

Fundraising and Research Careers in EU R&I Framework Programme

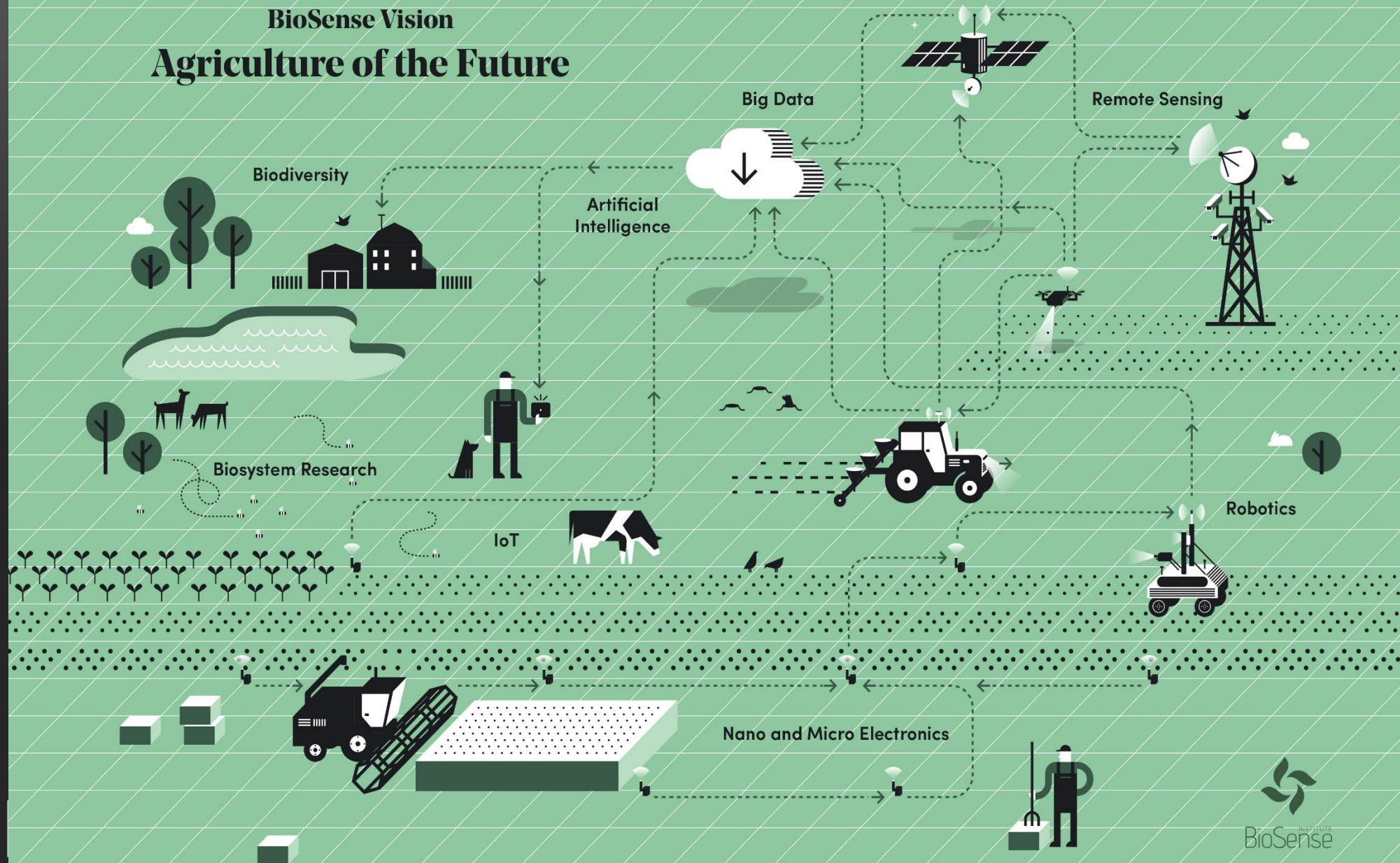
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University of Novi Sad
Serbia



BioSense Institute

- R&D institute for Information Technology in Biosystems
- Public institute, University of Novi Sad, Serbia
- Dynamic multidisciplinary international organization
- Main focus – IT in Agriculture and Food
- 85 permanent staff
- 50 part-time staff

BioSense Vision Agriculture of the Future



Funded Projects
2.684 17,38%
of total

Project Participations
6.111 8,47%
of total

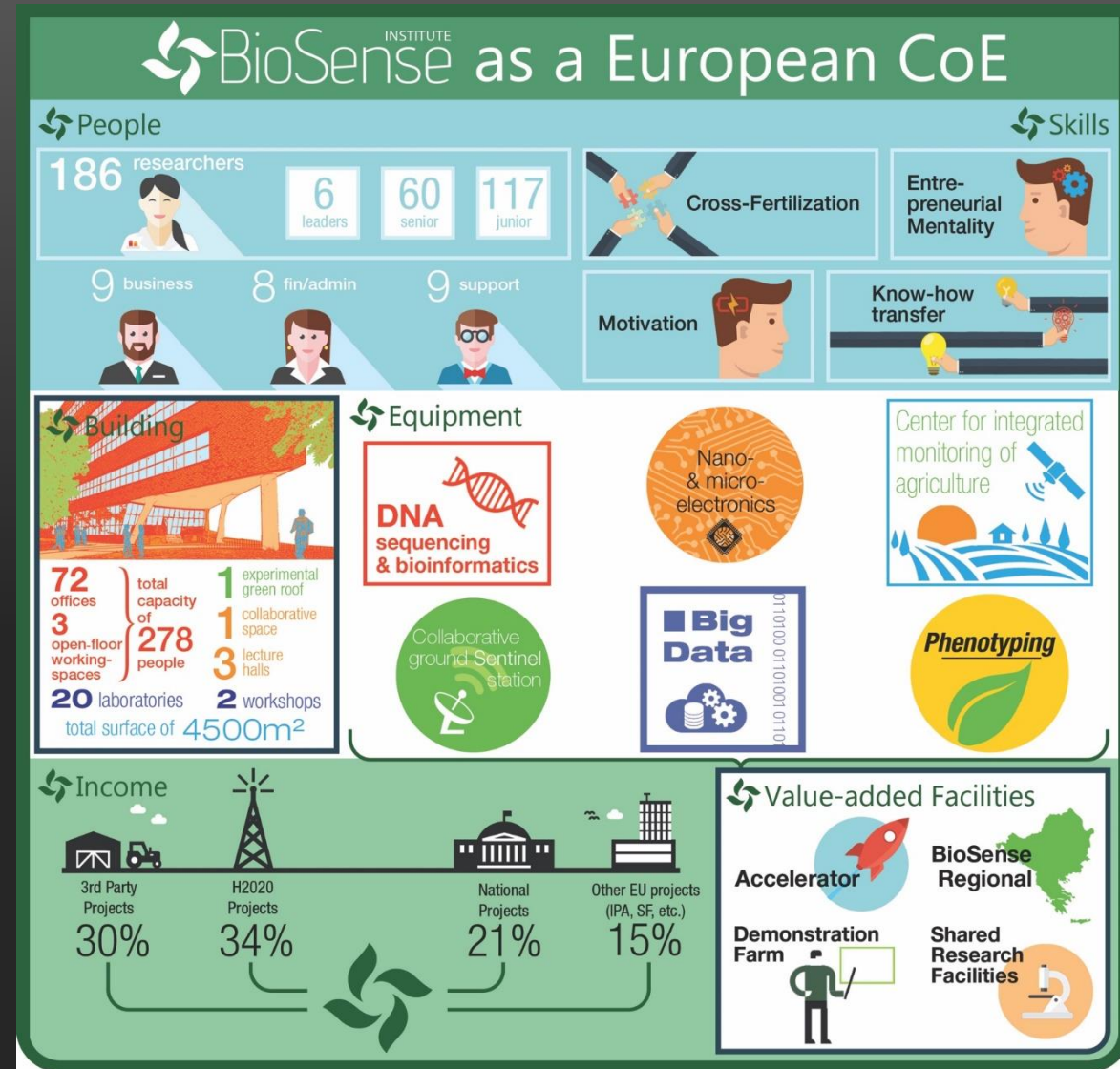
EU Contribution (EUR)
1,25G 4,52%
of total

