1. Actions

The Action Plan and HRS4R strategy must be published on an easily accessible location of the organisation's website.

Please provide the web link to the organization's Action Plan/HR Strategy dedicated webpage(s):
http://www.yoursite.com

Please fill in the list of all individual actions to be undertaken in your organisation's HRS4R to address the weaknesses or strengths identified in the Gap-Analysis. The listed actions should be concise, but detailed enough for the assessors to evaluate the level of ambition, engagement and the expected implementation process. The institution should strive to provide a detailed plan, not just an enumeration of actions.

Note: Choose one or more of the principles retrieved from the GAP Analysis.

Proposed ACTIONS

Principles:

() 1. Research freedom   () 2. Ethical principles   () 3. Professional responsibility   () 4. Professional attitude   () 5. Contractual and legal obligations

() 6. Accountability   () 7. Good practice in research   () 8. Dissemination, exploitation of results   () 9. Public engagement   () 10. Non discrimination

() 11. Evaluation/ appraisal systems   () 12. Recruitment   () 13. Recruitment (Code)   () 14. Selection (Code)   () 15. Transparency (Code)

() 16. Judging merit (Code)   () 17. Variations in the chronological order of CVs (Code)   () 18. Recognition of mobility experience (Code)

() 19. Recognition of qualifications (Code)   () 20. Seniority (Code)   () 21. Postdoctoral appointments (Code)   () 22. Recognition of the profession

() 23. Research environment   () 24. Working conditions   () 25. Stability and permanence of employment   () 26. Funding and salaries

() 27. Gender balance   () 28. Career development   () 29. Value of mobility   () 30. Access to career advice   () 31. Intellectual Property Rights

() 32. Co-authorship   () 33. Teaching   () 34. Complains/ appeals   () 35. Participation in decision-making bodies   () 36. Relation with supervisors

() 37. Supervision and managerial duties   () 38. Continuing Professional Development   () 39. Access to research training and continuous development

() 40. Supervision

	GAP Principle(s)	Timing (at least by year's quarter/semester)	Responsible Unit	Indicators/Target(s)
ACTION 1 – Create Ethics Code and Principles; **Objective** - Promotion of the commitment of the Institute to ethical principles	2. Ethical principles 3. Professional responsibility	4th Quarter 2022	Training Hub	**Implementation:** Publication on Institute's website of the iMM Code of Ethics; **Measured by:** Publication of Code of Ethics on the website
ACTION 2 – Onboarding Ethics Sessions; An Ethics Session will be included in the Onboarding session for newcomers; **Objective -** Provide training regarding iMM ethical principles and standards	1. Research freedom	4th Quarter 2022	Research Ethics Work Group	**Implementation:** the Research Ethics Work Group will create content to include in the Onboarding Ethics Session, based on the iMM Code of Ethics **Measured by:** Attendance list and session evaluation forms
ACTION 3 - Electronic lab books distribution; **Objective –** Improve the accessability to the professional as a tool but also also more easily checked by the group leader/tutor, allow the institution to support FAIR Principles (Findability, Accessibility, Interoperability, Reusability), while enabling oversight and sharing of data in a nonobtrusive way, increasing profissional responsibility and accountability, and reinforcing accountability	3. Professional responsibility	3rd Quarter 2023	Purchasing and Procurement	**Implementation:** The lab book are requested to the Purchasing and Procurement Department, who registers the request; **Measured by:** Number of electronic lab books requested vs number of researchers
ACTION 4 – Creation of Safety	6. Accountability	3rd Quarter 2022	Safety and	**Implementation:**

		(completed in July 2022 – Content available on iMM's intranet)	Compliance	Creation of OSH Management Manual, and SOP's that support the manual. Creation of the intranet website for Safety and Compliance, where the documents will be available. **Measured by:** We consider the goal to be complete, when the following documents are complete and available in the intranet:
Management system; Creation of OSH Management Manual, and SOP's that support the manual. Make this documents available in the intranet for the iMM community. **Objective -** Provide a method to manage Health and Safety at iMM, improving the way of evaluating the risks and preventing accidents/ professional diseases in the in the workplace. It allows to have a method to know what needs to be done, how to do it, who must do it, tracking progress towards the goals set.				- OSH Management Manual; - Control of Legal Requirements and Conformity Assessment - Nonconformities, preventive and/or corrective actions - Occupational Health
ACTION 5 – Environment Management system; Creation of Environment Management Manual, and SOP's that support the manual. Make this documents available in the intranet for the iMM community. **Objective -** Provide a method to manage Environment at iMM,	6. Accountability	End 2022	Safety and Compliance	**Implementation:** Creation of Environment Management Manual, and SOP's that support the manual. Creation of the intranet website for Safety and Compliance, where the documents

