

**Skisser med relevans innenfor
Humaniora**

Tabell: Oversikt over skisser med relevans for området **Humaniora**

Prosjekt-nummer	Prosjekttittel	Søkerinstitusjon	Prosjektleder	Estimert søkt beløp fra NFR
316241	Historical Registers	NR (NA, NL, FHI, SSB, UiT, The Norwegian Historical Data Centre (NHDC), UiB)	Lars Holden	30 000 000
316406	Coordinated Online Panels for Research on Democracy and Governance in Norway	UiB (UiO, UiA, NTNU, Institutt for samfunnsforskning, NORCE, NSD, ideas2evidence)	Anne Lise Fimreite	75 000 000
316416	fourMs Lab Upgrade	UiO	Alexander Refsum Jensenius	4 998 930
316446	Context-Sensitive Data for Open Research	UiO (NSD, UNINETT Sigma2, USIT/UiO, Uit, UB, OsloMET)	Kirsti Klette	23 473 200
316457	Nasjonal infrastruktur for teknologi og naturvitenskapelig forskning innen kulturarvsområdet (SciCult)	UiO (UiS, UiB, NIKU, NTNU, UiT)	Louis Boumans	85 750 000
316497	Norwegian diachronic corpus 200-1814 (Norchron)	UiO (UiO, NTNU, HVL, Arkivverket, Nasjonalarkivet)	Janne M. Bondi Johannessen	35 473 000
316508	NoDi - Norway Distributed: real-time audio-visual immersive communication research infrastructure	UiO (NTNU, UiT, UiA, Uninett)	Stefano Fasciani	28 857 000
316510	Infrastructure for Norwegian Rock Art Research	UiB (UiO, NTNU, UiS, MUSIT, Universitetsmuseenes IT-organisasjon; Alta Museum, World Heritage Rock Art Center)	Trond Klungseth Løddøen	130 000 000
316527	Digital corpus and dictionary of Norwegian medieval Latin	NB (Norwegian Academy of Science and Letters, UiO, UiB, Norwegian Academy of Language and Literature)	Espen Karlsen	21 513 040
316548	Norwegian e-infrastructure for research on LAM collections	NB (Arkivverket, UiO biblioteket, UiB biblioteket)	Jon Arild Olsen	102 500 000
316555	Virtual Ibsen Platform	UiO (OsloMet, UiO, NB, Norwegian Museum of Cultural History, Telemark Museum, Ibsen Museum Grimstad, Munch Museum, Scenewebarkivet, AusStage, LODEPA, DARIAH)	Ellen Rees	30 422 000
316562	FAIR Data Management Plan	NSD	Katrine Utaaker Segadal	7 566 000

Project number: 316241

Title: Historical Registers

Applicant (partners): NR (NA, NL, FHI, SSB, UiT, The Norwegian Historical Data Centre (NHDC), UiB)

Project Manager: Lars Holden

Short summary:

The project will build an infrastructure for historical registers, Histreg. The major component is the Norwegian Historical Population Register (HBR) with the objective to identify and link all persons living in Norway after 1801 across censuses, church books, emigrant lists and vital statistics up to and including the Central Population Register starting in 1964. Histreg will also include two additional components: 1) a full national register of properties and residences 2) a number of thematic historical registers (e.g. health, education, income). All these registers will be fully linkable between the registers and to modern register data. The HBR component has been funded in part by the Infrastructure program in the period 2014-2019 (denoted phase one), and is on the Norwegian Roadmap for Research Infrastructure. The systems and technical solutions for building HBR efficiently are now largely in place, but still far too rudimentary for most research purposes. In the proposed project we will be complete HBR by exploiting the investments made in phase one.

Histreg will be used in a large number of research projects in areas such as history, demography, economics, sociology, medicine, psychology and genetics by all the large universities, a large number of other universities, university colleges, research institutes and university hospitals.

