HELMHOLTZ MUNICH

CORE FACILITIES HEAD OFFICE

Helmholtz Munich Core Facilities Publication policy

BACKGROUND

Many cutting-edge tools in biomedical research are too expensive to buy and maintain, too complex to skillfully operate and sometimes simply too big to fit in a single lab.
To make such equipment available to the research community, Helmholtz Munich operates a set of scientific service platforms, called Core facilities (CF).
CFs provide fast, convenient, and affordable local access to cutting-edge technologies and services as well as staff with the expertise and skills needed to maximize their utility. Helmholtz Munich is dedicated to maintain service platforms essential to its strategic mission and continuously invests in their setup. Subsidized user fees help to cover a fraction of the CF operational cost, the full cost of running the core services is not passed on to the internal end-user. Payment for services does not preclude the need for proper acknowledgement of CF services and staff in publications and grant applications.

This policy is to provide general guidelines for all Helmholtz Munich CFs and scientific services on the appropriate type of citation (acknowledgement vs co-authorship).
It shall help to facilitate scientific dialogue and avoid misunderstandings between users and core scientists.

PROPER WAY AND APPRORIATE TYPE OF CITATION

Appropriate acknowledgment of CFs allows Helmholtz Munich to demonstrate involvement of the Center's services in projects across our research themes and beyond. Citing CF involvement in the acknowledgement section can be used as a metric of CF performance (alongside occupancy and cost recovery). This will help management to measure the value of the CFs, appropriately allocate funds, decide on the procurement of future equipment, and attract external interest.

Moreover, if CF staff has contributed significantly to published work above and beyond provision of standard services, inclusion as a co-author may be warranted in line with HMGU's publication policy and good scientific practice. What constitutes a significant contribution must be evaluated on a case-by-case basis and depends on the subject area in question. The responsibility for decisions regarding whether co-authorship and/or acknowledgment is appropriate resides with the principal investigator.
The intellectual contribution of CF scientists is to be treated like that of any other researcher involved in a study. It is an important tool for motivation and career

progression of CF staff and helps the organization to recruit and retain highly skilled staff in core services. Examples on activities for acknowledgement vs co-authorship are summarized in Appendix 1.

Acknowledgement of the CFs is mandatory.

Below are activities that are covered by an acknowledgement:

- CF provided routine service or training
- Instrumentation of the CF was used (self-service mode)
- CF collected data that require technical skill, but did not contribute to experimental (re-) design, significant protocol adaptation or data interpretation
- CF performed routine data QC to ensure the data correspond to technical standard
- CF staff reviewed a manuscript or grant for technical correctness and content or advised on a revision

If any or several of the above criteria are met the CF needs to be mentioned in the acknowledgement as stated below. It is good practice to mention the name(s) of CF staff with specific involvement in the published work.

Please use the following statement for acknowledgement:

We acknowledge the technical support of Core Facility XX (Insert name) at Helmholtz Munich. We thank Dr Doe/ Mrs Doe (insert correct name) for help with (insert specific support provided - if appropriate).

Co-authorship

Co-authorship is warranted when CF staff has made a significant scientific contribution to a project beyond the above-mentioned criteria for an acknowledgement, such as:

- Significant contribution in the design or re-design of the experimental strategy
- Development and delivery of project-specific non-routine training
- Establishment of novel cutting edge technologies and significant contribution in the design and conduct of first projects leading to high impact papers
- Development of novel methods or significant modification of an existing protocol for novel types of samples
- Building new or significant remodeling of existing equipment for a novel type of service
- Performing a significant part of data analysis and/or data interpretation (a simple data clean up or basic QC do not count as such activities)
- Writing of parts of the manuscript (more than just parts of material and methods) and/or creation of publication-ready figures

The head of a core Facility is not automatically to be included as a co-author if no significant contribution was made by him/herself. Users of Helmholtz Core facilities are obliged to abide by this publication policy, which is available online. In case a dispute still arises the user and CF staff will approach the Head of Core Facilities at Helmholtz Munich first who will help to facilitate a solution between both parties. If no satisfactory

solution is found the case will be passed on to the scientific head of the core facilities and the head of the respective CF's steering committee for mitigation.

Publications that reference the use of a CFs (both, acknowledgement or co-authorship) should be sent by email to the appropriate core facility and the Core Facilities Coordination Team (corefacilitykoord@helmholtz-munich.de) at Helmholtz Munich as a pdf copy, DOI or URL link.

If and to the extent that a legal document (such a collaboration agreement or commercial contract) stipulates more extensive publication regulations for work with a CF, such regulations shall prevail over the provisions from this Publication Policy.

Autonomous use of instruments	Training and consultation	Sample preparation	Method development	Data Acquisition	Data Acquisition
Train users to run self-use instruments, give general advise on their application and provide routine maintenance, such as: Bioanalyzer or QTrap self-use, confocal microscope or slide scanner, Q-PCR, flow cytometer or cell sorter.	Provide up to date routine training to users and general advise on core technology and applications. Provide free consultation sessions essential to perform the project, determine feasibility, support and help streamline/optimize study design or workflow, advise on sample and reagent selection.	Routine sample prep and QC (manual or automated), including related reports/data bank entries, such as: Perform routine cell or PBMC harvest, isolate primary cells from tissue, isolate nucleic acids or proteins from biosamples and measure concentration. Freezing/thawing/regrouping and cherry picking of samples. Standard protein digest, peptide cleaning, peptide fractionations, any sample prep using commercial kits. Standard histoprep and staining, routine antibody staining.	Scientific input to experimental (re) design with significant protocol adaptations: Establishment of novel sample preparation protocols (not just testing dilutions and incubation times, but genuinely modify or develop a method to something not done before). Development of a specifically tailored novel data analysis strategy or reagent. Project specific method development: Planning and performing pilot studies, then integrating results from pilot studies into novel project design.	Routine data acquisition with established protocols and routine instrument QC and set-up, such as: NGS sequencing or library prep, routine OLINK protocols, metabolomics using commercial kits and standardized protocols, routine proteomics such as standard DDA or DIA, routine image acquisition and slide scanning.	Non-routine data acquisition requiring significant technological adaptation, such as: Development and application of a novel or non-standard acquisition method e.g by combining techniques not used before. Optimization and/or modification of an instrument (re-build/new build) or develop non-routine scripts or settings to measure samples.
Acknowledgement	**Acknowledgement**	**Acknowledgement**	**Co-Authorship**	**Acknowledgement**	**Co-Authorship**

Data analysis	Data analysis	Publication support	Publication support
Basic data QC (e.g. CV analysis, RIN number, exclusion checks, known metabolite annotation). Primary data analysis such as routine check of data intergrity after NGS sequenicing, perform data normalization or compare to reference standards to deliver a final technically clean data set for customers to analyze, including related reports. Any clean-up or data analysis done by automated pipelines or standard (commercial) sofware solutions that produce the readout, including related reports (such as genotype calling of Illumina arrays).	Secondary and tertiary data analysis and data interpretation. Combining various data sets (OMICs analysis). Design or re-design of the data analysis strategy, developing novel tools, scripts, algorithms for data analysis. Provide multivariate statistical analysis and pathway annotation.	Review paper or grant for expert technical advice, provide info/write part sof materials and methods. Provide raw data files with basic QC and analysis result files.	Write significant parts of a paper beyond material and methoids, produce and provide publication ready figures and tables, interpret data.
Acknowledgement	**Co-Authorship**	**Acknowledgement**	**Co-Authorship**