

Shaping the Future of AI for Research at Stockholm University: A Faculty-Wide Dialogue

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AlbaNova Main Building



Shaping the Future of AI for
Research at SU

A Faculty-Wide Dialogue to Co-Create a Roadmap for a
Center for AI in Research

June 4, 13:30–17:00

Executive Summary

On June 4, 2025, the Faculty of Science at Stockholm University (SU) hosted a town hall meeting to explore how artificial intelligence (AI) is transforming scientific research and education. The event brought together researchers, educators, and leadership from across departments to share experiences, assess needs, and coordinate future efforts. The meeting was driven by the rapid rise of AI technologies, including large language models and machine learning systems, which are reshaping all stages of the scientific life cycle. Use cases presented at the meeting demonstrated AI's growing role in hypothesis generation, autonomous experimentation, accelerated simulations, high-dimensional data analysis, and scientific publishing. These tools are enabling more ambitious, reproducible, and interdisciplinary research. To build on these developments, participants identified three strategic priorities:

- Launch use case-driven pilot projects that address specific scientific challenges (e.g. lab automation, simulation acceleration, or noisy data analysis), with outcomes tracked through publications, grants, and collaborative outputs.
- Build sustainable infrastructure and knowledge exchange, including shared access to compute and data workflows, centralized training platforms, and discoverable best practices.
- Foster cross-disciplinary collaboration and capacity building via working groups, joint supervision, and initiatives that promote AI literacy across levels and departments.

These coordinated actions would be supported by a proposed AI Center for Science at SU, envisioned as a hub for cross-disciplinary research, training, infrastructure development, and the responsible use of AI in science. Together, these efforts aim to ensure that AI strengthens the scientific mission of SU and contributes positively to broader society.

Background and Motivation

Scientific discovery is undergoing a profound transformation. Traditional methods struggle to keep pace with the scale and complexity of modern research, while breakthroughs such as AlphaFold and Nobel Prize-winning contributions to machine learning have shown that artificial intelligence (AI) is now a powerful driver of scientific progress. Across disciplines—from physics and climate science to biology and materials research—AI is no longer just a tool but an active agent in generating hypotheses, designing experiments, accelerating simulations, and synthesizing knowledge.

This shift marks a critical juncture. AI enables deeper interdisciplinary collaboration, integrates knowledge across fields, and automates elements of the scientific process that once relied solely on human insight. At SU, this transformation has sparked institution-wide reflection on how to prepare for and lead in the emerging landscape of AI-enabled science.

Initial discussions at the Faculty of Science were led by Tom Britton and soon echoed at the university level, revealing both enthusiasm and a lack of coordination. While many researchers were already exploring AI tools, support structures for training, infrastructure, and collaboration remained fragmented. To address this, SU appointed Jens Jasche and Teresa Cerratto Pargman as AI coordinators in the fall of 2024. Their role is to map AI-related research, foster interdisciplinary connections, and represent SU in national and international networks. While this initiative began in the Faculty of Science, a growing interest has emerged in expanding it to the Faculties of Social Science and Humanities. This pilot could therefore be imagined to eventually lead to a university-wide center.

Building on this foundation, the Faculty of Science launched the *AI for Science* initiative in late 2024, led by Jens Jasche and Mathias Millberg Lindholm. The initiative's pilot year aimed to assess the faculty's AI readiness, build a shared understanding across disciplines, and explore the feasibility of long-term institutional structures to support AI in research and education.

To support this effort, the Faculty of Science has appointed a reference group composed of researchers from across disciplines. The reference group provides strategic guidance and external perspectives to ensure the initiative remains aligned with the needs of the broader research community and with ongoing developments in AI. Its responsibilities include reviewing the center's long-term goals, evaluating major initiatives, and advising on outreach and partnerships. Members also contribute critical feedback on priorities and impact, helping guide the initiative's evolution over time.

