## Gender Equality Plan Survey

Dear Colleagues - in 2022 a specially constituted group in INAF (Directorial Determination of 10/02/2022 no. 12) prepared a Gender Equality Plan (GEP) that INAF adopted in compliance with the Horizon Europe guidelines.

At the end of October 2023 INAF set up a a Working Group on the Gender Equality Plan to support INAF management in the 'Planning and implementation of the initiatives envisaged by the Gender Equality Plan', to which a budget of 500K Euros has been allocated (see Resolution no. 107/2022 of November 2022), renewed at the end of 2023.

Our first action was to contact you (November 2023) with a simple questionnaire to obtain an overview of the care responsibilities (e.g. children, disabled, elderly) of those working in INAF and to help us prioritize the use of funds and the implementation of the services outlined in the GEP.

This short document is a summary of what we learned from your answers to the questionnaire. 840 colleagues answered the questionnaire, we thank them all!

This report is divided into four sections.
The first section (Highlights from the questionnaire responses) briefly illustrates the most relevant results that we think emerged from your answers.
The second section (Statistics of responses received) shows the numerical results for each of the questions in the questionnaire.
The third section (Statistics by gender of responses received) shows the same graphs as the second section, but divided by gender of the respondents.
The fourth and last section (SOM analysis of results) explores the results of the questionnaire with a so-called unsupervised analysis - using the neural network method. With this method, we identify the most represented homogeneous macro-categories emerging from the different responses to the questionnaire.

Finally, we thank those of you who provided us with suggestions - we will take them into account.

Enjoy reading!
Il Gruppo di Lavoro GEP
9 ${ }^{\text {th }}$ February 2024

## FIRST SECTION

## Highlights from the questionnaire responses

The questionnaire was administered to the e-mail lists of employees, associates, and contractors in INAF. We received 840 responses, 30 in English and 810 in Italian.

The majority of respondents (789 out of 840, ~94\%) are INAF staff, both fixed-term and permanent.
They are $\sim 60 \%$ of the total staff in INAF with fixed-term or permanent contracts, which are ~1400 people according to the December 2023 INAF Registry.

On the other hand, the participation of PostDocs and PhD students was minimal compared to the total number PostDocs and PhDs in INAF: just over 10\% (we received only 30 responses out of 264 PostDocs and PhDs - again according to INAF Anagrafica).

Also the participation of the so-called Associate Personnel was very low, as we received only 7 answers out of a total of about 1000 people with this role. It is worth noting that these are mostly retired staff or staff living abroad, presumably with less interest in answering a questionnaire such as the one administered.
In addition, for unforeseen technical reasons beyond our control, some of our colleagues in this associate category were unable to access the questionnaire. We apologize for this.

The vast majority of the answers to the questionnaire therefore came from both fixed-term or permanent INAF staff, and we can consider the results of the questionnaire as representative of INAF personnel.

Most of respondents (821 out of 840) identified themselves as either male (377 respondents, $46 \%$ of the participants) or female ( 444 respondents, $54 \%$ of the participants) - only $2 \%$ of respondents answered 'other' or 'non-binary'.
Among the INAF staff (permanent and non permanent), the percentage of female and male gender is $37 \%$ and $63 \%$ respectively - INAF Anagrafica only provides these two genders). Thus, $50 \%$ of INAF male staff and $73 \%$ of female staff answered the questionnaire. This is a significant difference, suggesting a greater interest in the issues addressed by female colleagues than by male colleagues.

The main points emerging from the responses that we received are the following:

1 - less than $10 \%$ of the respondents have significant problems with disabilities of their own, and most require less than 5 h per week to follow up issues related to such disabilities. It should be noted that most of those who stated that they have problems with their own disability are female ( 35 female, 31 male, 2 non-binary, 68 in total).
$2-30 \%$ of the respondents live with minors (age $\leq 14$ years).

Among them there is a slight under-representation of the female gender.
In fact, while $46 \%$ of the respondents were female and $54 \%$ male, only $42 \%$ female participants declared that they live with minors, against the $58 \%$ of male. These numbers, albeit tentatively, could indicate that the female population presumably has more difficulty in combining the management of minors and therefore the choice of motherhood with the career path in our organization.

