Atelier de formation Les Actions Marie Skłodowska-Curie « Innovative Training Networks» ITN

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Training European Experts in Multilevel Bioimaging, Analysis and Modelling of Vertebrate Development and Disease

Marie Skłodowska-Curie ITN 2017-2020







Manchester Metropolitan University





TatraMed Filmless hospital technology



Universiteit Leiden









UNIVERSITY OF CAMBRIDGE











ImaginInLife

Volet excellence de H2020, MSCA ITN Training through research

Premier conseil: « It is all about training » : The beneficiaries

Pour un réseau Marie Curie, on ne monte pas le réseau comme pour un réseau de recherche :

Il faut un réseau de benéficiaires y compris du monde non-académique avec lesquels vous savez que vous pourrez être exigeants et que chacun accepte des taches spécifiques dans la formation de tous les jeunes du réseau (Training Officer, Career Developmen Officer, Work Package Leader, in charge of training events)

C'est beaucoup plus que juste un réseau de laboratoire de recherche, il faut montrer que chaque partenaire va s'investir dans le succès de cette aventure commune, qui est une aventure de formation !

Deuxième conseil: « It is all about training » : The Partner Organizations

C'est un réseau de formation de doctorants, attention aux bénéficiaires qui ne sont pas des universités (CNRS, INSERM, INRIA, entreprises,...), il faut identifier les Universités que enrolleront les doctorants correspondants dans leurs formation doctorales. Ces univesités doivent apparaître comme organisations partenaires clairement impliquées dans la formation doctorale.

Lors de montage et de la rédaction, ne jamais oublier qu'il s'agit d'un réseau de formation qui engage des jeunes chercheurs dans un programme doctoral!

Troisème conseil : « The training shall be ESR oriented »

Bien soigner les secondments. Ne pas hésiter à identifier des laboratoires ou des entreprises en dehors des bénéficiares qui pourront apporter un élément décisif dans la formation des doctorants et que vous solliciterez comme Partner Organisations qui acceuilleront les doctorants pour des secondments.

Lors de la préparatin des secondments, ne vous restreignez pas uniquement aux bénéficiares, voyez large, dans l'intérêt des doctorants !

Quatrième conseil : Weaknesses and risk managment

Ne pas se voiler la face. Quand on prépare un dossier pareil on apperçoit forcément des points faibles. Au lieu de les cacher sous le tapis, il faut en faire des points forts de la proposition en affirmatn clairement que ce sont des risques, et en expliquant comment on va les gérer.

Lors de montage et de la rédaction, toujours jeter un regard critique sur ce qu'on écrit et utiliser cette auto-critique pour la rédaction du tableau de gestion des riques !

Cinquième conseil: The Advisory Board

Prévoir un advisory board. Bien expliquer que, pour optimiser le fonctionnement, on a besoin d'un regard extérieur sur ce qu'on fait, et que donc on a déjà identifé quelques experts qui ont accepté de jouer ce role (si possible joindre les lettres d'engagement).

Lors de montage et de la rédaction, bien souligner que ce qui guide la proposition, c'est la volonté d'offrir la meilleur formation possible aux doctorants qui vont être recrutés!





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Un message clair tout au long de la proposition :

Le but du projet est de former les leader de demain dans le domaine

•à quoi exactement veut-on les former ? ImaginInLife : A l'imagerie du vivant

- "pourquoi ? ImaginInLife : Pour la connaissance, mais aussi parce que il y a des enjeux en santé
- •pour qui ? ImaginInLife : Pour la recherche, l'industrie (toxicologie, screening, pharmacie) et l'analyse d'images médicales





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Evaluators comments from unsuccesful proposals

- It is not clear how the ESRs in the non-academic environment or in the academic institutions that do not provide degrees themselves will be enrolled in PhD training.
- The training programme does not include convincing innovative aspects.
- There is very little network-wide training in transferable skills and the local courses at the different beneficiaries have not been presented in sufficient detail.
- Beyond technical tool development, the synergy between the different projects is not convincingly explained.
- The structuring effect on European level doctoral training remains very limited due to the lack of scientific coherence between the research projects.
- The time-schedule for the interactions between the different WPs is not convincingly detailed.
- The contingency plans are very general and they remain unclear at both the project and the ESR levels.
- The content of the workshops for specialised scientific skills is very broad given their short duration, mostly offering a theoretical- rather than practical-expertise.
- It is not clear the how supervision of the ESRs during their secondments in the non-academic partners will be managed.
- The communication and scientific engagement strategies for the general public are insufficiently described and the active role of the ESRs in these activities is not clear.
- The elaboration of individual WPs is clear, but coordination of the combined scientific WPs by the different partners is unclear. The sequential aspects and the interdependenc of WPse is unclear. What will some ESRs be doing while waiting for the establishment of the models.
- The description of the interactions among the participating organisations is insufficient (e.g. handling of potential patents between the participating institutions).