The Scientific Lifecycle Transformed by AI

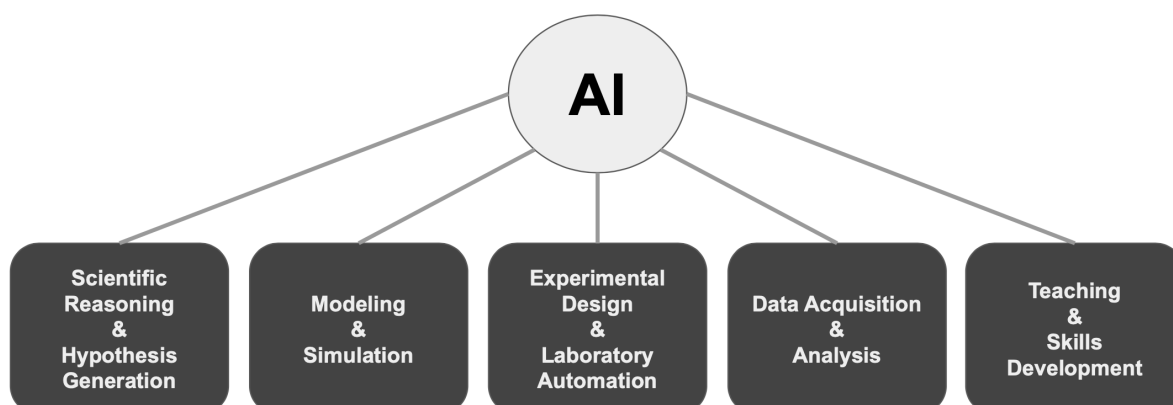


Figure 1: AI for Science: Artificial intelligence is transforming each stage of the scientific lifecycle—from hypothesis generation and modeling, to experimental design, data analysis, and communication. Organizing interdisciplinary collaboration around these tasks provides a durable, inclusive structure that reflects how research is actually conducted across domains.

The reference group meets regularly and currently includes:

- Gustaf Hugelius (Earth and Environmental Sciences)
- Anneli Kruve (Chemistry)
- Marc Friedländer (Biology)
- Annica Ekman (Mathematics and Physics)

A key milestone was the *Town Hall meeting in June 2025*, which is summarized below. The event brought together researchers, educators, and administrators to share experiences, align priorities, and explore how SU can become AI-ready. It revealed strong interest, persistent gaps, and a pressing need for coordinated action.

This transformation cuts across disciplinary boundaries, affecting methodologies, epistemologies, and infrastructures in every field. Addressing such complexity requires inclusive dialogue and mutual understanding across faculties. The Town Hall format was therefore chosen not merely as a forum for information-sharing, but as a deliberate structure to foster interdisciplinarity—bringing together diverse perspectives to co-define priorities, uncover shared challenges, and identify opportunities for synergistic collaboration.

Rather than organizing discussions around specific disciplines or AI techniques—which risks reinforcing silos or being rendered obsolete by rapid technological change—the event was structured around core stages of the scientific lifecycle: hypothesis generation, modeling, experimentation, data analysis, and scientific communication. These stages are common to all fields of research, and they are precisely where AI is beginning to have the most profound impact. By using the scientific workflow as a shared reference point, the Town Hall enabled researchers from different domains to discover common needs, surface transferable insights, and articulate where coordinated support is most urgently required (see Figure 1).

This task-centric approach not only deepens interdisciplinary exchange but also provides a durable foundation for organizing infrastructure, training, and institutional leadership in a rapidly evolving field.

While the road ahead is still being charted, it is clear that AI is not a passing trend—it is reshaping how knowledge is created, validated, and communicated. Through community-driven initiatives like *AI for Science*, SU is positioning itself to navigate this transformation with both scientific ambition and institutional responsibility.

AI for Science Town Hall Meeting Summary

On June 4, 2025, the Faculty of Science hosted a Town Hall meeting at AlbaNova University Center to engage the research community in shaping the future of artificial intelligence for scientific discovery at SU.

Purpose and Context

The event marked a key step in co-developing a roadmap toward a potential interdisciplinary AI Center for Scientific Research. The Faculty has launched a pilot year to explore such a center, with goals that include:

- Supporting interdisciplinary AI research
- Advancing training and skills development
- Providing shared infrastructure and computational resources
- Promoting responsible and transparent use of AI
- Identifying emerging priorities in close collaboration with the community

Meeting Format

The event brought together faculty members, researchers, students, and staff from across scientific disciplines. The event also attracted participants from the Faculty of Social Sciences and Humanities, notably including Teresa Cerratto-Pargman, who attended as the Stockholm University coordinator. It combined inspirational *Speed Talks* with interactive *Breakout Sessions*, aimed at surfacing shared challenges, opportunities, and needs.

