

MULTIPLY

FELLOWSHIP PROGRAMME

GUIDE FOR APPLICANTS *



A Marie Skłodowska-Curie COFUND Programme

Grant Agreement GA713694

Website: www.multiply.astonphotonics.uk

* The latest version of this Guide can be found at www.multiply.astonphotonics.uk



HISTORY OF CHANGES		
VERSION	PUBLICATION DATE	CHANGES SINCE LAST PUBLISHED
V1.0	14.12.2016	<ul style="list-style-type: none">– Added table ‘History of changes’– Corrected ‘call open’ date– Re-written section ‘application pack’– added condition into outgoing fellowship
V1.1	17.01.2017	<ul style="list-style-type: none">– Added clarification on mandatory MULTIPLY partner and industrial placements



Please read this document CAREFULLY before starting the application process

Key Dates

Application deadline	31st March 2017; 23:59 UK Time
Reference date for eligibility/mobility compliance	1 July 2017
Communication of results to successful applicants	Mid July 2017
Fellowship start date (latest)	1 November 2017

* Please note these dates are indicative and subject to change

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No GA-2015-713694.



ABOUT THIS DOCUMENT

This document presents the main features of the MULTIPLY Fellowship Programme and provides practical information for potential applicants on the application process, assessment procedure and conditions of employment. The information presented within this document is also available on the MULTIPLY website (www.multiply.astonphotonics.uk). Please check the website for the most up-to-date programme information and version of this Guide for Applicants.

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DEFINITIONS

EU Member States (MS): the current EU (European Union) Member States and their overseas departments (including Overseas Countries & Territories - OCT). Please also see item 2.1 below.

H2020 Associate Country (AC): a country which is party to an international agreement with the European Union, as identified in Article 7 of Regulation (EU) No 1291/2013. Please also see item 2.1.

H2020 Non-associated Third Country (TC): countries that are neither EU Member States (MS) nor associated to Horizon 2020 (AC).

Host centre: the legal entity employing, supervising and training the fellowship recipient during the MULTIPLY Fellowship. It is ultimately responsible for the fellowship recipient and the fellowship.

Experienced Researcher (ER): Shall, at the [Reference Date](#), be in possession of a doctoral degree, or have at least 4 years of full-time equivalent research experience.

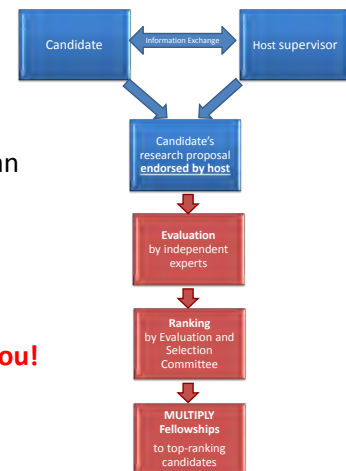


MULTIPLY (FELLOWSHIP PROGRAMME) IN A NUTSHELL

If this is you.....

- ✓ Are you a researcher working in **photonics**?
- ✓ Have your **own research idea** you would like to pursue?
- ✓ Want to **develop** your idea further with the help of an experienced scientist
- ✓ Happy to pitch your research idea and **compete** for funding?
- ✓ Willing to move to a new **country** for a year or two?

..... then the **MULTIPLY Fellowship Programme** may be right for you!



1 INDICATIVE TIMESCALES (CALL 1)

An indicative timescale for the selection process is as detailed below. The MULTIPLY Website will give details what stage in the process has been completed

- 3 Jan 2017: Call 1 for applications opens.
- 31 Mar 2017, 23:59 UK time: Call 1 closes; deadline for applications.
- Early Apr 2017: Preliminary Eligibility check completed; applications referred to Evaluation and Selection Committee.
- 1 Jul 2017: Evaluation, Ranking and Selection complete. This date is the *Reference Date* for purpose of compliance with [eligibility](#) and [mobility](#) criteria. **If – due to the volume of applications received - the ranking list cannot be completed by this date the corresponding reference date will also have to be delayed.** Applicants will be informed should this happen.
- Early Jul 2017: final eligibility and mobility check.
- Mid Jul 2017: results communicated to successful candidates (Offer-to-hire email).
- late Jul/early Aug 2017: results communicated to unsuccessful candidates; start of appeal procedure.
- 1 Nov 2017 latest possible employment start date for MULTIPLY Fellows from Call 1.

MULTIPLY will publish a total of **six** Calls for Applicants at roughly **6-monthly intervals** in order to allow prospective applicants to apply for the call that best fits with their existing employment schedule. Call 2 is expected to open 1 July 2017; the last call will be approximately in Oct 2019.



2 WHO CAN APPLY

MULTIPLY Fellowships are for [experienced researchers](#) of any nationality and residing worldwide, seeking a prestigious career development Fellowship based in one of MULTIPLY's Programme Host Organisations. Fellowships are open to candidates who meet all [eligibility](#) and [mobility](#) criteria.

MULTIPLY explicitly encourages applications from female candidates, candidates who have had career breaks and/or are looking to return to a research-based career and from candidates who have had a non-traditional career path including those who have built up research experience but who may not have a PhD.

3 THE MULTIPLY FELLOWSHIP PROGRAMME

3.1 OVERVIEW

The MULTIPLY Fellowship Programme, a [Marie Skłodowska-Curie COFUND Action](#), is a new International Mobility and Training Programme under Research Executive Agency (REA) Grant agreement No.713694, which will be run for a 5 year period commencing on 1st October 2016.

The aims of the MULTIPLY Fellowship Programme are to facilitate worldwide mobility and offer high-level interdisciplinary and transdisciplinary training for approximately 55 outstanding international researchers commencing their professional development in the area of photonics science, technology and applications. Applicants from any part of the world will be able to participate in this Programme, freely choosing their destinations and research topics.

MULTIPLY Fellowships will be awarded on a competitive basis and will be partially funded by the European Commission and cofounded by the Programme's 46 internationally leading academic and industrial partners /host organisations.

As MULTIPLY Fellows, the experienced researchers will be Marie Skłodowska-Curie Fellows (MSCF).

Aston Institute of Photonic Technologies (AIPT) at Aston University (UK) will be managing MULTIPLY, organising six Fellowship calls and overall implement the Programme. The ranking and selection of Fellows will be carried out by the independent **Evaluation and Selection Committee**.

3.2 THE PROGRAMME COORDINATOR (ASTON UNIVERSITY/AIPT)

The prestigious MULTIPLY Fellowship Programme is coordinated by **Aston University** (Birmingham, UK) and within it **Aston Institute of Photonic Technologies (AIPT)**.

Founded in 1895 and a University since 1966, Aston is a long established research-led University known for its world-class teaching quality and strong links to industry, government and commerce. Our research has a direct impact to society and 78% of it is rated world leading internationally excellent (REF 2014). We were recently ranked the 33rd Most International University in the world and 10th in the UK (THE Most International Universities' table), as well as 11th in UK for Student Experience (2016 Times/Sunday Times Good University Guide). <http://www.aston.ac.uk/about/>



Aston Institute of Photonics Technologies (AIPT) is one of the largest photonics research centres in the UK, with 90+ staff and current grant funding amounting to €20M, of which the largest fraction comes from EU projects. AIPT's success has been built on significant achievements in high-speed optical transmission and processing, nonlinear photonics, fibre grating technology, femtosecond laser material processing techniques, nano-photonics, fibre lasers, bio- and medical photonics, and in various fibre optic sensing applications <http://www.aston.ac.uk/eas/research/groups/photonics/>

3.3 EXISTING PARTNERS (THE POTENTIAL HOST ORGANISATIONS FOR FELLOWSHIPS)

MULTIPLY has the full backing of a consortium of 46 internationally leading academic and industrial partners/host organisations covering the globe from China to Australia, & from Russia to Mexico. The Partners/host organisations will maximise MULTIPLY Fellows career development opportunities and assist them in becoming future academic and industrial leaders by offering them cutting edge facilities, excellence in post-doctoral training and mentoring, fast-paced innovation activities and established industrial links, as well as a vibrant, international, and interdisciplinary environments.