improving the way of evaluating the risks and preventing accidents in the in the workplace. It allows to have a method to know what needs to be done, how to do it, who must do it, tracking progress towards the goals set. Make the documents available in the intranet so the iMM community can be informed about it.				will be available. **Measured by:** The goal will to be complete, when the following documents are complete and available in the intranet: Environment Management Manual Fluorinated Gases Waste collection requirements
ACTION 6 – Create content on health, safety and environment; The content of the emails send to create awareness are going to be available in the intranet, in order to increase the ways for information to reach iMMers. **Objective -** The content of the emails send to create awareness are going to be available in the intranet, in order to increase the ways for information to reach iMMers.	6. Accountability	4th Quarter 2022	Safety and Compliance	**Implementation:** The content of the emails send to create awareness are going to be available in the intranet, in order to increase the ways for information to reach iMMers. **Measured by:** The goal will be complete when one content information is available in the intranet.
ACTION 7 – Create funding agencies project audit guidelines; IMM intranet is a vehicle of information to IMM community and we will use it to convey more details about donor's audit procedures. In this action we will systematize: - Why? - Why are audit important? How do they link with project implementation and principles of sound,	6. Accountability	End 2022	Project Management	**Implementation:** The information described above will be available in IMM intranet within Project Management section **Measured by:** Document shared and available on iMM's intranet

transparent and efficient financial management? - What? - What is an audit, its objective and consequences. What type of audits there are. - When? – When do audits happen? To which projects do they apply? - Who? - Who should accompany an audit? Who are the auditors? - How? - How is audit process? What information/documents/topics are covered? **Objective –** To make the audit process clear and straightforward to Researchers				
ACTION 8 – Creation of Occupational health awareness document; Creation of information in the intranet and initiatives related to Occupation Health. **Objective -** Creation of awareness regarding Occupational Health, through the creation of initiatives and information in the intranet.	7. Good practice in research	4th Quarter 2022 (completed in July 2022 – Content available on iMM's intranet)	Safety and Compliance	**Implementation:** Creation of information in the intranet and an initiative (occupational doctor interview). **Measured by:** The goal will be complete when there is a tab about Occupational Health in the intranet and at least one initiative to create awareness is completed.
ACTION 9 – Workshop attendance importance; Creation of awareness about the importance of initial Safety training (integrated in the Onboarding session).	7. Good practice in research	4th Quarter 2022	Safety and Compliance	**Implementation:** Send general emails to create awareness about the importance of initial Safety training.

Objective - Send general emails to create awareness about the importance of initial Safety training.				**Measured by:** The goal will be complete when at least one email is send about the importance of initial Safety training (integrated in the Onboarding session).
ACTION 10 – Accident awareness; Send awareness email to all iMMers after real accidents happen at iMM **Objective -** To create awareness and inform all the iMM community, in order to avoid similar accidents from happening.	7. Good practice in research	4th Quarter 2022	Safety and Compliance	**Implementation:** Send awareness email to all iMMers after real accidents happen at iMM. **Measured by:** We consider the goal to be complete if at least 10% of accidents are followed by an awareness email.
ACTION 11 - iMM Handbook of Scientific Data Management, Deposition and Curation; The "iMM Handbook of Scientific Data Management, Deposition and Curation" that will be created covers aspects such as: i) Importance of Open Science and guidelines on how to manage the scientific data according to FAIR principles; ii) procedures and rules governing the deposition of scientific data resulting from the research developed at iMM in international research data repositories; iii) general rules of tackling the key issues of data deposition and curation;	8. Dissemination, exploitation of results	3rd Quarter 2023	Open Science Working Group	**Implementation:** The "iMM Handbook of Scientific Data Management, Deposition and Curation" will be developed by the new Data Sciences and IT Unit at iMM in collaboration with the pre-existing Open Science working group at iMM (composed by researchers and research managers). The development of the handbook will have into account the nature of the scientific data