Evaluators comments from ImageInLife (score 96)

Criterion 1 - Excellence

- + Most of the involved partners have a proven track record of high impact scientific results.
- + The topic of the proposal is currently of major interest as imaging technologies undergo rapid development.
- + Private companies are active participants; their contribution to the science and technology is appropriately presented.
- + The programme uses state-of-the-art methodologies and procedures to address the research objectives.
- + The involved academic partners have recognised Ph.D. training programs established. All ESRs are to be enrolled into a doctoral programs.
- + Local and network-wide training are balanced, Personal Career Development Plans are clearly stated, and mutual recognition of training is well described.
- + The description of the training program at the non-academic sector is credible. Translational aspects towards industry strengthen the program.
- + The proposed conferences and network events should allow entrepreneurship skills to be amassed.
- + The supervisors have demonstrated that they possess the scientific and managerial ability to deliver high quality research.
- + The experimental methodology available in the consortium is broad and complements each other well. Synergies between participants in the research programme are highly evident.
- + Recruited researchers will be exposed to different research environments. Interaction between participants will provide the ESR a view from bench to industry.

Evaluators comments from ImageInLife (score 96) Criterion 2 - Impact

- + The program will produce a range of imaging scientist specialists that are in great demand by various sectors of research and industry.
- + The fellows will obtain a high level of scientific and transferrable skills within the framework of the research and training offered.
- + Under the proposed international training programme the ESRs will be exposed to a variety of academic and non-academic environments.
- + The contribution of the non-academic sector to the training is very strong and convincingly elaborated.
- + Collaborations between partners exist and will be strengthened by the project.
- + The cohort of researchers trained by the network will have highly meaningful potential to enhance the innovation capacity of Europe.
- + Dissemination strategies are very well prepared and planned, are realistic, and will be effective.
- + The exploitation of results in case of success will be effective. A non-academic partner takes a role in defining a development strategy for each potential product resulting from the project.
- + Innovative public outreach events are planned. The target of the actions as well as the media planned to be used are varied.

Evaluators comments from ImageInLife (score 96) Criterion 3 - Implementation

+ A clear description of Work Packages is provided. The work packages are challenging, yet in large parts realistic to accomplish within the given time frame.

+ The allocation of resources is proportional to the tasks undertaken by the participants. + Fellow's individual projects are very well prepared and are consistent with the research

program. The expected results and the planned secondments are provided.

+ The deliverables and milestones are clearly presented, arguing for a successful project

+ The composition of the different management components is clearly defined. The responsibilities of network bodies are clearly articulated.

+ Risk management at the consortium level and mitigation measures are very well indicated.
The risk is realistically estimated and planned actions warrant proper realization of the project.
+ The financial plan is properly described.

+ The necessary laboratory equipment is available. Both academia and non-academia are well equipped with necessary state of the art instrumentation.

+ The facilities in each institution are adequate to support ESR training in research.

+ The capacity of the participating organizations is properly described and very good. Specifically, even capacities allocated for secondments and training activities to be carried out in the companies are well described.

+ Competences and experience of the participating organisations are very well suited. participating partners have earlier experience in participating in international research consortia.

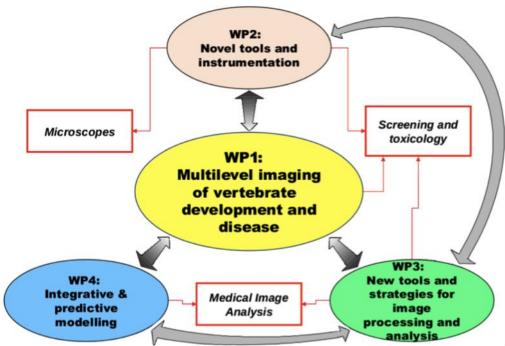
+ The complementarity of the participating partners is very well explained. In particular, the complementary activities between academia and non-academia sector is effectively exploited.