Massive experience coming from decades of successful fundamental research and industrial applications at Partner domicile worldwide from the foundation of the MULTIPLY Programme: non-linear and quantum photonics, integrated and ultra-fast optics and optical engineering, laser science and applications, industrial laser manufacturing, high-speed optical communications, sensing, imaging, optoelectronics, medical applications of photonics, nano-photonics, bio-photonics.

A list of Host Organisations who have agreed to take part in the MULTIPLY Programme is available on the MULTIPLY website in the section "Host Organisation" [here](#) . The website provides a description of key research areas, available research facilities, host infrastructure and details on relevant contact points within each organisation.

Please note that applicants to the MULTIPLY Fellowship Programme must have their research proposal endorsed by one of MULTIPLY's host organisation and submit a [Letter of Commitment](#) from the host together with the Fellowship application.

3.4 NEW PARTNERS/HOST ORGANISATIONS

MULTIPLY is open to new hosts organisations in order to increase options for prospective Fellows to work at top level host organisations. **MULTIPLY is open to enlist additional host organisations** from both academic and industry sectors, which are able to commit to providing the necessary cofunding to implement a Fellowship (typically 35,400 Euro per Fellowship Year) and which are able to provide a suitable research and training environment for the applicant, including access to research facilities and appropriate supervision. New partners/host organisations may join MULTIPLY on their own initiative or via a prospective Fellowship applicant who would like to work with a host not yet in the consortium. Please note however that new hosts can only be added before (but not during) a *Call for Applicants*, in order to allow fair competition for the fellowship at that new host.

In order to participate in the MULTIPLY programme the host is advised to contact the MULTIPLY Programme Management Team at Aston University directly by email eas_multiply_aipt@aston.ac.uk



MULTIPLY reserves right to decline host organisations that do not adhere to the basic principles of the European Union as detailed in [The European Charter and Code for Researchers](#).

4 MULTIPLY – THE TRIPLE "I" DIMENSION

4.1 INTERNATIONAL MOBILITY

Fellows are required to show transnational [mobility](#). MULTIPLY relies on a diverse institutional base spread over many countries around the world and involving many heterogeneous structures, allowing unprecedented mobility opportunities, including geographical, ethnical, and socio-cultural. The prospective Fellows are completely free to choose their host organisation from the extensive list of 46 international MULTIPLY partners/host organisations located across the 5 continents of Europe, Asia, Australia, North America and South America. During the Fellowship there will be further opportunities of international collaboration and visits to labs and groups within the MULTIPLY consortium, allowing Fellows to fully exploit synergies with other host organisations.

4.2 INTER-DISCIPLINARITY

Photonic technologies are enabling – they permeate every other research discipline, and as such they naturally serve as a fundamental underpinning of many important fields of science and applications. Within every key photonics research area identified by MULTIPLY, photonic research activities are a primary component of interdisciplinary synergy.

4.3 INTERSECTORAL EXPOSURE

MULTIPLY partners/host organisations have a broad network of **industrial collaborators** across all sectors of photonics and these contacts will be integrated into the training. An important structuring feature of the training programme is that research project is designed so that Fellows are encouraged to work closely with at least one other industrial partner outside their host team and additionally spend a dedicated period working with another MULTIPLY partner. Industrial placement will train Fellows in understanding of entrepreneurship and the commercial context of research during the MULTIPLY programme. The industrial placement will also provide Fellows with important connections for scientific career development and collaborations in either the private or academic sector.

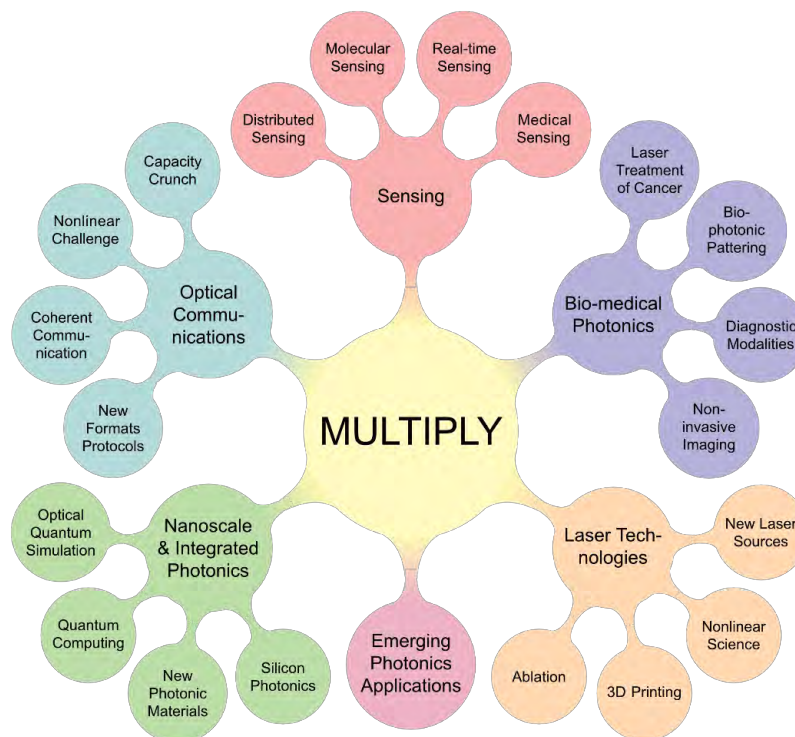
4.4 SECONDMENT AND INDUSTRIAL PLACEMENT

A period of industrial placement and a secondment (refer to Section 10.1) to another host within the MULTIPLY Programme are **mandatory** in MULTIPLY as a means to achieve inter-sectorial exposure. Applicants are advised to develop – with input from their chosen host - short research visits and secondments in their research proposal. With host's approval you can spend time away from the host location as long as the time away is a clear part of your research project. However, since researcher mobility is a key part of the programme, extended periods back in the country that a researcher has just come from will not normally be allowed.

5 RESEARCH AREAS

Rapid growth of photonics market and its expansion into other domains creates an enormous demand for innovative solutions and highly qualified experts commanding multidisciplinary skills in photonics and its allied disciplines.

To address this huge demand, MULTIPLY welcomes proposals at the intersection of key research areas (RA), addressing specific challenges:



5.1 RA1: OPTICAL COMMUNICATION

Challenges:

- Combating Capacity crunch – combating capacity limits of the existing data transfer technologies;
- Overcoming Nonlinear limitation – ever increasing amounts of power travelling within a single optical fibre make it impossible to use conventional linear transmission modes;
- Coherent communication for increasing channel capacity – taking advantage of not only the amplitude of the light field but also of its phase to significantly increase channel capacity;
- New data transfer formats and protocols – overcoming the physical challenges and accommodating new physical principles.