Number of project participations and EU Contribution by organisation

Legal Name	Country	EU Contribution (EUR)	Project Participations
Totals		1.251.687.644 €	6.111
BIOSENSE INSTITUTE - RESEARCH AND DEVELOPMENT INSTITUTE FOR INFORMATION TECHNOLOGIES IN BIOSYSTEMS	Serbia	21.239.349 €	16
TARTU ULIKOOL	Estonia	18.791.525 €	56
TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	Turkey	17.564.621 €	51
ENERGOCHEMICA TRADING AS	Slovakia	15.675.968 €	2
INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK	Poland	14.272.826 €	37
UNIWERSYTET WARSZAWSKI	Poland	13.815.263 €	48
Masarykova univerzita	Czech Republic	13.773.956 €	38
NEMZETI KUTATASI FEJLESZTESI ES INNOVACIOS HIVATAL	Hungary	13.738.143 €	10
CESKE VYSOKE UCENI TECHNICKE V PRAZE	Czech Republic	13.639.438 €	46

ANTARES project

1st ranked in H2020
Teaming call





Agenda

- Horizon 2020
- Horizon Europe
- Marie Skłodowska Curie Actions
 - Individual Fellowships
 - Innovative Training Networks
 - COFUND
 - Research and Innovation Staff Exchange
- Job opportunities
 - Job searching
 - Job application



About me

- Senior researcher at the Group of Nano and Microelectronics
- PhD in microwave electronics in 2013 from the University of Novi Sad
- Coordinator of the project H2020-MSCA-RISE-2017 **NOCTURNO** Non-Conventional Wave Propagation for Future Sensing and Actuating Technologies
- Work Package leader in H2020 project ANTARES Phase 2 2017-2024
- Project coordinator in Serbia in EUREKA project E!13044 WaQuMoS
- Project manager of H2020 project ANATRES Phase 1 2015-2016
- Project manager of FP7 project InnoSense
- Participated in FP7 projects and EUREKA projects



HORIZON 2020

What is Horizon 2020?



Horizon 2020

- Biggest EU R&I programme
- Budget 80 billion EUR 2014-2020
- Expected outcome – taking great ideas from the lab to the market
- Overrun the fragmentation imposed by the national boundaries
 - the EU level ensures an important budget line, deep transnational coordination, strong cooperation, full exploitation of networks and the exchange of human capital
- Strategy – coupling research and innovation



Horizon 2020

Excellent Science

Total funding for 2014-2020	€ million
European Research Council (ERC) Frontier research by the best individual teams	13 095
Future & emerging technologies Collaborative research to open new fields of innovation	2 696
Marie Skłodowska-Curie actions (MSCA) Opportunities for training and career development	6 162
Research infrastructures (including e-infrastructure) Ensuring access to world-class facilities	2 488

Societal Challenges

Total funding for 2014-2020	€ million
Health, demographic change & wellbeing	7 472
Food security, sustainable agriculture and forestry, marine/maritime/inland water research and the bioeconomy	3 851
Secure, clean & efficient energy	5 931
Smart, green & integrated transport	6 339
Climate action, environment, resource efficiency & raw materials	3 081
Inclusive, innovative & reflective societies	1 310
Secure societies	1 695

Industrial Leadership

Total funding for 2014-2020	€ million
Leadership in enabling & industrial technologies (LEITs) (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 557
Access to risk finance Leveraging private finance & venture capital	2 842
Innovation in SMEs Fostering all forms of innovation in all types of SMEs	616



Horizon Europe



Horizon Europe

- 100 billion EUR R&I programme
- 2021-2027
- Continuation of H2020
- Objectives:
 - Strengthen EU science and technology thanks to increased investment in highly skilled people and cutting-edge research;
 - Foster the EU's industrial competitiveness and its innovation performance
 - Deliver on the EU's strategic priorities



Horizon Europe

- The **three-pillar structure will be continued**, but redesigned for more coherence, both between and within pillars





HORIZON 2020

Why Horizon 2020?

Serbia vs. Italy



MSCA Actions

What are the Marie Skłodowska Curie Actions?

A European Union funded programme for structuring researcher **training, mobility and career development**

Objectives

Ensure the optimum development and dynamic use of Europe's intellectual capital to generate new skills, knowledge and innovation

- **Budget 2014-2020: € 6.162 billion**



MSCA Actions

MSCA: What do the MSCA offer researchers?

- Prestigious career opportunities
- Excellent working conditions: employment contracts, full social security etc.
- Opportunities to work and train with the best researchers in Europe and worldwide
- Whole career training: complementary skills
- Access to top level conferences, professional associations & Marie Curie Alumni



MSCA Actions

Who: All levels of research experience from PhD researcher upwards – there are actions for different levels of experience.

What: All areas of research are supported: bottom-up approach.

Where: Anywhere: any research performing organisation, public or private worldwide - there are actions for European and international mobility.



MSCA Actions

IF

Individual Fellowships

What?
Personal research projects, between sectors and countries

Who applies?
Individual researcher and organisation

Who is funded?
ER, i.e. postdocs

ITN

Innovative Training Networks

What?
Research training through interdisciplinary and international networks
Industrial or joint doctorates

Who applies?
International network academia and non-academia

Who is funded?
ESR

COFUND

Co-funding of Regional, National, and International Programmes

What?
Regional, National, and International Programmes to foster researchers' trainings and careers

Who applies?
Organisation managing/funding PhD programmes

Who is funded?
ER and ESR

RISE

Research and Innovation Staff Exchange

What?
Exchange of research and innovation staff in a particular project

Who applies?
International network academia and non-academia

Who is funded?
ER and ESR, techs, admin and manag staff



MSCA Actions

Early-stage
researcher
(ESR)

No PhD
< 4 years of
experience

Can participate in
ITN
RISE
COFUND

Experienced
researcher
(ER)

PhD or
>4 years of
experience

Can participate in
IF
RISE
COFUND



MSCA Actions

- Member States (MS)– countries members of the EU
- Associated Countries (AC) - Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Former Yugoslav Republic of Macedonia, Georgia, Moldova, Montenegro, Serbia, Tunisia, Turkey and Ukraine
- Third Countries – Australia, US, Canada, Brazil...



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MSCA – Individual Fellowship

- **Excellent opportunity for individual experienced researchers to boost career abroad.**
- To enhance the creative and innovative potential of experienced researchers through advanced training, international and intersectoral mobility
- Researchers of any nationality, any age
- Within and beyond Europe (MS and AC)
- In particular:
 - the return and (re)integration of European researchers from outside Europe and those who have previously worked in Europe
 - promotes the career restart



MSCA – Individual Fellowship

- **General idea:**

- An individual researcher with PhD degree applies for IF with a research institution out of the country where the researchers carried out the main activities.
- The research institution is a beneficiary at which the researcher is employed during the IF.