iv) procedures and flowcharts for data deposition and curation at iMM; v) examples of data management plans including the support from iMM's TTO for issues of ownership of scientific information and transfer of knowledge and results; vi) supporting documents and internal helpdesk contact. **Objective -** To create and disseminate iMM's internal guidelines for the implementation of Open Science Practices.				produced at iMM in order to be as adequate and tailored as possible to our researchers needs. Upon completion, this handbook will be massively disseminated internally (through our internal communication unit) and made available internally in the centralized research intelligence system and made public in iMM's website. **Measured by:** Existence of the Handbook, availability on the Institute's intranet and monitoring its access by iMM's community through the centralized research intelligence system.
ACTION 12 – Open Science Awareness sessions; Awareness sessions covering topics such as "Benefits from Open Science" and "Importance of making research data FAIRer" will be periodically held at iMM, with a special focus for the participation of young researchers, as well as specific training for researchers and lab managers on data protection licenses, available tools for scientific data deposition and curation, deposition and validation processes, and data management. Objective - To raise awareness about the importance and	8. Dissemination, exploitation of results	4th Quarter 2023	Open Science Working Group	**Implementation:** Periodic seminars/workshops held at iMM by invited experts on Open Science and Data Management as well as by the Head of the new iMM's Data Sciences and IT Unit . These seminars will be open to the whole iMM community (including researchers and science

benefits of Open Science practices on Research. To disseminate the iMM Open Science practices and facilitate the implementation of the procedures by the iMM community.				managers); **Measured by:** Number of sessions and Attendance list and session evaluation forms
ACTION 13 - Revision of internal and institutional communication; All documents and materials produced under the scope of internal (newsletters, emails, others) or institutional (website, institutional documents and reports, social media posts, or dissemination emails and materials, others) **Objective** - Have an inclusive form of communication, across the areas of internal and external communication of the institute.	9. Public engagement	End 2022	Communication Office	**Implementation:** Internal or Institutional communication will be analyzed and edited to adopt an inclusive language (gender neutral; bilingual communication) **Measured by:** Revised iMM website and media channels, number of emails with inclusive language
ACTION 14 – Resume in person activities (iMM Horizon and School visits); During 2022 and upon the COVID-19 pandemic resolution, we will resume our outreach in-person activities that include school visits to iMM and public events organized at iMM **Objective** - Bring citizens closer to the work developed at iMM, towards a knowledge-based society	9. Public engagement	End 2022	Communication Office	**Implementation:** Organization of public events, such as, the iMM Horizons, an activity dedicated to the general public that brings together a medical doctor, a scientist and a patient around one same question related to a disease; **Measured by:** Number of sessions and participants, number of school visits
ACTION 15 – Revise language according to Gender Equality Plan; Promotion of the use of gender-neutral and inclusive language in the institutional	9. Public engagement	1st Semester 2023	Gender Equality working Group; Human Resources	**Implementation:** Revision of the main HR forms to ensure that non-discriminatory

communication material **Objective -** Use at iMM of gender-inclusive language				language is used Creation of guidelines for gender inclusive language; **Measured by:** N. of HR forms revised Publication of
ACTION 16 – Include indication of international work environment and Gender sensitive in all calls; **Objective –** Inform all applicants of work environment at iMM	12. Recruitment	2nd Quarter 2022	Human Resources	**Implementation:** Include the indication of international work environment and Gender sensitive on all call notice, **Measured by:** All Calls posted include indication of international work environment and Gender sensitive
ACTION 17 – Create facility adequate to Breast-feeding; Provide a solution for iMMers that wish to breast-feed or harvest breast milk. **Objective -** Provide a solution for iMMers that wish to breast-feed or harvest breast milk.	24. Working conditions	End 2022 (completed in June – Facility is available for iMMers)	Safety and Compliance; Human Resources	**Implementation:** Since iMM does not have space, this goal will have to make partnerships with FMUL, HSM or UL, to give a room with the necessary conditions or a room that iMM can transform meet the conditions necessary. **Measured by:** The goal will be complete when a room with all the necessary conditions is available for iMMers.
ACTION 18 – Creation Gender Equality Plan; **Objective -** Promotion of the commitment of the Institute to equality, diversity and inclusion	27. Gender balance	2nd Quarter	Gender Equality working Group	**Implementation:** Publication on Institute's website of the iMM Gender Equality Plan; **Measured**