Agenda

- **13:30 – 13:45** Welcome and Introduction
- **13:45 – 14:30** *Speed Talks*
- **14:30 – 14:50** Break (with refreshments)
- **14:50 – 15:35** Thematic Breakout Discussions
- **15:35 – 15:45** Break
- **15:45 – 16:15** Breakout Summary and Roadmap Planning
- **16:15 – 17:00** Structured Networking

Speed Talk Presentations

- **AI@SU** – Arne Elofsson (Department of Biochemistry and Biophysics)
- **Using Deep Learning to Track Changes in Wetlands Worldwide** – Fernando Jaramillo (Department of Physical Geography)
- **Rewards and Risks of Science in the Age of AI** – Allison Hsiang (Department of Geological Sciences)
- **Stepping Up Our Machine Learning/AI Education at SU** – Chun-Biu Li (Department of Mathematics)

Breakout Themes

Participants engaged in focused discussions around the following thematic areas:

1. **Scientific Reasoning and Hypothesis Generation with AI**
(e.g., large language models, semantic tools, literature mining)
2. **AI for Experimental Design and Laboratory Automation**
(e.g., closed-loop systems, robotics, intelligent scheduling)

3. **AI-Enhanced Modeling and Simulation**
(e.g., surrogate modeling, emulators, simulation-based inference)
4. **Data Acquisition, Processing, and Analysis**
(e.g., AI along the data pipeline, reproducibility, infrastructure)
5. **Teaching, Training, and Skills Development**
(e.g., AI fluency for researchers, interdisciplinary education)

Outcomes and Next Steps

The Town Hall surfaced clear interest in building institutional capacity for AI in science. Discussions revealed both enthusiasm and urgent needs across education, research, infrastructure, and collaboration. The ideas collected from this meeting will inform the continued development of the *AI for Science* initiative and guide planning for a possible Faculty-wide AI Center.

All researchers—whether actively using AI, just beginning, or curious—are encouraged to stay engaged as the initiative evolves.

1 Summary of Breakout Sessions

After the speed talks, five parallel breakout sessions were held to gather input from the university community. Each session lasted 45 minutes and provided a space for researchers and staff from across the university to share ideas, identify challenges, and propose directions for how an AI centre could support their work. These sessions focused on key domains of scientific research and education where AI is poised to make a significant impact.

1.1 Thematic Summary of Breakout Sessions

This section collates the outcomes of the five thematic sessions into a set of overarching themes. Rather than presenting each session in isolation, we identify cross-cutting issues, needs, and opportunities that emerged collectively across the university community.

1. Infrastructure and Access

Participants across all sessions stressed the need for accessible computational infrastructure, including high-performance computing (HPC), storage, and deployment support for AI models. There was broad agreement that many research groups lack the technical support to deploy models, access existing resources (e.g., Hugging Face, SciLifeLab), or make informed decisions about software and licenses. Specific needs include licenses for relevant AI tools, the capability to build AI tools locally, and assistance with model deployment (e.g., similar to SciLifeLab Serve, like KB Whisper for humanities researchers). Centralized access to AI resources, communal scientific training data, and shared data storage (provided by SU) for both published and sensitive unpublished data were also highlighted.

2. Identified Funding and Resource Opportunities

Several specific funding channels and existing/upcoming resources were identified as potential avenues to support AI for Science initiatives:

- **Local Interdisciplinary Research Funding:** A clear need was expressed for dedicated local funding to support interdisciplinary AI projects within the university.
- **SSF (Stiftelsen för Strategisk Forskning):** This foundation was highlighted as a potential external funding source for Swedish research.
- **CircuLab Wallenberg (Spring 2026):** This upcoming SU facility in material science is already planning to hire experts for implementing AI into experimental design and writing code, presenting a valuable internal resource and collaboration opportunity.
- **SU Imaging Facility:** This facility’s webpage was mentioned as a central point for identifying existing infrastructure at SU. For more information, see the Imaging Facility at SU (IFSU) website.

