and Environmental Engineering Faculty of Engineering

Expertise

Water engineering

Relevant projects

EU projects

- BINGO
- TRUST
- TECHNEAU
- CITYNET
- CARE-S
- CARE-W



ASSOCIATED RESEARCHERS **Destination 6:**

Resilient, inclusive, healthy and green rural, coastal and urban communities

Here you can find potential NTNU professors and employees that are interested in collaborations on destination 6.

The following pages are sorted into the calls for the destination presented in the draft for cluster 6. To simplify your navigation among available expertise per topic, the list of topics have been made clickable.

DESTINATION 6 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Resilient, inclusive, healthy and green rural, coastal and urban communities.

HORIZON-CL6-2024-COMMUNITIES-01-1: Unlock the potential of the New European Bauhaus in urban food system transformation.

HORIZON-CL6-2024-COMMUNITIES-01-2: Societal perceptions and benefits of rural life and jobs: will COVID 19 generate a long-lasting shift?.

HORIZON-CL6-2024-COMMUNITIES-01-3: Participation and empowerment of Arctic coastal, local, and indigenous communities in environmental decision-making.

Call - Resilient, inclusive, healthy and green rural, coastal and urban communities.

HORIZON-CL6-2024-COMMUNITIES-02-1-two-stage: Innovating for climate-neutral rural communities by 2050.

HORIZON-CL6-2024-COMMUNITIES-02-2-two-stage: New sustainable business and production models for farmers and rural communities

HORIZON-CL6-2024-COMMUNITIES-01-3: PARTICIPATION AND EMPOWERMENT OF ARCTIC COASTAL, LOCAL, AND INDIGENOUS COMMUNITIES IN ENVIRONMENTAL DECISION-MAKING



Contact information

andreas.erbe@ntnu.no +47 73594048

Relevant industry contacts

Many industry partners (metal-producing industries in Norway and other parts of Europe; surface pretreatment producing industries); Public sectors (e.g., local museums).

Andreas Erbe

Department of Materials Science and Engineering Faculty of Natural Science

Expertise

- Materials degradation (corrosion) on a molecular, mesoscropic to macroscopic level
- Materials interaction with environment (incl. complex biological environments in the body)
- Vibrational spectroscopy (IR, Raman) in complex matrices, especially for materials surface analysis, study of solvation, and in combination with electrochemical techniques
- Surface treatment of metals and semiconductors (pretreatment, etching, etc.) incl. recycled aluminium
- Electrochemical techniques
- Data analysis and machine learning techniques in relation to the above

Relevant projects

Many fundamental and applied research projects, most of them via national funding initiative, but also including MSCA-ITN



Contact information sveinung.sagrov@ntnu.no 4793096277

Relevant links outside academia

Norsk vann Norwegian Church Aid

Sveinung Sægrov

Department of Civil and Environmental Engineering Faculty of Engineering

Expertise

Water engineering

Relevant projects

- EU projects
- BINGO
- TRUST
- TECHNEAU
- CITYNET
- CARE-S
- CARE-W



ASSOCIATED RESEARCHERS

Destination 7:

Innovative governance, environmental observations and digital solutions in support of the Green Deal

Here you can find potential NTNU professors and employees that are interested in collaborations on destination 7.

The following pages are sorted into the calls for the destination presented in the draft for cluster 6. To simplify your navigation among available expertise per topic, the list of topics have been made clickable.

DESTINATION 7 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

Call - Innovative governance, environmental observations and digital solutions in support of the Green Deal

Innovating with governance models and supporting policies.

HORIZON-CL6-2024-GOVERNANCE-01-1: Additional activities for the European Partnership for a climate neutral, sustainable and productive Blue Economy.

HORIZON-CL6-2024-GOVERNANCE-01-2: Regional ecosystems of innovation to foster food system transformation.

HORIZON-CL6-2024-GOVERNANCE-01-3: The role of mainstream media, social media and marketing in fostering healthy and sustainable consumption patterns and how to encourage good practices

HORIZON-CL6-2024-GOVERNANCE-01-4: Supporting the All-Atlantic Ocean Research and Innovation Alliance and Declaration.

Deploying and adding value to Environmental Observations.

HORIZON-CL6-2024-GOVERNANCE-01-5: Customisation/pre-operationalisation of prototypes end-user services in the area Climate Change Adaptation and Mitigation.

HORIZON-CL6-2024-GOVERNANCE-01-6: Develop innovative applications to support the European Green Deal, building on meteorological satellite data.

Digital and data technologies as key enablers.

HORIZON-CL6-2024-GOVERNANCE-01-7: Enhancing working conditions and strengthening the work force through digital and data technologies – the potential of robotics and augmented reality in agriculture

Strengthening agricultural knowledge and innovation systems (AKIS)

HORIZON-CL6-2024-GOVERNANCE-01-8: Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice.