				by: Publication on the website
ACTION 19 – Create Alumni Webpage with info about all iMM Alumni (including photo, biosketch, testimonial), and where iMMers and iMM Alumni can interact and talk directly; **Objective** - Give visibility to the iMM Alumni members and use it as a career development tool for iMM researchers, where iMM researchers can learn from the more experienced former iMM researchers	28. Career development	2nd Quarter	Training Hub	**Implementation:** Creation of the webpage; **Measured by:** iMM Alumni webpage will be publicly available
ACTION 20 – Alumni initiatives (Alumni sessions, Annual Alumni meetings, Mentoring Program, Science careers sessions); Organization of initiatives joining iMM Alumni and iMM researchers; **Objective** - Promote the interaction between iMM Alumni and iMM researchers	28. Career development	End 2022	Training Hub	**Implementation:** Initiatives will be organized and widely disseminated among iMM researchers and Alumni; **Measured by:** Number of initiatives, number and feedback of participants
ACTION 21 – resume MyID Program session; **Objective –** Provide to iMM community with the Program sessions again	28. Career development 30. Access to career advice	2nd Semester 2023	Human Resources	**Implementation:** Promote and inform all community to enroll and promote the sessions schedule; **Measured by:** Number of sessions and participants
ACTION 22 – include clause in all calls stating that mobility is valued; **Objective –** Inform all applicants of selection criteria	29. Value of mobility	2nd Quarter 2022	Human Resources	**Implementation:** Include selection criteria information on all calls; **Measured by:** Calls posted include clause where mobility is valued
ACTION 23 – Include in the Ethical Code	32. Co-authorship	4th Quarter 2022	Training Hub	**Implementation:** the

and Principles; Institutional guidelines regarding co-authorship will be included in the iMM Code of Ethics; **Objective -** the institutional strategy, practices and procedures regarding co-authorship will be defined and available to the iMM community				Training Hub will provide content in this regard to be included in the iMM Code of Ethics; **Measured by:** Publication on Institute's website of the iMM Code of Ethics
ACTION 24 - Provide Leadership workshops for supervisors in order to give the necessary skills to personnel in leadership positions or roles; **Objective – ** Provide training in the necessary skill set for leadership positions or roles.	36. Relation with supervisors; 37. Supervision and managerial duties; 40. Supervision	2nd Semester 2023	Human Resources	**Implementation:** Identify positions and roles where leadership skills are required and schedule Leadership workshops; **Measured by:** Number of supervisors participating until all needs are met
ACTION 25 – Move backup system to Cloud; The backup and archives will be storage in AWS Cloud. The server will be in Frankfurt and the backup of this server will be in Paris.The backups are sent through Veeam backup and using a fiber channel used only for sending backups and receiving restores. The archive will be automatic following our guidelines. The archive can be, also, made manually. **Objective -** We want to secure our data, preventing the risks of data loss. Also, we will reduce IT waste because we wont buy any disks or tapes to save the backups. We will also reduce the energy consumption.	7. Good practice in research	End 2023	Information System Unit	**Implementation:** This project is already ongoing, on test mode. We are sending our critical backups to the cloud. Backups will be made daily, weekly, monthly and annually. **Measured by:** %of successful backups. Veeam has report tools and alerts. Everyday, we will check if the backup was made and sent successfully. A control of the success of the backup is taken daily. A backup is 100% successful if the backup is fully sent to AWS

ACTION 26 – Upgrade server infrastructure to hybrid; This project is parallel with the backup project. We want to have an hybrid infrastructure, that means we'll have virtual machines hosted in the AWS Cloud. We want to migrate the old infrastructure first. **Objective -** With this, we'll have access to our data even if we have problems in our data center. Also, with the migration of the old infra, we will reduce our energy consumption and waste by at least, 30%.	7. Good practice in research	End 2023	Information System Unit	**Implementation:** This project, also, is ongoing. Every connection to our data on AWS will be through the direct fiber we have for the backups (or maybe another fiber only for data transfer, less the backup) **Measured by:** % of storage and virtual machines offsite at least 50%
ACTION 27 – Install Azure Sentinel Anti-virus on Institute's computers; The Azure Sentinel is a cloud and AI based antivirus system. The system works like an traditional antivirus but have a lot of tools like warn us if some user is having an activity that's not normal for the user, like connecting to his computer from a new country. This project is not 100% sure that will be made because we have some meeting with all the UL to see if we'll have a centralized Antivirus System. **Objective -** Protect our data and users, as well as prevent ransomware and have preventing security instead of reactive security.	7. Good practice in research	End 2023	Information System Unit	**Implementation:** New software to be installed on all equipments. **Measured by:** 90% of equipments with Anti-Virus installed

Note: Add as many actions as needed.