- **NAISS Resources:** SU’s access to NAISS (HPC facilities, AI resources) was noted, with a suggestion for the AI Center to help researchers apply to these centers and assist with computing proposals. For more information on national resources check NAISS.

3. Training, Teaching, and Upskilling

The need to build AI literacy across all career stages was a central theme. From faculty and PhD students to lab technicians and research staff, there is demand for:

- Modular, domain-specific training programs, acknowledging that approaches to learning and using tools are highly dependent on the domain and field.
- Peer-to-peer and mentorship-based learning.
- Dedicated AI teaching resources with credit recognition, with flexibility in evaluation, especially for pedagogical training. The idea of "buying hours" for faculty to teach specialized 5-hour ML courses was suggested.
- Ethical and methodological training, including critical thinking when using AI and addressing issues of originality and integrity, and the crucial question of how to ensure AI output is "never wrong" in a given context.
- Specific training on how to implement AI code, as expertise in general research is available, but practical coding knowledge is often lacking.

The development of specialized PhD courses, potentially in a format where professors and students present papers (e.g., "PhD course on AI4 Science"). These courses should be well-booked and saved as resources for new participants. Participants emphasized that training should not only be offered to students but also to active researchers and staff who must supervise or collaborate on AI-driven projects. This includes general workshops for professors and researchers on the strengths and weaknesses of specific AI methods and how to define AI projects for students, potentially in shorter, more focused formats (e.g., one-day or week-long trainings) to accommodate senior staff schedules. Student projects with credit were also suggested as a means for learning AI concepts. Furthermore, guidance regarding practical challenges such as data privacy (e.g., GDPR compliance) and reasonable cost estimates for AI model use when writing grant applications ¹. was requested. The precedent of applied statistics courses was cited as a model for structured, fast-paced learning. The challenge of time commitment for staff training was also noted.

4. Collaboration and Knowledge Sharing

Many expressed a desire for regular forums where researchers could exchange ideas, discuss tools, and co-develop solutions. Suggestions included:

- A central registry of AI expertise and interests at SU, including a list of people with associated topics and expertise who volunteer to be contacted.
- Interdisciplinary seminars and speed-talks, including "days where people give speed talks, just basically outlining their problems." A recurrent seminar series (e.g., bi-weekly) on broader ideas like "what's new in the field" was also proposed.
- AI-focused matchmaking for co-supervision or short-term collaborations, specifically mentioning making co-supervision of Masters students from different departments structurally possible as a way to foster connections and test collaboration viability without excessive commitment.
- Regular cross-departmental discussions to identify common points for lab automation and exchange best practices.
- Proactive engagement with other universities (e.g., Linköping University, KTH) and national experimental groups with interests in lab development and instrumentation, to learn from their experiences and avoid reinventing solutions.
- Consideration of an AI newsletter (faculty-level or thematic) to foster community and disseminate information, similar to the Center for Advanced Teaching and Learning's newsletter.

¹AI tools may be used to help prepare research grant applications to the Swedish Research Council, provided that applicants ensure the content is accurate, follows good research practice, and is not plagiarized. VR's Guidelines for the Use of AI Tools

- The creation of a shared resource landing page for the AI Center, detailing who does what, what kind of data they work with, existing knowledge, and solved problems. This page could also collate information on existing AI applications usable by SU students and staff (e.g., Keenious), lists of relevant papers, courses, basic examples, simple tutorials, and recorded seminars.
- Offering AI consulting services with human resources to tutor/mentor faculty individually, tailored to their specific needs.

There was a clear appetite for both structured collaboration (e.g., workshops, joint supervision) and informal networks of support, with a recognized need for a "hub of expertise and knowledge exchange" that can efficiently transmit knowledge without bottlenecks. The RISE was mentioned as a potential internal partner to assist in these efforts. Discussions also touched upon whether collaboration outcomes must always be joint papers, suggesting a broader view of successful collaborative outputs. The integration of SciLifeLab facilities (e.g., NBIS for bioinformatics) was also highlighted as crucial, particularly for data acquisition and analysis in life sciences, noting their extensive resources and experience with large-scale, sensitive data management and rapid data analysis.

