Designing Researcher Development Path to Empower Competence Growth and Strategic Alignment in a Research Organization

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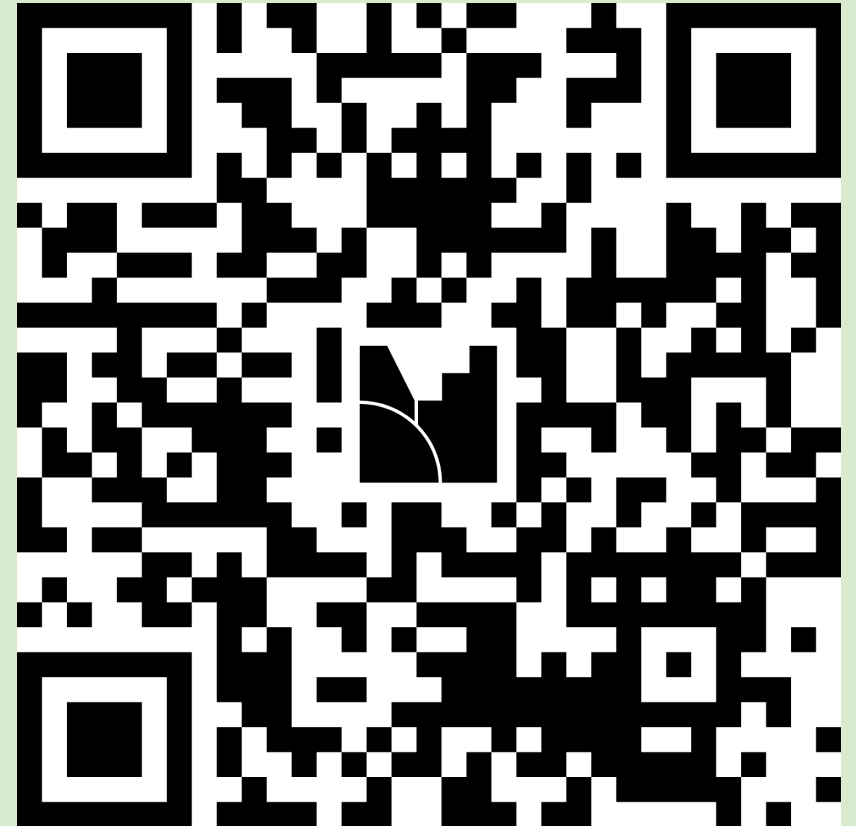with Elina Heininen, Aku Heinonen, Marjo Kilpijärvi & Suvi Vesterinen

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GTK

Menti #1

Does your organization have a structured development path for researchers?

menti.com
Access code: 6242 3993

Motivation for the development

- Align the expectations of researchers competence development with the organizational strategy

- Offer diverse opportunities to learn, develop, and advance in your career

- Transparency and understanding on researcher evaluation, both internally and externally