The register is owned and administrated by the National Archives of Norway (NA). The register will have five platforms for dissemination: Statistics Norway (SN), NA, National Institute of Public Health (NIPH), UiT/NHDC and the online histreg.no. Other national register data will be linked to HBR. The project apply for funding to build the register and to develop new software systems where the main goal is to give a diverse user group improved access to the register. NA, SN, NIPH and UiT/NHDC are responsible for the maintenance and dissemination of the register as part of their public funding and responsibility. Norsk Regnesentral (NR) coordinates the building of the register and The National Library (NL) is important for dissemination and to reach minorities.

Project number: 316406

Title: Coordinated Online Panels for Research on Democracy and Governance in Norway

Applicant (partners): UiB (UiO, UiA, NTNU, Institutt for samfunnsforskning, NORCE, NSD, ideas2evidence)

Project Manager: Anne Lise Fimreite

Short summary:

High quality scientific data is a core feature of existing research on the democratic governance structure in Norway. Our survey and registry data are among the best in the world. However, digitalization now challenges us to imagine and build new infrastructures equipped to meet the demands for high-quality scientific data in our digital age. Unique opportunities exist in Norway due to its high internet coverage. By establishing the proposed new national infrastructure KODEM - Coordinated Online Panels for social science and multidisciplinary research on Democracy and Governance - we take full advantage of these unique opportunities. For the first time KODEM will

coordinate data-collection in panels that cover the entire core of democratic governance-citizens, elected representatives, public administrators, judges, and journalists. KODEM will generate scientific discoveries, more collaboration across institutions and disciplines, high quality international cooperation, more policy-relevant research, higher research pace, larger research scale, and better resource efficiency. In the fall of 2020, a pilot - KODEM_DEMO - will be fielded as a trial.

Organizationally, KODEM will make use of a time-sharing model successfully piloted at the Digital Social Science Core Facility (DIGSSCORE) at the University of Bergen. This time-sharing model will serve the needs of the broad-based national consortium containing participants from the large research universities in Norway, from important research institutes and from data archives and data collectors. KODEM will enable scientific advances across a wide range of scientific fields including Political Science, Public Administration, Media and Communication Studies, Legal Studies, Economics, Psychology, Sociology, and Public Health.

Project number: 316416

Title: fourMs Lab Upgrade

Applicant (partnere): UiO

Project Manager: Alexander Refsum Jensenius

Short summary:

The fourMs lab (Music, Mind, Motion, Machines) is a world-class infrastructure for studies of human movement and physiology in an immersive multimedia environment. It is primarily used for studies of music-related body movement, music performance, and music psychology. In recent years it has also increasingly been used for linguistics, dance, sports, and well-being. The lab is central to the activities of RITMO Centre for Interdisciplinary Studies in Rhythm, Time and Motion, which has been a Norwegian Centre of Excellence since 2017. Funding is sought for upgrading the main motion capture system of the lab. The original motion capture system from Qualisys was funded through the Research Council's infrastructure program in 2008, and installed in 2009. The more than 10-year old equipment is in dire need of replacement. Newer motion capture systems have much better spatial and temporal resolution than the current setup, and therefore allow for recording with higher accuracy and precision. We have recently also experienced a number of failures and errors related to the age of the electronics in the old system. This has caused down-time in the lab, when different parts of the system have had to be sent for repair. Clearly there is a need to do a major upgrade of the main hardware. Over the years we have seen a growing interest in combining motion capture with other types of measurements, including physiological sensing and eye tracking. We therefore also apply for expanding some of the add-on systems in the lab, and prepare for better synchronization solutions with such systems. All in all, these upgrades and new investments are necessary for the fourMs Lab to continue to be a state-of-the-art research facility for the years to come. If funded, it will further strengthen University of Oslo as a world-leading institution for empirical music research, and open for even more interdisciplinary and international collaboration.