3 - The percentage of those who take care of third parties - be they minors, the elderly or those living with disabilities - rises to $42 \%$ of those who replied to the questionnaire, a significant number within INAF.
This suggests the presence of a large proportion of INAF staff caring for parents and/or cohabitants with disabilities.
It should be noted that as many as $40 \%$ of this already conspicuous number of staff members who claim to have caring responsibilities towards third parties also claims to devote more than 25 hours of their time per week to this caring task, decidedly significant numbers.

4 - Among the persons who declared to have caring responsibilities towards third parties, the gender division sees a significant over-representation of the female gender. In fact, out of a total of 351 people who declare having caring responsibilities towards third parties, 189 are female, 157 are male, and 5 are non-binary or prefer not to answer. Thus $53 \%$ of those with care responsibilities towards third parties are female, to be compared with $46 \%$ of the total respondents. The comparison with what was seen in point 3 about the gender composition of those who live with minors, seems to suggest that the task of caring for the elderly (presumably parents or close relatives) largely concerns the female component of the organization.

5 - It is also interesting to observe that the female component is the one that declares to have the heaviest burden of the caring task: it is the majority of those who declare to spend more than 25 hours a week of their time on caring tasks towards third parties, see the graph of the answers to question 9 divided by gender. Also the female component declares that it has the highest percentage of the responsibilities related to family care, and in this case the graphs divided by gender of the answer to question 10 show an extremely marked difference.

6 - Finally, the answers to the final questions about which GEP actions are considered of primary importance show a marked preference for the importance of three actions in this order:

- a - Establishment of centralized INAF funds dedicated to finance the allocation of maternity allowance (mandatory) both to colleagues with TD contracts, when burdened by external funding source, and to colleagues holding AdR (GEP action AT1-4).
- b - Agreements in all INAF offices with nursery schools, kindergartens, summer schools and any other institution that meets the care needs of children and/or persons with disabilities (action AT1-6 of the GEP).
- c - Setting up a Counselling Point in INAF, which staff can refer to for support in situations of discomfort and discrimination in the workplace (action AT5-2 of the GEP).

The perception of the importance of these three actions proposed by the GEP is shared by all INAF personnel - the graphs showing the distribution of scores by gender for these three actions are indistinguishable.

It may be interesting to note that while female participants also give a relatively high score to training and long-term actions, the relative score expressed by male colleagues is considerably lower for such actions.

## SECOND SECTION

## Statistics of Responses Received

Number of colleagues who responded to the questionnaire: $\mathbf{8 4 0}$ in total. Most of the responses (more than $90 \%$ see what is shown on page 5) are from permanent/not permanent INAF staff.

Question 1 - How old are you?
Età dei partecipanti


Età dei partecipanti


| How old are you? | $<25$ | $25-35$ | $36-45$ | $46-55$ | $56-65$ | $>65$ | No answer |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total number of <br> answers | 3 | 148 | 225 | 255 | 183 | 16 | 10 |
| Percentage | 0.004 | 0.176 | 0.268 | 0.304 | 0.218 | 0.019 | 0.012 |

Question 2 - What genre do you identify with?


| What genre do you identify with? | Female | Male | Non-binary | No answer |
| :---: | :---: | :---: | :---: | :---: |
| Total number of answers | 377 | 444 | 9 | 10 |
| Percentage | 0.45 | 0.53 | 0.01 | 0.01 |

Tipo di contratto


Tipo di contratto


| What contract do you <br> have? | Permanent | Non- <br> permanent | PostDoc | PhD | Associate | No answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total number of answers | 617 | 172 | 18 | 12 | 7 | 14 |
| Percentage | 0.735 | 0.205 | 0.021 | 0.014 | 0.008 | 0.017 |

Question 4 - What kind of working hours do you adopt?


Orario Lavorativo


| What kind of working hours do you <br> adopt? | Part-time | Full time | Other | No answer |
| :---: | :---: | :---: | :---: | :---: |
| Total number of answers | 28 | 785 | 12 | 15 |
| Percentage | 0.033 | 0.935 | 0.014 | 0.018 |

Question 5 - Do you live with kids aged less than 14 ?


Presenza di minori ( $\leq 14$ anni)


| Do you live with kids (age $\leq 14)$ | No | Yes | No answer |
| :---: | :---: | :---: | :---: |
| Total number of answers | 562 | 265 | 13 |
| Percentage | 0.670 | 0.315 | 0.015 |

Question 6 - Do you have disabilities or chronic illnesses that require ongoing care?