5.2 RA2: SENSING

Challenges:

- Development of cutting-edge new technologies – sensing of bio-molecules and hazardous materials, real-time sensing, sensing of nano-particles and single molecules;
- Development of practical systems for specific applications – distributed sensing in oil/gas industry, structural/alarm sensing in buildings, aerospace industry.
- Development of new techniques and approaches to environmental optical sensing.
- Medical sensing, – optical fingerprinting of biological molecules and associating them with diseases.

5.3 RA3: BIOMEDICAL PHOTONICS

Challenges:

- New diagnostic modalities – development of non-invasive optical methods based on the likes of coherent/diffusion imaging, spectroscopy of elastic scattering, fluorescence diagnostics, laser Doppler flowmetry, tissue oximetry etc. for a variety of applications ;
- Bio-photonic ‘patterning’ – multi-modal optical detection including Doppler shift, backscattering, absorption, and fluorescence can be used to create unique ‘biophotonic fingerprints’, and thus reliably distinguish between healthy and affected live tissues or cells.
- Laser treatment of cancer cells – modern photodynamic methods, including two-photon excitation of the active molecules, laser-assisted release of medical agents, new modalities of interaction between the laser light and biological tissues, control of delivery/treatment depth.
- Bio-medical imaging – super-resolution techniques and new laser sources.
- Restriction: research using human embryonic stem cells cannot be supported under MULTIPLY.

5.4 RA4: LASER TECHNOLOGIES

Challenges:

- Laser 3D printing, 3D printing of metals – very fast direct 3D printing of heavy-duty mechanical parts, use of various metals and alloys (e.g. refractory), efficient ways of raw material fabrication;
- 3D printing for biomedical applications – e.g. organ printing, creation of micro-structured implant materials, in situ tissue deposition, new types of prosthetics, and many others;
- Advanced ablation technologies – from minimally-invasive laser surgery to cosmetic skin treatment, new ablation modalities are essential to reduce damage to healthy tissues, to improve efficiency of treatment, and to reduce chance of complications;
- New laser sources – development of new lasers types with unique parameters is indispensable for continued advances in a variety of industrial and scientific applications;
- Nonlinear science in lasers – understanding and paving the way to harnessing non-linearity.



5.5 RA5: NANO-SCALE AND INTEGRATED PHOTONICS

Challenges:

- Optical simulators of quantum phenomena – promising field of controllable optical systems used to model behaviour of other quantum systems, with the potential of tackling problems unsolvable with conventional computers, among which are many problems in quantum chemistry, quantum biology, and solid-state physics;
- Silicon photonics & optical interconnects – enabling the next-generation computing and data transfer by building optical elements, – beam splitters, multiplexers, optical switches – into photonic integrated circuits combined with conventional electronic, allowing super-compact and super-efficient communication equipment (repeaters, transceivers), dramatic reduction of delays in cluster computing; paving the way to optical inter-connection of key components within an individual CPU.
- New photonic materials and meta-materials – negative refractive index in the optical spectrum, optics for sub-wavelength imaging, super-lenses, ultralow-loss optical media.
- Plasmonics and new optical devices and techniques based on nano-photonics.

5.6 RA6: EMERGING PHOTONICS APPLICATIONS

This challenge category has been specifically conceived to accommodate and welcome projects not falling into any of the other categories. MULTIPLY recognises the importance of thinking outside pre-defined or conventional patterns and encourages exploration of out-of-blue-sky or unconventional ideas, which are the only way to bring truly new disruptive knowledge propelling humanity towards new horizons.

6 ELIGIBILITY

6.1 EXPERIENCED RESEARCHER

Experienced Researchers

- Shall, at the [Reference Date](#), be in possession of a doctoral degree, or
- If the applicant does not have a doctoral degree they shall have at least 4 years of [‘full-time equivalent research experience’](#)

At the *Reference Date* the applicant MUST fulfil the criteria of being an ‘Experienced Researcher’ as per MSCA definition:

If there are any queries about your level of experience, the applicants should contact the MULTIPLY Programme Management team at eam_multiply_aipt@aston.ac.uk before submitting an application.



6.2 REFERENCE DATE

For **Call 1** the applicable *Reference Date* will be **1 July 2017** (subject to the ranking list being finalised before this date). To be eligible for funding applicants have to demonstrate that they comply with both [eligibility](#) and [mobility](#) criteria **on** the *Reference Date*.

MULTIPLY accepts that applicants may find it difficult to know for certain whether they will comply with both [eligibility](#) and [mobility](#) criteria at a future '*Reference Date*'. MULTIPLY therefore asks applicants to make an **informed assumption**.

Compliance with the eligibility and mobility criteria will be checked in detail AFTER the '*Reference Date*' and applicants are advised that documents evidencing compliance may be requested at any stage during the Evaluation and Selection Process. Originals of some of the documents requested will have to be seen by the prospective host and/or MULTIPLY Management Team before any employment contract is signed.

In the unlikely event of a delay in establishing the ranking list the applicable *Reference Date* may need to be revised (delayed).

6.3 FULL-TIME EQUIVALENT RESEARCH EXPERIENCE

Research Experience is measured **from** the date when the researcher obtained the degree entitling him/her to embark on a doctorate (either in the country in which the degree was obtained or in the country of the prospective host) even if a doctorate was never started or envisaged.

Research Experience is measured **to** the [Reference Date](#).

Only time spent on **postgraduate research activities** can be included. The **postgraduate research activities** have to have been remunerated and can include the PhD studies and any other relevant research training activity. Working outside research will not be taken into account.

Part-time work: Any periods of part-time activity in research should be translated into full-time experience (e.g. 3 year half time = 1.5 years full-time).

6.4 CAREER BREAK

MULTIPLY does not impose an age limit or a requirement of a recent PhD degree and encourages applications from applicants who suspended their career for personal reasons (e.g. maternity/paternity/parental/sick leave and compulsory military) or professional reasons (e.g. inter-sectoral and non-academic mobility such as working in industry) to reintegrate into the research environment and be treated on equal footing with those candidates who developed their scientific careers continuously.

Career breaks shall not be penalized in the assessment procedure, i.e. applications shall only be evaluated according to their merit. Career break will not be an obstacle or a disadvantage, and the only criteria taken into consideration are those specified in the evaluation process. Nonetheless, it will be requisite that the applicant sufficiently substantiate the claim of a career break and reasons therefor.



7 MOBILITY

Applicants to the MULTIPLY Fellowship Programme must show **transnational mobility** by carrying out the research training activities in a country (or — in case of international European interest organisations — with this organisation) where they have resided or carried out their main activity **for no more than 12 months in the 3 years** immediately prior to the [Reference Date](#).

Compulsory national service and/or short stays such as holidays are not taken into account.

For OUTGOING fellowships: be nationals or **long-term residents** of a MS/AC.

8 FELLOWSHIP OPTIONS

8.1 INCOMING INTO EUROPE / INTRA-EUROPEAN FELLOWSHIP

- Applicants can be of any nationality.
- Applicants must demonstrate transnational [mobility](#).
- Prospective host is located in an EU Members States (MS) or Associated Countries (AC).
- Researcher already located within the country of their prospective host can apply but **only** if they fulfil the [mobility](#) rule.
- Researchers already **permanently** employed by their prospective host (or organization) **cannot** apply; nevertheless, researchers with permanent positions could still benefit from MULTIPLY, if moving to another organisation (and complying with the mobility rule) during, for instance, a sabbatical leave.

8.2 OUTGOING FROM EUROPE TO THE WORLD

- Applicants have to be nationals or **long-term residents** of an EU Member State or Associated Country at the [Reference Date](#).

