



Stian Torset

Doctoral Researcher,
Max Planck Institute for Marine
Microbiology

- 11. January 1996
- Bremen, Germany
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- Norwegian

Social Network

LinkedIn Page

Hard Skills

- FISH-NanoSIMS - Sample Prep and Statistical Analysis
- Stable Isotope Probing (^{13}C and ^{15}N , combined with LDI-TOF, GC-MS, NanoSIMS)
- Environmental Sampling and Microbial Enrichment
- Metabolomics of Polar Metabolites (BSTFA derivitization, GC-MS)
- Geobiochemical Modeling (Geochemist's Workbench®/ custom scripts)
- Preparative and Experimental Protein Biochemistry
- Anaerobic Microbiology
- Common transfection and transformation methods
- Data analysis and visualization in Python, R, and Matlab
- Anvio based metagenomics
- Metatranscriptomics using CoDA principles and Deseq2

Education

- 2021 – 2025 **Dr. rer. Nat** Max Planck Society & University of Bremen
Sponsored by the Hector Fellowship Association, I am currently pursuing a doctorate at the Max Planck Institute for Marine Microbiology under the supervision of Prof. Dr. Antje Boetius and Dr. Gunter Wegener (Defense date 13.Oct 2025)
Doctoral Thesis HGF-MPG Group of Deep-Sea Ecology and Technology
Molecular characterization of alkane metabolizing archaea
- 2019 – 2021 **M.Sc. Molecular Biology** University of Bergen (UiB)
Master Thesis Computational Biology Unit and the Deep Ocean Group, UiB
The variation of primary producers and NAD(H) maintenance methods across geochemical energy gradients
- 2016 – 2019 **Bachelors Degree, Molecular Biology** University of Bergen

Working Experience

Experimental and Expeditionary

- Summer 2022 **GS2022 AMOR Expedition** 10 days, Arctic Ocean
Expedition to the Arctic mid-Atlantic ocean ridge (AMOR). I was sampling sediments to establish methane oxidizing enrichments with a support role as maintenance and deployment of temperature loggers (used as backups to new equipment)
- Summer 2021 **GS2021 AMOR Expedition** 11 days, Arctic Ocean
Expedition to AMOR. I was responsible for the maintenance and deployment of temperature loggers with support role in microbiology, geochemistry, OFOBS, and sonar logging.
- Summer 2019 **IAESTE internship** Institute of Bioenergy Research, University of São Paulo
Working as a lab technician in the Gross group, I used molecular techniques to support the labs CRISPR based system to increase survivability in yeast.
- Summer 2018 **Lab Intern** Sars Centre for Marine Molecular Biology
Working at the Rentzsch group, I gained experience working with CRISPR-Cas9 injection methods on *Cnidaria*.

Administrative and Educational

- 2021 - 2025 **Teaching assistant** Max Planck Institute for Marine Microbiology
Assisted in teaching and hosting tutorials for students in the Master's program of the institute. Taught in modules for Microbial Oceanography with Prof. Antje Boetius and Protein Biochemistry with Dr. Tristan Wagner
- 2020 - 2021 **Strategic Unit for Biological Sciences** Norwegian Council of Higher Education (NCHE)
The NCHE is the national forum for institutions of higher education in Norway which recommend topical policy to law makers and relevant institutions
- 2018 - 2021 **Student Mentor** University of Bergen (UiB)
Student Mentors at UiB mentor incoming students with sessions for their first 3 days and regular checkups throughout the semester
- 2019 - 2020 **The Board of Education** UiB
The BoE draft and employ the university's strategy in education and discuss educational policy from the faculty to national level.
- Aug 2017- June 2021 **Teaching Assistant** Institute of Biological Science, UiB
I was selected as teaching assistant in the courses MOL100, MOL200, MOL201 and MOL203.

Other

- 2015 - 2016 **Lance Corporal** The Norwegian Royal Guard
As an infantry leader in the Royal Guard I was held to an exceptional standard of discipline and work ethic; expected to lead soldiers both in the field and while garrisoned.