Disabilità/Malattie croniche proprie


No

| Presence of disabilities/chronic illnesses | No | Yes | No answer |
| :---: | :---: | :---: | :---: |
| Total number of answers | 743 | 68 | 29 |
| Percentage | 0.884 | 0.081 | 0.035 |

Question 7 - Average times needed per week for such therapies or treatments?


Tempo necessario cura disabilità proprie


| Time for terapies | $>25 \mathrm{~h}$ | $16-25 \mathrm{~h}$ | $5-15 \mathrm{~h}$ | $<5 \mathrm{~h}$ | No answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total number of answers | 4 | 3 | 3 | 43 | 15 |
| Percentage | 0.06 | 0.04 | 0.04 | 0.63 | 0.22 |

Question 8 - Do you have care or caring responsibilities to third parties (e.g., minors, disabled, elderly, ...)?


Accudimento verso terzi (minori, anziani, disabili, ...)


| Caring responsabilities (minors, disabled, elderly) | No | Yes | No answer |
| :---: | :---: | :---: | :---: |
| Total number of answers | 462 | 351 | 27 |
| Percentage | 0.55 | 0.42 | 0.03 |

Question 9 - On average, how many hours per week do you devote to such caring responsibilities toward third parties (children, the elderly, the disabled, ...) ?


Tempo speso per cura minori, anziani, disabili, ...


| Needed time caring third parties | $>25 \mathrm{~h}$ | $16-25 \mathrm{~h}$ | $5-15 \mathrm{~h}$ | $<5 \mathrm{~h}$ | No answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total number of answers | 143 | 56 | 83 | 46 | 23 |
| Percentage | 0.407 | 0.160 | 0.236 | 0.131 | 0.066 |

Question 10 - What percentage of the responsibilities related to family care (children, elderly, disabled ... ) falls on you?

Percentuale responsabilità cura minori, anziani, disabili, .


Percentuale responsabilità cura minori, anziani, disabili, ...


| Percentage of time to care for third <br> parties | $>90 \%$ | $61-90 \%$ | $31-60 \%$ | $<30 \%$ | No answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total number of answers | 32 | 84 | 156 | 57 | 22 |
| Percentage | 0.091 | 0.239 | 0.444 | 0.162 | 0.063 |

Question 11 - What is the employment status of the person with whom you share family care responsibilities?


Stato lavorativo partner che condivide cura terzi


| Partner employment <br> status | Full time | Part time | Retired | Unemployed | Other | No answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total number of answers | 199 | 28 | 27 | 21 | 12 | 64 |
| Percentage | 0.567 | 0.080 | 0.077 | 0.060 | 0.034 | 0.182 |

Question 12 - How important are the following actions to you - from 0 (not at all important) to 5 (extremely important):
-1 - Include the Gender variable in all its facets in the parameters used for all evaluations of various types in INAF (Team composition, allocation of assignments, attention to specific issues).

- 2 - Promotion of gender balance in evaluation committees (members and chairpersons) for the recruitment of researchers, teaching and technical-administrative staff and in selection committees for doctoral courses and research grants.
- 3 - Preparation of a training module on gender balance mandatory for directors of headquarters, Commissions and Working Groups of the Institution.
- 4 - Centralized INAF funds to finance AdR and TD maternity allowance and for AdR contract extension in case of maternity leave.
- 5 - Stable presence of a Listening Desk in INAF, which staff can refer to for support in situations of discomfort and discrimination in the work environment.
- 6 - Dedicated funds for child care measures for INAF conference participants.
- 7 - Establishing agreements with kindergartens, nursery schools, summer courses.
- 8 - Activation of dedicated spaces for children and parents at all INAF venues.