5. Practical Use Cases and Pilot Projects

Rather than focusing on developing new AI algorithms, many sessions advocated using AI to solve pressing research problems:

- Lab automation and experimental design: This includes using generative algorithms to improve experimental design (e.g., for building an electron spectrometer), coupling AI to instruments for automated lab operation, and intelligently sampling large parameter spaces (temperature, pressure, etc.). Automatic data acquisition in experimentation and robotic experiments were also emphasized.
- Data analysis under noisy or sparse conditions: This involves ML-optimized data analysis of noisy experimental data to extract more information than human observation, and connecting data to complex underlying models. AI is particularly useful for quickly filtering large or redundant datasets and for identifying the usefulness and signal level of data, especially in data-light domains. The center could help bridge the gap between data-rich and data-light fields.
- AI-Enhanced Modeling and Simulation: This includes speeding up computationally costly and complex physics calculations, and using reinforcement learning to explore extremely large parameter and/or model spaces to find optimization shortcuts.
- Hypothesis generation from complex datasets: This involves using AI to define new research questions.
- Novel AI applications: Examples include using neural networks to encode quantum states that are difficult to model with existing methods.

Pilot projects were proposed as a way to build momentum and demonstrate the utility of an AI centre, with KPIs focused on tangible implementation in the lab for testing, leading to data production and lab operation. Participants also noted that not all automation requires advanced AI; sometimes simpler techniques can be equally powerful, emphasizing a focus on productivity over solely developing new AI models. Inspirational external examples like the Max IV self-driving lab were also referenced.

6. Governance, Scope, and Strategic Vision

Several groups raised foundational questions:

- What counts as AI in the context of the centre? (e.g., distinguishing "AI" and "machine learning," and considering support for foundational data science techniques "before" AI). The center should focus on using AI to be more productive scientists, not solely on developing new AI models.
- Who defines its priorities?
- How do we ensure broad access and avoid bottlenecks? (e.g., ensuring efficient knowledge transmission to avoid bottlenecks through a few facilitators, and having a platform to get people started and up to the same level).

There is a need to clearly define the centre's scope, ensure it is inclusive across disciplines, and avoid focusing too narrowly on technical development at the expense of research enablement. A key strategic suggestion was to hire professors of AI in science to bring in experienced individuals with both hard knowledge and

contextual understanding, ensuring scientists remain in the loop. The center is envisioned as a continual project, with a need for clear goals to maximize utility given resource constraints (e.g., "no extra pile of money"). The importance of introducing new staff and students to the workings surrounding AI was also raised.

1.2 Cross-Cutting Themes and Commonalities

Theme	S1	S2	S3	S4	S5
Infrastructure & Access	✓		✓	✓	
Training & Upskilling	✓	✓	✓		✓
Collaboration & Knowledge Sharing	✓	✓	✓	✓	✓
Use Cases & Pilots	✓	✓	✓	✓	✓
Governance & Vision		✓	✓	✓	✓

Table 1: Themes discussed across breakout sessions. Checkmarks indicate sessions in which the theme prominently appeared.