Project number: 316446

Title: Context-Sensitive Data for Open Research

Applicant (partners): UiO (NSD, UNINETT Sigma2, USIT/UiO, Uit, UB, OsloMET)

Project Manager: Kirsti Klette

Short summary:

In order to benefit from the rapid growth of video, multi-media and online data ("context-sensitive data" as a collective term) in the social sciences, the humanities and health research, a concerted effort is needed for the development of a flexible research infrastructure for advanced analysis – supporting data storage, sharing, reanalysis and synthesizing research in line with the FAIR-principles. The main objective for CoSedOr (Context-Sensitive data for Open research) is to establish a secure and flexible system for sharing contextsensitive data that meet these requirements and national / international privacy standards. The infrastructure will enable research collaboration between projects, countries and time spans, as well support security and quality in the delivery of research-based resources for teaching and professional training in several disciplines and occupational areas. Furthermore, the infrastructure will be a "testbed" for new solutions related to secure storage and metadata systems across various research fields, both in Norway and across the Nordic countries. CoSedOr is an upgraded and expanded development of eVIR (eInfrastructure for Video Research, 2017-2020/22). The project is organized thematically in four work packages: Wp1. Ethics, confidentiality, privacy protection and intellectual property rights. New regulations / variation across countries of informed consent and privacy schemes will be integrated in CoSedOR and tested in a multidisciplinary, national and international (Nordic) context. Wp2. Metadata solutions for sharing data. A key idea for CoSedOr is to develop a multi-unit system that enables capturing relevant metadata to facilitate long term FAIR reuse of the data described above. Wp3. Interoperability and integration of data sources. The main objective for this WP will be to facilitate the interoperability of selected support tools and systems. Wp4. Implementation and provision of services for a specter of user environments. This WP will identify the needs of the expected user environments for CoSedOr, i.e. students / candidates at MA and PhDlevel and researchers in educational science (teaching and learning), social science and health (psychotherapy), humanities (musicology and linguistics), health and law. CoSedOr is a distributed construction that engages the above-mentioned disciplines in the development and testing of the research infrastructure. It will draw on the expertise of key institutional actors in fields related to this eInfrastructure: (1) At four universities, (2) National archive functions, (3) National and international standards for data management and indexing of data, (4) National standards for ethics and privacy, (5) technical solutions, (6) key administrative professional stakeholders, and (7) international partners.

Project number: 316457

Title: Nasjonal infrastruktur for teknologi og naturvitenskapelig forskning innen kulturarvsområdet (SciCult)

Applicant (partners): UiO (UiS, UiB, NIKU, NTNU, UiT)

Project Manager: Louis Boumans

Short summary:

SciCult has two main objectives. The **first** is the establishment of a national distributed infrastructure for scientific research on cultural heritage materials to ensure optimal usage of existing capacities. This parallels national infrastructures in other European countries and the ESFRI initiative E-RIHS at the European level. Eventually, SciCult may participate as the Norwegian node in E-RIHS. SciCult services include streamlined access to facilities and expertise, support in data management, training activities, and an offer of analysis capacity to smaller custodians of cultural heritage objects and sites. The **second** part of the SciCult proposal consists of physical infrastructure to fill gaps in the existing facilities: A CT scanner for large objects, ground/airborne radar, mobile imaging lab, and instruments for chemical analysis. These new instruments will be located at existing facilities at UiO, UiS, NTNU.

Project number: 316497

Title: Norwegian diachronic corpus 200-1814 (Norchron)

Applicant (partners): UiO (UiO, NTNU, HVL, Arkivverket, Najonalarkivet)

Project Manager: Janne M. Bondi Johannessen

Short summary:

The overarching goal is to build Norchron, a new, national, comprehensive database of texts across historic stages of the Norwegian language (200–1814), in terms of; 1) upgrading existing software, tools and services for its contents; 2) implementing specialised solutions for annotating of documents; and 3) providing transcriptions and annotations of text alongside images that will constitute the content of the searchable database. Such a corpus would be unique resource for researchers studying language change, would also be a significant contribution to preserving an important aspect of the Norwegian cultural heritage.

