Institutional transformation towards Open Science

Experiences from UiT The Arctic University of Norway

Kenneth Ruud
Prorector research
Huginn and Muninn
The Tromsø Study goes open access
UiT The Arctic University of Norway
Strategy of open access/open data

• **University strategy 2009-2013**
  • Open Access should be the preferred dissemination channel for research results
  • Open Access Policy approved by the University board in 2010

• **UiT 2020: Developing the High North**
  • No explicit mention of Open Access/Open Data
  • Policy on Research Data approved by the University board in March 2017.

• **UiT 2022: Developing the High North (to be approved)**
  • UiT shall be nationally leading on Open Science and research articles should be made openly accessible whenever possible
Open Access
Munin Open Research Archive

Communities

Select a community to browse its collections.

Administrasjon [42]
Avdeling vernepleie (Harstad) [7]
Det helsevitenskapelige fakultet [3775]
Det juridiske fakultet [480]
Det kunstfaglige fakultet [19]
Fakultet for bloviten, fiskeri og økonomi [1763]
Fakultet for humaniora, samfunnsvitenskap og læreutdanning [3105]
Fakultet for idrett, reiseliv og sosiaffag [106]
Fakultet for ingeniørvitenskap og teknologi [136]
Fakultet for naturvitenskap og teknologi [1481]
Tromsø Museum [170]
Universitetsbiblioteket [226]

Doctoral presentations

Doctoral presentations of current interest, where the thesis is available in Munin:

22 Nov 2017: Tore Christoffersen

*The influence of birth weight, childhood fractures and lifestyle factors on peak bone mass in Norwegian boys and girls between 15-18 years of age. The Tromsø Study, Fit Futures*

28 Nov 2017: Espen Waage Skjeflo

*Harnessing Innate Immunity - Complement and TLR Inhibition in Experimental Models of Gram Positive and Polymicrobial Bacteremia and Sepsis*

Recently Added

*What is the impact of underweight on self-reported health trajectories and mortality rates: a cohort study*

Loren, Geir P; Schirmer, Henrik; Emaus, Nina (Journal article; Tidsskriftartikkel; Peer reviewed, 2017-10-02)

*The influence of birth weight, childhood fractures and lifestyle factors on peak bone mass in Norwegian boys and girls between 15-18 years of age. The Tromsø Study, Fit Futures*

Tore Christoffersen (Thesis, 2017-11-22)

### PhD thesis, master thesis and articles

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#### Table: Masteroppgaver and Doktoravhandlinger

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An active university library staff

Dear author,

Below please find a list of your articles from 2016 in subscription journals. These articles should be self-archived in accordance with the university's open access policy, and in accordance with what the publisher permits. By 21st February, these articles were not uploaded to Cristin for self-archiving, to be made available in Munin.

If the article is marked «Published» in the column «Permitted version», you are allowed to self-archive the published version, and we ask you to upload this version to Cristin. If it is marked «Final draft» in the column «Permitted versions», the publisher will not allow you to use the published version for self-archiving. But the publisher allows you to self-archive the final manuscript version submitted after peer review. We ask you to upload a PDF of this manuscript to Cristin to be made available in Munin. The University Library will perform a final check to make sure that the final version is available in accordance with what the publisher permits.

You will find more information on how to upload to Cristin here http://tenuv.org/fescucw

If you want more information or need help, ask your Cristin contact or contact us by replying to this e-mail.

Yours sincerely, The Open Access team of the University Library

Leif Longva
Tel 7764 6255

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<th>Indirect NMR spin-spin coupling constants in diatomic alkyl halides</th>
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<td>Analytic calculations of anharmonic refined and hyper-Raman vibrational spectra</td>
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<td>Magnetic properties with multipole orders and DFT: The complete basis set limit achieved</td>
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<td></td>
<td>Three-photon circular dichroism: towards a generalization of Chirp insertion non-linear right observation</td>
<td>Final draft</td>
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Where are we today?