Long-term residents are researchers who spent a period of full-time research activity of at least 5 consecutive years (without breaks in research) in one or more Member States or Associated Countries.

- Applicants must demonstrate transnational [mobility](#).
- Prospective host is located in a Third Countries (TC).
- Selected MULTIPLY fellow will have to be employed with a host organization located in an EU Member State or Associated Country for the duration of the fellowship.
- Researchers already **permanently** employed by their prospective host (or organization) **cannot** apply; nevertheless, researchers with permanent positions could still benefit from MULTIPLY, if moving to another organisation (and complying with the mobility rule) during, for instance, a sabbatical leave.



- A [return phase](#) to MS/AC is strongly advised

8.3 CLASSIFICATION OF COUNTRIES: MS/AC/THIRD COUNTRY

EU Member State: Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

Associated Countries: http://ec.europa.eu/research/bitlys/h2020_associated_countries.html

Third Countries: Third Countries are defined as neither EU Member States nor Countries Associated with Horizon 2020.

9 FELLOWSHIP DURATION AND STARTING DATE

9.1 DURATION

MULTIPLY Fellowships are offered for 1 and 2 years, and for up to 3 years in exceptional circumstances and only with a prior agreement from both the MULTIPLY Management Team and the prospective host. The call details will specify the length of Fellowships available at participating hosts. Any deviations regarding the potential Fellowship duration from those given in the call details **MUST** be discussed and agreed with both prospective host and the MULTIPLY Management Team at Aston University **PRIOR** to submission of the application.

9.2 EMPLOYMENT START DATE

The latest possible employment start date for Call 1 is **1st Nov 2017**. In their submitted proposal applicants are requested to give a realistic indicative starting date, which has to be agreed with their prospective host. Successful applicants will be asked to confirm their employment start date in the Acceptance Letter. Any date later than **1st Nov 2017** has to be explicitly agreed with both the MULTIPLY Programme Management team at Aston University and the host.

As there will be twice yearly calls for Fellowship applications MULTIPLY encourages applicants to apply to the call that best matches their employment schedule.

Visa implications:

Applicants are strongly advised to contact the EURAXESS service centre (or the Visa Compliance Officer at the chosen host), **as soon as possible after submission of their research application**. This enables the applicant to receive information about documents and procedure well in advance in order to submit a visa request immediately after the communication MULTIPLY funding decision. Any delays in obtaining the visa have to be communicated swiftly to both the host and the MULTIPLY Management Team.



10 APPLYING FOR A MULTIPLY FELLOWSHIP

A complete [list of dates](#) for the various stages of the application process is listed in the beginning of this Guide for Applicants. The key dates for Call 1 are:

- 31 Mar 2017, 23:59 (UK time): deadline for applications
- 1 Jul 2017: [Reference Date](#) for purpose of compliance with [eligibility](#) and [mobility](#) criteria. This is the date the Evaluation, Ranking and Selection has been completed. **If – due to the volume of applications received - the ranking list cannot be completed by this date the corresponding reference date will also have to be delayed.** Applicants will be informed should this happen.
- Mid Jul 2017: **Offer-to-hire** emails send out to successful candidates
- 1 Nov 2017 latest possible employment start date for MULTIPLY Fellows from Call 1

MULTIPLY will publish roughly 6-monthly calls for applicants, six calls in total. The last call will be approximately in Oct 2019.

10.1 PREPARATION OF THE FELLOWSHIP APPLICATION

Applicants have free choice of the research topic, research area and host organization and are encouraged to start preparations as early as possible. An online MULTIPLY Application Pack is available from the website, containing all templates needed for a Fellowship application, including the research proposal template.

A list of host organisation participation in the Call for Applicants is available on the MULTIPLY website, together with the information on the length of Fellowships offered at participating hosts. Detailed host descriptions such as research areas, equipment they can provide for Fellowships, the names of the scientists-in-charge and contact information are also available on the programme website.

At the onset applicants must make contact with the named person of their chosen host organisation express a wish to participate in MULTIPLY and discuss their potential/proposed project idea with their host organisation. The host will confirm if they are happy to work with the applicant on his/her chosen topic and may offer advice on developing the research proposal further. This approach ensures that the applicant will have the full support of the host to carry out their research should the application be successful. Applicants will further develop and fine-tune their research idea **in collaboration with** their chosen host, incorporating industrial placements and secondments (see below).

Industrial placements and secondments (obligatory)

Applicants should draw on their host's network of industrial contacts to plan a 1-2 month industrial placement and further research visits and secondments, indicating initially the organisation, lengths of stay and purpose of the visit.

Each MULTIPLY project proposal should be so designed that the fellows within the MULTIPLY programme will

- work closely with at least one other industrial partner outside their host organisation (1-2 month placement),



- and in addition, will spend a dedicated period working with another MULTIPLY partner (1-3 month placement)

Plan of activities during the industrial and MULTIPLY partner placement will be designed by you and the partners in consultation with the fellow. It is pertinent that all such placement periods are clearly set out in the proposal, and deviations from the proposed placement plans during the duration of the fellowship should be avoided.

For one year fellowships **only**, given time constraints, it will not always be possible to incorporate the mandatory placements. If this be the case, at the time of framing the proposals, please provide a clear description as to how the project will address the [Triple-I dimension](#) mentioned above.

Letter of Commitment (obligatory)

When the research proposal has been completed to the satisfaction of both applicant and host the proposals (and all additional mandatory documents from the [MULTIPLY Application Pack](#)) shall be submitted by the applicant in liaison with his/her chosen host organisation. As the host will be providing significant funding and resources should the proposal be successful, a **Letter of Commitment** (template on the website) must be signed and dated by a representative of the host organisation and included in the application.

When writing their research proposal applicants are strongly advised to familiarise themselves with the [evaluation](#) and [ranking criteria](#) detailed in great depth in this guide.

10.2 SUBMISSION OF THE APPLICATION

Fellowship applications must be submitted via the 'Ex-Ordo' online application system accessed from the [MULTIPLY website](#). In order to submit an application, you will be asked to register in the system, creating an individual login. Following registration, you can begin your application, save it and return to it at any time before the call closes at midnight on 31 March 2017.

Applicants experiencing any technical difficulties with the online application system are asked to contact the MULTIPLY Programme Management Team for assistance.

Personal data of applicants submitted as part of the application for the MULTIPLY Fellowship will be processed only for the purposes of the present call and the possible signing of the employment contract with the MULTIPLY Host Organisations, as well as the general implementation of the MULTIPLY Fellowship Programme. Data will be stored on a secure server.

10.3 REQUIREMENTS FOR ELIGIBLE APPLICATIONS

For an application to be eligible it **MUST**:

- be received no later than the call deadline. **Late submissions will not be considered**
- be received through the *ExOrdo* online application system
- be written in English and use the template provided
- be within MULTIPLY research areas
- be complete and contain all documents requested in the [MULTIPLY Application Pack](#)



- all documents from must be submitted in PDF format, with the applicants name in the file name (Preferred format: SurnameName_FileDescription)
- comply with the guidelines and specifications (length, font size etc) listed in the proposal template
- adhere to the [ethical rules](#) of MULTIPLY and the European Union Horizon 2020 research programme

The **MULTIPLY Application Pack** containing all templates and documents necessary for the application can be found on the MULTIPLY website, in the section “MULTIPLY Application Pack”

RESTRICTIONS ON MULTIPLE SUBMISSIONS

Prospective Fellows can only apply once in each call; multiple submissions with different hosts in any one call are NOT eligible and will be removed without further notice.

