UNIVERSITETET
I OSLO

Innovation and Open Research

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RITMO Centre for Interdisciplinary Studies of Rhythm, Time and Motion

22.9.2023

Music Researcher

Lab and Centre Director

Research Musician

Open Research Advocate

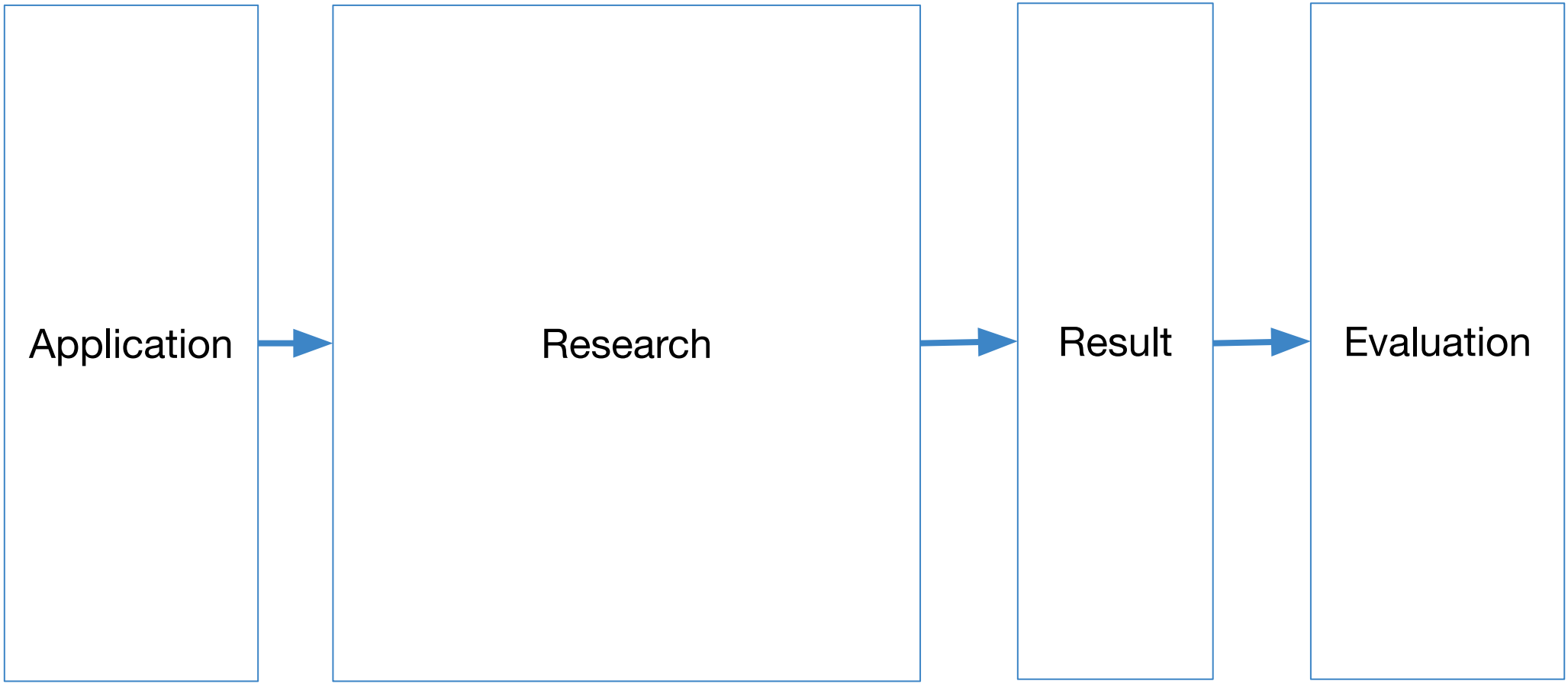