Results table - in progressively darker red the actions that received the highest marks.

| $\#$ | Action | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | No <br> answer | Mean <br> mark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Include the gender variable in INAF <br> evaluations | 185 | 83 | 91 | 142 | 131 | 149 | 59 | $\mathbf{2 . 3 3}$ |
| $\mathbf{2}$ | Gender balance in evaluation <br> committees | 97 | 54 | 95 | 114 | 199 | 249 | 32 | $\mathbf{3 . 1 3}$ |
| $\mathbf{3}$ | Training module on gender balance for <br> directors | 129 | 67 | 119 | 115 | 147 | 218 | 45 | $\mathbf{2 . 7 7}$ |
| $\mathbf{4}$ | Centralized INAF funds to finance AdR <br> and TD maternity allowance | 16 | 17 | 28 | 51 | 142 | 549 | 37 | $\mathbf{4 . 2 1}$ |
| $\mathbf{5}$ | Stable presence of a Listening Desk in <br> INAF | 29 | 45 | 61 | 127 | 186 | 375 | 17 | $\mathbf{3 . 7 7}$ |
| $\mathbf{6}$ | Dedicated funds for child care during <br> INAF conferences | 60 | 53 | 80 | 107 | 182 | 324 | 34 | $\mathbf{3 . 4 3}$ |
| $\mathbf{7}$ | 28 | 53 | 91 | 161 | 462 | 24 | $\mathbf{3 . 9 9}$ |  |  |
| $\mathbf{8}$ | Establishing agreements with <br> kindergartens, summer courses | 28 | Activation of dedicated spaces for <br> children and parents at all INAF venues | 50 | 39 | 77 | 120 | 170 | 349 |

Graphs of the votes received by each proposed action.


Azione 3


Azione 5


Azione 7


Azione 2



Azione 6


Azione 8


## THIRD SECTION

## Statistics by gender of responses received

For this analysis we used only the responses of those who identified their gender as either male or female - that is, 821 of the 840 participants, about $98 \%$.

The remaining $2 \%$ of participants answered "other" (non-binary gender or prefer not to answer, see page 4).

This sample is divided into 377 respondents who answered Female and 444 respondents who answered Male to the question "With what gender do you identify yourself" corresponding to $46 \%$ and $54 \%$ of the subsample defined above.

Among the INAF staff (permanent/non permanent), the percentage of female and male gender as indicated by the registry (December 2023) is $37 \%$ and $63 \%$ respectively.

Question 1 - How old are you?

Età dei partecipanti - per Genere


Question 3 - What kind of contract do you have?

Tipo di contratto - per Genere


Question 4 - What kind of working hours do you adopt?


Question 5 - Do you live with children aged less than14?


Question 6 - Do you have disabilities or chronic illnesses that require ongoing care?


Question 7 - What is the average time needed per week for such therapies or treatments?


Question 8 - Do you have care or caring responsibilities to third parties (e.g., minors, disabled, elderly, ...)?


Question 9 - On average, how many hours per week do you devote to such caring responsibilities toward third parties (children, the elderly, the disabled, ...) ?


Question 10 - What percentage of the responsibilities related to family care (children, elderly, disabled ... ) falls on you?


Question 11 - What is the employment status of the person with whom you share family care responsibilities?


Question 12 - Importance of enumerated actions - from 0 (not at all important) to 5 (extremely important). The last column gives the average rating given.

| $\#$ | Action <br> Male gender answers | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | No <br> answer | Average <br> mark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Include the gender variable in INAF <br> evaluations | 134 | 53 | 51 | 74 | 51 | 43 | 38 | $\mathbf{1 . 7 9}$ |
| $\mathbf{2}$ | Gender balance in evaluation <br> committees | 68 | 31 | 60 | 70 | 101 | 91 | 23 | $\mathbf{2 . 7 4}$ |
| $\mathbf{3}$ | Training module on gender balance for <br> directors | 89 | 49 | 69 | 57 | 73 | 80 | 27 | $\mathbf{2 . 3 6}$ |
| $\mathbf{4}$ | Centralized INAF funds to finance AdR <br> and TD maternity allowance | 8 | 9 | 14 | 29 | 81 | 289 | 14 | $\mathbf{4 . 2 6}$ |
| $\mathbf{5}$ | Stable presence of a Listening Desk in <br> INAF | 13 | 27 | 35 | 76 | 102 | 185 | 6 | $\mathbf{3 . 7 3}$ |
| $\mathbf{6}$ | Dedicated funds for child care during <br> INAF conferences | 35 | 35 | 44 | 68 | 100 | 146 | 16 | $\mathbf{3 . 2 8}$ |
| $\mathbf{7}$ | Establishing agreements with <br> kindergartens, summer courses | 16 | 11 | 29 | 57 | 102 | 219 | 10 | $\mathbf{3 . 9 3}$ |
| $\mathbf{8}$ | Activation of dedicated spaces for <br> children and parents at all INAF venues | 26 | 22 | 43 | 74 | 99 | 163 | 17 | $\mathbf{3 . 4 7}$ |