11 THE MULTIPLY APPLICATION PACK

Templates for all key documents required during the application process can be found on the MULTIPLY website, in the section **MULTIPLY Application Pack**. To be considered complete the application must comprise the following documents:

- **Research Proposal** - written in English and using the template provided.
- **Extended academic CV** - no specific pre-set format required.
- **Signed ‘Letter of Commitment’ from the Host Organisation.** The application pack contains a template for the *Letter of Commitment* certifying that the prospective host will make available the required co-funding for the implementation of the Fellowship, should the applicant’s research proposal be selected for funding by the MULTIPLY’s Evaluation and Selection Committee. Applicants are requested to upload a scan of the letter duly signed and stamped by their prospective host organisation.
- **Scan of a valid photo identity document (national ID card or passport).** Applicants who are in possession of more than one nationality are requested to upload their **European** identity document if available.
- **Documents in evidence of mobility compliance (*).** Applicants must check that they meet the [mobility](#) criteria and attach scans of documents evidencing their compliance with the mobility rules for the 3 years prior to the ‘*Reference Date*’. Documents can include but are not limited to employment contract, visa certificate, rental contracts for accommodation, utility bills, entry/exit stamps in their passport etc; please provide 2 documents per year with documents for the final months (between the application submission and the ‘*Reference Date*’) to be submitted at a later stage if requested so by the MULTIPLY Management Team.

The Application Portal allows you to upload a single file only, so please combine your evidence into a single or zipped document.



- **Scan of PhD degree certificate** (if applicable) (*). Only mandatory if applicant currently holds a PhD degree. If the applicant does not hold a PhD degree they can still apply provided they meet additional criteria (below). Where degree documents are submitted in a language other than English, the applicant has to submit a certified translation.
- **Scan of qualification other than PhD** (if applicable). Only applicants who are **not** in possession of PhD degree at the '[Reference Date](#)' are required to upload a scan of the degree that entitled them to '*embark on a doctorate (either in the country in which the degree was obtained or in the country of the prospective host) even if a doctorate was never started or envisaged*'.

Where degree documents are submitted in a language other than English, the applicant has to submit a certified translation.

- **Documents in evidence of research experience** (if applicable) (*). Only applicants who are **not** in possession of PhD degree at the '[Reference Date](#)' are required to upload scans of documents evidencing 4-year (full-time equivalent) research experience. Documents can include but are not limited to letter from university evidencing enrolment in a post-graduate research degree, employment contract with description of key responsibilities etc.

The Application Portal allows you to upload a single file only, so please combine your evidence into a single or zipped document.

- **Documents in evidence of having *European long term residency status*** (if applicable) (*). Only required for OUTGOING Fellowship where the candidate is **not** an EU national. The applicant is required to upload proof of their *European long term residency status*, i.e. evidence of a period of full-time research activity of at least 5 consecutive years (without breaks in research) in one or more Member States or Associated Countries. Evidence for this can include but is not limited to employment contract with description of key responsibilities.

The Application Portal allows you to upload a single file only, so please combine your evidence into a single or zipped document.

- **Documents in evidence of research experience** (if applicable) (*). Only applicants who are **not** in possession of PhD degree at the '[Reference Date](#)' are required to upload scans of documents evidencing 4-year (full-time equivalent) research experience. Documents can include but are not limited to letter from university evidencing enrolment in a post-graduate research degree, employment contract with description of key responsibilities etc.

The Application Portal allows you to upload a single file only, so please combine your evidence into a single or zipped document.

- **Documents in evidence of *Family Status*** (*). A family allowance will be paid to Fellows who provide evidence for having family obligations. 'Family' is defined as '...persons linked to the researcher (i) by marriage, or (ii) a relationship with equivalent status to a marriage recognised by the legislation of the country where this relationship was formalised; or (iii) as dependent children who are actually being maintained by the researcher.' Documents submitted may include but not limited to marriage certificate or equivalent, birth certificate of dependent children, evidence of dependent children living with or being supported by applicant etc.



The Application Portal allows you to upload a single file only, so please combine your evidence into a single or zipped document.

The family status of a researcher will be determined at the [Reference Date](#) and will not be revised during the lifetime of the Fellowship, even if the Fellow's status changes.

- **Declaration on Ethical Issues.** An *Ethics Issues Self-Declaration Form* is available from the MULTIPLY website and must be completed and submitted with the application regardless of whether or not ethical issues have been identified in the research proposal. Also see section [Ethical Issues](#) for further information.

Please note: If funded, original documents of the above will have to be submitted for verification to your prospective host and/or the MULTIPLY Management Team.

(*) MULTIPLY accepts that applicants may find it difficult to know for certain whether they will comply with [eligibility](#) and [mobility](#) criteria at a future '[Reference Date](#)'. MULTIPLY therefore asks applicants to make an **informed assumption**. Compliance of successful applicants will be checked in detail AFTER the '[Reference Date](#)'. Successful candidates will also be required to sign declarations on being an Experienced Researcher, and on complying with the Mobility prior to employment.

12 THE MULTIPLY SELECTION PROCESS -

The evaluation and selection process follows and fully complies with the Guidelines of the [European Code and Charter for Researchers](#)² and will introduce applicants to the principles contained within. MULTIPLY will aim to complete the Selection, Evaluation and Ranking of applicants as speedily as possible following the deadline for the submission of proposals. This process will consist of eight stages from an initial check to completeness to the public announcement of the call outcome and consist in detail of:

- **Stage 1: Check for Completeness of Application**

The MULTIPLY Management Team at Aston University will check that all documents as specified in the call for applicants/MULTIPLY application pack have been submitted as part of the application process. Incomplete applications will not progress and applicants will be notified.

- **Stage 2: Preliminary Eligibility/Mobility Assessment**

A preliminary assessment whether applicants are likely to fulfil the [eligibility](#) and [mobility](#) criteria at the (future) [reference date](#) will be carried out by the MULTIPLY Management Team. Applications clearly falling short of the criteria will not progress and applicants will be notified. During the Evaluation and Selection process the MULTIPLY Management Team might get in touch with individual applicants requesting additional information regarding their eligibility and mobility compliance.

² <http://ec.europa.eu/euraxess/index.cfm/rights/europeanCharter>



- **Stage 3 (if applicable): Ethics Issues**

Any ethical issues will be noted at this stage and, passed for assessment to Aston University's Ethics Group.

- **Stage 4: Independent Expert Review.**

Eligible applications will be forwarded to the Evaluation & Selection Committee (ESC), which is independent from both Aston University (the Programme Coordinator) and the host organisations available within MULTIPLY. The ESC will assign a minimum of 3 independent international [Expert Reviewers](#) to each application. Experts will be selected from an approved international panel of experts within the scientific area covered by the specific programme area. The experts will numerically score applications on professional merits, scientific and technological quality of the proposed project, feasibility of implementation and the potential impact of the proposed project and submit to the ESC a report on the candidate's application using the standard template. For more information please refer to [Criteria for the Evaluation of Fellowship Applications](#).

- **Stage 5: Ranking.**

When all expert reviews have been received by the Evaluation and Selection Committee, the committee will produce a [ranked list of applications](#) scoring above set thresholds and – taking into consideration the maximum number of Fellowships available at each host institution - recommend applications to be accepted, rejected or placed on the waiting list.

