



Short Term Scientific Missions

A new Network of European BioImage Analysts to advance life science imaging (NEUBIAS)

This Action is a programme for establishing a network of BioImage Analysts (BIAlysts), in order to maximize the impact of advances in imaging technology on the Life-Sciences (LSc), and to boost the productivity of bioimaging-based research projects in Europe. BIAlysts have recently emerged in various research institutions but these experts are still not well recognised in the LSc community. They are specialised in customising image analysis (IA) workflows by assembling and automating multiple computational tools, and by interacting with Software developers and Life Scientists to facilitate IA. The Action aims to provide a stronger identity to BIAlysts by organizing a new type of meeting fostering interactions between all stakeholders including: Life scientists, BIAlysts, microscopists, developers and private sector. It will collaborate with European Imaging research infrastructures to set up best practice guidelines for IA. The Action plans to create an interactive database for BioImage analysis tools and workflows with annotated image sample datasets, to help matching practical needs in biological problems with software solutions. It will also implement a benchmarking platform for these tools. To increase the overall level of IA expertise in the LSc, the Action proposes a novel training programme with three levels of courses, releasing of open textbooks, and offering of a short term scientific missions programme to foster collaborations, IA-technology access, and knowledge transfer for scientists and specialists lacking these means. This Action will support the long-term scientific goals of European science and industry by bridging essential fields of scientific excellence.





1 - Objectives

STSMs will strategically contribute to the Action's scientific aim of maximizing image-based research outputs by enabling 1) collaborations on innovative image analysis methods, 2) access to big data analysis technology and image analysis tools for scientists lacking them locally, and 3) knowledge transfer to support careers and regional development. These actions will help boosting career path of image analysts, by detecting early career vocations and increasing skills and know-how of analysts.

These Missions are aimed at supporting individual mobility, strengthening the existing networks and fostering collaborations by allowing (i) Early Career Investigators (ECIs) and also (ii) experienced BioImage Analysts to visit an institution, laboratory or industry in another participating COST Country or an approved non-COST country institution. Thus, bringing together researchers of different scientific backgrounds and image analysts within international multi-disciplinary projects will increase the potential for scientific breakthroughs, high-impact publications, creation of new research fields, building of interdisciplinary activities and creating collaborations that may not currently be represented by the local imaging community.

STSMs will be offered on regular competitive calls throughout the duration of the COST Action CA15124 (NEUBIAS), from July 2016 until April 2020. The scientific context will be strictly limited to BioImage-Analysis-driven projects involving Image analysis technology and knowledge transfer in the field of Life Science. Access to and operation of Imaging instrumentation will in general not be considered as a component of the evaluated scientific projects.

2 - The Applicant

The selection of the applicant is the responsibility of the STSMs coordinating team.

The applicant must be engaged in an official research programme as post-graduate student, postdoctoral fellow or research staff, or can be employed by, or affiliated to, an Institution or legal entity, which has within its remit a clear association with performing research. The Home and the Host institutions can be public or private. The Home and Host institution should be located in different countries. STSMs within the same country are not allowed.





The following table shows the scenarios available to eligible STSM applicants

Home Institution	Host Institution		
	To another Participating COST Country		
From a participating COST Country	To an approved NNC* Institution		
	To an approved IPC** Institution		
From an approved NNC institution	To a Participating COST Country		
From an approved EU RTD organization	To a Participating COST Country		

^{*} NNC - COST near neighbor country

Applicants are responsible for obtaining the agreement of the host institution BEFORE the submission of their application.

Geographical and gender balance issues will be taken into consideration for the selection of candidates, according to COST policies.

3 - Home and Host institution

The home and the host institution can be public or private, and should be in a COST Member State or an approved non-COST country institution. In exceptional cases a STSM may be approved from a home institution in a COST signatory country to a host Institution in a non-COST country but not the other way round.

Short-Term Scientific Missions between different Actions may be considered by the Management Committees of both Actions.

4 - Duration

Short-Term Scientific Missions, minimum one week (5 working days), maximum 3 months, shall be made within the time frame of the operation identified in the proposal and within the period of the respective COST Action.

^{**} IPC – International partner country





5 - Finance

The financial support is a contribution to the costs of a STSM and may not necessarily cover all the costs in each case. During an STSM neither the MC, nor the COST Office nor the Grant Holder may be considered as an employer. Grantees must make their own arrangements for all health, social, personal security and pension matters.

The financial contribution for a STSM will be a fixed grant based on the Applicant's budget request and the evaluation of the application by the STSM assessment committee. Up to 140 euros for the daily allowance and up to 400 euros for the travel expenses will be granted. The maximum financial support granted to a STSM shall not exceed 2500 euros. Financial support is given according to COST policies (see Vademecum) after the termination of the STSM and upon review of the STSM report, to be evaluated by the STSM coordination team and by the Host Lab representative. The grants are executed under the form of a reimbursement to the STSM successful applicant.