The text material from the various historical periods is extremely varied both with respect to number of words and proportion of material previous annotated. The whole runic material contains 6000 words, with no previous annotation, Old Norwegian non-legal manuscripts contains as much as 700 000 words, of which 600 000 have already been annotated with some grammatical information. There are 10 000 diplomas in Old and Middle Norwegian, of which only a small part, 35 000 words out of 2 mill. words, have already been annotated. The texts from the newest period (Early Modern Norwegian) consist of 120 000 words, and have not been transcribed or annotated. The Norchron corpus will consist of 1.6 million words when ready.

The main tasks across all text types and historical stages are: 1. new transcriptions of some texts and improvements of others 2. development of a common XML structure for metadata 3. fill in metadata (source, geo location etc.) for each text 4. annotation of lexemes and word classes for all texts, and morphosyntactic features and syntactic structure of a selection of texts 5. translation at word-level

(glossing) for all words 6. selection and identification of images of source material 7. programming of technical tools and the Glossa search system, including linking to other resources, such as maps and dictionaries.

It is anticipated that Norchron, with its open CC BY-SA 4.0 licence, will be widely used by researchers in linguistics, philology and history, but also by students and teachers in the education system and even members of the public.

Project number: 316508

Title: NoDi - Norway Distributed: real-time audio-visual immersive communication research infrastructure

Applicant (partners): UiO (NTNU, UiT, UiA, Uninett)

Project Manager: Stefano Fasciani

Short summary:

Norway Distributed (NoDi) is a real-time audio-visual immersive communication infrastructure as well as an innovative national cross-institution laboratory distributed across UiO, NTNU, UiA and UiT. The laboratory is composed of four physical rooms, one in each institution, in which the components of the infrastructure are permanently installed and managed. The rooms are equipped with state of the art system for audio, visual and data real-time communication. This is supported by a backbone network from Uninett providing a large bandwidth and low latency stable interconnection. When connected, these rooms provide a single virtual space enabling researchers to work together on a variety of tasks, including those that require tight synchronization, immersion, and a realistic feel of presence (telepresence). Each room represents a node in this constellation of connected spaces, and it also acts as a gateway to other locally connected rooms (within the same institute or campus) with less sophisticated yet effective telecommunication technology.

This infrastructure is rooted in the departments of music of four major Norwegian universities, and components of this infrastructure are aligned with the research needs in music related fields, such as tele matic music and music technologies. Real-time remote collaboration on music-related tasks is one of the most demanding applications for computer systems and networks. As a consequence, the intended infrastructure has a much larger scope and it has an unprecedented potential to benefit the research community and the society at large. Indeed the infrastructure allows to carry out long-term studies on synchronous online music collaboration (from performance to pedagogy), on communication and collaboration via immersive telepresence, on distance learning and education, as well as on the techniques and music technologies of the infrastructure itself. Finally, the infrastructure significantly broadens the spectrum of resources (human and physical) available for researchers in each institution through.

Project number: 316510

Title: Infrastructure for Norwegian Rock Art Research

Applicant (partners): UiB (UiO, NTNU, UiS, MUSIT, Universitetsmuseenes IT-organisasjon; Alta Museum, World Heritage Rock Art Center)

Project Manager: Trond Klungseth Løddøen

Short summary:

The ImAge project (Infrastructure for Norwegian Rock Art Research) will establish a national infrastructure for advanced research on prehistoric rock art, available for archaeological and interdisciplinary approaches. This will be achieved by implementing a digital infrastructure where virtual access, dissemination, and visually displayed georeferenced past imagery – in its landscape setting – will be the objective. Among the deliverables are interactive databases with detailed image information, digitised historic documentation and high-resolution 3D-scans from Norwegian rock art sites. Increased capacity to observe, share and use data for research from larger numbers of locations, even remote sites, will be a major contribution by ImAge. The infrastructure will open for multivariate, deep learning, big data and other such analyses.