Utviklingen i open access
Andel av alle publiserte artikler
Key elements for success

• Firmly secured in the leadership of the organisation at all levels

• A service-minded library that cares (passionately) about Open Access, Open Data and Open Science
  • Makes it easy for researchers to upload articles in the institutional research archive
  • Checks that we as researchers comply with the requirements of publishers for uploaded manuscripts
  • Reminds us about the importance of Open Access publishing
  • Provides supports for Gold Open Access publishing

• Open access fund to help support OA publishing

• Open access journals of high international standing
Open Data
Principles and guidelines for research data management at UiT: Researcher responsibility

• For research at UiT that is not organised as a project, the employee carrying out the research is responsible for the research data. For research projects, the project manager is responsible for the research data unless otherwise agreed and regulated by contract.

• The researcher shall write a data management plan in an early phase of the project and preferably within six months of the start of the project.

• The researcher shall ensure that the research data is securely stored, backed up, and archived, in accordance with the Information security management system at UiT.

• The researcher shall make the research data openly available for future use by all relevant users, providing this is not prevented by any legal, ethical, security, or commercial reasons.

• The research data shall be made openly accessible as early as possible.

• Research data shall be equipped with standardised metadata that enable other researchers to search for and use the data.

• The research data shall be equipped with licenses for access, reuse, and dissemination. These licenses should be internationally recognised and set as few limitations as possible regarding access to, reuse, and dissemination of the data.
Principles and guidelines for research data management at UiT: Postgraduate and supervisor responsibility

• Postgraduate research students and their supervisors shall ensure that research data management is planned and documented at the start of the research project in the form of a data management plan.

• The supervisor has the main responsibility for ensuring that research data funded by UiT or a third party is delivered to the supervisor when the student completes his/her programme of study at UiT.
Principles and guidelines for research data management at UiT: Institutional responsibility

• UiT shall offer guidance and support in the development of data management plans.

• UiT shall offer the data archiving and publishing service UiT Open Research Data, which makes research data openly available for reuse, providing legal, ethical, security or commercial reasons do not prevent open access. UiT shall offer training and support to researchers so they can archive and openly publish their data in UiT Open Research Data or in other reliable external repositories, and advise the researchers how to equip each deposit with standardised metadata.

• UiT shall facilitate that research data is made openly accessible for use as early as possible and at the lowest possible cost.

• UiT shall offer guidance and support to set licenses for access, reuse, and dissemination of research data.

• UiT shall offer guidance and support to researchers who have third party agreements and contracts

• All training, support and guidance UiT offers shall aspire to meet best practice.

• UiT is responsible for assessing the sharing of and access to research data resulting from research at UiT.
UiT Open Research Data

UiT Open Research Data
support transparent and reproducible research

Dataverse Category
Research Project (1)

Publication Date
2016 (32)
2017 (32)
2014 (22)

Seabird monitoring counts in Sør-Varanger, NE Norway 1966-2012
Field counts of cliff-breeding seabirds in Sør-Varanger, 1966-2012

Diet of Northern gannet in North Norwegian colonies
TroLLing

Tromsø Repository of Language and Linguistics

European Open Data Champions

By sharing our data, and doing this in an open, public, community fashion, we can determine the best practices for our field.
Saving Data for the Future

UiT Open Research Data
support transparent and reproducible research

Seabird monitoring counts in Sør-Varanger, NE Norway 1966-2012

Description
Field counts of cliff-breeding seabirds in Sør-Varanger, 1966-2012

Subject
Medicine, Health and Life Sciences; Earth and Environmental Sciences

Keyword
Seabirds, Monitoring, North Norway

Related Publication
Research Data Portal

God forvaltning og deling av forskingsdata er sentralt for å fremdra transparens og kvalitet i forskinga, og for at UiT kan fulla samfunnsopdraget sitt som breidduniversitet i nord.

Forskingsdataportalen UiT skal gi informasjon om lagring, handtering, arkivering, tilgjengelegging og deling av forskningsdata til studentar og forskarar ved UiT.
Training

Take control of your PhD journey
From (p)reflection to publishing

Academic integrity and the transparency of science
Searching for literature
Open access publishing
Research data management
Reference management

Data management plan

Key research funders, such as the Research Council of Norway and the EU, set requirements that a research project must have a good plan of how data will be collected, handled and archived.