| \# | Action <br> Female gender answers | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | No <br> answer | Average <br> mark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Include the gender variable in INAF <br> evaluations | 44 | 29 | 39 | 66 | 77 | 103 | 19 | $\mathbf{2 . 9 9}$ |
| $\mathbf{2}$ | Gender balance in evaluation <br> committees | 24 | 12 | 32 | 43 | 95 | 154 | 7 | $\mathbf{3 . 6 2}$ |
| $\mathbf{3}$ | Training module on gender balance for <br> directors | 35 | 18 | 47 | 57 | 72 | 132 | 16 | $\mathbf{3 . 2 7}$ |
| $\mathbf{4}$ | Centralized INAF funds to finance AdR <br> and TD maternity allowance | 6 | 8 | 13 | 21 | 60 | 249 | 20 | $\mathbf{4 . 2 0}$ |
| $\mathbf{5}$ | Stable presence of a Listening Desk in <br> INAF | 14 | 17 | 24 | 49 | 82 | 182 | 9 | $\mathbf{3 . 8 5}$ |
| $\mathbf{6}$ | Dedicated funds for child care during <br> INAF conferences | 22 | 16 | 33 | 39 | 79 | 172 | 16 | $\mathbf{3 . 6 5}$ |
| $\mathbf{7}$ | Establishing agreements with <br> kindergartens, summer courses | 9 | 10 | 21 | 32 | 59 | 234 | 12 | $\mathbf{4 . 1 2}$ |
| $\mathbf{8}$ | Activation of dedicated spaces for <br> children and parents at all INAF venues | 20 | 15 | 33 | 46 | 69 | 178 | 16 | $\mathbf{3 . 6 7}$ |

Graphs of votes received by each proposed action - divided by gender

Azione 1


Azione 3


Azione 5


Azione 7


Azione 2


Azione 4


Azione 6


Azione 8


## FOURTH SECTION

## SOM analysis of the results

In this section we briefly present the results of an unsupervised analysis of questionnaire results, obtained by the self-organization of a SOM neural network.
This type of analysis groups the most similar questionnaire results together, displaying them in a two-dimensional map. This subdivision is done without any intervention by those who will interpret the results.
The parameters that were taken into account are the answers to the questions in the first part of the questionnaire (questions $1,2,3 \ldots 11$ ). It was then sought to find out whether preferences for actions to be pursued preferentially for GEP (question 12, Actions 1-8) differed among the groups.

The total map resulting from the analysis is a square of $75 x 75$ neurons into which the 840 questionnaires received fall.


Note the distribution into distinct regions, as indicated by the red circles.
The regions containing the largest number of responses are marked by the four letters $\mathrm{A}, \mathrm{B}$, C and D, which are $91 \%$ of the respondents.

The region identified by the letter A contains $34 \%$ of the respondents and contains people of both genders（with slight overrepresentation of the female gender），somewhat older than average，with more TI than TD contracts and working full－time，with more caring responsibilities for children or third parties．Interest in actions to support parenting issues， with funds to attend symposiums or setting up agreements with daycare centers is higher than average．

The graphs we show on this page highlight these points：they show with the thick black line the histograms of the answers received from people in region A ，and in colour the ditributions（normalised to the same total number）of the answers received，for each question asked，from the entire population of the 840 questionnaires received．


Another $34 \%$ of respondents are contained in the region（75．15），the one identified by the letter $B$ ．These respondents are predominantly male and without major responsibilities to third parties or children．This group of people shows a marked interest in the action related to the opening of the counselling desk．

The $17 \%$ contained in region C－around（75．30）－is clearly made up of people who identify as female，more TD than the population average，without major care responsibilities．There
is a greater interest in the actions we have defined as more long-term and less immediately tangible.

Finally, the same interest in longer-term actions is shared by the persons in the region (0.75) identified by the letter D , also female-dominated and older than average and containing $6 \%$ of respondents. This group reports care needs for self and others.