HORIZON-CL6-2024-GOVERNANCE-01-9: Thematic networks to compile and share knowledge ready for practice.

DESTINATION 7 - CALLS

DISCLAIMER: Please notice that the Topics list is clickable to allow you to immediately reach the one for which you could be intersted to open a collaboration dialogue with NTNU

HORIZON-CL6-2024-GOVERNANCE-01-10: Organic farming thematic networks to compile and share knowledge ready for practice.

HORIZON-CL6-2024-GOVERNANCE-01-11: Biodiversity thematic networks to compile and share knowledge ready for practice.

HORIZON-CL6-2024-GOVERNANCE-01-12: Developing EU advisory networks on forestry

HORIZON-CL6-2024-GOVERNANCE-01-13: Developing EU advisory networks on sustainable livestock systems

HORIZON-CL6-2024-GOVERNANCE-01-11: BIODIVERSITY THEMATIC NETWORKS TO COMPILE AND SHARE KNOWLEDGE READY FOR PRACTICE



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History

Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the high-arctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1.**The** impact of vertebrate herbivores on ecological and ecosystem dynamics
- 2.**The** functional and phylogenetic biogeography of trophic guilds
- 3. Biodiversity analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project:

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.



Contact information sarah.martin@ntnu.no +47 90195029

Relevant links outside academia

Previously worked in private sector (Guardant Health - a cancer diagnostic start-up company in USA. Worked in technology development to detect cfDNA).

Sarah Martin

Department of Natural History Faculty of NTNU University Museum

Expertise

Genomic, transcriptomic and epigenomic methods - both in terms of laboratory and bioinformatic analyses.

Experience with various plant and animal species of varying quality (e.g. ancient DNA, herbarium collections, modern plant and animal tissue, and forensic specimens)

Relevant projects

Currently involved in a NORPART funded training network (<u>BiGTREE</u>) for biodiversity genomics.

Currently running EverGreen project exploring the ageing process (radiocarbon dating and somatic mutation analyses) and population genomics of Welwitschia mirabilis from Namibia.

Epigenomic studies in humans and cell cultures.

Transcriptomics of neurodegeneration.

Transcriptomics of ancient maize kernels.



Cameron Ghalambor

Department of Biology Faculty of Natural Sciences

racuity of Natural 2

Contact information

cameron.ghalambor@ntnu.no +47 92055927

Relevant links outside academia

Smithsonian Institution

The Nature Conservancy

Expertise

Global Change Biology, Evolutionary Ecology, Ecophysiology

Expertise specific to this call:

Research coordination networks for environmental monitoring

Relevant projects

Current: Physiological basis of insect community responses to climate change

Current: Landscape Phenomics: Predicting vulnerability to climate variation by linking environmental heterogeneity to genetic and phenotypic variation

Past: An integrative approach to the ecological and evolutionary causes of range limits

Past: An integrative trait-based approach to predicting variation in vulnerability of tropical and temperate steam biodiversity

HORIZON-CL6-2024-GOVERNANCE-01-13: DEVELOPING EU ADVISORY NETWORKS ON SUSTAINABLE LIVESTOCK SYSTEMS



Contact information james.speed@ntnu.no +47 73592251

James Speed

Department of Natural History

Faculty of NTNU University Museum

Expertise

Research involves a range of taxa from vascular plants and bryophytes to invertebrates, birds and mammalian herbivores.

I work at a range of scales, from the individual to the biome, with short term experiments to palaeoecology, and from local scale patterns to regional scale processes.

I have worked in environments from the high-arctic and temperate-alpine regions to boreal forests and African savannahs.

My research falls into three thematic areas, ordered in terms of depth

- 1.**The** impact of vertebrate herbivores on ecological and ecosystem dynamics
- 2.**The** functional and phylogenetic biogeography of trophic guilds
- 3. Biodiversity analytics.

Relevant projects

Disentangling the effects of climate change and herbivory on ecological dynamics

CHARTER: Drivers and feedbacks of changes in Arctic terrestrial biodiversity

AfricanBioServices: Investigating how productivity, nutrient cycling and carbon storage vary with livestock and wild herbivore grazing along a climatic gradient in the Serengeti-Mara ecosystem

SustHerb Project:

Working towards sustainable management of moose, red deer and their food resources. I am involved in analysing vegetation and tree response to browsing herbivores.



DNTNU

KNOWLEDGE FOR A BETTER WORLD

PROPOSED BY NTNU BRUSSELS OFFICE MH FACULTY TSO HEALTH

ΡΗΟΤΟΣ

PAGE 1 - NTNU NANO PAGE 4 - PER HENNING/NTNU PAGE 5 - PER HENNING/NTNU PAGE 7 - GEIR MOGEN/NTNU PAGE 11 - NTNU NANO PAGE 14 - GEIR MOGEN/NTNU

JUNE 2023