The establishment of an Open Recruitment Policy is a key element in the HRS4R strategy. Please also indicate how your organisation will use the Open, Transparent and Merit-Based Recruitment Toolkit and how you intend to implement/are implementing the principles of Open, Transparent and Merit-Based Recruitment. Although there may be some overlap with a range of actions listed above, please provide a short commentary demonstrating this

implementation. If the case, please make the link between the OTM-R checklist and the overall action plan. (max. 1000 words) *

At iMM, all recruitment processes are transparent and are well defined.
All candidates are selected based on their merits and qualifications. All vacancies are published on several platforms (Euraxess, Linkedin, Netempregos) as well as on the iMM website. The website includes an online application form. There is a mandatory preliminary hearing period required by law on which complaints can be presented. This process can be initiated by email. All results are public and of public knowledge.

If your organisation already has a recruitment strategy which implements the principles of Open, Transparent and Merit-Based Recruitment, please provide the web link where this strategy can be found on your organisation's website:

URL: https://imm.medicina.ulisboa.pt/hrs4r-human-resources-strategy-for-researchers/

2. Implementation

General overview of the expected overall implementation process of the action plan: (max. 1000 words)

iMM is committed to implement and follow the Code of Conduct and the OTM-R Principles. This implementation process will require the participation of several departments, as it involves the revision/ implementation of important procedures, as well as the whole community.

The Training Hub for the creation of the Ethics Code and Principles and for the appointment of the Research Ethics Group. This Group will then deliver the Ethics sessions as part of the Onboarding process. The Training Hub is also responsible for all the Alumni initiatives (create an Alumni webpage, Annual meetings and Mentoring Program) and for the Science careers sessions.

The Purchasing and Procurement is responsible for the acceptance of the Electronic Lab books and for its distribution.

The Safety and Compliance is responsible for implementing the Safety Management and Environment Management systems. This department is also in charge of making the contents on Health and safety and on occupational health to be available on the Institute's intranet, as well as for the institutional communication on accident prevention and awareness and workshop attendance.

The Pre-Award department created the Open Science working Group to be responsible for Open Science matters to be compiled in the Handbook of Scientific Data Management, Deposition and Curation and for delivering the Open Science awareness sessions.

The recently created Gender Equality working Group will carry out the actions defined in the Gender Equality plan to promote equal participation of women, men, transgender and non-binary employees, identifying and eliminating any stereotype or barrier that impedes anyone from developing their best selves in the professional life at the iMM. This plan is structured in thematic areas: 1. gender equality in recruitment and career progression; 2. gender balance in leadership and decision-making; 3. prevention of gender-based and sexual harassment; 4. integration of the gender dimension into research content;5. work-life balance; 6. organisational communication and culture.

The Communication Office is responsible for the revision of the internal and institutional communication in all its channels (website, social media and others) with the objective of making it more inclusive and gender neutral as proposed on the Gender Equality Plan. This department is also responsible for resuming the in person activities (iMM Horizon and school visits).

The Human Resources department is responsible for revising the call notices to include the indication of international work environment and gender sensitive and the valorization of mobility. On the development aspect, the HR department is responsible for the MyID Program sessions.

Make sure you also cover all the aspects highlighted in the checklist below, which you will need to describe in detail:

How will the implementation committee and/or steering group regularly oversee progress?*

The working group managers meet every 3 months in order to oversee the action execution and timeline completion. In these meetings, objectives may be redefined and needed resources may be adjusted accordingly to the action in question.
When actions are fulfilled a report is sent to the Steering Committee with that information.

How do you intend to involve the research community, your main stakeholders, in the implementation process?*

The research community involvement began with the application of a survey on the 40 Principles of the Charter and Code in order to conduct a more accurate GAP analysis. On this survey proposed suggestions of measures to be implemented were asked.
All the working Groups created (Diversity and Inclusion, Open Science, Research Ethics) are composed with members of our research community with various degrees of seniority.
This survey is to be repeated regularly (annually) to assess the effects of the proposed measures and to identify improvement opportunities.

How do you proceed with the alignment of organisational policies with the HRS4R? Make sure the HRS4R is recognized in the organisation's research strategy, as the overarching HR policy.

All measures and changes proposed by any of the working groups or departments are checked for conformity with the HRS4R policies by the Steering Committee and Human Resources and afterward approved by the Board of Directors before being put in place.

How will you ensure that the proposed actions are implemented?*

The implementation is going to be ensured by frequent monitoring and with the use of the timeline proposed in the action plan.

How will you monitor progress (timeline)?*

Progression meetings will be scheduled with every working Group involved to ensure completion within the timeline or to adjust the timeline.

How will you measure progress (indicators) in view of the next assessment?*

Progress will be measured with completion rates for each of the proposed actions.
The survey will be applied again to all the community and statistical data compared to identify areas to address.

Additional remarks/comments about the proposed implementation process: (max. 1000 words)