EUA OPEN SCIENCE

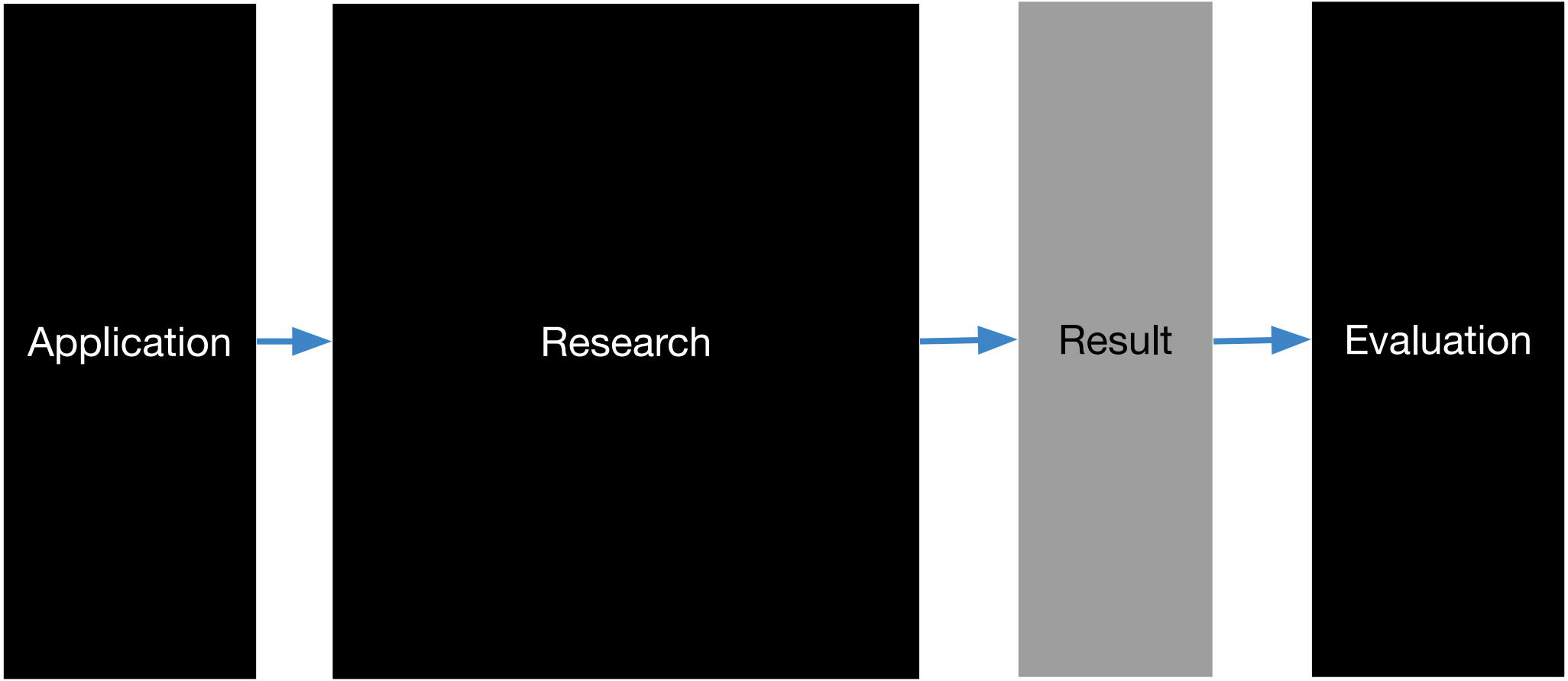
Expert Group on
Open Science
European University
Association

Åpen forskning ≈ Open research

≠

Åpen vitenskap ≈ Open science


Application
Research
Result
Evaluation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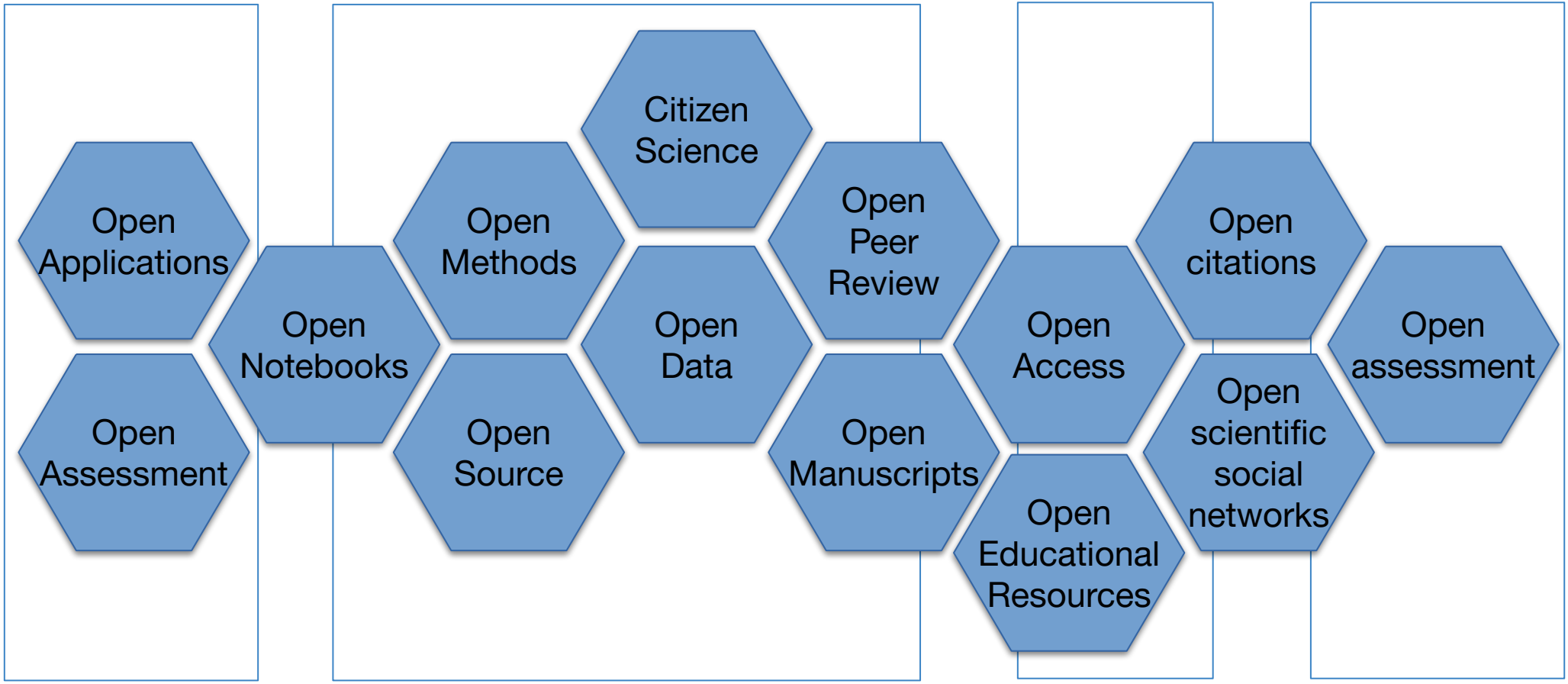