- **General Mobility Rule**

Researchers **must not** have resided or carried out their main activity in the country of their host organization for more than **12 months in the previous 3 years** before the call deadline



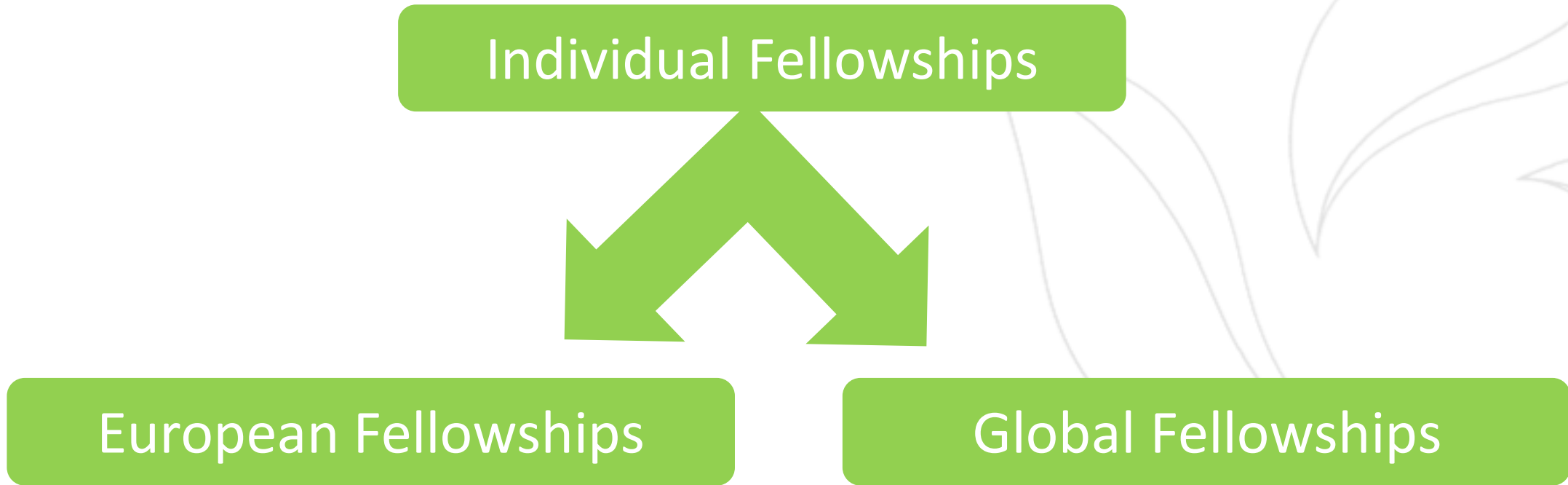
MSCA – Individual Fellowship

- Research areas: No pre-defined research topics (»**bottom-up**«)
- Eligible: **Experienced Researchers (ERs)**:
 - doctoral degree (95% of the applicants) **or**
 - at the Call deadline, at least 4 years research experience (full-time equivalent) after graduation
- Working conditions: Generally **full-time employment contract** including **social security**



MSCA – Individual Fellowship

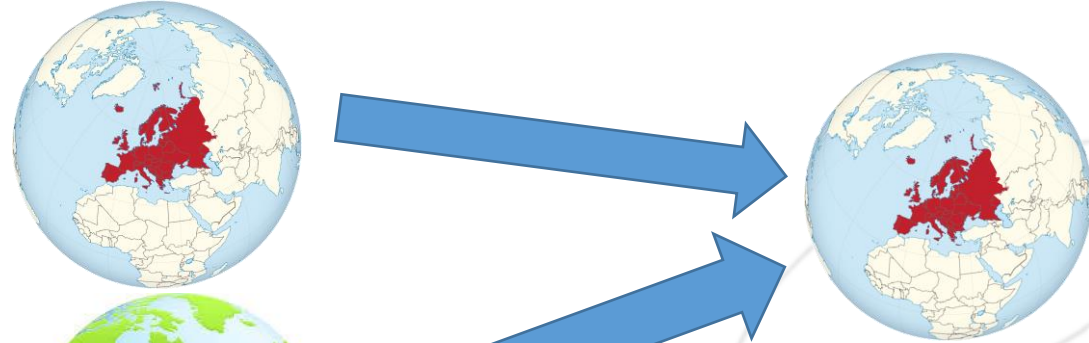
- Excellent opportunity for experienced researchers to boost career abroad.





MSCA – Individual Fellowship

European Fellowships



Researchers moving within or coming to MS/AC countries (12-24 months)

Global Fellowships



Researchers from MS/AC countries (12-24 months) going to Third countries (12-24 months) and return to Europe (12 months)



MSCA – European IF

European Fellowships

Standard EF

Reintegration Panel

Society and Enterprise Panel

Career Restart Panel



MSCA – Standard European IF

- 1 to 2-year **research stay in Europe** (MS/AC)
- **Experienced researchers of any nationality**
- **Host institution:** academic or non-academic (MS/AC)
- **8 scientific panels:**
 - Chemistry (CHE)
 - Social Sciences and Humanities (SOC)
 - Economic Sciences (ECO)
 - Information Science and Engineering (ENG)
 - Environment and Geosciences (ENV)
 - Life Sciences (LIF)
 - Mathematics (MAT)
 - Physics (PHY)



MSCA – Career Restart Panel (CAR) European IF

- Resuming a scientific career after a break (e.g. illness, parental leave, working outside research)
- Researchers of **any nationality**
- Not have been active (being employed or holding a scholarship in research) in research for at least **12 consecutive months in the 18 months prior to the call deadline**
- Researchers must not have resided or carried out their main activity in the country of their host organisation for more than **3 years in the 5 years** immediately before the call deadline



MSCA – Society and Enterprise Panel (SE) European IF

- Assistance in conducting research in the non-academic sector
- Host institution must be located in a MS/AC and be a **non-academic institution** (e.g. industry, business, NGO etc.)
- Researchers of **any nationality**
- The researcher **must not have** resided and/or carried out his/her main activity **for more than 3 years in the 5 years** immediately before the call deadline



MSCA – Reintegration Panel (RI) European IF

- Assistance in returning to Europe from a Third Country
- Researchers with **MS/AC nationality or MS/AC long-term residence** (at least 5 consecutive years)
- The researcher must **move or have moved directly from a TC to the MS or AC where the host organisation is located**
- Researchers must not have resided or carried out their main activity in the country of their host organisation for more than **3 years in the 5 years** immediately before the call deadline



MSCA – Global IF

Global Fellowships



MSCA – Global IF

- One to two-year **research stay outside of Europe**
- **Mandatory** one-year **return phase in Europe** (MS/AC)
- **Experienced researchers** with **MS/AC nationality** or **MS/AC long-term residence** (at least five consecutive years)
- Two host institutions
 - in a third country (partner organisation)
 - in MS/AC (return phase),
- Researchers must not have resided or carried out their main activity in the country of their host organisation for more than **1 year in the 3 years** immediately before the call deadline



MSCA – Global IF

- **8 scientific panels:**
 - Chemistry (CHE)
 - Social Sciences and Humanities (SOC)
 - Economic Sciences (ECO)
 - Information Science and Engineering (ENG)
 - Environment and Geosciences (ENV)
 - Life Sciences (LIF)
 - Mathematics (MAT)
 - Physics (PHY)



MSCA – Individual Fellowship

- Optional secondment phase in **MS/AC**, preferably **intersectoral** to boost other skills

Fellowship duration	Secondment duration
≤ 18 month	≤ 3 month
> 18 month	≤ 6 month



MSCA – Individual Fellowship

- Funding:

	Researcher unit cost in EUR person/month			Institutional unit cost in EUR person/month	
	Living Allowance	Mobility Allowance	Family Allowance	Research, training and networking costs	Management and indirect costs
Individual Fellowships	4,880	600	500	800	650



MSCA – Individual Fellowship

- Success rate:

	Submitted	Evaluated	Selected for funding	Success rate in %
Standard-EF	7.154	7.065	1.029	14,6
EF-CAR	329	322	46	14,3
EF-RI	539	533	78	14,6
EF-SE	209	204	58	28,4
GF	858	833	137	16,4
Altogether	9.089	8.957	1.348	14,8



MSCA – Individual Fellowship

- **Application procedure:**
- Part A – administrative data (CV, infrastructure of the host, supervisor, ethics...)
- Part B – proposal text
 - 10 pages
 - Excellence
 - Impact
 - Implementation
- Evaluation
 - Excellence (50%)
 - Impact (30%)
 - Implementation (20%)



MSCA – Individual Fellowship Calls

H2020-MSCA-IF call	2018	2019	2020
Opening-Closing	April 12 – Sept 12 2018	April 11 – Sept 11 2019	April 08 – Sept 09 2020
Budget	220 mil EUR	237 mil EUR	325 mil EUR



MSCA Actions

IF

Individual Fellowships

What?

Personal research projects, between sectors and countries

Who applies?

Individual researcher and organisation

Who is funded?

ER, i.e. postdocs

ITN

Innovative Training Networks

What?

Research training through interdisciplinary and international networks
Industrial or joint doctorates

Who applies?

International network academia and non-academia

Who is funded?

ESR

COFUND

Co-funding of Regional, National, and International Programmes

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Who is funded?