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Awards and Honors

Teaching Award (2024)

Subject – Protein Biochemistry, International Max Planck Research School for Marine Microbiology

Teaching Award (2023)

Subject – Protein Biochemistry, International Max Planck Research School for Marine Microbiology

Best Poster Award (2022)

Gordon's Research Conference on the Molecular Basis of One Carbon Metabolism

Hector Fellowship (2021-2025)






Sponsors interdisciplinary cutting-edge research projects, 9000€ per year

Ms. Lina Asbjørnsens Scholarship (2020)

Awarded to the most proficient students in Mathematics and Natural Science with Marine disciplines prioritized

Ms. Lina Asbjørnsens Scholarship (2019)

Soft Skills Courses

-  Scientific Presentation – 2 days
-  Social Media for Scientists – 4 days
-  Project Management – 1 week MBA module
-  Entrepreneurship – 1 week MBA module
-  Small-unit Leadership – 1 week

Publications and Presentations

Transcriptional Remodeling in Response to Sulfur Source Redirects Electron Flow in *Methanothermococcus thermolithotrophicus*

S. Torset, M. Jespersen, G. Wegener, T. Wagner

Manuscript in Prep

Alkane-Oxidizing Consortia Produce Substantial Amounts of Disaccharides

S. Torset, L. Stock, M. Liebeke, G. Wegener

Manuscript in prep

A novel room temperature ethane oxidizer couples Ferredoxin driven membrane potential with assimilation of DIC

S. Torset, Y. Guo, L. Stock, M. Elvert, A. Waldesperg, K. Knittel, M. Liebeke, V. Orphan, G. Wegener

Manuscript in prep

Anaerobic Methane Oxidizers

K. Knittel, G. Wegener, S. Torset, A. Boetius

Handbook of Hydrocarbon and Lipid Microbiology

The formation of the disaccharides trehalose and sucrose by anaerobic oxidation of methane affects DOC in marine cold seep sediments

L. Stock, G. Wegener, S. Torset, M. Liebeke, L. L. Lapham, L. Dirksen, J. Pohlman, E. Lalk, A. Hildebrand and M. Elvert

Manuscript in prep

Submission
Sep 2025

Aug 2024

July 2023

July 2022

[POSTER] Novel Ethane-Oxidizing Microbial Consortia Store Carbon in Deep-Sea Sediments as Sugars

S. Torset, Y. Gao, L. Stock, K. Knittel, M. Liebke, V. Orphan, G. Wegener
Gordons Research Conference on the Molecular Basis of One-Carbon Metabolism, Mt. Snow, Vermont, USA

[POSTER] Probing deep sea ethane oxidizing archaea with FISH-NanoSIMS

S. Torset, Y. Gao, K. Knittel, V. Orphan, G. Wegener
Gordons Research Conference on the Molecular Biology of Archaea, Mt. Snow, Vermont, USA

[POSTER+PITCH] Identifying microbial actors in biogenic production of amorphous elemental carbon

S. Torset, L. Wörmer, A. Boetius, G. Wegener
Gordons Research Conference on the Molecular Basis of one Carbon Metabolism and ISME




Synergistic Activities

Chair	ItMatters conference 2024 - Session on Molecular interactions and Communication
Co-organizer	ItMatters conference 2024
Rep	Ph.D Representatives MPI-Bremen
Student rep	MARMIC steering committee
President	Helix - Molecular biology student council
Student rep	Institute board of Biological Science (UiB)
Vice-President	The student council of the faculty of mathematics and natural science (UiB)
Member	Board of studies, the faculty of mathematics and natural science
Chair	The committee on education and science, the Student parliament at UiB (SpUiB)
Member	The committee on education and science, SpUiB
Member	The public relations committee, SpUiB
Parliamentary leader	The Scientific Alliance (SpUiB)
Member	Committee on the introduction of transferable skills at the the faculty of mathematics and natural science

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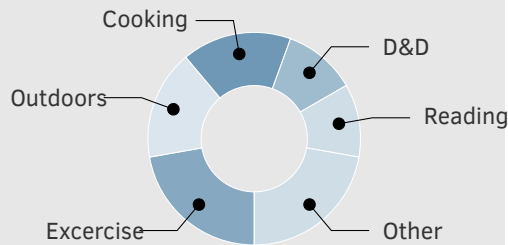
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Languages

 Norwegian	● ● ● ● ●
 English	● ● ● ● ●
 German	● ● ● ● ●

About Me

I'm generally an extroverted and happy person who likes to meet new people, spend time outside, and staying active. I consider myself a mix of old-school nerd, active student, and energetic friend.



Licences and Certifications

LAS302	Ethics of experimental mammal science
LAS303	Ethics of experimental fish science
Drivers Licence	EEA - Type B
1st aid certification	Military type 2 qualifying for field duties; Norsk Folkehjelp certification with focus on drug and alcohol related situations
Divers Licence	PADI OWD

References

Dr. Tristan Wagner

Group Leader, Microbial Metabolism, Institute de biologie structural, Grenoble

- | twagner@mpi-bremen.de

Prof. Dr. Ida Helene Steen

Professor of Microbiology, UiB

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Dr. Gunter Wegener

Sr. Scientist, HFG-MPG Bridge Group for Deep-Sea Ecology and Technology

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Further references can be provided by request