Open Applications
Open Notebooks
Open Assessment
Open Methods
Open Source
Citizen Science
Open Data
Open Peer Review
Open Manuscripts
Open Access
Open Educational Resources
Open citations
Open scientific social networks
Open assessment

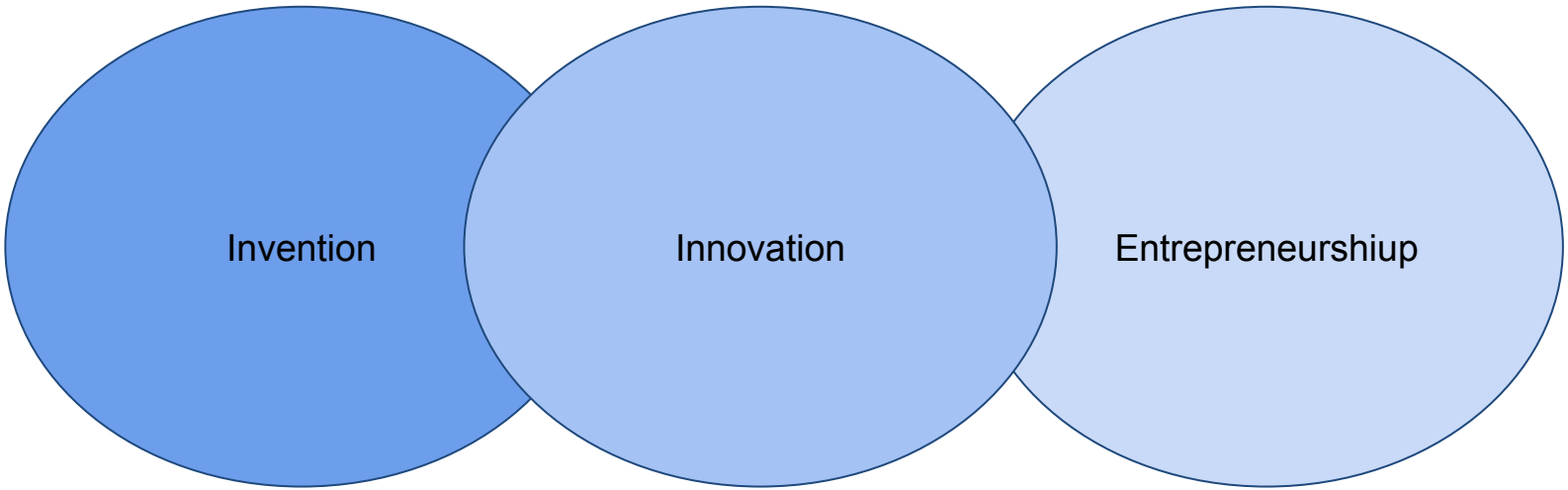
Innovation?

Innovation – Knowledge in use

Research from UiO forms the basis for new solutions to important societal needs.

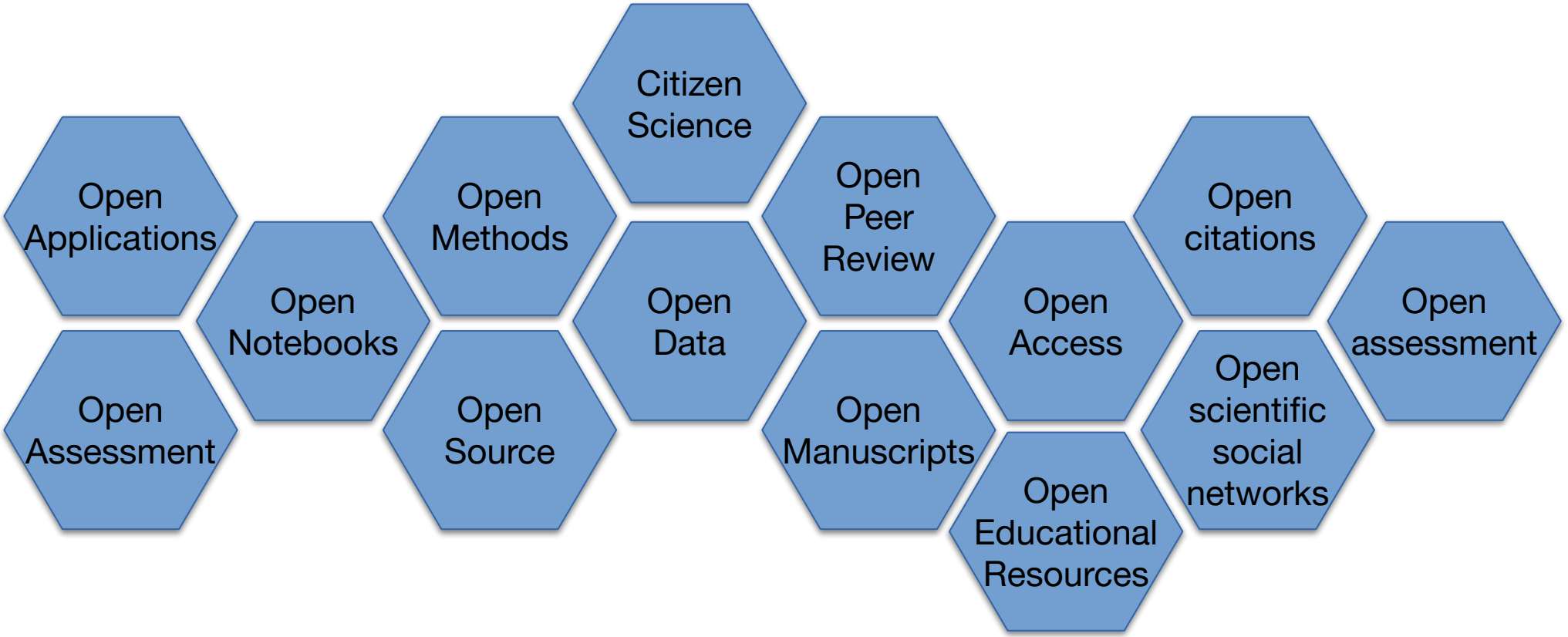
By promoting innovation and entrepreneurship, UiO ensures that our research can be transformed into solutions that have significant value for the society.