- **Stage 6: Communication of results to successful applicants**

Applicants who have been recommended for funding by the ESC will receive an 'Offer-to-Hire' email together with the ESC's *Evaluation Summary Report* (see below) and an *Acceptance Form* from the MULTIPLY Programme Management Team at Aston University **in mid-July 2017. It is therefore important that all applicants have access to their email during this period.** The offer must be accepted within 14 calendar days of receipt. 'Acceptance' shall mean returning to Aston University by email and within the deadline a scan of the signed and dated *Acceptance Form*. Any outstanding documents evidencing compliance with [eligibility](#) and [mobility](#) criteria requested by the Aston Management Team will also need to be provided within this period.

Applicants rejecting the offer or failing to return the *Acceptance Form* within the prescribed timeframe forfeit their offer and the next highest ranking applicant to a host with open position(s) will be offered the Fellowship instead.

Please note that although the 'Offer-to-Hire' is communicated by the Programme Coordinator Aston University, you will be hired not by Aston University, but by the host you selected in your proposal.

- **Stage 7: Communication of results to unsuccessful applicants**

When all available Fellowships have been awarded remaining (unsuccessful) candidates will receive the ESC's *Evaluation Summary Report* detailing the following information:



- Funding decision: recommended for funding/rejected list/reserve list (if applicable)
 - Final numerical score
 - Reasons for selection/rejection as detailed within the summarized expert reviews and scores
- **Stage 8: Public Announcement of Results**

When all available positions for a given call have been filled, the names and short biographies of the successful candidates, now known as MULTIPLY Fellows, will be posted on the MULTIPLY website.

13 WHO ARE THE EXPERTS EVALUATING THE RESEARCH PROPOSALS?

MULTIPLY has access to a pool of independent international experts, who have been selected by a committee independent from the coordinator (Aston University) and the potential hosts. Experts are chosen annually on the basis of their professional standing and reputation, their publication record, their industry expertise in photonics and its applications and finally their awareness of the societal dimension of the proposed work. Experts available to MULTIPLY will have the highest available level of professional expertise and strike a just balance between academic and industrial expertise; fair gender balance, geographical, and ethnic diversity. All experts available to MULTIPLY will have legally declared that they shall follow the code of conduct for the experts and keep both the proposal and the reviewing process confidential.

13.1 CONFLICT OF INTEREST

Upon accepting a research proposal for review, experts are required to declare that there is no conflict of interests. Experts who are in some way connected to the applicants (including, but not limited to family ties, professional ties, such as the expert supervised the applicant, co-authored his/her paper(s), is/was in the same research group, participated in preparation of the project of any applicant, or provided a recommendation letter for any of the applicants) are considered in direct conflict of interest. Such experts will be excluded from reviewing said proposal.

13.2 ANONYMITY AND CONFIDENTIALITY

The list of experts shall remain confidential throughout the whole evaluation process. The identity of the reviewers for any given proposal will only be known to the Evaluation and Selection Committee and the Aston MULTIPLY Management Team. Experts' names will be protected and not be made public to the applicant neither during nor after the reviewing process.

Experts are expected to adhere to strict confidentiality guidelines and not discuss or divulge the content of any research proposal they are evaluating to anyone. Under no circumstances may experts contact an applicant or a member of the host research group during or after the evaluation process.



14 CRITERIA FOR THE EVALUATION OF FELLOWSHIP APPLICATIONS

Experts will review research proposals according to the criteria set out below.

- The candidates must positively demonstrate that their capabilities are sufficient to take advantage of the offered Fellowships and that completion of the proposed research programme will improve the applicant's skills, qualifications and aid in career development, while fostering European research competitiveness.
- Key knowledge and qualification (e.g. inter-sectorial mobility, scientific or industrial management experience) are also positively acknowledged in the context of contribution to enhancing inter-sectoral co-operation.
- The evaluation experts will base their reviews on a wide range of criteria including supervision, teamwork, knowledge-transfer, management of innovation and research, and public awareness activities.
- For candidates with an industry exposure, evaluation will place a special emphasis on development and protection of new intellectual property and commercialisation of inventions.

MULTIPLY Fellow selection criteria are formulated so as to identify applicants with the highest potential a successful Fellowship, which hinges on the quality of the applicant, the scientific quality of a proposal, the level of implementation, and the project impact. All criteria are evaluated by the assigned experts on a 10-point scale; the weights listed in the table below will be taken into account and scores from the expert reviews will be averaged to provide a composite evaluation:

Criterion	Weight	Threshold	Sub-criteria		
Applicant quality	35%	7	Assessment of research & scientific expertise of the applicant.	Assessment of diversity of knowledge & qualifications	Practical experience and transnational mobility
Scientific quality of proposal	30	6	Applicability and soundness of the proposed approach and methods	Innovative aspects; comparison to the world level of research on the topic	Importance of the research topic; possibility of alternative research paths
Implementation	20	7	Infrastructure, facilities international exposure of the host organisation; Fellow support	Management plan, implementation plan, dissemination activities	Project feasibility, similarities and complementarities in research; potential synergies
Impact	15	6	Impact on the research fields, the importance of research tasks, its applicability	Potential for a lasting effect of the Fellowship (reintegration, future collaboration with host organisation)	Contribution to European excellence, competitiveness, & ERA mobility



15 SCORING, RANKING AND SELECTION OF FELLOWSHIP APPLICATIONS

15.1 CALCULATING FINAL SCORE

For each criterion in the above table the scores returned by the (three or more) expert reviewers will be averaged and multiplied by the criterion's weight. Adding these together will produce a final score for each proposal.

15.2 MINIMUM REQUIRMENT FOR RANKING

Only proposals exceeding the minimum threshold in each of the criterial (as averaged by the expert reviews received) will be included in the ranking. Minimum thresholds are detailed in the table above.

15.3 RANKING

Ranking of all eligible research proposals will be according to the final score. The entire ranking procedure is performed by the Selection and Evaluation Committee, which is independent of the coordinator (Aston University) and the host organisation(s). Each call will have a fixed number of Fellowships available, and these will be offered to the highest ranking Fellows who have selected hosts with available Fellowships. Applicants need to be aware that hosts are likely to limit how many Fellowships they can offer in any given call and this number will be indicated in the call details. It is therefore possible that a high-scoring proposal will not be funded if the number of available Fellowships at the selected host has already been filled by even higher scoring proposals.

In case of **equal final scores**, ranking is performed by considering the scores for the criteria with the highest weight.

16 HOW CAN I GAUGE HOW STRONG MY APPLICATION IS?

The evaluation protocol of research proposals followed in MULTIPLY is not dissimilar to the one of Marie Skłodowska-Curie Actions Individual Fellowships (MSCA-IF) under the Horizon H2020 programme of the European Commission (EC). The EC has published a self-evaluation guide for MSCA-IF research proposals which is available [here](#)³ and may be of help when trying to gage your own proposal's strengths and weaknesses. While a good indicator, please do keep in mind that MSCA-IF and MULTIPLY research proposals are NOT identical, so not all sections in the MSCA-IF self-evaluation document may apply.

17 APPEAL PROCESS

The appeals procedure is not meant to call into question the scientific judgment of the Evaluation and Selection Committee; or the expert reviewer's scores and/or comments on the research proposal. Appeals will only consider procedural shortcomings and/or factual errors. MULTIPLY accepts no

³ http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/ef/h2020-call-ef-msca-if_en.pdf



responsibility for lost applications or documents where this is due to the applicant having provided incorrect contact details or having failed or delayed in notifying changes to these details.