Consequently, before commencing a project, you should have a plan for how you are going to manage your data. UB can help you to write a data management plan that satisfies the requirements of your research funder and – perhaps even more importantly – makes it easier for you to keep track of your project.

Slide: Helene N. Andreassen and Lene Østvand, UB-UiT
Steps to success

• Firmly secured in the leadership of the organisation at all levels

• Unified solution, close collaboration between the research services units, the university library and the information technology services at the university

• A service-minded library that cares (passionately) about Open Data
  • Makes it easy for researchers to upload data
  • Helps create a data management plan

• **Train the new generation**

• Data storage solutions should be made available from the start of the project, as described in the data management plan

• Assign DOI to data to make the data citable

• Use open (institutional) data repositories for storing the data for a research paper (supplementary information). Both paper and data become citable.
How actively and frequently do I encourage our staff to publish OA?

My latest career strategy: Start my own strategically titled journals.

"Your outstretched hand, the Russian’s wave, appear ambiguous. Forgive my bluntness.” *

Research Council of Norway’s (RCN) policy on Open Access

The RCN demands Open Access of all scientific publications arising from research funded in part or in full by the RCN. All such publications should be deposited in institutional archives.

The rights of researchers to freely choose publication channel for scientific publications is an important part of academic freedom. [...] The RCN therefore encourages researchers funded by the RCN to choose journals with Open Access.

The RCN wants to encourage full open access to scientific publications (“gold open access”).

Position of the Norwegian Government

• Scientific publications from publically funded research shall be made openly accessible. Researchers should explore the possibilities for OA publication and choose OA journals when scientifically appropriate. It should be the exception that publically funded research is not made accessible in research repositories.

• [...] 

• Institutions and consortia that negotiate agreements with publishers must ensure that these agreements promotes OA without an increase in cost, and that there is transparency about the content of the agreement.

• [...] 

* From the libretto to John Adam’s opera “Nixon in China”, libretto by Alice Goodman
”Your outstretched hand, the Russian’s wave, appear ambiguous. Forgive my bluntness.” *

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The RCN wants to encourage full open access to scientific publications (”gold open access”).

“This is an excellent centre with an outstanding programme of research that is ambitious and yet fulfilling those ambitions. The scientific outcome in published papers is impressive, there are many papers in high-impact journals such as Nature and Science.”

* From the libretto to John Adam’s opera “Nixon in China”, libretto by Alice Goodman
“Your outstretched hand, the Russian’s wave, appear ambiguous. Forgive my bluntness.” *

* From the libretto to John Adam’s opera “Nixon in China”, libretto by Alice Goodman
San Francisco Declaration of Research Assessment

DORA makes one general and 17 specific recommendations.

General recommendation:
Do not use journal-based metrics, such as Journal Impact Factors (JIFs), as surrogate measures of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions.

For Organizations That Supply Metrics
• Be transparent
• Provide access to data
• Discourage data manipulation
• Provide different metrics for primary literature and reviews

For Publishers
• Cease to promote journals by Impact Factor; provide an array of metrics
• Focus on article-level metrics
• Identify different author contributions
• Open the bibliographic citation data
• Encourage primary literature citations

For Research Institutions
• When hiring and promoting, state that scientific content of a paper, not the JIF of the journal where it was published, is what matters
• Consider value from all outputs and outcomes generated by research

For Researchers
• Focus on content
• Cite primary literature
• Use a range of metrics to show the impact of your work
• Change the culture!

For Funding Agencies
• State that scientific content of a paper, not the JIF of the journal where it was published, is what matters
• Consider value from all outputs and outcomes generated by research

• Only Norwegian institution that has signed: UiT The Arctic University of Norway

• A promise from UiT to applicants applying for positions at UiT

• Gives no safety for our own researchers in how they will be evaluated by funding bodies (or other institutions)

• In principle not difficult to implement in routines and practices

• Challenge to ensure full compliance in practice
Thank you for your attention!