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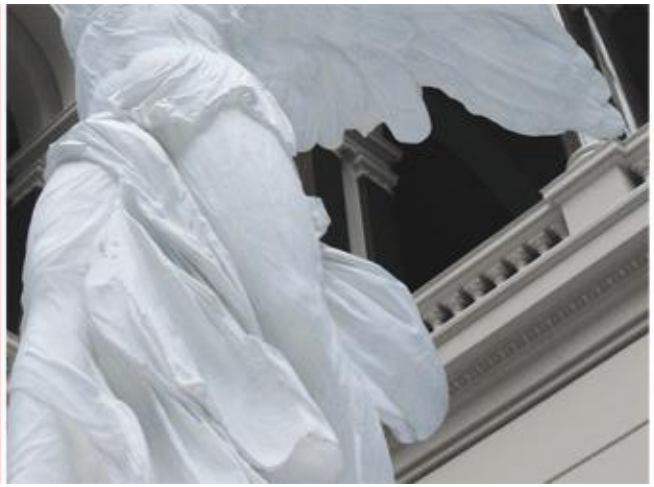

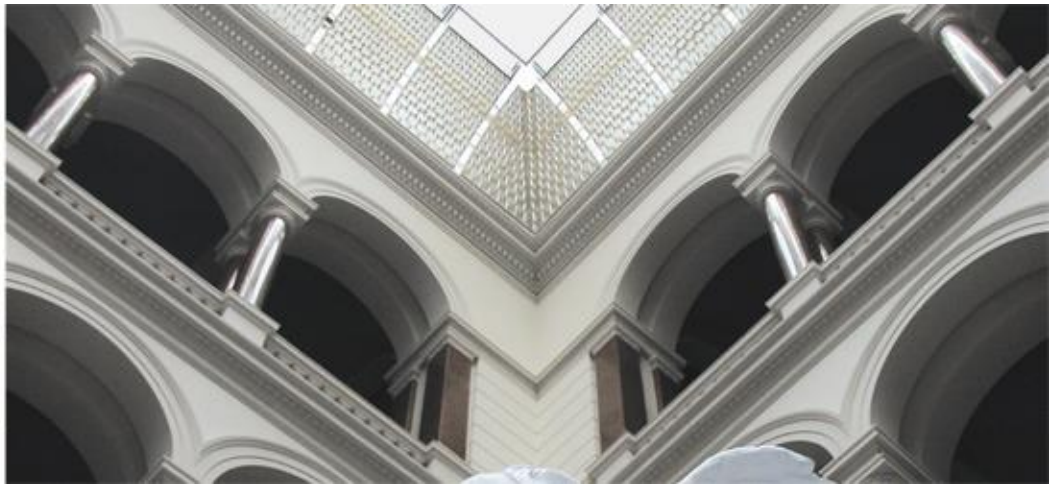

# Marie Skłodowska Curie Actions
# Innovative Training Networks and Individual Fellowships

|EU Office of TU Berlin at Faculty III – April 8, 2019

# Marie Skłodowska Curie Actions

*Content*

## Innovative Training Networks (ITN)

- General Aspects, Types, Objectives
- The Joint Research & Training Programme
- The Early Stage Researcher
- Proposal, Success Rates, Projects

## Individual Fellowships (IF)

- General Aspects and Objectives
- Types, Conditions and more
- Proposal etc.
- Success Rates, Application and Projects

# INNOVATIVE TRAINING NETWORKS - GENERAL ASPECTS

**Joint research**

- **Transnational mobility (of E**arly **S**tage **R**esearcher**)** as the basic principle
- „**Bottom-up“-approach**, i.e. research topics are chosen freely by the applicants – all areas of research and technological development are eligible
- Participation of **non-academic sector** is an **important** factor
- **Consortium** size : at least **3 beneficiaries** in **3 different countries** (EU MS/AC)**,
- Compliance with **“40%** rule”: no more that 40% of EU contribution for beneficiaries of the same country
- **Duration** of ITN: **4 years**
- Recruitment of **E**arly **S**tage **R**esearcher with less than 4 years (full-time equivalent) research experience