An appeal should be made within 10 calendar days of receiving the rejection letter. The appeal letter should be sent by e-mail to the MULTIPLY Programme Manager. Appeals received within this timeframe are sent by the Programme Manager to the Chair of Evaluation & Selection Committee (ESC) to consider an appeal meeting in due time. Decision is made by the Committee and approved by the Chair. The ESC's decision is sent via the MULTIPLY Programme Manager team to the applicant. This decision is final.

18 REMUNERATION AND TERMS OF EMPLOYMENT

The prestigious MULTIPLY Fellowships will be very competitive in terms of salary. Each MULTIPLY Fellow will enter into their own employment contract with their chosen host institution. Due to the range and geographical spread of host institutions it is impossible to give specific details for each scenario, however all Fellows will be offered as a minimum:

- Fellows will must be employed on full employment contracts or other direct contracts with equivalent benefits. (Note: In exceptional cases where the national law prohibits employment contracts, a 'Fixed-amounts Fellowship' will be offered as an alternative. Your prospective host will inform you if this applies to them).
- Employment contract will be full time. Part-time contracts are not allowed but under exceptional cases and only with prior agreement from the MULIPLY Management Team.
- Employment contracts will including full social security coverage.
- Holiday entitlement will be negotiated directly with the chosen host and be in line with that of other employees at the chosen host.

18.1 COMPONENTS CONTRIBUTING TO YOUR SALARY

MULTIPLY is part-funded by the European Commission (EC) and part-funded by the prospective hosts. Therefore the financial rules of the EC's COFUND programme (Call identifier: H2020-MSCA-COFUND-2015) will apply.

All Fellow will be entitled to **Living** and **Mobility** allowance. An additional **Family** allowance will be paid IF the Fellow is eligible and family status has been declared and evidenced as part of the application process.

Please note: The numbers given in the table below do not constitute the salary you receive but the funds available for the host to employ the Fellow. **Employer's on-costs** (such as employer's contribution to social insurance, pension scheme etc) will be deducted from the funds available. Different hosts will have different 'on-costs' and your prospective host will be able to inform you about these.

The different components that will contribute to your taxable gross salary are outlined below.



Allowance	Amount available to the host (per person month)	covers
Living allowance	€3950 (€47,400/year)	Ongoing living costs
Mobility allowance	€500 (€6000/year)	Fellow's expenses related to mobility, i.e. relocation expenses, travel from place of origin to host, moving personal belongings, visa costs, language courses etc
Family allowance (if applicable):	€150 (€1800/year)	Cost related to Fellow's family

Please note: In line with all EC-funded Projects costs are calculated in Euros but Fellows will be paid by their Host Organisation in the currency used for their normal accounting, typically in the local currency.

18.2 TAXATION

The Fellow will be liable to pay taxes (such as income tax) and any other statutory deductions (such as social security and their own contribution to the pension scheme) according to the rules in the country of the host organisation. Taxation and statutory deduction will also depend on the Fellows personal circumstances. Your prospective host will be able to advise you further on this issue.

18.3 ADDITIONAL FUNDS FOR RESEARCH AND TRAVEL

The host will support the Fellowship with additional funds for the implementation of the research (€500/month) and travel to conferences and meetings (€150/month). The manner in which these will be made available will depend on the host.

19 SUPPORT FOR THE FELLOWS

The MULTIPLY Management Team will offer support to all applicants during the entire period from application preparation stage until the end of the Fellowship and beyond, where appropriate. The MULTIPLY Programme Manager will run a support helpdesk (via email) for applicants and Fellows throughout the duration of the Programme. Helpdesk Support will include provision of information on:

- the application
- the eligibility criteria
- the submission procedure
- technical support for any problems associated with the online application system.

EURAXESS Service Centre

A wide range of information is accessible through the [EURAXESS](http://ec.europa.eu/euraxess) Service [ec.europa.eu/euraxess]. Among others EURAXESS provides information on a range of issues and areas affecting researchers,



including immigration and visas, employment law, healthcare, childcare, social services and life in the chosen host country (EC Member states only).

Support from prospective host

The host will provide administrative support during the initial relocation phase, including visa arrangements if applicable. The host will also be able to offer practical advice on all local issues such as childcare, rental accommodation, social facilities at the host and beyond etc.

20 COMMITMENTS OF THE FELLOW

20.1 THE 3-WAY AGREEMENT

A formal 3-way Fellowship Agreement will be signed by Aston University (as Coordinator), the Host Organisation and the appointed MULTIPLY Fellow. This will state the arrangements for the legal and financial administration of the MULTIPLY Fellowship.

20.2 COMMITMENT TO INFORM

The Fellow commits to keeping the host and MULTIPLY Management Team informed of any changes in personal circumstances and any significant delays in the implementation of the submitted/funded research proposal.

All Fellows are required to keep the host and the MULTIPLY Management Team updated with their contact details for up to 3 years after the completion of their MULTIPLY Fellowship.

20.3 RESEARCH IMPLEMENTATION AND BREAKS IN FELLOWSHIP

The Fellow commits to implementing the research at the chosen host organisation in accordance with the research proposal submitted to and accepted for funding by the MULTIPLY Programme. Any deviations from the research as outlined in the applicant's research proposal will have to be explicitly authorised by both the host and the MULTIPLY Management Team.

All absences during the Fellowship will be regulated by the employment contract and where appropriate by the National Legislation. Breaks in your Fellowship will be permitted for reasons of pregnancy and military or other civil duties.

All requests for a temporary leave during the Fellowship will be considered on a case-by-case basis and can be authorised for justified serious reasons connected to personal or family circumstances. All temporary leaves have to be requested through the appropriate channels and be explicitly authorised by both the host and the MULTIPLY Management Team.

20.4 CAREER DEVELOPMENT

The Fellow – with input from the MULTIPLY Management Team, the host organisation and the scientist in charge - will write and implement a personal Career Development Plan. This plan will be updated annually.



20.5 REPORTING AND OTHER PROJECT-RELATED DOCUMENTATION

Fellows will be expected to deliver project reports: a final project report for Fellowship of 12 months, annual and final reports for projects exceeding 12 months. Reports should contain the following elements:

- the progress towards the objectives of the of the Project;
- the progress towards the milestones and deliverables foreseen in the Research Training Activities;
- the identification of any problems encountered and corrective action taken
- any existing or newly identified ethical issues which have arisen during the Project and how they are dealt with (and any ethical clearance obtained)
- any other project-specific information requested by either host or Programme Coordinator

Fellows commit to completing Pre-Secondment Reports prior to any planned secondment followed by a detailed Post-Secondment Report upon their return (templates will be made available). Fellows commit to completing any project-related paperwork requested by either host or Aston-Management Team within a reasonable timeframe.

20.6 STATUTORY EVALUATION QUESTIONNAIRES

All MULTIPLY Fellows are obliged to complete the statutory evaluation questionnaires provided by the Coordinator and/or the European Commission throughout and at the end of the Project, including a follow-up questionnaire to be completed two years after the end date of the Project. For this purpose MULTIPLY Fellows are required to keep the host and the Aston Management Team updated with their contact details for up to 3 years after the completion of their MULTIPLY Fellowship.