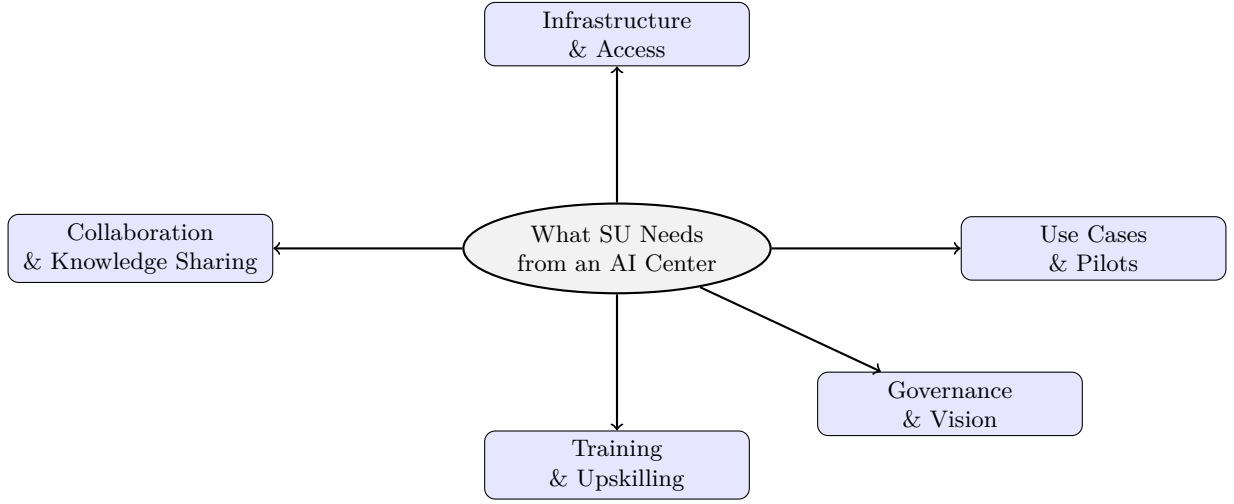


Figure 2: Thematic needs emerging from breakout sessions.

Across all five sessions, certain themes emerged repeatedly:

- A need for centralized coordination and support
- A desire to focus AI efforts on enabling scientific research, not replacing it
- The importance of interdisciplinary exchange and knowledge transfer
- The demand for training that respects disciplinary context and practical constraints

There is a shared vision of an AI Center that is both enabling and integrative—supporting bottom-up experimentation while providing top-down coordination and resources.

1.3 Suggested Focus Areas for Follow-Up Workshops

Based on the ideas and concerns raised during the breakout sessions, we propose three targeted workshops to be held in the next phase of planning:

- Workshop 1: AI in Practice — Use Cases from SU Researchers**
Showcase real applications of AI in SU labs, including experimental automation, simulation, and hypothesis generation. Emphasize challenges, lessons learned, and reproducible workflows.
- Workshop 2: Building an Inclusive AI Training Program**
Co-design a training roadmap that addresses diverse needs (students, faculty, staff) and includes input from Statistics, CS, and domain researchers. Explore modularity, credit structures, and ethics components.

3. **Workshop 3: Shared Infrastructure and Deployment Support**

Identify available resources at SU (HPC, storage, software), discuss gaps, and outline what the AI centre could provide centrally. Include hands-on guidance on deploying models using university-supported tools.

These workshops will not only continue the conversation but begin to translate ideas into action and structure for the emerging AI Center.

Actionable Items and Implementation Roadmap

Based on the discussions and identified needs from the Faculty-Wide Dialogue on AI for Research at SU, the following actionable items are proposed, categorized by their estimated complexity and effort for implementation, with further grouping for clarity.

Low Complexity (Quick Wins / Low-Hanging Fruits)

These items are generally easier to initiate and can provide immediate value or build momentum.

Communication & Community Building

- **Encourage Ongoing Engagement:** Actively invite and remind researchers to stay engaged with the AI for Science initiative as it evolves.
- **Organize Interdisciplinary Seminars and Speed-Talks:** Host regular events where researchers can briefly present their problems and findings related to AI.
- **Propose a Recurrent Seminar Series:** Establish a bi-weekly or monthly seminar series focusing on "what's new in the field" of AI for science.
- **Consider an AI Newsletter:** Launch a faculty-level or thematic newsletter to disseminate information, share updates, and foster community.
- **Evaluate and Select Sustainable Communication Platforms:** Research and select appropriate communication tools (e.g., Slack alternatives like Discourse) considering factors like cost, message retention, and user experience, to foster community engagement.
- **Organize Regular Cross-Departmental Discussions:** Facilitate meetings to identify common points for lab automation and exchange best practices.
- **Introduce New Staff and Students to AI Workings:** Develop a clear onboarding process or introductory materials for new personnel regarding AI resources and practices at SU.