- GTK researchers can plan and develop their skills while considering the needs of GTK's core mission and strategy
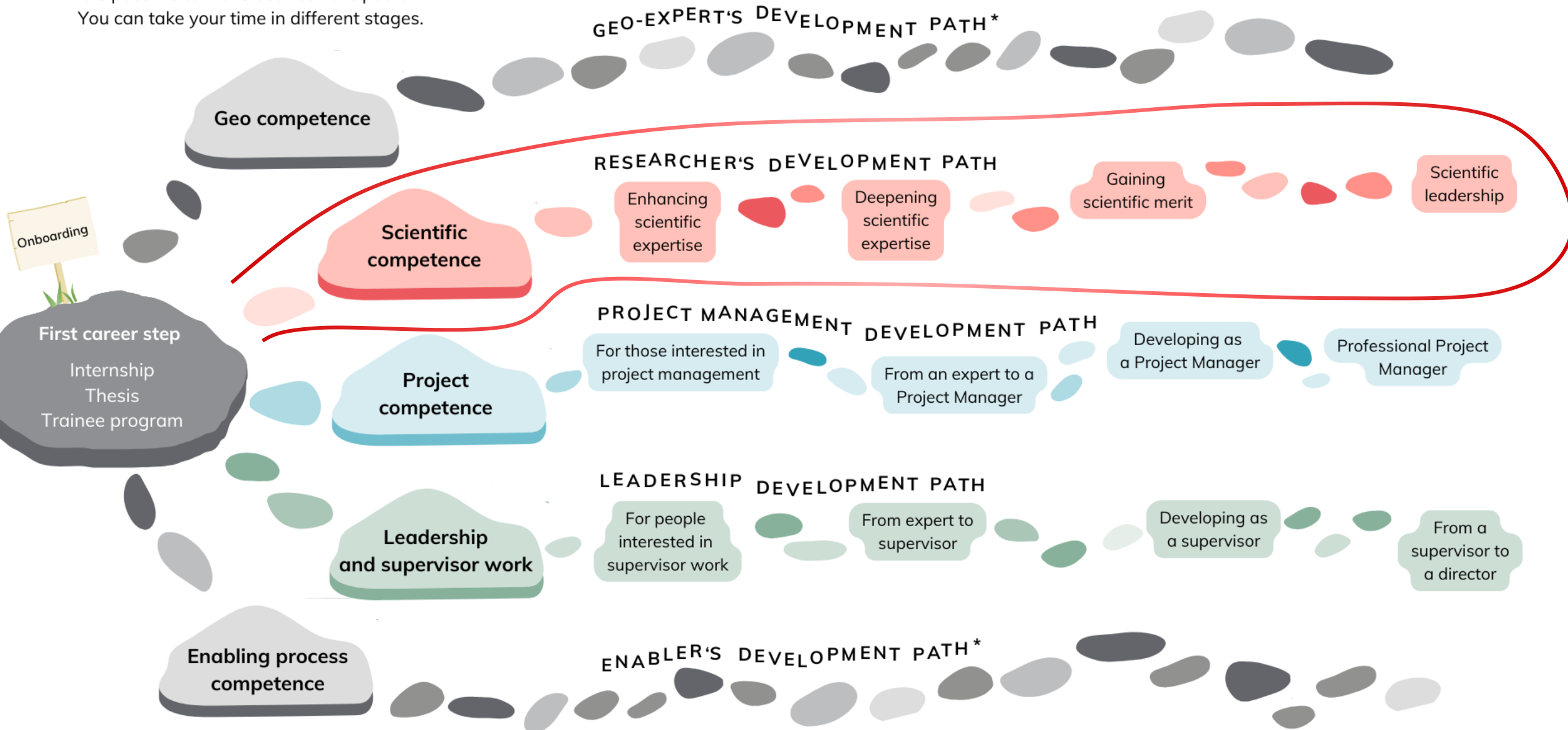
Competence development paths in GTK

It is possible to move between the paths.
You can take your time in different stages.