6 - Registration and deadlines

The Applicant must use the on-line registration tool as described in **Annex A - On-line registration and operation of STSMs**. Applications may be submitted according to the schedules stipulated by the MC of the relevant Action, bearing in mind that delays must be taken into account for the assessment and administrative procedures.

The application together with the MC approval should arrive at the COST Office at least 3 weeks before the mission starts.

7 - The Assessment

a) The STSMs coordinating team of the Action will make the scientific and budgetary assessment and decision of the application.

The NEUBIAS STSMs coordinating team consists of at least four scientists, in addition to, the actions' Chair, who is authorized to take the final decision. External advice may be sought.

The STSMs coordinating team and other evaluators will not be involved in the assessment of proposals in which they have a personal or financial interest. In exceptional circumstances (e.g. uniqueness of expertise), this condition may be





waived with the agreement of the other members involved, if the interest is declared and considered not to compromise the potential decision.

- b) The STSMs coordinating team has defined the criteria for assessing applications in line with the Action objectives (See description in section 8 Approval).
- c) It is expected that every care will be taken to avoid any bias on the grounds of gender, age or nationality

8 - Approval

The MC Chair is responsible for circulating the application for decision to the assessment panel.

The MC chair has to inform the COST Office Science Officer or the grant holder (in case of an annual grant) about the decision. After checking the application for the compatibility with the existing rules and procedures, the Science Officer will inform the Applicant about the outcome of the assessment and will arrange the necessary formalities for the issue of the grant in case of a positive result and availability of funding.

STSM Selection Criteria:

General criteria

- a) The application serves the goal of fostering collaboration in the field of Bioimage Analysis, in particular, establishing new scientific contacts.
- b) The STSM serves for the exchange of know-how, meaning that researchers either exchange expertise due to the planned scientific visit, get practical skills of using unique "technology" not available in their home institution or learn new theoretical methods or experimental approaches.
- c) The scientific quality of the proposed STSM is high, its timeliness is justified, and the work plan for its realization is well founded.
- d) The application should be financially justified meaning that the estimate of expenses is reasonable.





The evaluation criteria, values and weights are depicted in the table, below:

Criteria to Score the STSM Project						
	Value			Weight		
	Low	Medium	High	/1		
Relevance of the STSM goals with NEUBIAS objectives	2	5	10	0.25		
Relevance of the Host Lab's expertise to support the STSM goals	2	5	10	0.15		
Realistic goals of the project compared to its targeted duration	2	5	10	0.2		
For Analysts and/or Life Scientists evolving in a research Lab: Potential for publication and/or dissemination of results. Scientific relevance and timeliness of the proposed STSM	2	5	10	0.3		
For Analysts and/or Life Scientists evolving in Imaging Facilities: Potential for dissemination and technology transfer back to home country. The STSM serves for the exchange of know-how	2	5	10	3.3		
The application serves the goal of fostering collaboration in the field of Bioimage Analysis	2	5	10	0.10		

Criteria taken into Account for final Decision		
There are no previous STSM by same applicant		
Geographical distribution of applicants across the same STSM call		
Applicant is Early Career Investigator or PhD candidate		
Gender Balance across the same STSM call		

The above criteria approved by the MC will be communicated in advance to all potential applicants through the Webpage of the Action www.neubias.org.





Annex A: On-line registration and operation of STSMs

All applicants must read before preparing their request for a STSM, the MoU of the COST Action CA15124 (NEUBIAS)

The Applicant is responsible for obtaining the agreement of the host institution, before submitting his/her application.

* The STSM is not targeted to "full service" in Image analysis, i.e. the Host-labs will not perform analysis of users' data but will support scientists in a collaborative way to develop tools and knowledge to perform their own work of analysis. Interaction with the Host labs is not expected to be full time during the Mission, the applicant is expected to work independently on the project for an important part of the stay. Host Labs are not funded under this framework and contribute *in kind* to the collaborative work.

Application

Within COST Action CA15124, applications should be submitted according the procedure detailed below:

Step 1 - Formal agreement and on-line registration by the applicant

- 1. Obtain the written agreement of the host institution, before submitting an application.
- 2. Complete the online application form (https://e-services.cost.eu/user/login/stsm):
- 3. The Applicant must use the on-line registration tool to register their request for an STSM, at least 3 weeks before the beginning of the STSM. The following information has to be encoded with the registration:
 - Applicant's title, name, work place, postal address, telephone, and e-mail address.
 - name, postal address, telephone and e-mail of the prospective host at the receiving institute.
 - the planned dates and length of stay.
 - the title of the planned STSM.
 - a short description of the proposed work plan. Please indicate what impact this STSM will have for your project. How does the topic fit into the goals of the COST Action?
 - Curriculum Vitae with list of publications (if applicable).
 - a budget request with breakdown for the costs of the STSM (financial data for travel and subsistence expenses).
 - bank details.





