

HORIZON EUROPE CALLS 2024/2025

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



 NTNU

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

Produced by: NTNU Brussels Office, NTNU Oceans,
NTNU Sustainability, NTNU Nano, NTNU food forum, NV faculty

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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 Energy



NTNU Health



NTNU Oceans



NTNU Sustainability



NTNU
BIOTECHNOLOGY



NTNU
DIGITAL



NTNU
NANO

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.

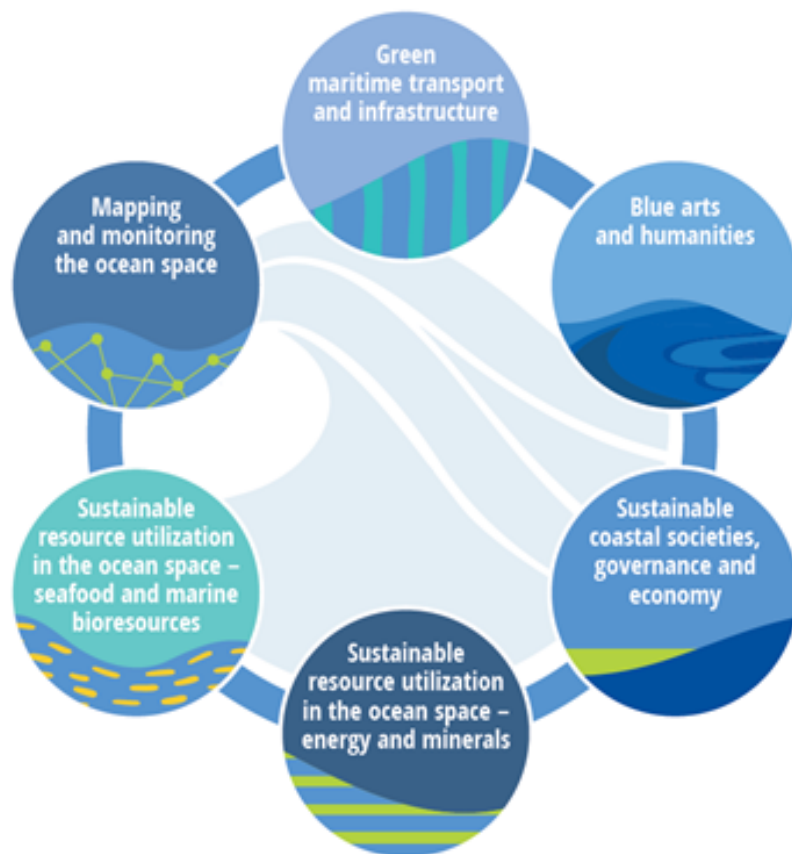
NTNU opened the doors to its Brussels Office in 2015 and today the staff consists of four people, Director Massimo Busuoli, one Senior Adviser and two trainees.

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 bio-resources.

- 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



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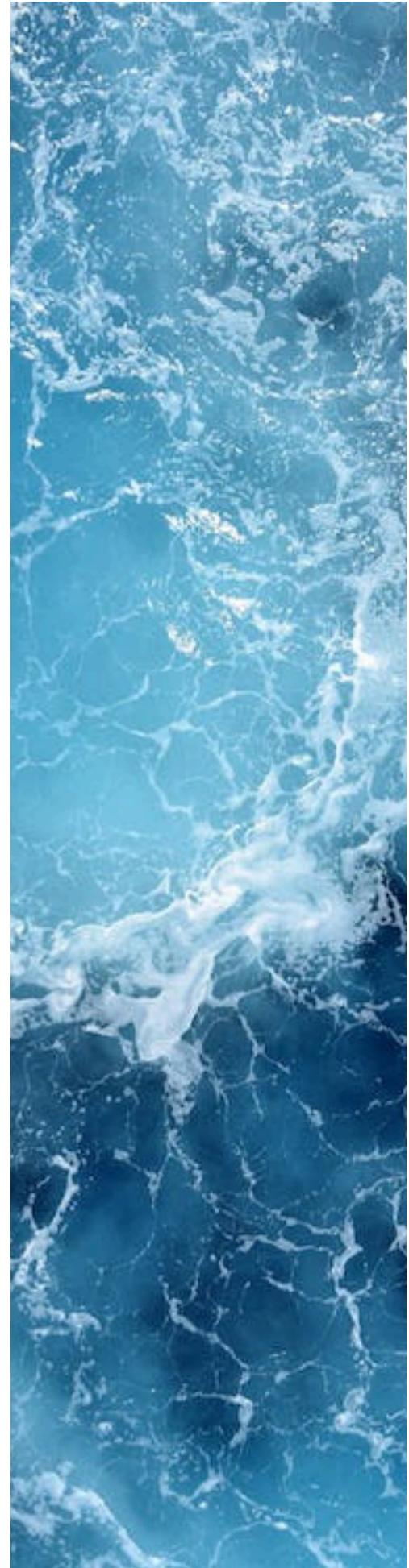