+ All partners fully committed to the program (joint letters and proposed allocation of



Des schémas clairs et parlants :



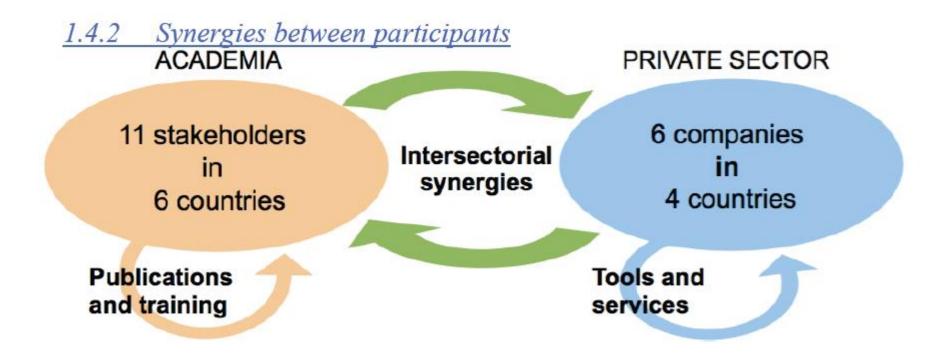


Work Package (WP) List with their private sector applications in the figure (red)





academia – private sector interactions



alternatives for private sector partners: for example patient organizations





InLife Training and Career Development Officers/ Task groups

<u>**Training Officer**</u>, Annemarie Meijer, University Leiden, P2, will be in charge of:

- 1) Coordinating the Network Selection Committee (below)
- 2) Setting up PCDPs of ESRs and pressing them to maintain personal professional portfolios
- 3) Communicating and Overseeing implementation of all **network-wide training event**
- 4) Stimulating the ESRs to **optimally exploit the complementary** competences of the network
- 5) Reviewing the ESR performance and development to advise adjustments of the training
- 6) Keeping personal contact with all ESRs to oversee that the training meets their needs.
- Career Development Officer, Jozef Urbán, TatraMed Software s.r.o., P10 in charge of:
- 1) Advising on CV building importance and tailoring PCDPs to fit future career ambitions,
- 2) Stimulating good practice for researchers and employers in line with HRS4R;
- 3) Raising the profile of gender, faith, and cultural issues in relation to career requirements;
- 4) ESR personal mentoring to help make decisions on career choices.

In addition, three task groups of three SB members will be created at the beginning of the project: - Ethics and Gender task group, in charge of monitoring any risk of scientific misconduct and the effective implementation of the gender recommendations in the recruitment procedure and all along the project

- **Conflict Resolution task group** including the project manager. ESRs will have the possibility to refer to this group in case of conflict with one of their supervisors

- Industrial training task group composed of non-academic partners. Due to cultural differences between academic and private sector participants we consider that this task group is necessary for a special followup of the corresponding network-wide training events and secondments.



Risk management



- 1) Delay in recruitment
- 2) PhD recruitment at beneficiaries that do not deliver PhD degrees nor have their own PhD degree programme
- 3) More time needed to finish PhDs
- 4) Conflict between partners including on IPR.
- 5) Insufficient interactions between beneficiaries and WPs.
- 6) Risks at the level of the coordination of an 11-beneficiary structure
- 7) Scientific misconduct and ethical problems due to ESR implication in clinics
- 8) ESR leaves in the course of his/her doctorate
- 9) Supervisor leaves the network, mentoring or delays or experimental problems during PhD work
- 10) Problems or delays in executing a research WP
- 11) Conflict between ESR and supervisor
- 12) ESR becomes ill / pregnant

13) Using the zebrafish and different mammalian models could obliterate one of the aims i.e. tackle human development and diseases



Output indicators



Category	Indicator
Scientific Excellence	Total number of publications
	Publications in high-impact journals (IF≥5)
	ESR talks in international conferences
	ESR posters in international conferences
	PhD thesis completed
Synergy	Number of joint publications
	secondments out of the hosting country
Training	ECTS from the ImageInLife network-wide training
	Total Nb of secondments in other sector
Transferable skills	Hours of training in transferable skills
	Diversity of topics covered
ESR career	ESR with job contract at the end of the project
	ESR employed in a non-academic organisation
Dissemination	Publications in Open Access journals
Communication	Participation in public engagement activities
	Participation in network communication activities
Gender	Number of recruited women researchers