GEO-EXPERT'S DEVELOPMENT PATH*

Geo competence

Onboarding

RESEARCHER'S DEVELOPMENT PATH

Scientific competence

Enhancing scientific expertise

Deepening scientific expertise

Gaining scientific merit

Scientific leadership

First career step

Internship
Thesis
Trainee program

PROJECT MANAGEMENT DEVELOPMENT PATH

Project competence

For those interested in project management

From an expert to a Project Manager

Developing as a Project Manager

Professional Project Manager

LEADERSHIP DEVELOPMENT PATH

Leadership and supervisor work

For people interested in supervisor work

From expert to supervisor

Developing as a supervisor

From a supervisor to a director

ENABLER'S DEVELOPMENT PATH*

Enabling process competence

* to be published later

Strategy 2024–2027

Technological innovations

Raw material and material self-sufficiency

Carbon sinks

Carbon-neutral energy

Environment

Solutions to accelerate the transition to a sustainable, carbon-neutral world

Our focus areas

Availability of Critical Raw Materials

Circular Economy of Minerals

Geophysical Applications

Geoscience Information Solutions

Energy Transition

Geoenvironment

Sustainable Water Resources

We strengthen the human-focused working life

Coaching culture

Smooth and meaningful work

Constantly developing skills

Cross-border collaboration and communication

We utilise technology and AI

We expand the financial base

Customer solutions

Science and innovations

Geoscience information

For Earth and for Us

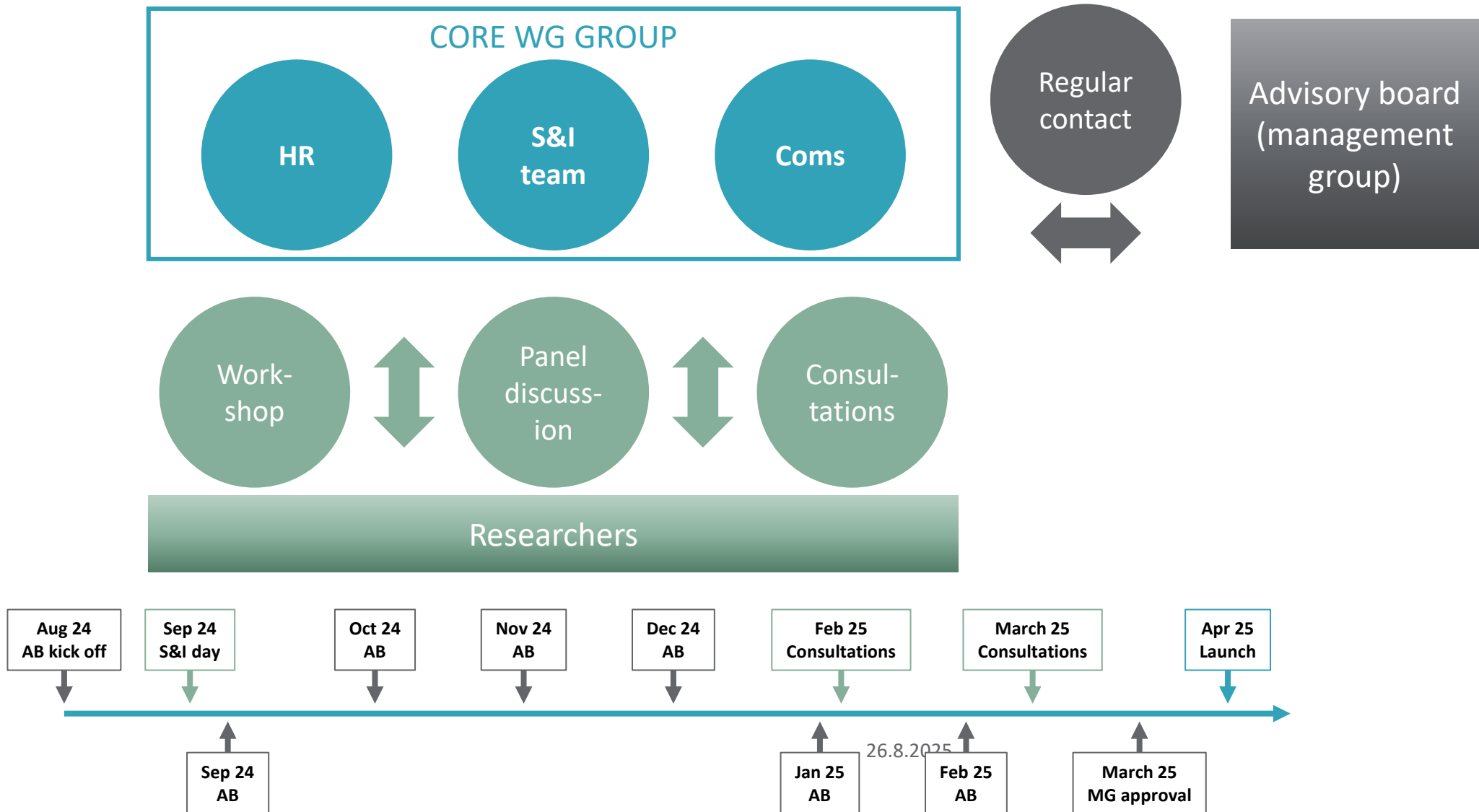Bravely curious and innovative   More together   Appreciative and responsible

GTK

Competence Development Paths

- **Development paths focus on competence growth**; versus **career paths** define roles and requirements.

- Enable GTK personnel to plan and grow their skills in alignment with GTK's mission and strategy (*Focus area S&I roadmaps*).

- Progress requires individual initiative—there's no obligation to reach the end of a path.

- Employees may remain at any stage or explore different paths as roles evolve.

- Advancing on a career path depends on available roles and demonstrated competence. Career paths are linked to GTK's pay system.

We strengthen the human-focused working life

Coaching culture

Smooth and meaningful work

Constantly developing skills

Cross-border collaboration and communication

Enhancing scientific expertise

For whom: Master's degree holder

Tasks/development:
- Independent research work under the supervision of more experienced researchers, scientific publications, preparation of research or customer reports
- Increasing competence through project work

Duration of the stage, e.g.: 4 years, if working on doctoral dissertation full-time

Example titles: Researcher, Geologist, Geophysicist

Achievements: advanced scientific knowledge and research experience, PhD

Deepening scientific expertise

For whom: Doctoral degree holder

Tasks/development:
- Independent research and scientific publications, applying for small-scale project funding, participating in the planning of research projects
- Deepening competence through project work, learning science communication