We facilitate innovation in several ways: through units that support students and staff in innovation processes, through collaboration with the business sector, and through new meeting places that foster innovation.


Invention
Innovation
Entrepreneurshiup

Open Innovation?

by whom?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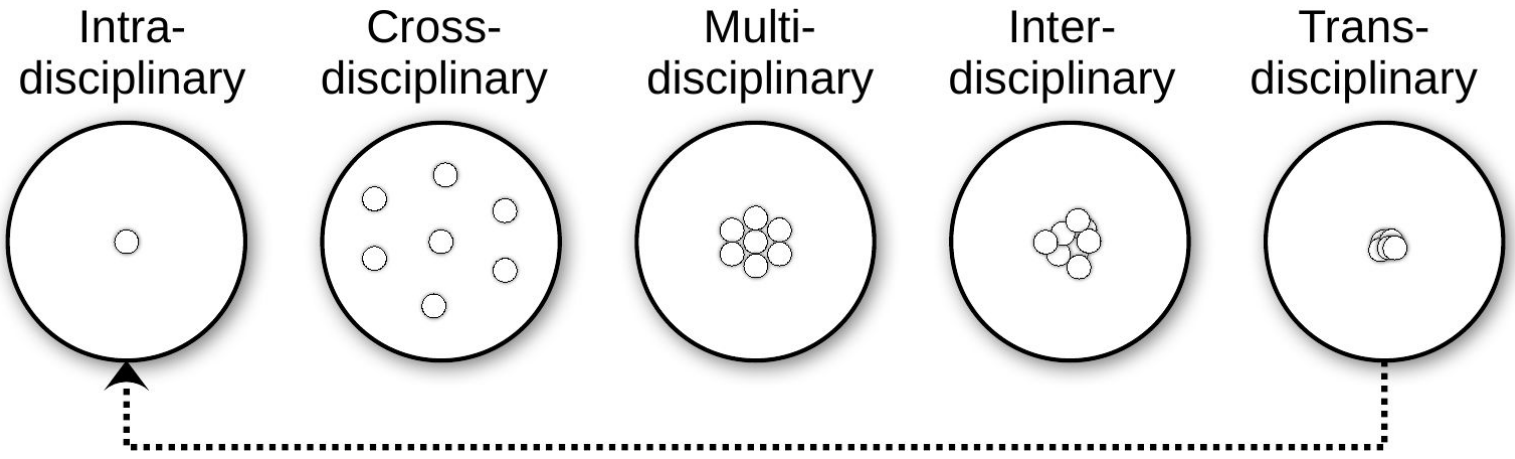
Interdisiciplinarity


Intra-
disciplinary
Cross-
disciplinary
Multi-
disciplinary
Inter-
disciplinary
Trans-
disciplinary

Foster innovation?

NOR-CAM - A toolbox for recognition and rewards in academic careers

Universities Norway

European Commission

Evaluation of Research Careers fully acknowledging Open Science Practices

Rewards, incentives and/or recognition for research practicing Open Science

Written by the Working Group on Rewards under Open Science
July – 2017

Research and Innovation

eua EUROPEAN UNIVERSITY ASSOCIATION

ABOUT ISSUES SERVICES

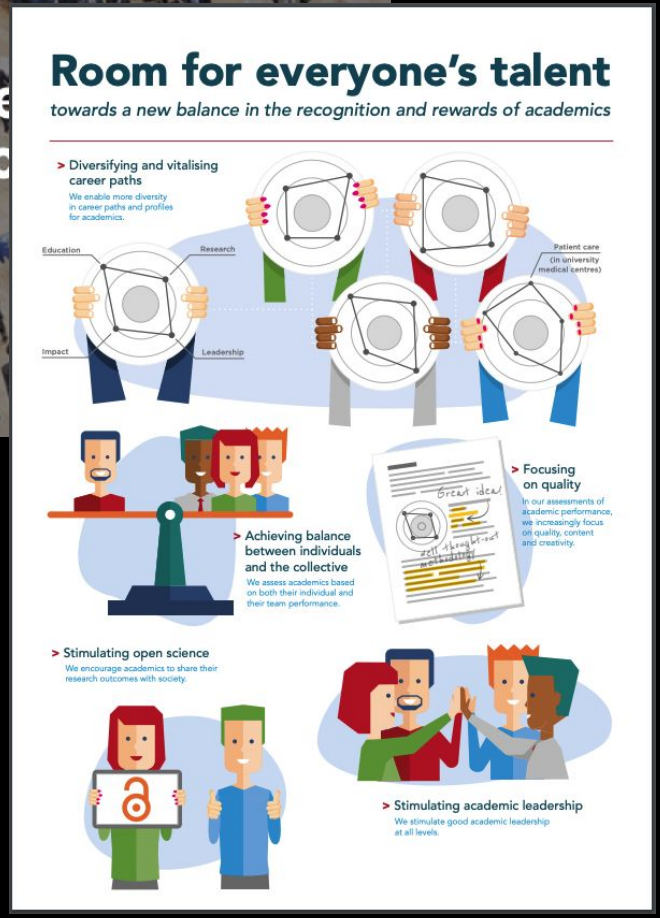
Career Assessment in the Transition to Open Scienc