Rock art as such, are prehistoric images, potential memories and expressions of both ideology and belief systems made by past societies. It is part of our common cultural heritage, where digital documentation produces new value for future research. The rock art in Norway spans over several thousand years, from the Early Stone Age into the Early Iron Age, with great variation in location, motives, techniques and styles. As this tradition also encompasses great disparity across time and space, it provides insight and addresses issues of cultural change. Collection and documentation of rock art in Norway started in the early 19th century and has undergone enormous changes from initial pen on paper depictions, via plastic tracings, photos, some digital documentation and will by ImAge be brought further into the digital age. The digital national infrastructure for Norwegian rock art will be achieved by the combination of three processes: 1) produce new high-resolution 3D scans and photogrammetry of rock art sites and images across Norway, 2) harmonize information in available digital archives, integrated into unified digital database solutions, and 3) digitise all analogue rock art archives at host and partner institutions. The end-result of ImAge will be databases and digital archives that facilitate and interconnect large numbers of sites, individual motives, compilations of images and types of documentation – thus enabling analytical search and advanced research procedures for Norwegian rock art. Information accessible by the ImAge-implementation will be available for both researchers, heritage management, people in general, and open new possibilities for research on rock art in a modern and unprecedented way. The project follows up on the very recent White Paper (St.meld 16, 2019-2020), where digital infrastructure is pointed out to be significant for the future of culture heritage in Norway as an asset for both research and management. The new infrastructure will be integrated and later maintained by MUSIT – the national infrastructure for the university museums in Norway.

Project number: 316527

Title: Digital corpus and dictionary of Norwegian medieval Latin

Applicant (partners): NB (Norwegian Academy of Science and Letters, UiO, UiB, Norwegian Academy of Language and Literature)

Project Manager: Espen Karlsen

Short summary:

MIDLAT2 aims at creating a research infrastructure for the study of Latin as used in Norway in the Middle Ages. This is part of a larger, European initiative coordinated by the International Union of Academies to document Latin as the common language of Europe in this period. The Norwegian Academy of Science and Letters initiated the project in the 1920s and was the host institution when the project received support with the RCN infrastructure programme 2016/2019. The National Library will host the next phase of the project in collaboration with The Norwegian Academy of Science and Letters, the Universities of Bergen and Oslo and the Norwegian Academy for Language and Literature.

The infrastructure consists of a digital corpus of all Latin texts concerning Norway in the Middle Ages, a concordance based on the corpus, and a dictionary compiled from the concordance. Additionally, the corpus will be lemmatised, simplifying search in a morphologically rich language like Latin. The corpus is created as part of The National Library's effort to digitise the Norwegian textual heritage. The digital corpus, the lemmatisation and the concordance will in themselves constitute important resources for the study of Norwegian Medieval Latin, but also serve as stepping stones toward the ultimate goal of the project, which is a digital dictionary of Norwegian Latin. In addition to its evident relevance for Latin studies, it is expected that the project will have great importance for the understanding of Nordic medieval history and its place in a broader European context, as well as the Latin influence on Old Norse.

Project number: 316548

Title: Norwegian e-infrastructure for research on LAM collections

Applicant (partners): NB (Arkivverket, UiO biblioteket, UiB biblioteket)

Project Manager: Jon Arild Olsen

Short summary:

As research becomes increasingly data-driven, the humanities and social sciences need powerful digital infrastructures in order to remain relevant and help tackle the social challenges of today. Norway has long been at the international forefront of digitizing its documentary heritage. This includes text, film, photo, and audio from collections in libraries, archives, and museums (LAM). However, as recently pointed out in many research policy documents (e.g. *Humaniora i Norge*, *Oppfølging av evaluering av humanistisk forskning i Norge*, and *Norsk veikart for forskningsinfrastruktur*), a common infrastructure for searching, accessing, and analysing Norwegian LAM collections is sorely lacking. The aim of the present proposition is to create a national distributed e-infrastructure – eLAM – that can realize the research potentialities created by the collective digitization efforts of the LAM sector. By offering coordinated access to digital collections as well as relevant tools and services for data extraction, processing, analysis, and management, the infrastructure will open up Norwegian LAM collections and allow researchers to detect and explore information and patterns that have previously remained hidden in isolated datasets. The

infrastructure will be developed by some of the main actors in the Norwegian LAM sector. Together, the collections of the National Library and the National Archives constitute the major part of Norwegian documentary heritage. The University of Bergen Library hosts important special collections and has taken steps towards a national coordination in this field. The National Archives hosts a national publication platform for archival institutions and museums. The participation of the University of Oslo Library and the University of Bergen Library ensures that the infrastructure is developed in close cooperation with and according to the needs of the academic community. eLAM will also be instrumental in developing natural language processing and artificial intelligence solutions in Norway. By adapting parts of the infrastructure to the public, eLAM will help spread knowledge and inspire public debate.