Duration of the stage, e.g.: 4-8 years from doctoral degree

Example titles: Geologist, Researcher, Postdoc Researcher

Achievements: expertise and independent research also based on coordinated projects accumulated extensively

Gaining scientific merit

For whom: person progressed from the postdoc stage

Tasks/development:
- Demanding research in one's own field of expertise, strategic research programmes/development projects, supervision and development of research work, reporting of research results and scientific publication, in Finland and internationally
- Creating networks and developing pedagogical competence

Duration of the stage, e.g.: 8 years

Example titles: Senior Researcher

Achievements: international merit, recognized and distinguished expert

Scientific leadership

For whom: internationally scientifically distinguished senior researchers

Tasks/development:
- Responsible for the content, external funding and publication activities of the own research entity, management of extensive international research projects, S&I roadmap responsibility
- Development of international networks, development of the competence of the personnel of the own research entity

Duration of the stage, e.g.: term of office in accordance with the professorial policy 5 years (+ 5 years extension period) -> permanent professorship

Example titles: Associate Research Professor, Research Professor, (Senior Researcher)

Achievements: leading wide-ranging research entities

Upcoming! Doctoral guidelines

Postdoctoral guidelines

Professor policy

Existing support structures for researchers

Support from supervisors

- Work Management: Helping researchers prioritize tasks and balance workloads, Encouragement &

- Guidance: Supporting and facilitating competence development.

- Regular Development discussions

Support from S&I team

- Funding and applications

- Grants for developing collaboration and scientific expertise

- Research ethics

- Scientific publishing and Open science

- Strategic development and planning of research

- Develops cooperation opportunities

Support from the work community/colleagues

- Support from scientific leadership (e.g., research professors), experienced researchers, mentors, and the entire scientific community

- S&I days and S&I coffees

- Support can also be obtained from networks outside GTK (e.g., universities, the international scientific community)

Advancing Scientific Expertise through Projects

- At GTK, projects are central to developing research competence and aligning with strategic goals.

- Researchers are encouraged to take initiative—planning, applying for funding, and leading projects.

- Scientific publishing is integrated into project work and proposal design.

- Collaboration with clients includes exploring data use for research and publications.

- Existing data is leveraged to support continuity across projects and outputs.

- A culture of curiosity and responsibility is fostered—trying new approaches is valued.

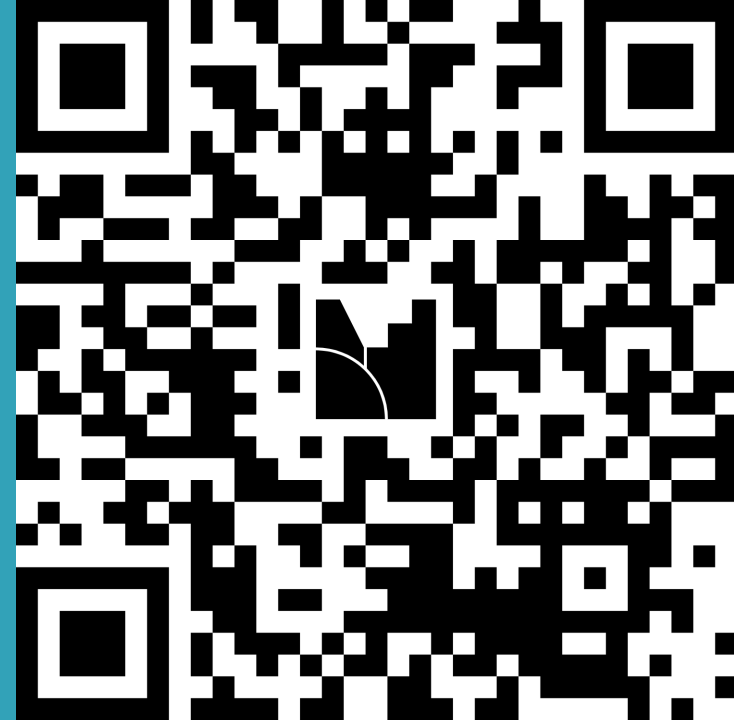- Ongoing dialogue with peers and supervisors supports growth.

FOR EARTH AND FOR US

The Geological Survey of Finland (GTK) produces impartial and objective research data and services in support of decision-making in industry, academia, and wider society to accelerate the transition to a sustainable, carbon-neutral world. GTK employs more than 400 experts specializing in the mineral economy, circular economy, solutions related to energy, water and the environment, as well as digital solutions. GTK is a research institution governed by the Finnish Ministry of Employment and the Economy, operating in Finland and globally.
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