ER and ESR, techs, admin and manag staff



MSCA – Innovative Training Networks

- To train a new generation of creative, entrepreneurial and innovative early-stage researchers able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit;
- To raise excellence and structure research and doctoral training, **extending the traditional academic research training setting**,
- To provide **enhanced career perspectives** in both the academic and non-academic sectors through international, interdisciplinary and inter-sectoral mobility combined with an innovation-oriented mindset



MSCA – Innovative Training Networks

- Excellence: International network of organisations applies and proposes a joint research training or doctoral programme
- All domains & bottom-up
- Multidisciplinary approach
- Meaningful exposure to non-academic sector
- Fellowships of 3-36 months
- Project duration up to 4 years



MSCA – Innovative Training Networks

ETN

European
Training
Networks

*Participants implement
a joint research programme*

EID

European
Industrial
Doctorates

*Doctoral programme with the
non-academic sector*

EJD

European
Joint
Doctorates

*Doctoral programme to deliver
joint degrees*

8 scientific panels:

Chemistry (CHE)
Social Sciences and Humanities (SOC)
Economic Sciences (ECO)
Information Science and Engineering (ENG)

Environment and Geosciences (ENV)
Life Sciences (LIF)
Mathematics (MAT)
Physics (PHY)



MSCA – Innovative Training Networks

Eligibility

European Training Networks

Min. 3 beneficiaries from any sector from 3 different MS/AC

European Industrial Doctorates

Min. 2 beneficiaries from 2 different MS/AC: min. 1 from academic sector awarding PhD + min. 1 from non-academic sector

European Joint Doctorates

Min. 3 beneficiaries from academic sector awarding PhD from 3 different MS/AC

Above this minimum:
participants from any
sector / country

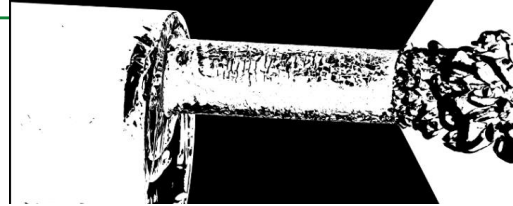


MSCA – European Training Networks

- **Network of participants implementing a joint research training programme**
- **Mandatory**
 - Min. 3 beneficiaries from 3 different MS/AC
 - Each beneficiary recruits and hosts at least 1 ESR
- **Other**
 - Non-academic participation essential
 - PhD enrolment typically expected
 - Secondments to other countries/sector/disciplines
 - Joint supervision recommended
 - Partner organisations (any country/sector)



MSCA – European Training Networks



- HAoS project creates new generation of numerical tools that will facilitate the cost effective design of novel fuel injection equipment.



DELPHI





MSCA – European Industrial Doctorate

- **Mandatory:**
 - Min. 2 organisations from 2 different EU/ associated countries
1 academic awarding PhD + 1 non-academic
- **Other:**
 - Individual research projects under the topic of the doctoral programme
 - Joint supervision by academic and non-academic supervisor
 - Flexible recruitment rule
 - Each fellow enrolled in the doctoral programme
 - Each fellow must spend $\geq 50\%$ of time in non-academic sector
 - Secondments to partner organisation possible



MSCA – European Joint Doctorate

- **Mandatory:**
 - Min. 3 beneficiaries from academic sector awarding PhDs, from 3 different MS/AC
 - Each ESR enrolled in the joint (international) doctoral programme
 - Joint selection, training and supervision
 - Commitment to deliver joint/double/multi degrees
- **Other:**
 - Meaningful stays at joint doctorate beneficiaries
 - Non-academic participation through secondments to other sector/disciplines



MSCA – Innovation Training Network

- Funding:

	Researcher unit cost in EUR person/month			Institutional unit cost in EUR person/month	
	Living Allowance	Mobility Allowance	Family Allowance	Research, training, and networking costs	Management and indirect costs
ITN	3270	600	500	1800	1200



MSCA – Innovation Training Network

H2020-MSCA-ITN call	2019	2020
Opening-Closing	Sept 13 2018 – Jan 15 2019	Oct 12 2019 – Jan 09 2020
Budget	470 mil EUR	525 mil EUR



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MSCA – COFUND

- The **COFUND** scheme aims to stimulate regional, national or international programmes to foster excellence in researchers' training, mobility and career development
- **Co-funding new or existing regional, national, and international programmes** to open up to, and provide for, international, intersectoral and interdisciplinary research training, as well as transnational and cross-sectoral mobility of researchers at all stages of their career



MSCA – COFUND

- Participating organisations in COFUND are **legal entities that fund or manage Doctoral Programmes or Fellowship Programmes** for researchers, or that recruit, supervise, host or train researchers (research funding agencies, ministries, universities, research organisations, private companies, museums, hospitals...)

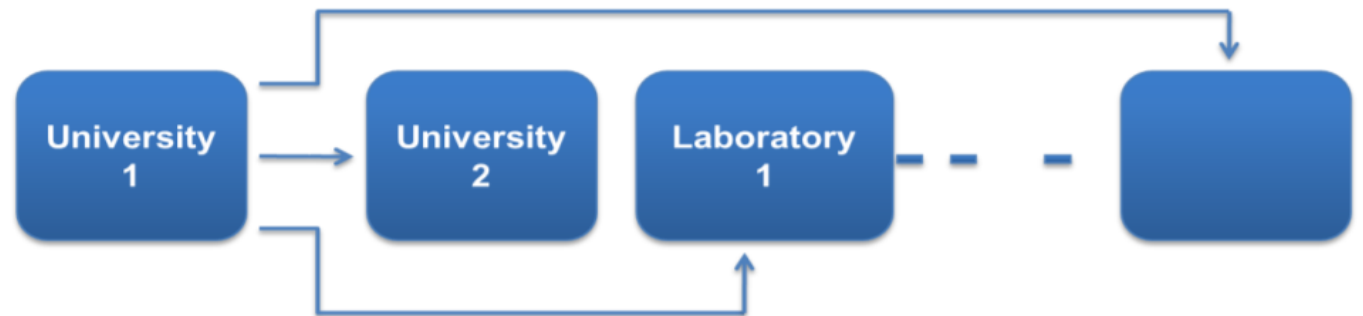


MSCA – COFUND

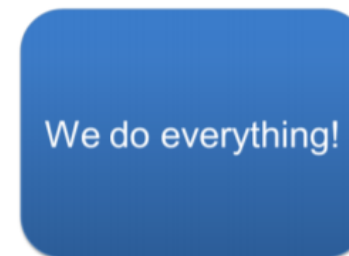
Hierarchical:



Horizontal:



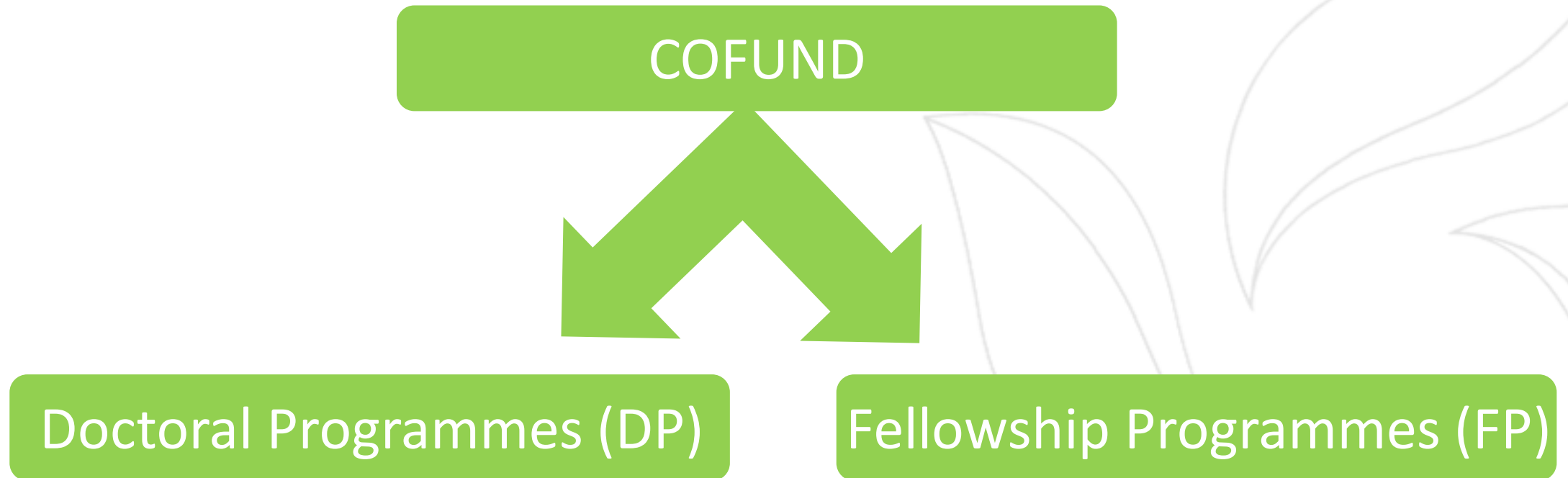
Single Point:



1 beneficiary
and partner
organisations



MSCA – COFUND





MSCA – COFUND

- To offer high-quality research options to researchers and to cover as many research disciplines as possible
- Duration of the programme 3-5 years
- DPs typically offer programmes that last for the duration of PhD programme
- FPs usually last for 1-3 years
- **Researchers may not have resided** or carried out their main activity (work, studies, etc.) in the country of the beneficiary/partner organisation for **more than 12 months in the 3 years** immediately before the co-funded programme's call deadline or the date of recruitment
- For **Fellowship programmes similar to those of the MSCA-IF** researchers may **not have resided** or carried out their main activity (work, studies, etc.) in the country of the beneficiary/partner organisation **for more than 3 years in the 5 years** immediately before the co-funded programme's call deadline or the date of recruitment



MSCA – COFUND Doctoral Programmes

- **Development and broadening of the research competencies of early-stage researchers (ESR)**
- Possibility of joint or double/multiple degrees and mutual recognition of training activities
- The selection of the researchers - **vacancies internationally advertised** and published, including on the **EURAXESS website**
- Possibility of secondments



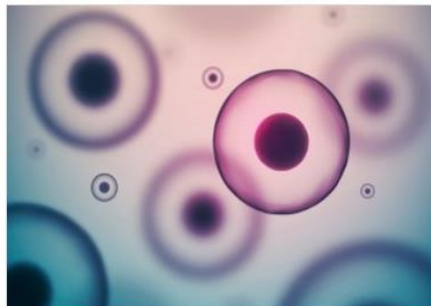
MSCA – COFUND Doctoral Programmes

- Example: RESCUE COFUND



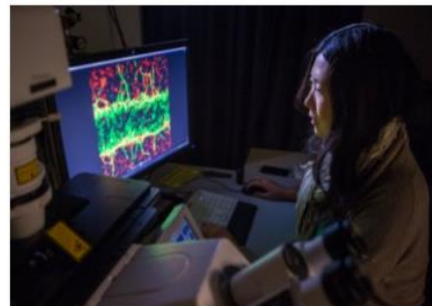
- RESCUE train researchers in the field of Regenerative Medicine research towards valuable new applications in medicine
- Joint programme between the University Medical Center Utrecht (UMCU) and Utrecht University (UU), coordinated by UMCU
- Over 50 partner academic and industry organisations (secondments)

ESR PhD projects



Stem Cells and Organoid Biology

We have 10 positions in Stem Cells and Organoid Biology



Cardiovascular Tissue Regeneration

We have 9 positions in Cardiovascular Tissue Regeneration



Musculoskeletal Tissue Regeneration

We have 10 positions in Musculoskeletal Tissue Regeneration



MSCA – COFUND Fellowship Programmes

- Individual-driven research training and career development fellowships for **experienced researchers**
- Calls for proposals advertised at international level, and on the EURAXESS website
- Freely choose a research topic and the appropriate host organisation



MSCA – COFUND Fellowship Programmes

- FELLINI - Fellowship for Innovation at INFN
- The National Institute for Nuclear Physics ([INFN](#))
- Candidates proposes projects in application
- Fields:
 - Experimental Particle Physics
 - Experimental Astroparticle Physics
 - Experimental Nuclear Physics
 - Theoretical Physics
 - Technological Research
- 4 national labs, 20 national units, 1 national centre
- 3-years length, 1-year secondment





MSCA – COFUND

- FUNDING:
 - ESR, recruited under an employment contract/equivalent direct contract, a **minimum of EUR 2 709/personmonth**
 - ER - recruited under an employment contract/equivalent direct contract, a **minimum of EUR 3 836/personmonth.**
- CO-FUNDing of the programmes



MSCA – COFUND

H2020-MSCA-COFUND call	2019	2020
Opening-Closing	April 04 – Sept 26 2019	April 08 – Sept 29 2020
Budget	90 mil EUR	100 mil EUR



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MSCA – Research and Innovation Staff Exchange

Partnership

Academic and
non-academic
institutions

Europe and
rest of the
world

Staff Exchanges

Project
implemented
through the
secondment of
existing staff

Staff seconded
for a period of
1 to 12 months

Transfer of Knowledge

International
and inter-
sectoral
transfer of
knowledge

Sharing of
ideas and R&I
culture



MSCA – Research and Innovation Staff Exchange

RISE CONSORTIUM

- At least **3 independent participants** in **3 different countries**

- Of which at least **2 participants** from **2 different MS/AC**

- **If all in MS/AC:** at least **1 academic** and **1 non-academic** (intersectoral)