*** EID: min. 2 beneficiaries*

# INNOVATIVE TRAINING NETWORKS - TYPES

- EUROPEAN TRAINING NETWORK – ETN
  - Enrolment in doctoral programme not mandatory (but typical)
  - Secondments up to 30% of ESR's recruitment time possible
  - 8 scientific panels,
- EUROPEAN INDUSTRIAL DOCTORATE - EID
  - At least 50% stay in non-academic sector,
  - Industry-oriented research,
  - Enrolment in doctoral programme and joint supervision (from 2 sectors) mandatory,
  - 1 multi-disciplinary panel
- EUROPEAN JOINT DOCTORATE (EJD)
  - Enrolment in doctoral programme mandatory (2/3 of ESR: joint, double, multiple p.), final degree from min. 2 countries
  - Joint supervision is mandatory,
  - 1 multi-disciplinary panel

** Respect the MSCA mobility rule*

*** EID: min. 2 beneficiaries*

# INNOVATIVE TRAINING NETWORKS - OBJECTIVES

- **Raising excellence** by:
  - Establishing a research programme “beyond state of the art” and a
  - Doctoral training **beyond traditional academic research training** setting
- Establishing a **new generation of creative, entrepreneurial, and innovative Early Stage Researchers** (ESR)**:** converting knowledge & ideas into products & services
- To equip ESR with both: **research related** and **transferable** competences
- Improved **career perspectives** in both the **academic** and **non-academic sector**
- **Lasting (doctoral) cooperation** among institutions and between academic and non-academic sector



** No doctorate & less than 4 years of research experience*

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## The Joint Research & Training Programme

- **Multi- & interdisciplinary** research activities through up to **15 individual**, **supervised** (doctoral) projects (max. **5** in a **2-partner-EID**)
- Structured, innovative **educational programme**: courses (local and network-wide), laboratories, summer schools, e-learning etc.
- **Knowledge exchange** through **inter-sectoral visits** and
- **Secondments** (to partner organisations) are encouraged (EID mandatory)

## The early stage researcher:

- **Duration** of funding for an **ESR**: 3 - 36 month
- ESR transnational **mobility:** main activity (work, studies, etc.) in the country of the recruiting beneficiary **is limited to 12 months** in the **3 years prior to** the recruitment date.
- ESR can be of **any nationality,** can move from **any country** (but must respect the mobility rule)

Innovative Training Networks

# Innovative Training Networks – Proposal, Success Rates, Projects

## Proposal

| Weighting | Priority if ex aquo | Section |
|---|---|---|
| 50% | 1 | Excellence |
| 30% | 2 | Impact |
| 20% | 3 | Implemen-tation |

max. **30** pages

## After Evaluation

| 2018 Success rate: **7.4%** | |
|---|---|
| ETN | 6.6% |
| EID | 13.1% |
| EJD | 11.1% |

Call for Application once a year.
Next deadline: **January 2020**

## TU Berlin – Current ITN Projects (H2020)

| Faculty | Acronym | Title | Prof. | Role | Type |
|---|---|---|---|---|---|
| II | ROMSOC | Reduced Order Modelling, Simulation and Optimization of Coupled systems | Mehrmann | Coordinator | EID |
| II | SynCrop | Synthetic Ciorcuits for Robust Orthogonal Production | Budisa | Beneficiary | ETN |
| **III** | **Biorapid** | **Rapid Bioprocess Development** | **Neubauer** | **Beneficiary** | **ETN** |
| **III** | **EJDFoodSci** | **Food science, technology and engineering** | **Methner** | **Beneficiary** | **EJD** |
| IV | FogGuru | FogGuru: Training the Next Generation of European Fog Computing Experts | Markl | Beneficiary | EID |
| IV | VisIoN | Visible light based Inter-operability and Networking | Caire | Beneficiary | ETN |
| V | ANNULIGhT | Annular Instabilities and Transient Phenomena in Gas Turbine Combustors | Paschereit | Beneficiary | ETN |

# Marie Skłodowska Curie Actions

## Individual Fellowships (IF)

- General Aspects and Objectives
- Types, Conditions and more
- Proposal etc.
- Success Rates, Application and Projects