Step 2 - Formal STSM application and annexes

After encoding the information and pressing the "submit" button the online registration tool will issue a formal STSM application, which has to be downloaded and sent by the applicant electronically (by e-mail as attachment), together with any necessary document which the Applicant may regard as helpful in supporting the application at the evaluation process:

- Detailed work plan
- Curriculum Vitae with list of publications (if applicable)
- Motivation letter
- Letter of support from the home institute
- Letter of support from the host institute

The application has to be sent to:

- the future Host of the STSM
- the Chair of the Management Committee of the Action Julien Colombelli: julien.colombelli@irbbarcelona.org
- the STSM coordinator Julia Fernandez-Rodriguez: juliafer@cci.sahlgrenska.gu.se
- the Financial Administrator of the Action Raquel Furió: Raquel.furio@irbbarcelona.org

Step 3 - Assessment of the STSM

The STSM Coordinator committee will perform the scientific and budgetary assessment of the applications considering the Action objectives and the previously defined evaluation criteria. The committee will also define an acceptable funding level for the approved applications.

Step 4 - Approval from the Management Committee

The MC Chair informs the COST that the proposed STSM has been approved. This information can be in the form of an e-mail stating:

Subject: STSM Reference number, COST Action number, grantees name

On behalf of the Management Committee of the above COST Action, I would like to inform you that after evaluation:

- the attached request for an STSM for has been approved
- a grant of EUR xxx has been recommended
- the host institute accepted the proposal





Step 5 - Cost Office Acceptance Letter (Grant Letter)

The COST Office (or the administrative Institute of the Action: Grand Holder) will send to the Applicant an acceptance letter in which the grantee is informed about:

- the approval of the STSM
- the level of the financial grant given

The Applicant has to return this acceptance letter, after accepting the grant with his/her signature. The Applicant will receive a payment request form at the same time.

After the STSM

The grantee is required to submit a scientific report (3-5 pages) to the host institution, MC Chair and the STSM coordinator for approval within 30 days after the end date of the STSM. The report should describe:

- Purpose of the STSM
- the work carried out during the STSM
- the main results obtained
- Future collaboration with the host institution (if applicable)
- Foreseen publications/articles resulting from the STSM (if applicable)
- Scientific By-products that will be disseminated as outcome of the STSM, and how.
- Potential impact of the STSM on his/her future career path
- Confirmation by the host institution of the successful execution of the STSM
- Other comments (if any).

The failure to submit the scientific report within 30 days will effectively cancel the grant.

Publications resulting from STSM activities should acknowledge CA15124 (NEUBIAS) support.

Successful applicants will be asked to present the outcome of their STSM at a NEUBIAS Working Groups meeting.

Step 7 - Notice of completion by the Management Committee (post approval)

The MC Chair of the Action will send a short notice to the COST Office or Administrative Institute with the confirmation that the STSM has been successfully accomplished and that the grant can be paid. This communication will be in the form of an e-mail stating:

Subject: STSM Reference number, COST Action number, grantee's name On behalf of the Management Committee of the above COST Action I would like to inform you that the above STSM has been completed and the scientific report approved by the MC and Host.





Step 8 - Payment by the Cost Office

The COST Office or the grant holder will execute the payment of the fixed grant directly to the grantee or the organising institute as requested in the application after receipt of the following documents:

- Notice of completion by the Management Committee (step 7);
- Completed Payment request form (step 5).
- Summary of scientific report (maximum 1 page)

Further information and rules

Applicants are strongly encouraged to read the detailed information provided by COST.

- Full details on **COST VADEMECUM**
- COST website: Short Term Scientific Missions

COST STSM Standard e-mails

Standard e-mails to the COST Office (or the Administrative Institute)

- 1) Information to the COST Office after STSM APPROVAL: Subject: STSM Reference number, COST Action number, grantee's name On behalf of the Management Committee of the above COST Action I would like to inform you after evaluation that:
 - a) the attached request for an STSM for has been approved
 - b) a grant of EUR xxx has been recommended
 - c) the host institute accepted the proposal
- 2) Information to the COST Office after STSM COMPLETION by MC Chair or STSM coordinator: Subject: STSM Reference number, COST Action number, grantee's name On behalf of the Management Committee of the above COST Action I would like to inform you that the above STSM has been completed and the scientific report approved by the MC and Host.