R&I project

R&I activities

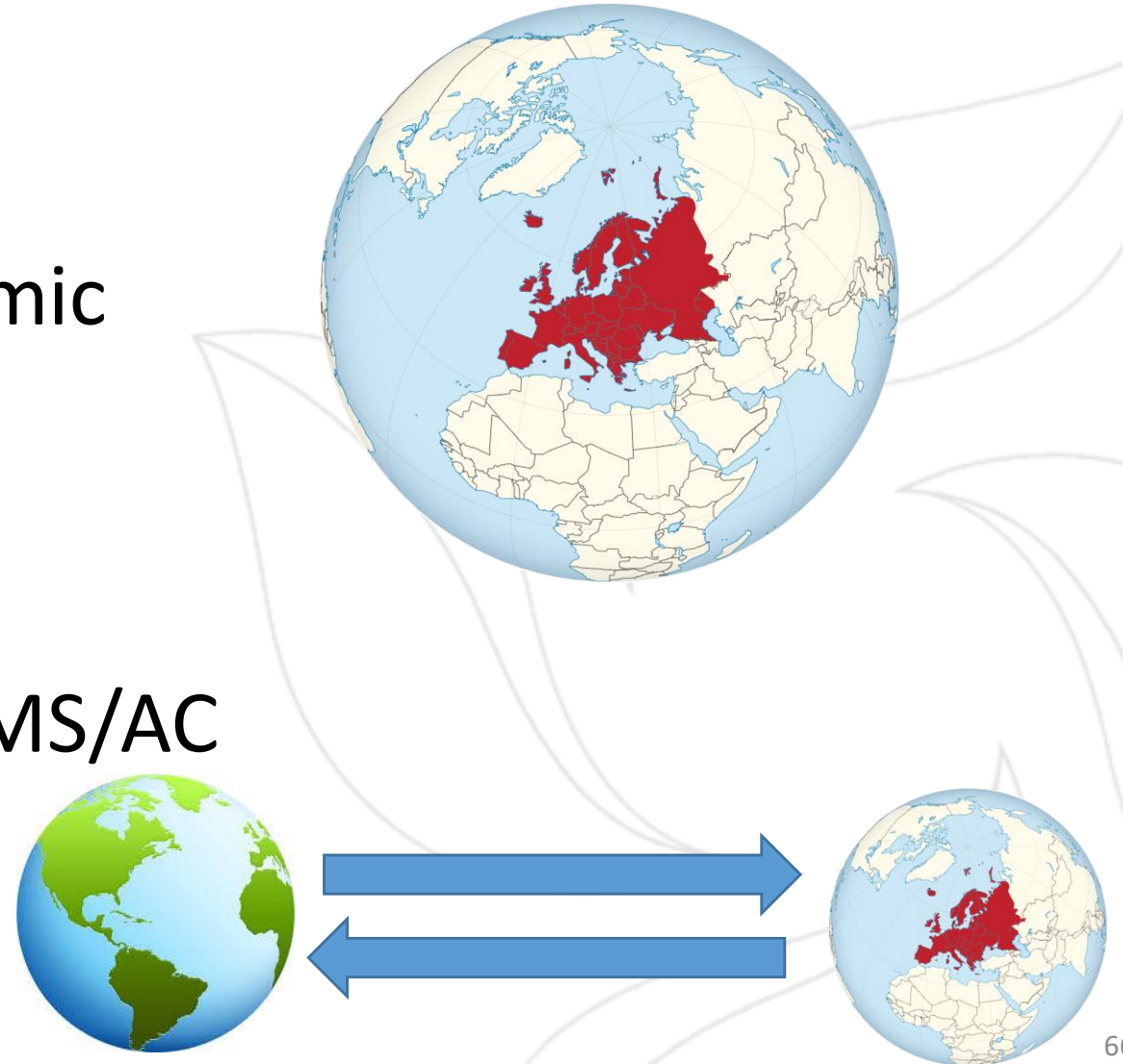
Staff secondments

Max duration 48 months



MSCA – Research and Innovation Staff Exchange

- Staff exchange:
 - Inter-sectoral - between academic and non-academic partners
 - International – between MS/AC partners and TC partners





MSCA – Research and Innovation Staff Exchange

- Staff exchange:
 - ESR (no PhD and < 4 years experience)
 - ER (PhD or > 4 years experience)
 - Managerial staff
 - Administrative or Technical staff



MSCA – Research and Innovation Staff Exchange

- Funding:

	Researcher unit cost in EUR person/month	Institutional unit cost in EUR person/month	
	2000/2100	Research, training, and networking costs	Management and indirect costs
MSCA		1800	700



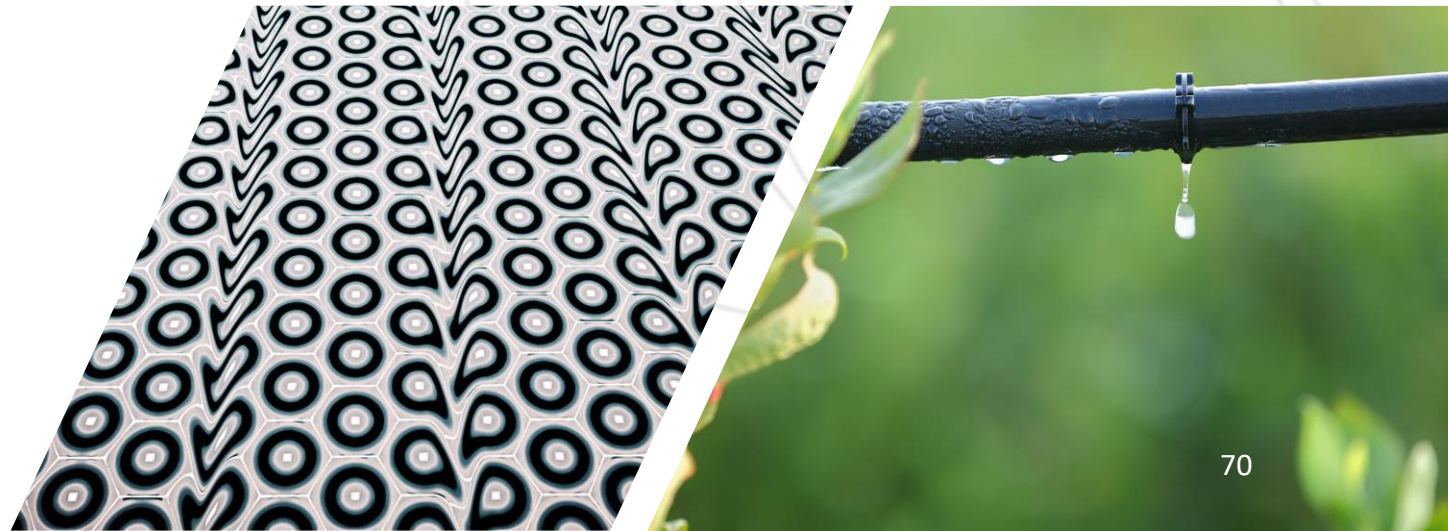
MSCA – Research and Innovation Staff Exchange

H2020-MSCA-ITN call	2019	2020
Opening-Closing	Dec 04 2018 – Apr 02 2019	Dec 05 2019 – Apr 07 2020
Budget	80 mil EUR	80 mil EUR

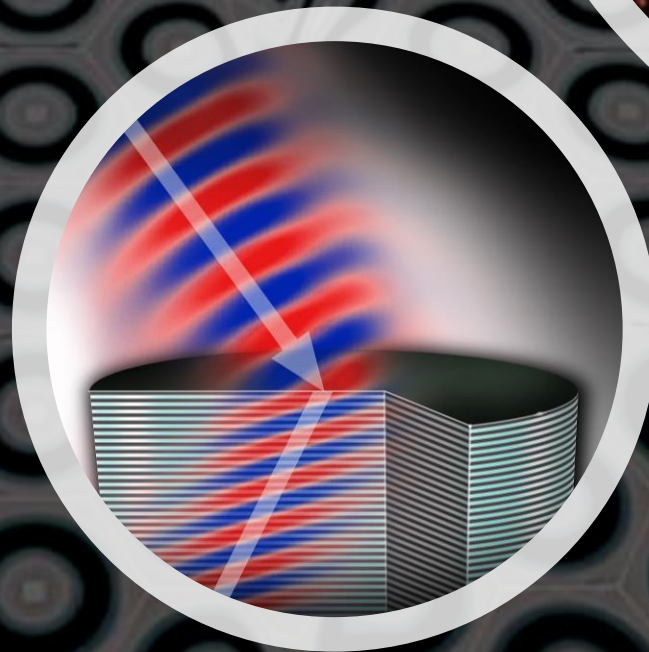
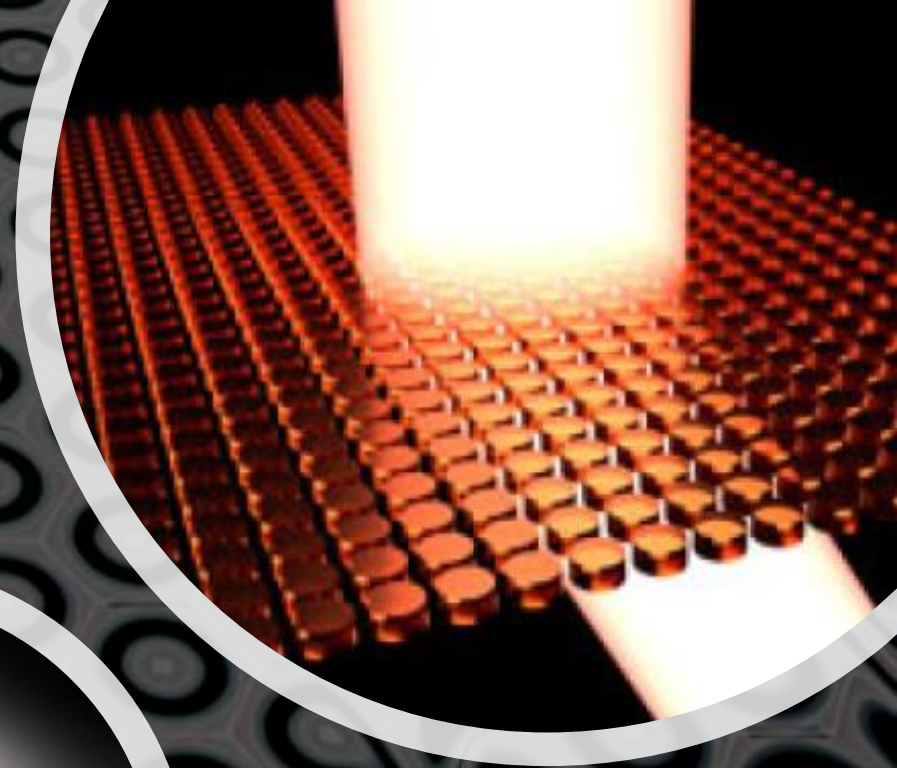