18 MAY 2020 | WORKSHOP

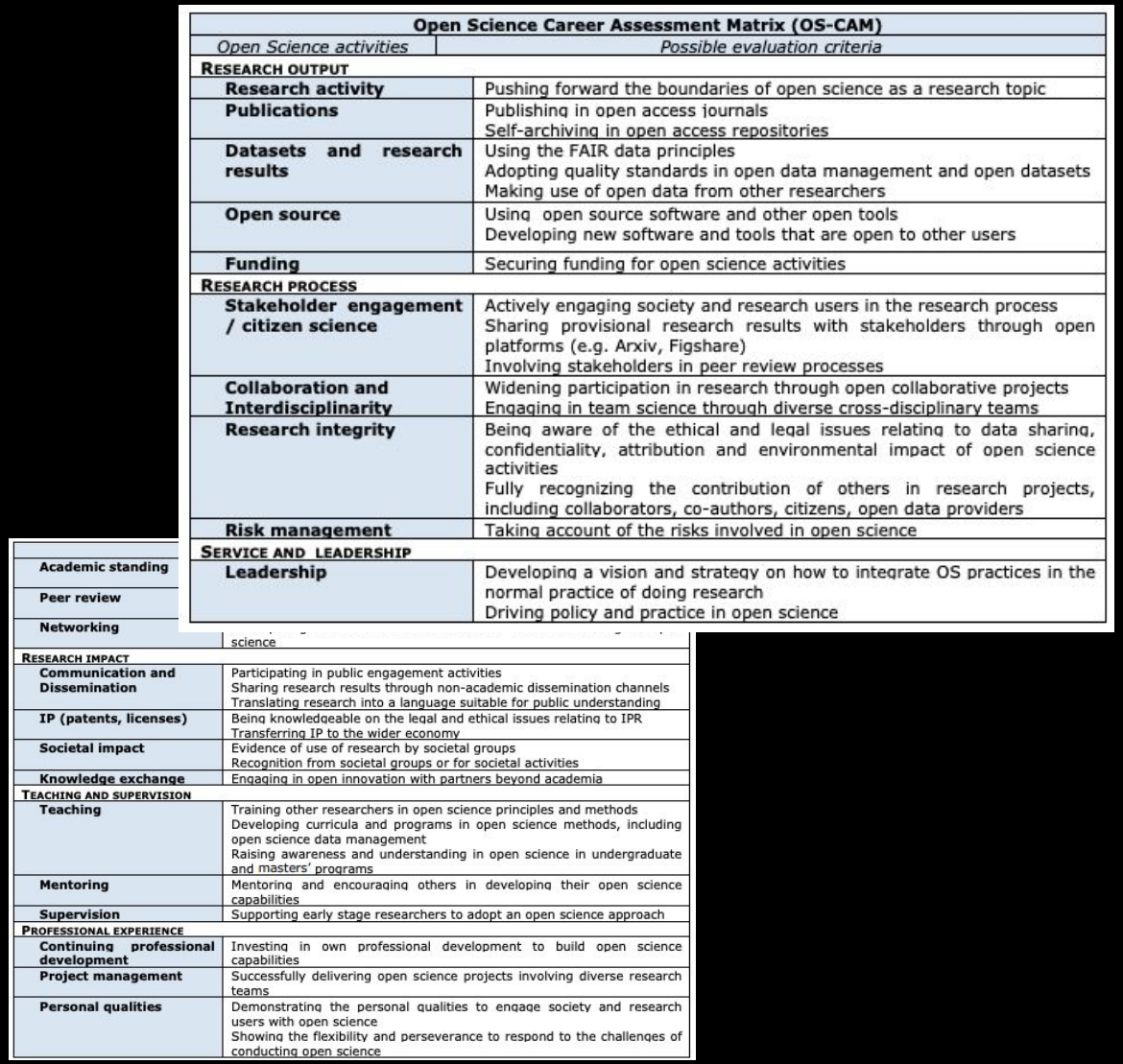
OSLO , NORWAY

Room for everyone's talent

towards a new balance in the recognition and rewards of academics



The Open Science Career Assessment Matrix (OS-CAM)