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NTNU Sustainability

Overcoming the grand challenges of our time will require new thinking and new knowledge. This is the motivation of [NTNU Sustainability](#), 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



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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, nanomagnetism 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

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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 available 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

[Chamila Thushari Attanapola](#)

IE - Faculty of Information Technology and Electrical Engineering

[Nathalie Søyseth](#) and [Filip Jessen](#)

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

[Thais Mothe-Diniz](#) and [Eugen Gravningen Sørmo](#)

SU - Faculty of Social and Educational Sciences

[Bård Li](#) and [Jens Rohloff](#)

ØK - Faculty of Economics and Management

[Thomas Aarnseth](#)

VM - NTNU University Museum

[Astrid Johansen](#)

NTNU in Gjøvik

[Anne Hilde Ruen Nymo](#)

NTNU in Ålesund

[Medya Temelli Fenerci](#)



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 interested 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.](#)



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Faculty of Engineering

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Relevant links outside academia

Norsk Vann
Norwegian Church Aid

Expertise

Water engineering

Relevant projects

EU projects

- BINGO
- 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

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Contact information

sveinung.sagrov@ntnu.no
4793096277

Relevant links outside academia

Norsk Vann
Norwegian Church Aid

Expertise

Water engineering

Relevant projects

EU projects

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



Thomas Meyn

Department of Civil and Environmental Engineering
Faculty of Engineering

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Relevant links outside academia

Water treatment
engineering companies,
Norwegian Public Road
Authorities, Municipalities

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



Lorenzo Cañas Bottos

Department of Social Anthropology
Faculty of Social and Educational Sciences

Contact information

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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 interested 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 non-contentious 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-02-4-TWO STAGE: TACKLING OUTBREAKS OF PLANT PESTS



Cameron Ghalambor

Department of Biology
Faculty of Natural Sciences

Contact information

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+47 92055927

Relevant links outside academia

Smithsonian Institution

The Nature Conservancy

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



Sarah Martin

Department of Natural History
Faculty of NTNU University Museum

Contact information

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+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).

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 ([BiGTREE](#)) 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



Emre Yaksi

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

Contact information

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+4790738961

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 interested 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.](#)



Sotirios Grammatikos

Department of Manufacturing and Civil Engineering

Faculty of Engineering

Contact information

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Relevant industry contacts

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

Expertise

- 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)
 - impPURE, 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**]



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Contact information

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Relevant industry contacts

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

Expertise

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



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Relevant industry contacts

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

Expertise

- Polymer composites
 - Sustainability
 - Quality control
 - Circularity
 - Structural health monitoring
 - Recycling
 - Waste management
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 - PRecycling, Horizon Europe, Ref: 101058670 [Plastics Recycling from and for home appliances, toys and textile, **2022-2026**]



Thomas Meyn

Department of Civil and Environmental Engineering
Faculty of Engineering

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Relevant links outside academia

Water treatment
engineering companies,
Norwegian Public Road
Authorities, Municipalities

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



Sotirios Grammatikos

Department of Manufacturing and Civil Engineering
Faculty of Engineering

Contact information

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+47 90577561

Relevant industry contacts

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

Expertise

- 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



Sarah Martin

Department of Natural History
Faculty of NTNU University Museum

Contact information

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+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).

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 ([BiGTREE](#)) 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 interested to open a collaboration dialogue with NTNU

C

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.](#)



Thomas Meyn

Department of Civil and Environmental Engineering
Faculty of Engineering

Contact information

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Relevant links outside academia

Water treatment
engineering companies,
Norwegian Public Road
Authorities, Municipalities

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



Emre Yaksi

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

Contact information

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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)



Astrid S. de Wijn

Department of Mechanical and Industrial Engineering
Faculty of Engineering

Contact information

astrid.dewijn@ntnu.no

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:

- 1) molecules and nanoscale objects, especially in the context of friction
- 2) 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 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 interested to open a collaboration dialogue with NTNU

CCall - 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



KNOWLEDGE FOR A BETTER WORLD

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NTNU BRUSSELS OFFICE
MH FACULTY
TSO HEALTH

PHOTOS

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JUNE 2023