NOCTURNO

- **NOCTURNO**
 - Non-Conventional Wave Propagation for Future Sensing and Actuating Technologies
- Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)
 - Call: H2020-MSCA-RISE-2017
- January 2018 – December 2021



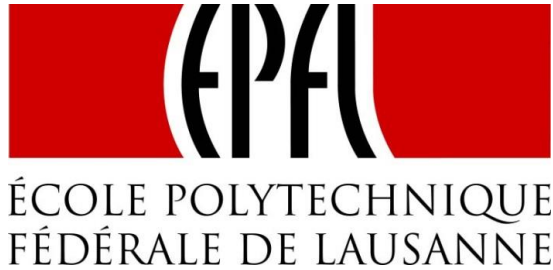
- Focuses on:
 - Development of **sensors and actuators** based on **non-conventional propagation of acoustic waves** in artificial media
 - **Electromagnetic/optical sensors** based on **metasurfaces**
 - **Advanced manufacturing technologies** with the aim to provide practical solutions for the fabrication of novel acoustic and metasurface-based sensors and actuators





Consortium

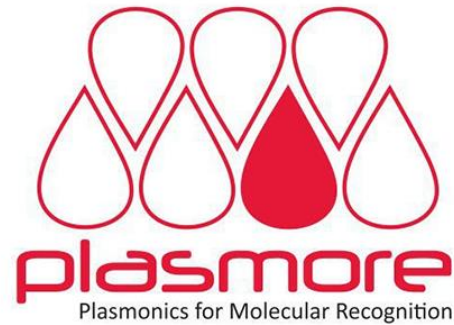
European academic



UNIVERSITY OF
BIRMINGHAM



European non-academic



INOSENS

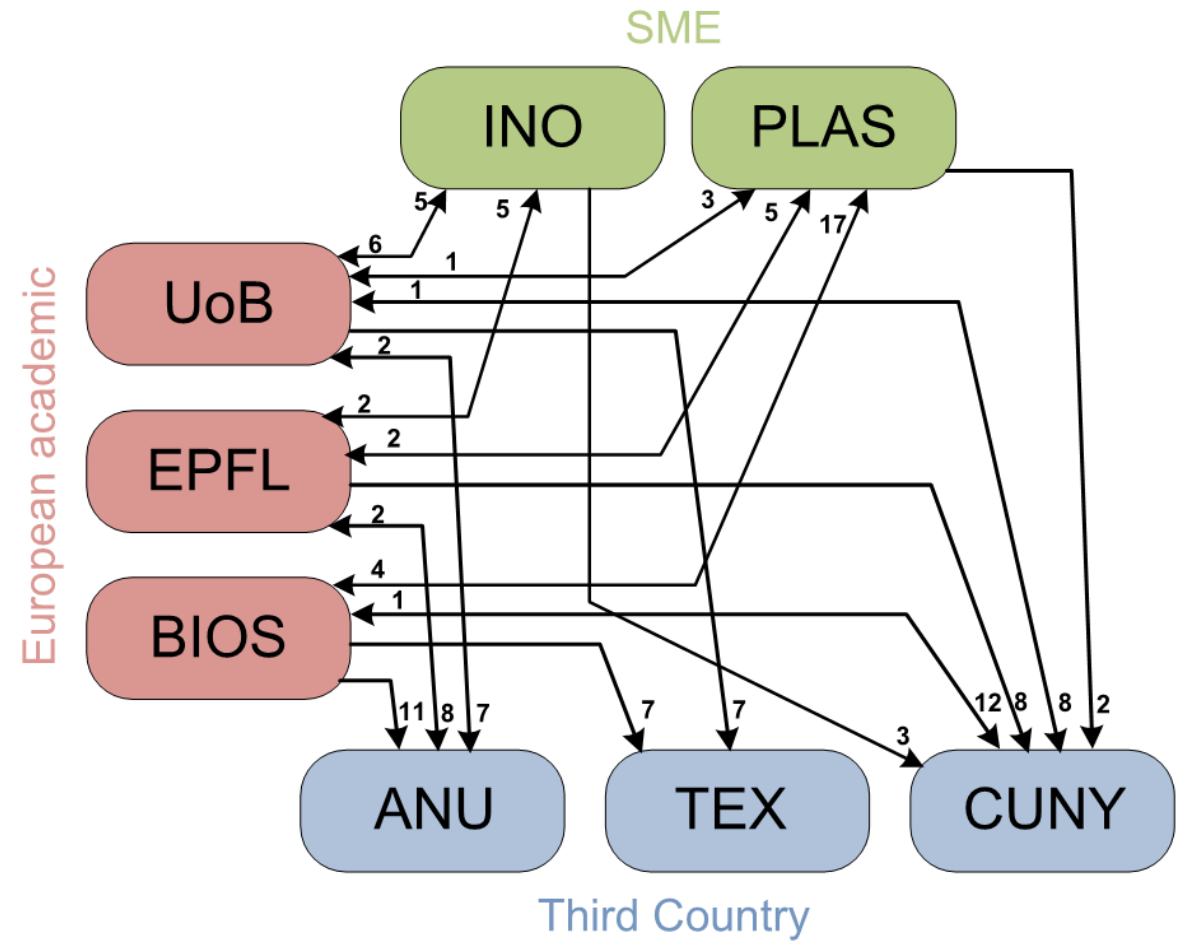
Third-country



Australian
National
University



Secondments





Further information

- http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-intro_en.pdf
- http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-msca_en.pdf
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- http://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-guide-appl-msca-rise_en.pdf
- <https://publications.europa.eu/en/publication-detail/-/publication/00d78651-a037-11e8-99ee-01aa75ed71a1/language-en/format-PDF/source-77975709>

Job searching





Job searching

- MSCA – Individual Fellowship – “individual” proposal
- MSCA – RISE – career development if part of the consortium
- MSCA – ITN – for PhD candidates, looking for the project -> application -> recruitment
- MSCA – COFUND – for experienced researchers, looking for the project -> application -> recruitment



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Job searching

- EURAXESS - Pan-European initiative delivering information and support services to professional researchers.
- <https://euraxess.ec.europa.eu/>

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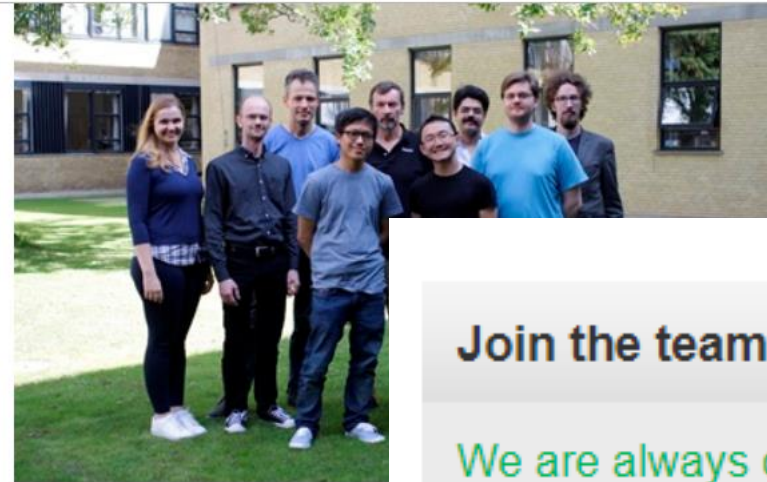
- Directly to the well-established research group

PRINCIPAL INVESTIGATOR



Andrea Alù

Dr. Alù is currently seeking brilliant and highly motivated graduate students and postdocs to join his group. If you believe to be an exceptional candidate with interests in electromagnetism, plasmonics, metamaterials and/or acoustics please feel free to contact him.