Information & Resource Centralization

- **Centralize Information on Existing SU Facilities:** Actively promote and link to existing infrastructure like the SU Imaging Facility (IFSU) webpage.
- **Create a Central Registry of AI Expertise and Interests:** Develop a searchable list of individuals with AI-related topics and expertise who volunteer to be contacted for collaboration.
- **Create a Shared Resource Landing Page for the AI Center:** Develop a central webpage detailing who does what, data types, existing knowledge, solved problems, usable AI applications (e.g., Keenious for reference discovery and experiment validation), relevant papers, courses, basic examples, simple tutorials, and recorded seminars.

Initial Workshops & Planning

- **Workshop 1: AI in Practice — Use Cases from SU Researchers:** Organize a workshop to showcase real applications of AI in SU labs, emphasizing challenges, lessons learned, and reproducible workflows.
- **Workshop 2: Building an Inclusive AI Training Program:** Organize a workshop to co-design a training roadmap addressing diverse needs (students, faculty, staff), including input from various departments, and exploring modularity, credit structures, and ethics.

- **Workshop 3: Shared Infrastructure and Deployment Support:** Organize a workshop to identify available resources, discuss gaps, outline central provisions, and offer hands-on guidance on deploying models using university-supported tools.
- **Host Practical LLM Workshops:** Organize mini-workshops on interacting with research data via LLMs capable of utilizing specific endpoints (e.g., MCP endpoints), requiring some preparation for autumn.

Training & Upskilling (Initial Steps)

- **Offer General Workshops for Professors and Researchers:** Provide shorter, focused (e.g., one-day or week-long) workshops on strengths/weaknesses of AI methods and defining AI projects for students, accommodating senior staff schedules.
- **Offer Foundational LLM Talks:** Provide virtual/hybrid talks on the foundations of Large Language Models (LLMs), such as an updated version of "Tokens of love" (e.g., based on Matthias Zepper's SciLifeLab talk), available on short notice.

Medium Complexity

These items require more planning, dedicated resources, or cross-departmental coordination.

Strategic Planning & Assessment

- **Map AI-Related Research:** Systematically identify and document existing AI research and activities across the university.
- **Assess Faculty's AI Readiness:** Conduct a comprehensive assessment of the faculty's current capabilities and needs regarding AI.
- **Build a Shared Understanding Across Disciplines:** Develop common frameworks and communication channels to enhance mutual understanding of AI's role in different fields.
- **Represent SU in National and International Networks:** Ensure SU's active participation and voice in broader AI research communities.

Infrastructure & Resource Provision

- **Provide Licenses for Relevant AI Tools:** Secure and manage licenses for essential AI software and platforms.
- **Enable Capability to Build AI Tools Locally:** Provide resources and support for researchers to develop and customize AI tools within their labs.
- **Provide Assistance with Model Deployment:** Offer technical support for deploying AI models, including a curated selection of open-weights models suitable for common tasks (e.g., KB Whisper for Swedish audio transcription), provided as a service to researchers.
- **Provide Communal Scientific Training Data:** Curate and make available shared datasets for AI training purposes across disciplines.
- **Help Researchers Apply to NAISS Centers and Assist with Computing Proposals:** Provide guidance and support for researchers seeking access to national HPC and AI resources through NAISS.
- **Provide Procurement Assistance for Third-Party Services:** Facilitate the procurement of certain third-party AI services to streamline access for researchers, acting as an administrative aid without necessarily absorbing all costs.

Training & Education Development

- **Develop Modular, Domain-Specific Training Programs:** Create flexible training modules tailored to the specific needs and contexts of different scientific domains.
- **Promote Peer-to-Peer and Mentorship-Based Learning:** Establish programs or platforms that facilitate knowledge exchange and mentorship among researchers.