Open Science Career Assessment Matrix (OS-CAM)	
Open Science activities	*Possible evaluation criteria*
RESEARCH OUTPUT	
Research activity	Pushing forward the boundaries of open science as a research topic
Publications	Publishing in open access journals Self-archiving in open access repositories
Datasets and research results	Using the FAIR data principles Adopting quality standards in open data management and open datasets Making use of open data from other researchers
Open source	Using open source software and other open tools Developing new software and tools that are open to other users
Funding	Securing funding for open science activities
RESEARCH PROCESS	
Stakeholder engagement / citizen science	Actively engaging society and research users in the research process Sharing provisional research results with stakeholders through open platforms (e.g. Arxiv, Figshare) Involving stakeholders in peer review processes
Collaboration and Interdisciplinarity	Widening participation in research through open collaborative projects Engaging in team science through diverse cross-disciplinary teams
Research integrity	Being aware of the ethical and legal issues relating to data sharing, confidentiality, attribution and environmental impact of open science activities Fully recognizing the contribution of others in research projects, including collaborators, co-authors, citizens, open data providers
Risk management	Taking account of the risks involved in open science
SERVICE AND LEADERSHIP	
Leadership	Developing a vision and strategy on how to integrate OS practices in the normal practice of doing research Driving policy and practice in open science
Academic standing	
Peer review	
Networking	science
RESEARCH IMPACT	
Communication and Dissemination	Participating in public engagement activities Sharing research results through non-academic dissemination channels Translating research into a language suitable for public understanding
IP (patents, licenses)	Being knowledgeable on the legal and ethical issues relating to IPR Transferring IP to the wider economy
Societal impact	Evidence of use of research by societal groups Recognition from societal groups or for societal activities
Knowledge exchange	Engaging in open innovation with partners beyond academia
TEACHING AND SUPERVISION	
Teaching	Training other researchers in open science principles and methods Developing curricula and programs in open science methods, including open science data management Raising awareness and understanding in open science in undergraduate and masters' programs
Mentoring	Mentoring and encouraging others in developing their open science capabilities
Supervision	Supporting early stage researchers to adopt an open science approach
PROFESSIONAL EXPERIENCE	
Continuing professional development	Investing in own professional development to build open science capabilities
Project management	Successfully delivering open science projects involving diverse research teams
Personal qualities	Demonstrating the personal qualities to engage society and research users with open science Showing the flexibility and perseverance to respond to the challenges of conducting open science

Six principles

- Measure quality and excellence through a better balance between quantitative and qualitative goals
- Recognise several competencies as merits but not in all areas at the same time or by each employee
- Assess all results, activities and competencies in the light of Open Science principles
- Practice transparency in the assessment and visibility of what should be recognised as merit
- Promote gender balance and diversity
- Assist in the concrete practice of job vacancy announcements and assessment processes locally

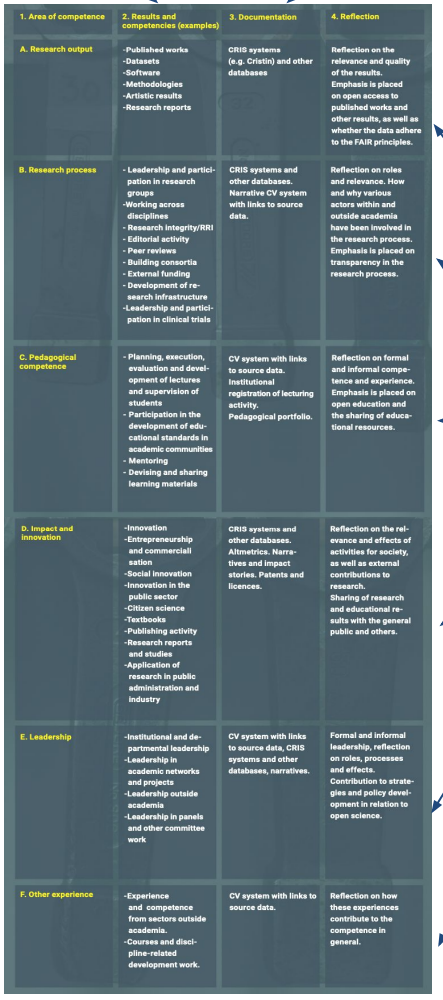
NOR-CAM - Norwegian Career Assessment Matrix

Column 2: Examples of results and competences

Column 3: Documentation

Column 1: Six areas to be assessed

Column 4: Reflection



1. Area of competence	2. Results and competencies (examples)	3. Documentation	4. Reflection
A. Research output	-Published works -Datasets -Software -Methodologies -Artistic results -Research reports	CRIS systems (e.g. Cristin) and other databases	Reflection on the relevance and quality of the results. Emphasis is placed on open access to published works and other results, as well as whether the data adhere to the FAIR principles.
B. Research process	- Leadership and participation in research groups -Working across disciplines - Research integrity/RRI - Editorial activity - Peer reviews - Building consortia - External funding - Development of research infrastructure -Leadership and participation in clinical trials	CRIS systems and other databases. Narrative CV system with links to source data.	Reflection on roles and relevance. How and why various actors within and outside academia have been involved in the research process. Emphasis is placed on transparency in the research process.
C. Pedagogical competence	- Planning, execution, evaluation and development of lectures and supervision of students - Participation in the development of educational standards in academic communities - Mentoring - Devising and sharing learning materials	CV system with links to source data. Institutional registration of lecturing activity. Pedagogical portfolio.	Reflection on formal and informal competence and experience. Emphasis is placed on open education and the sharing of educational resources.
D. Impact and innovation	-Innovation -Entrepreneurship and commercialisation -Social innovation -Innovation in the public sector -Citizen science -Textbooks -Publishing activity -Research reports and studies -Application of research in public administration and industry	CRIS systems and other databases. Altmetrics. Narratives and impact stories. Patents and licences.	Reflection on the relevance and effects of activities for society, as well as external contributions to research. Sharing of research and educational results with the general public and others.
E. Leadership	-Institutional and departmental leadership -Leadership in academic networks and projects -Leadership outside academia -Leadership in panels and other committee work	CV system with links to source data, CRIS systems and other databases, narratives.	Formal and informal leadership, reflection on roles, processes and effects. Contribution to strategies and policy development in relation to open science.
F. Other experience	-Experience and competence from sectors outside academia. -Courses and discipline-related development work.	CV system with links to source data.	Reflection on how these experiences contribute to the competence in general.