# INDIVIDUAL FELLOWSHIPS - *GENERAL ASPECTS AND OBJECTIVES*

## *GENERAL ASPECTS*

- **Bottom-up approach**, i.e. research fields are chosen freely by the applicants
- **Joint** Application of **Experienced Researcher** (ER)* and **Supervisor,** i.e. co-development of proposal incl. a convincing integration and supervision concept
- **Transnational mobility** of **ER** as the basic principle, i.e.:
- **IF mobility rule**: main activity (work, studies, etc.) in the country of the beneficiary is **limited to 12 months in the 3 years prior** to the call deadline

## *OBJECTIVES*

- Supporting **excellent** research
- Enhancing the **creative and innovative potential of ER**: diversify individual competences in terms of skill acquisition (research related **and** transferable)
- Providing **opportunities to work on research and innovation in** Europe (MS/AC) or **outside Europe**
- Improved **employability** and **career prospects** both in and outside academia

# Individual Fellowships – Types, Conditions and more…

## Who can apply – the Experienced Researcher:

- Shall dispose of a **doctorate** or **more than 4 years of research experience** (FTE)
- Can move from **any country (EF/GF)** to an **EU MS/AC** – given that mobility rule is respected
- May choose to **lecture**, **tutor**, and **supervise students**, and follow training in order to perform such tasks.

## European Fellowship (EF)

- Researcher of **any nationality**
- Duration: **between 12** and **24 month** at an institution in EU MS/AC
- **Optional secondment**
- **Mobility rule** applies to the **receiving institution** (Standard EF)

# Individual Fellowships – Types, Conditions and more…

## Global Fellowship (GF)

- Researcher with **MS/AC nationality** or long-term resident
- Duration: **Initial outgoing phase** to a 3rd country (US, NZ…): **12 to 24 month** + mandatory **return period to the host institution** in EU MS/AC: **12 month**
- **Optional secondment**
- **Mobility rule** applies to institution in **third country**

### *Proposal*

| Weighting | Priority if ex aquo | Section |
|---|---|---|
| 50% | 1 | Excellence |
| 30% | 2 | Impact |
| 20% | 3 | Implemen-tation |

max. **10** pages

### *Evaluation*

- Single stage – one step
- Through **independent experts**
- **In eight scientific panels** (Standard EF and GF, other types single panels)

# INDIVIDUAL FELLOWSHIPS – *SUCCESS RATES, APPLICATION AND PROJECTS*

## *APPLICATION*

- One call per year
- Next call opening: April 11, 2019 and
- Deadline: **September 11, 2019**

| IF 2018 Success Rate | |
|---|---|
| EF | 13.2% |
| GF | 21.7% |

## *INDIVIDUAL FELLOWS AT TU BERLIN (H2020 )*

| Faculty | Acronym | Title | Researcher | Supervisor | Type |
|---|---|---|---|---|---|
| II | Cloud-worlds | Cloud Worlds: from Venus to Exoplanet | Lee | Rauer | EF |
| **III** | **H2O-Split** | **Carbon-Oxynitride Coupled Arti-ficial Photosynthesis System for Solar Water Splitting Beyond 600nm** | **Khujamberdiev** | **Gurlo** | **EF** |
| **III** | **Rotary-Wing** | **Closed-Loop Flow Control to Enhance Aerodynamic and Aeroacoustic Performance of Wind-Turbine Blades** | **Stalnov** | **King** | **EF** |
| IV | Machine Cat | Machine Learning for Catalytic Carbon Dioxide Activation | Gastegger | K.R. Müller | EF |
| IV | ODICON-ASMA | Optimal Distributed Control and Application to Smart Grids | Charalampidis | Raisch | EF |
| IV | PACT | Proof-theoretical Approaches to Concurrency Theory | Guenot | Nestmann | EF |
| IV | SMARTER | A Scalable and Elastic Platform for Near-Realtime Analytics for The Graph of Everything | Le Phoc | Hauswirth | EF |
| IV | ZERO-TRAIN-BCI | Combining constrained based learning and transfer learning to facilitate Zerotraining Brain-Computer Interfacing | Kindermans | K. R. Müller | EF |
| **VI** | **Ultra-LightCon-3D** | **Ultra-Lightweight Concrete for 3D printing technologies** | **Sikora** | **D. Stephan** | **EF** |

# THANK YOU FOR YOUR ATTENTION!


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