

**Application Form**

**Spatial Biology at Single Cell Resolution**

***Proof of Concept Grants* 2024**

**Purpose**

The Mission of the Microscopy and Cytometry Core Facility is *to provide access and develop tools in cutting edge microscopy and cytometry services to catalyze high-impact biomedical research at Amsterdam UMC and VU*. We are service-oriented team of specialists that make complex technology accessible and affordable to our users. Collaborating with manufacturers to achieve win-win situations is in our DNA and this internal grant opportunity is an example on how we generate value for our stakeholders. MCCF has two primary focus points; the characterization of tissue and cell suspension heterogeneity using highly parametric methodologies and the characterization of cell architecture and function using (live cell) microscopy approaches. With this internal grant opportunity we are aiming at stimulating research in spatial biology topics using the wide array of technologies available at MCCF.

**Criteria**

* The Xenium grant is made possible thanks to the investment in a 10X Genomics Xenium platform by the departments of Molecular Cell Biology & Immunology (**MCBI**), Anatomy & Neurosciences (**ANW**), the Amsterdam Infectious diseases & Immunology Research Institute (**AI&I**), and the Microscopy and Cytometry Core Facility (**MCCF**, VUMC Location).
* To reflect on the investing partners that made the implementation of this technology possible, the topics for the *Xenium* grant are restricted to immunology, infectious diseases, and neurodegenerative diseases. The *Hyperion* and *Vectra* grants are open to all Amsterdam UMC and VU applicants and, therefore, any topic is welcome.
* This call is aimed at *proof of concept* studies that can be executed within 6 months to 1 year, so samples need to be already available and a clear/feasible approach properly described.
* Applicants are expected to provide some matching; indicate the source and available matching in section 4.
* The grant recipient will commit to present the data generated thanks to this *Proof of Concept* grant a symposium hosted by MCCF.
* Timeline:
	+ Projects submission: October 14th, 2024, 14:00
	+ Announcement of selected applicants: October 18th, 2024
	+ Usage of budget within 2024.
	+ Presentation of data in symposium: April/May 2024.

**Available grants**

|  |  |  |  |
| --- | --- | --- | --- |
| **Grant** | **Xenium grant** | **Hyperion grant** | **Vectra grant** |
| Amount | *3 grants of 10000 EUR* | *2 grants of 5000 EUR* | *1 grant of 5000 EUR* |
| Matching required | Depending on the Xenium kits requested | Depending on the number slides, the cost per slide is approx. 1300 eur for a 31-marker immune-oncology panel | €3.500 |
| Restrictions | No specific restrictions | Discovery lab acquisition using a Hyperion XTi supported workflow in which there is a combination of Xenium and Hyperion  | Only available for the [PhenoCode Signature kit](https://www.akoyabio.com/phenocode-signature/#intro) |

1. **Main applicant:**

* Title(s), initial(s), surname:
* Position:
* Department:
* Work address:
* E-mail:

*(add more co-applicants if necessary)*

* Attach simplified CV of involved partners to this application (*Max 2 A4 per CV)*

2. **Motivation of grant proposal**

*Max 250 words*

3. **Brief description of the grant proposal**

*Max. 600 words*

Please describe:

* Which grant or combinations of grants are you applying for?
* Selected topic of interest and fitness to the call
* Rationale of the study and work plan
* Data analysis strategy and expected outcomes
* Feasibility analysis, sample availability
* Expected impact in follow up studies and larger grant applications

4. **Budget specifics**

*Only for research consumables/not for salary costs. Provide an indication of the matching provided by applicant.*

Send the completed application form together with your CV (as one PDF-file) **before October 1st 2024, 14:00** to div9-MCCF@amsterdamumc.nl. For more information, please send us an email to div9-MCCF@amsterdamumc.nl.