Project number: 316555

Title: Virtual Ibsen Platform

Applicant (partners): UiO (OsloMet, UiO, NB, Norwegian Museum of Cultural History, Telemark Museum, Ibsen Museum Grimstad, Munch Museum, Scenewebarkivet, AusStage, LODEPA, DARIAH)

Project Manager: Ellen Rees

Short summary:

No other aspect of Norwegian culture, past or present, can match the global impact of the plays of Henrik Ibsen. The proposed project will create a world class open access Virtual Ibsen Platform (VIP) available to multiple simultaneous users from any networked location in the world.

Ibsen research is a global phenomenon. The University of Oslo's (UiO) Centre for Ibsen Studies (CIS) serves an international network of scholars across five continents with major nodes in China, the USA, India, Bangladesh and Australia. Norway's national playwright equals the importance of Shakespeare in the international entertainment industry; three new professional stage or screen productions of his plays open somewhere in the world every week. Ibsen is a pillar of Norwegian soft diplomacy; his plays serve as a vehicle for social and civil development, and to position Norwegian industries competitively.

CIS is mandated by UiO to support Ibsen research and documentation. Over the past twenty years, it has, among other digital resources, built a digital archive of Ibsen's writings, an event database holding production records, an international Ibsen bibliography, and a VR immersive model of Ibsen's first

theater. VIP will build on these data holdings to create a virtual platform that supports global Ibsen research and cultural production, ensuring both that VIP meets the required standards and formats and secures this invaluable cultural heritage for the future. It will enhance the CIS data through collaboration with Norwegian and international partners, create an interactive user interface that will deliver data selected through a federated search engine, offer tools for the manipulation and interrogation of data, establish worksites for collaborative research, and develop a VR laboratory for research. The impact of research facilitated by VIP will be maximized through online dissemination using multiple display formats.

VIP will be fully functional by 2028, the 200th anniversary of Ibsen's birth. This event will be celebrated on a major scale through extensive national and international investment in the performing arts, entertainment, and tourist industries; we anticipate a surge of event-related research activity from these industries, as well as an increased use of Ibsen's works in the broader education sector. Internationally no equivalent platform has been created to promote a national

cultural figure; this novel e-infrastructure will enhance Norway's image as a nation that marries technological advancement with progressive cultural values.

Project number: 316562

Title: FAIR Data Management Plan

Applicant (partners): NSD

Project Manager: Katrine Utaaker Segadal

Short summary:

The FAIR Data Management Plan (FAIR-DMP) project aims to upgrade and improve NSDs' set of integrated tools and services for Data Management Planning, helping researchers and institutions in making their data FAIR and shareable. The portfolio of services consists of three tools with machine-actionable functionality: a Data Management Plan tool¹, a Data Policy Manager², and a Data Management Plan Overview³ for institutions. The upgrade of these DMP services will include several new integrated support tools that will help researchers in planning for sharing their research data. The upgrades will include services such as: a license selector that will guide the researchers in selecting licenses for both open- and restricted data; a guide for identifying relevant metadata standards; a built-in guide for estimating storage and computing costs connected to data management; and a mechanism for assigning tasks, and setting roles and responsibilities regarding data management and data processing.

Additionally, the upgrade will build a system for turning all (final version) DMPs into FAIR Digital Objects⁴ by assigning them with a DOI⁵ and allowing researchers to publish them in a national public registry of DMPs.

An upgrade of this portfolio of services will contribute to cultural change with respect to data FAIRness and is an initiation towards a broader national FAIR ecosystem for keeping research data as open as possible and as closed as necessary.