- **Suggest "Buying Hours" for Faculty to Teach Specialized ML Courses:** Implement a system to compensate faculty for developing and teaching short, specialized machine learning courses.
- **Provide Ethical and Methodological Training:** Offer courses or workshops on critical thinking, originality, integrity, and ensuring "never wrong" AI output.
- **Provide Specific Training on How to Implement AI Code:** Offer practical coding workshops and resources to bridge the gap between theoretical knowledge and practical application.
- **Develop Specialized PhD Courses:** Create advanced PhD-level courses on AI for Science, potentially in a paper-presentation format, ensuring they are well-booked and archived.
- **Provide Guidance on Data Privacy (GDPR):** Offer clear guidelines and support for researchers on GDPR compliance when handling data with AI.
- **Provide Guidance on Reasonable Cost Estimates for AI Model Use in Grants²:** Assist researchers in accurately estimating and budgeting for AI-related costs in grant applications.

Collaboration & Project Facilitation

- **Launch Use Case-Driven Pilot Projects:** Initiate specific projects addressing scientific challenges (e.g., lab automation, simulation acceleration, noisy data analysis, hypothesis generation, novel AI applications) with tracked outcomes (publications, grants, collaborative outputs).
- **Foster Cross-Disciplinary Collaboration and Capacity Building:** Establish working groups, promote joint supervision, and launch initiatives to enhance AI literacy across various levels and departments.
- **Implement AI-Focused Matchmaking for Co-Supervision/Collaborations:** Create a system to connect researchers for joint supervision of master's students or short-term projects.
- **Make Co-Supervision of Masters Students Structurally Possible:** Address any administrative or structural barriers to interdepartmental co-supervision of students.
- **Engage Proactively with Other Universities/National Groups:** Establish formal collaborations and knowledge-sharing initiatives with external institutions and experimental groups.
- **Offer AI Consulting Services with Human Resources:** Provide tailored, individual tutoring and mentorship for faculty from dedicated AI experts.

Funding Opportunities

- **Explore SSF as External Funding Source:** Proactively identify and apply for funding opportunities from foundations like SSF.
- **Leverage CircuLab Wallenberg (Spring 2026):** Collaborate with this upcoming facility to integrate AI into experimental design and coding, utilizing their expert hires.

High Complexity

These items represent significant strategic undertakings requiring substantial investment, long-term planning, and institutional commitment.

Center Establishment & Governance

- **Support a Proposed AI Center for Science at SU:** Establish and fund a dedicated interdisciplinary AI Center as a hub for research, training, infrastructure, and responsible AI use.
- **Explore Feasibility of Long-Term Institutional Structures:** Conduct in-depth studies and planning for permanent organizational structures to support AI in research and education.
- **Guide Planning for a Possible Faculty-Wide AI Center:** Oversee the comprehensive planning and development process for the proposed AI Center.

²AI tools may be used to help prepare research grant applications to the Swedish Research Council, provided that applicants ensure the content is accurate, follows good research practice, and is not plagiarized. VR's Guidelines for the Use of AI Tools.

- **Clearly Define the Center’s Scope:** Establish precise boundaries and objectives for the AI Center, distinguishing its focus (e.g., enabling scientific productivity vs. novel AI algorithm development).
- **Ensure Broad Access and Avoid Bottlenecks:** Design the center’s operations to facilitate efficient knowledge transmission and broad accessibility, preventing reliance on a few key individuals.
- **Hire Professors of AI in Science:** Recruit senior academic staff with expertise in both AI and scientific domains to provide leadership and contextual understanding within the center.

Comprehensive Infrastructure & Data Solutions

- **Build Sustainable Infrastructure and Knowledge Exchange:** Develop robust, long-term solutions for shared access to compute and data workflows, centralized training platforms, and discoverable best practices.
- **Ensure Centralized Access to AI Resources:** Implement systems and policies for efficient and equitable access to high-performance computing, specialized software, and AI models.
- **Provide Shared Data Storage:** Establish secure and scalable shared data storage solutions for both published and sensitive unpublished scientific data.
- **Integrate SciLifeLab Facilities:** Formalize and deepen collaboration with SciLifeLab facilities (e.g., NBIS) for data acquisition, analysis, and management in life sciences.

Long-term Funding & Program Development

- **Seek Dedicated Local Interdisciplinary Research Funding:** Actively pursue and secure internal funding specifically allocated for interdisciplinary AI projects within the university.
- **Develop Dedicated AI Teaching Resources with Credit Recognition:** Create formal, credit-bearing educational programs and resources for AI, including flexible evaluation methods.