20.7 PUBLICATIONS AND OPEN ACCESS (OBLIGATORY)

Fellows commit to maintaining an up-to-date list of publications arising from the Fellowship on the designated area of the MULTIPLY Document Management System. In line with all other funded European Commission Actions under H2020 it is a condition of the MULTIPLY Fellowship that all peer-reviewed publications resulting from the funded project are **Open Access**, i.e. freely available online with no restrictions on use, within 6 month of publication. Therefore MULTIPLY Fellows must ensure open access to all peer reviewed scientific publications as soon as possible after the acceptance of the publication and within the timeframe prescribed.

[Four Simple Steps to Open Access](#)⁴ (from openaire.eu)

- **Step 1.** Submit a paper to a journal of your choice (there is no restriction). Publishing costs (article processing fees) are eligible costs and can be reimbursed within the project period.
- **Step 2.** Deposit the final peer reviewed manuscript or publisher's PDF in an institutional or subject repository (or Zenodo.org if no other option is available) as soon as possible and at the latest on publication. It is not enough to list publications via a project website – they'll go unnoticed!

⁴ <https://www.openaire.eu/edocman?id=800&task=document.viewdoc>



- **Step 3.** Acknowledge project funding in the article's metadata by including the terms ["European Union (EU)" and "Horizon 2020"], the name of the action, acronym and grant number; the publication date and length of embargo period if applicable, and a persistent identifier (e.g. DOI, handle).
- **Step 4.** Ensure Open Access to the deposited publication. An embargo of 6 months is acceptable.

20.8 DISSEMINATION AND VISIBILITY OF EC FUNDING (OBLIGATORY)

Dissemination activities shall be compatible with the protection of intellectual property rights, confidentiality obligations and the legitimate interests of the owner(s) of the foreground.

The Researcher and the Host Organisation will acknowledge the support of the European Commission under the Marie Skłodowska-Curie COFUND Fellowship Programme in any related publication or publicity event. All publications or any other dissemination of foreground generated by the Project shall include the following statement to indicate that the said foreground was generated with assistance of financial support from the European Union: ***"The research leading to these results has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No GA-2015-713694"***.

20.9 SCIENTIFIC INTEGRITY

Fellows must follow the rules of behaviour laid down in the [European Code for Research Integrity](#)⁵

20.10 PUBLIC ENGAGEMENT

As a condition of Fellowships within the MULTIPLY programme, each Fellow will spend some time presenting their research in an appropriate manner to local schools and will also be required to write 2 articles per Fellowship for the popular press in order to (a) enable the Fellows to develop their communication skills to non-scientists and (b) to raise the profile of science (and the EC's contribution to it) and to inspire school children to take up careers in science. When public engagement activities take place at the host organization the Fellows are expected to take a leading role within.

21 ETHICAL ISSUES

Projects will be subject to ethical scrutiny, and applicants will need to provide a completed ethical issues form (template on the website) with their application. Horizon 2020 has specific considerations regarding ethics which will govern the ethical scrutiny of projects. Specifically, projects must have an exclusive focus on **civil** applications; and projects aimed at human cloning for reproductive purposes, or those intended to modify the genetic heritage of human beings which could make such changes heritable, or those intended to create human embryos solely for the purpose of research or stem cell procurement, cannot be supported under Horizon 2020 rules.

⁵ http://www.esf.org/fileadmin/Public_documents/Publications/Code_Conduct_ResearchIntegrity.pdf



Please be aware that it is the **applicant's responsibility** to identify any potential ethical issue, to handle the ethical aspects of the proposal and to detail how these aspects will be addressed. This responsibility extends to the duration of the Fellowship and includes the proactive identification of any **newly** arising ethical issues, which have to be brought to the attention of the Fellow's PI and the Aston Management TEAM for advice on how to deal with them.

The most common ethical issues include but are not limited to

- the use of human embryonic stem cells, or human tissue (please note that any research using human embryonic stem cells cannot be supported under MULTIPLY)
- the involvement of children, patients or vulnerable populations,
- research on animals and non-human primates,
- privacy and data protection issues,
- importing to/exporting from the EC any material,
- research with potential for either military use (MULTIPLY research proposals will need to have an exclusive focus on civil applications)
- criminal/terrorist abuse.

An Ethics Issues Form is available for download at the MULTIPLY website and must be submitted with the application regardless of whether or not ethical issues are identified in the research proposal. If there are no ethical issues to be reported, this should be stated in the form. Proposals with potential ethical issues will be referred to the (Aston University) Ethics Committee for further evaluation. The Committee will be asked to consider the research proposed from an ethical and legal point of view, and to advise the MULTIPLY management committee on the nature of the issue and how it should be addressed. In the event of a research proposal being considered contrary to Horizon 2020 ethical principles, UK legislation or the policy of the host department, the application will be removed from the process, the candidate informed and given the opportunity to appeal as described above.

22 INTELLECTUAL PROPERTY RIGHTS

Intellectual Property generated by the MULTIPLY programme will generally remain the property of the Host Organisation; but there may be instances where it would be appropriate for the research Fellow to be granted part-ownership of the IP. MULTIPLY will develop an Intellectual Property Guide by month 6 of the programme which will advise on how IP should be managed throughout the programme. Instances of where the research Fellow should receive part ownership of IP, in particular in the cases of compliance with national or organisational policy, will be clearly defined in the MULTIPLY Intellectual Property Guide.

The MULTIPLY Intellectual Property Guide will include guidance and requirements for the host organisation organisations which are complementary to the IPR conditions and requirements in the MSCA Grant Agreement, and will cover the following areas:

- Ownership of results;
- Protection of results;
- Access rights for EU institutions;



- Exploitation of results;
- Transfer of ownership and granting of licenses;
- Dissemination of results;
- Open access; both to scientific publications and research data.

23 VISA, WORK PERMIT AND RELATED AUTHORISATION

Fellows may need visa and related authorisation (residence, work permit etc) before entering the country of the chosen host. Fellows will be required to take care of these documents themselves. It is recommended to contact EURAXESS service centre (or the local Visa Compliance Officer at the chosen host), as soon as possible after submission of your research application to MULTIPLY. This enables the applicant to receive information about documents and procedure well in advance in order to submit a visa request immediately after the communication MULTIPLY funding decision.

24 FAQ

Please refer to the MULTIPLY Website for extensive coverage of frequently asked questions.



25 CONTACT DETAILS

MULTIPLY Management Team

Aston Institute of Photonic Technologies

Aston University

Aston Triangle, B4 7ET

Birmingham, UK

Programme Manager: Dr Srikanth Sugavanam

Email: eamultiplyaipt@aston.ac.uk

Project Website: www.multiply.astonphotonics.uk



RELEVANT LINKS

European Charter for Researchers

<http://ec.europa.eu/euraxess/index.cfm/rights/europeanCharter>

Code of Conduct for the Recruitment of Researchers

<http://ec.europa.eu/euraxess/index.cfm/rights/codeOfConduct>

EC Guidance: How to complete your ethics self-assessment

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf

European Textbook on Ethics in Research

http://ec.europa.eu/research/science-society/document_library/pdf_06/textbook-on-ethicsreport_en.pdf

European Code for Research Integrity

http://www.esf.org/fileadmin/Public_documents/Publications/Code_Conduct_ResearchIntegrity.pdf

Open Access and OpenAire

<https://www.openaire.eu/edocman?id=800&task=document.viewdoc>

Call details underlying the MULTIPLY Grant Agreement

http://ec.europa.eu/research/participants/portal/doc/call/h2020/h2020-msca-cofund-2015/1652606-guide-for-applicants-2015_en.pdf

Annotated Model Grant Agreement

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 713694.