Metamaterials Group

Group Leader:

Associate Professor, D.Sci. **And**

Senior Members and Postdocs:

- Dr. Radu Malureanu
- Dr. Osamu Takayama
- Dr. Evgeniy Shkondin
- Dr. Akira Kudo

Ph.D. Students:

- Taavi Repän
- Johneph Sukham
- Larissa Vertchenko
- Rasmus Elkjær Jacobsen

Associate Member:

META-MEMBERS



Join the team!

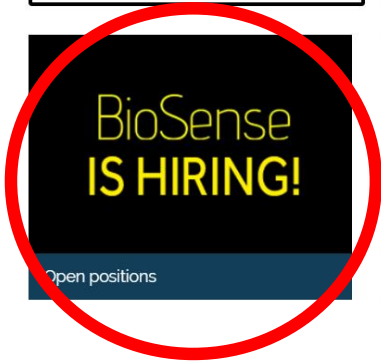
We are always on the lookout for new students and colleagues! For example there are a couple of opportunities for postdocs!

If you would like to join the group, please contact the group leader, Prof. Andrei Lavrinenko.

You may also find it valuable to consult the **list of open positions** at DTU.



Job searching



Open positions

Research leader in development of sensing devices – [PDF](#)

Research leader in satellite imaging and remote sensing – [PDF](#)

Research leader in multispectral/hyperspectral image processing – [PDF](#)

Research leader in Big Data – [PDF](#)

Experienced researcher in development of sensing devices – [PDF](#)

Experienced researcher in satellite imaging and remote sensing – [PDF](#)

Experienced researcher in multispectral/hyperspectral image processing – [PDF](#)

Experienced researcher in Big Data – [PDF](#)

Experienced researcher in IoT – internet-of-things – [PDF](#)

Experienced researcher in bioinformatics – [PDF](#)



Job application

- CV and cover letter
- CV - factsheet
- Cover Letter demonstrates your personality and other relevant skills
- Additional documents – e.g. research plan



Job application - CV

- **Form:**
 - **Length:** 2-4 pages
 - **Structure** – personal details, work experience, education, research...
 - Europass format
 - <https://europass.cedefop.europa.eu/documents/curriculum-vitae>
 - **Formatting:** CV should be clear and easy to read
 - **Brief, concrete, not many details**



Job applica

- **Personal Details**
- **Career Summary**
- **Education**
- **Research** - highlight key research findings and accomplishments, research interests
- **Publications**
 - a short list of the most representative publication
 - full list in the appendix



PERSONAL INFORMATION

Nikolina Janković



+381 21 485 2138



nikolina@biosense.rs

Sex Female | Date of birth [REDACTED] | Nationality Serbian



Job application - CV

- **Personal Details**
- **Career Summary**
- **Education**
- **Research** - highlight key research research interests
- **Publications**
 - a short list of the most represe
 - full list in the appendix

WORK EXPERIENCE

07/2015- **Research Assistant Professor**
BioSense Institute, Novi Sad, Serbia

Research in the field of microwave electronics, metamaterials, optics, and their application in sensors applied in agriculture, food, and environmental monitoring

From 2016 Head of the Group for Nano and Microelectronics

2018-2021 Coordinator of the project H2020-MSCA-RISE-2017 NOCTURNO Non-conventional wave propagation for future sensing and actuating technologies 777714

Leader of the Work Package 2 – Human resources in ANTARES Phase 2 - Centre of Excellence for Advanced Technologies in Sustainable Agriculture and Food Security, H2020 WIDESPREAD-01-2016-2017

Project manager of EU-funded projects FP7 InnoSense (ended in 2016) and H2020 ANTARES Phase 1 (ended in 2016)

[Business or sector](#) Research

12/2014-06/2015 **Research Assistant Professor**
Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia

Research in the field of microwave electronics and metamaterials

Lecturing RF and Microwave Electronics, Modelling and Simulation of RF and Microwave Circuits

[Business or sector](#) Research, Education

EDUCATION AND TRAINING

2008-2013 **PhD degree**
Faculty of Technical Sciences, University of Novi Sad, Serbia
Title: Microwave microstrip multi-band filters with independently controlled passbands

2002-2008 **Master of Science in Electrical and Computer Engineering**
Faculty of Technical Sciences, University of Novi Sad, Serbia
Title of Master Thesis: High-impedance surfaces that use fractal curves



Job application - CV

EU-funded projects

H2020

NOCTURNO Non-conventional wave propagation for future sensing and actuating technologies
H2020-MSCA-RISE-2017 777714, **coordinator**

ANTARES - Centre of Excellence for Advanced Technologies in Sustainable Agriculture and Food Security, H2020 Teaming Programme phase 2, 2017-2024, **WP leader**

- **Honors and Recognitions** - prizes, awards, honors or other recognitions for your research and work with the year it occurred and by who/which body the award was granted.
- **Funding** - the funding you have attracted for your research and work (grants, scholarships and funds)
- **Teaching**
- **Administrative experience** – events, coordination...
- **Professional experience** – working experience in e.g. industry relevant for the position
- **Other skills and qualifications** - technical and practical skills, certifications, languages...
- **Professional affiliations and memberships**
- **Attendance at conferences and seminars** - list the most relevant conferences or seminars where you presented or was invited
- **References** - list contact persons who can provide a reference for your research, work and character.
- **Appendices** - list of publications, certifications...

Other skills

- Experienced user of simulation tools HFSS, CST, Sonnet, AWR Microwave Office, MatLab, Mathematica



Job application – Cover Letter

- **Demonstrate your enthusiasm** for the post, based on the research you have done
- **Explain your rationale** for applying and how the role fits with your career plans
- Answer the question “**Why should we hire you?**” by demonstrating how you meet the key criteria
- Provide **evidence of** your written communication and language **skills**



Job application – Cover Letter

- No longer than 1 page in paragraph format
- **Address:** Address the letter to a named person
- **First paragraph:** An introduction, explaining which job you are applying for, how you heard about the post, and some brief background on who you are e.g. in terms of your research interests and background.
- **Middle section:** Evidence of how you meet the criteria for the role,
- **Final section:** Explain what attracts you to this role in this institution and how the role fits in to your career plans.
- **Concluding paragraph:** what makes you suitable for the job and a statement



Job application – Cover Letter

- 😊 To understand the job context - make your own enquiries (online research, colleagues...)
- 😊 Your Selling Points – what differentiate from the competition
 - 😊Depth of expertise
 - 😊Blends of experiences/expertise
 - 😊Specific achievements
 - 😊Developed research network
- 😞 Summarize CV – giving too much details
- 😞 Make unsubstantiated statements about relevant skills and experience without giving examples
- 😞 Make generalised statements about why you want to work for the institution



Job application – Cover Letter

- I would like to express my interest in the position of Research Fellow in Applied Health Research which **I saw advertised on naturejobs.**
- I have **recently completed my PhD in “Title of Thesis’ at the University of Pavia. My PhD involved research about...** and it also included... Prior to that, I received MSc degree in the field of at the University of Pavia.
- **This position appears to be an ideal blend of my experience in ... and ...**
- I am **particularly impressed by the BioSense Institute’s** commitment to application of ICT in agriculture and environmental protection as the burning issues in the world. **I am also drawn to the Institute’s multidisciplinary approach** to research. **Since I** collaborated with the researchers from Department of Biology and Department of Electronics during my PhD, **I believe in the importance of thinking beyond narrow academic disciplines.**



Job application – Cover Letter

- I have held research posts in both academia and R&D making me ideally suited to a role ... **My technical skills and deep knowledge of ... has given me a real understanding** of the practical applications of ... I also took the opportunity to learn about data analysis techniques, for example ...
- At the University of... I worked as... and this **increased my competence in ...**
- **I am confident that my** expertise in electronics and project proposal preparation, my broad experience in both academic and R&D, my focus on a multidisciplinary approach and my strong organisational and influencing skills make me an ideal match for this position.



Job interview

- Do your homework – get deeply into the institution/department/group to whose position you are applying
- Be prepared to answer “stupid” questions (how do you see yourself in 5 years, what makes you better than other candidates, what is your driving force...)
- Salary

A series of light gray, stylized leaf outlines are arranged in a swirling, fan-like pattern on the left side of the slide.

Thank you!

biosense.rs

nikolina@biosense.rs