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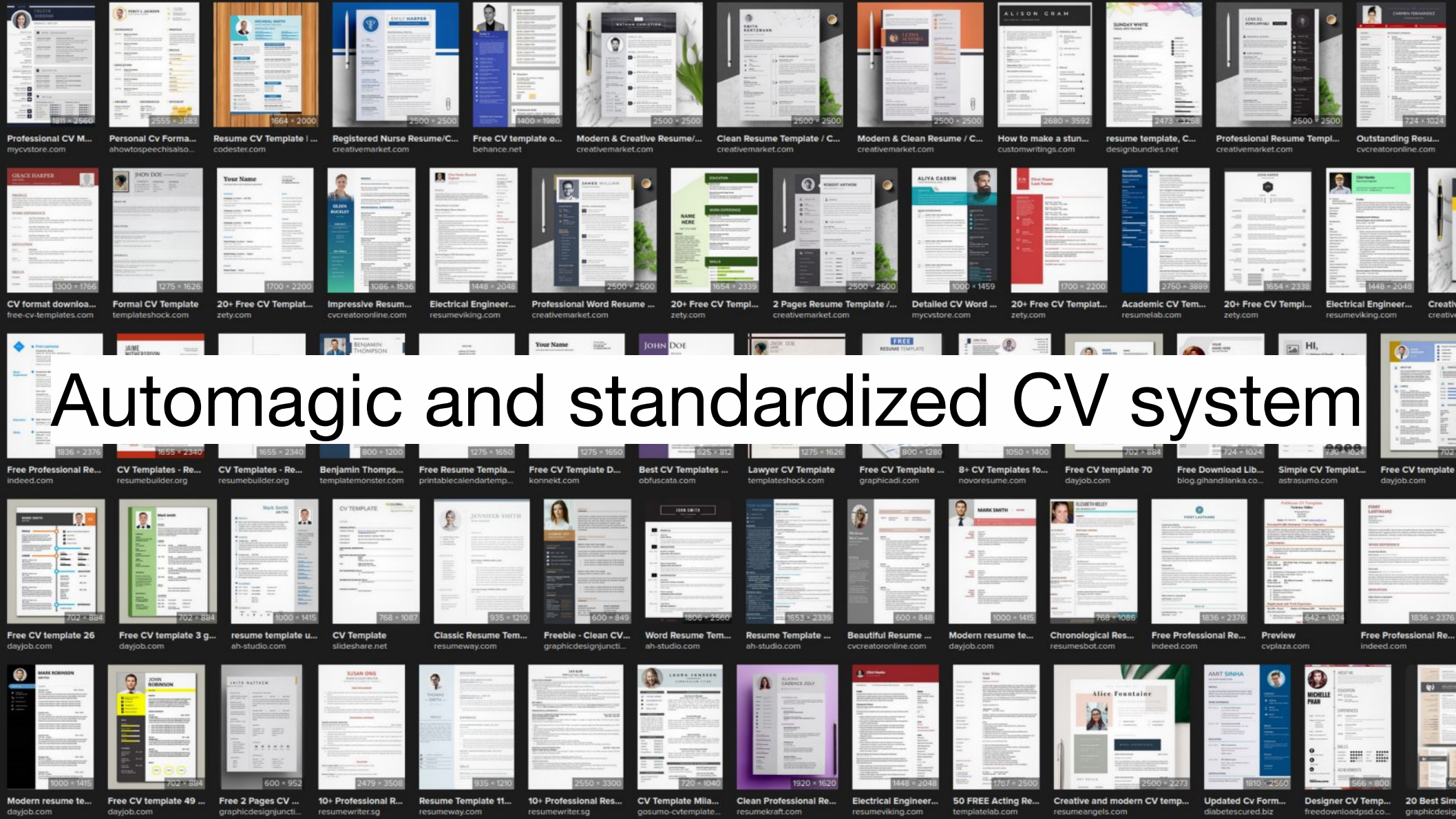
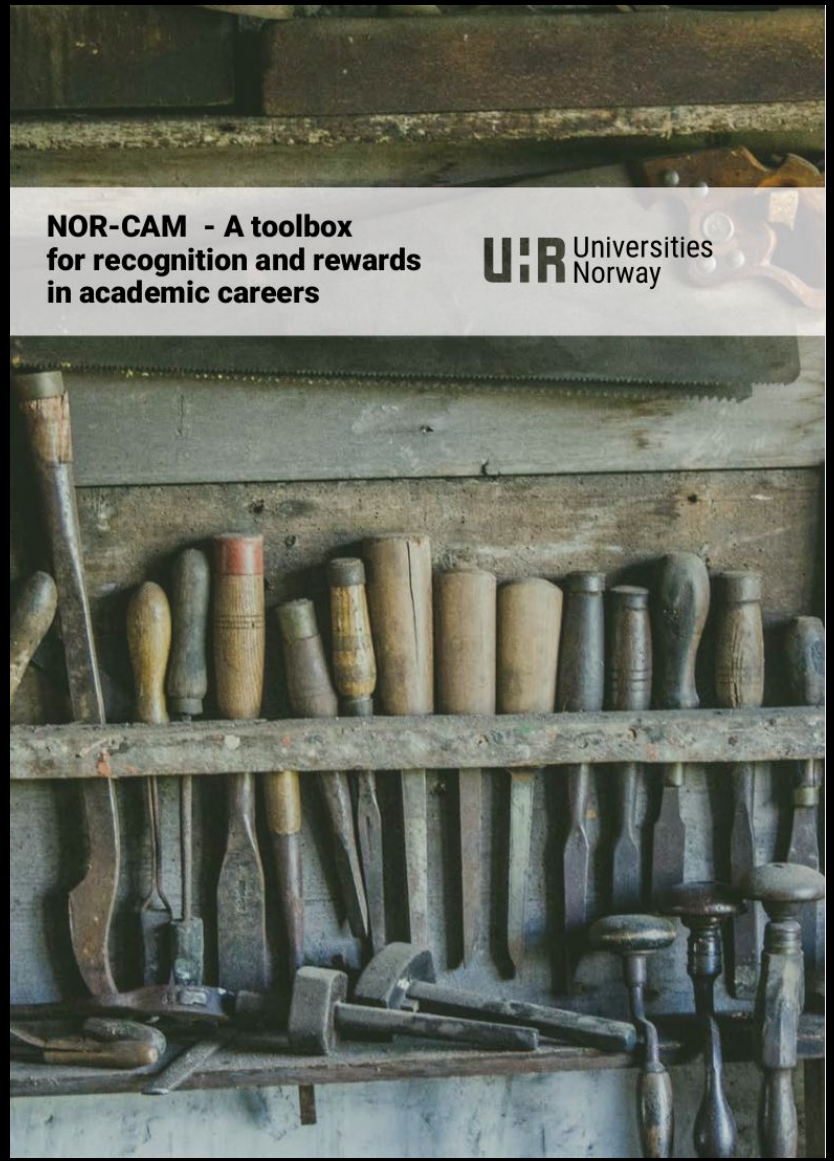
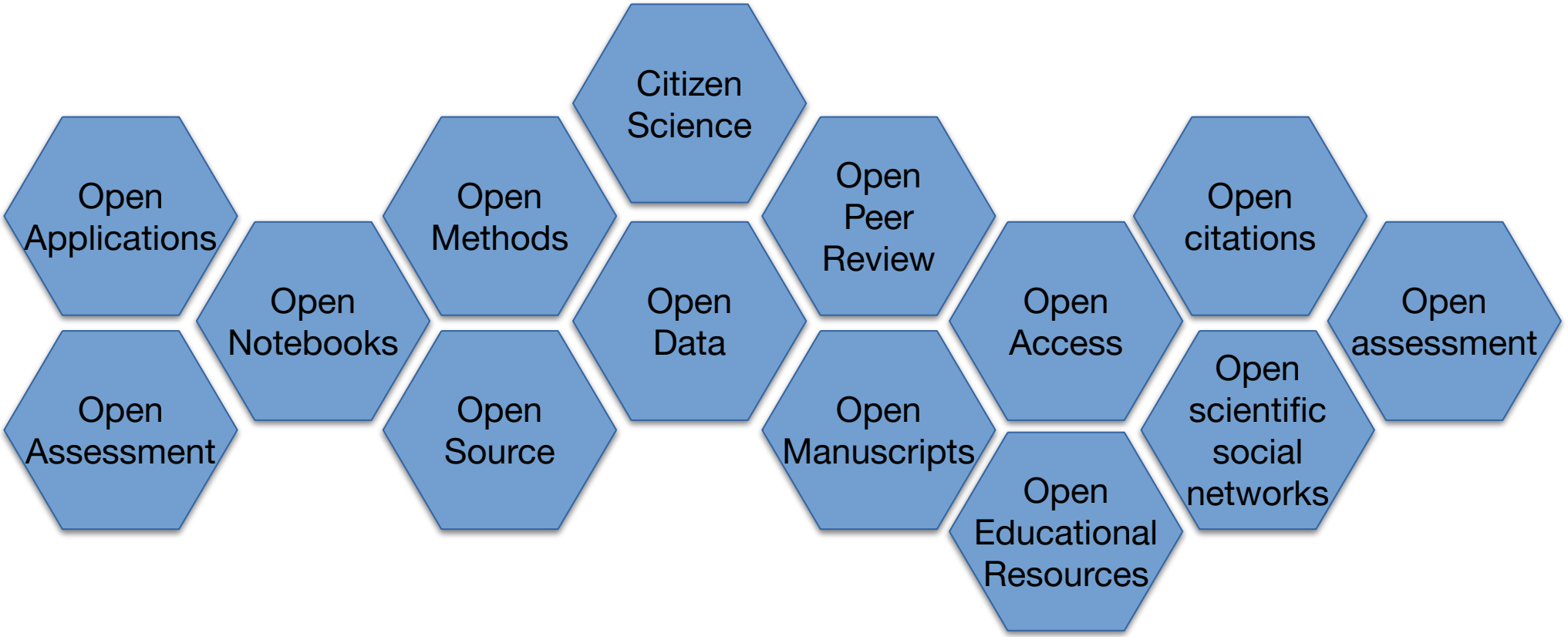

Automagic and standardized CV system

Automagic and standardized CV system

- User friendly
- Web based
- Retrieve data from different national and international systems
- Integrated with recruitment/assessment systems



https://www.uhr.no/en/news-from-uhr/nor-cam-a-toolbox-for-recognition-and-rewards-in-academic-careers.5780.aspx


Citizen Science
Open Applications
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Open Source
Open Manuscripts
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Open Educational Resources