

# 1° Training Plan for Researchers

University of Insubria a.y. 2020/2021

Survey analysis and Research and Innovation Office proposals

5 May 2020



HR EXCELLENCE IN RESEARCH



## Background analysis and proposed improvement action – February 2019 / January 2021



In the framework of Training Plan for Researchers (foreseen in Action Plan), a specific chapter on “**teaching**” is expected and it could include regular edition of courses on specific learning disorders (after the positive experience of a una tantum workshop held in 2018), teaching and research integrity courses, teaching methodologies and lecturing techniques; peer-to-peer guidelines written by senior researchers expert in teaching and mentoring. Some ongoing initiatives related to professional development of teaching skills are offered:

- Recently run, a training course focused on teaching to- and verification of learning of students with specific learning disorders;
- Internal guidelines for the editing of a “syllabus” on teaching aims and methodologies of each course;
- partnership with European Network for Academic Integrity ENAI Academic integrity with regard to both teaching and research

(...) workshops <https://www.uninsubria.it/la-ricerca/supportoai-ricercatori> (in Italian, to be translated in English as result of Action Plan) Workshops addressed to FSRs promoted by Departments or, if cross-sector skills, by Doctoral School; - course on “Animal welfare and protection in research activities and laboratories” available also in streaming; - highly specialized international courses called “Summer and Winter Schools”; - Career Service offers a series of placement opportunities for PhD candidates and active liaison with companies is promoted; - Uninsubria’s association with APRE, NETVAL and ENAI ensures each year training courses open to researchers and administrative staff involved in research projects

- ▶ Action 14 from **Action Plan**: Definition of a TRAINING PLAN FOR RESEARCHERS and feasibility study on appropriate methodology (on line, webinar, labs, workshops, courses); it will include the following topics (and others will be identified after an online survey directed to all researchers):
  - \*English course to promote international collaboration;
  - \*tutorial on supervision, teaching and dissemination designed by senior supervisors to ensure clear and transparent supervision arrangements for doctoral students;
  - \*teaching skills: public speaking, specific learning disorders etc.;
  - \*workshops on Integrity/Ethics for researchers (general topic as plagiarism and specific ones as biobanks);
  - \*new editions of training courses already implemented

<https://www.uninsubria.eu/research/hr-excellence-research-uninsubria>

# HRS4R survey: Exploring Researchers' Training Needs

- ▶ Reporting period: 18 January / 1 April 2020
- ▶ No. emails sent: 683 of which:
  - R1: 240 PhD students
  - R2: 60 research fellows
  - R3+R4: 383 researchers, associate and full professors

**Total response rate: 26,35%**



Satisfactory response rate, considering that the Covid19 emergency has limited all direct dissemination and promotion activities



## 1. Your researcher's profile according to the European Framework

● R1 First Stage Researcher, up t...	61
● R2 Recognised Researcher, Ph...	24
● R3 Established Researcher, res...	18
● R4 Leading Researcher, resear...	77

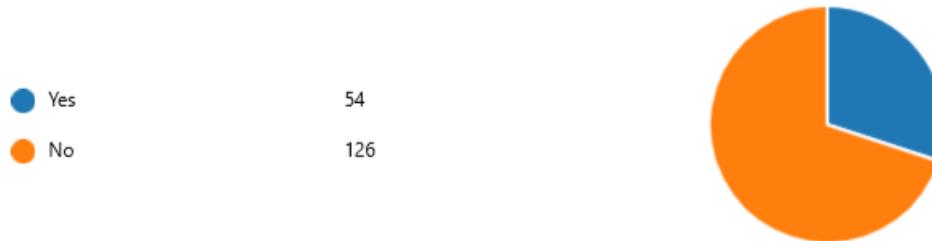


## 2. Your ERC Sector

● Life Sciences (LS)	80
● Physical Sciences and Enginee...	53
● Social Sciences and Humanitie...	47



3. Have you ever attended one of the courses offered by the Uninsubria (i.e. APRE on H2020) ?



1/4/2020

Microsoft Forms

4. The course/s I attended was/were interesting and useful

53  
Risposte

★★★★☆  
Valutazione media 3.15

Feedback on  
the training  
courses  
already  
offered by  
Uninsubria



## Strengths

► Answers to question no. 5:  
(blank answers omitted)

“What did you like or dislike  
of each attended course/s?  
Please, specify the course/s  
title”

I like the fact that new methodologies and deeper scientific knowledges are proposed in our seminars.

Project writing. Very well organized. The lecturer was clear and prepared.

APRE on H2020 Project writing course. I really liked the workshop that followed, because it gave me interesting ideas about how to write a project.

HORIZON 2020 Opportunità per il tema Health: preparare una proposta di successo 20180124 - course contents were useful

Title: Le Marie Sklodowska Curie Actions I like the overview of all available programs.

It was about important subjects linked to my everyday job

It was very general and did not give concrete suggestions for Humanities research

Possibly good for early stage researchers

I went to an APRE event about the details of applying for funding, for example from the Horizon 2020 programme. I felt that the vast majority of the content was unlikely to ever be relevant to me personally.

Il corso è stato un po' superficiale

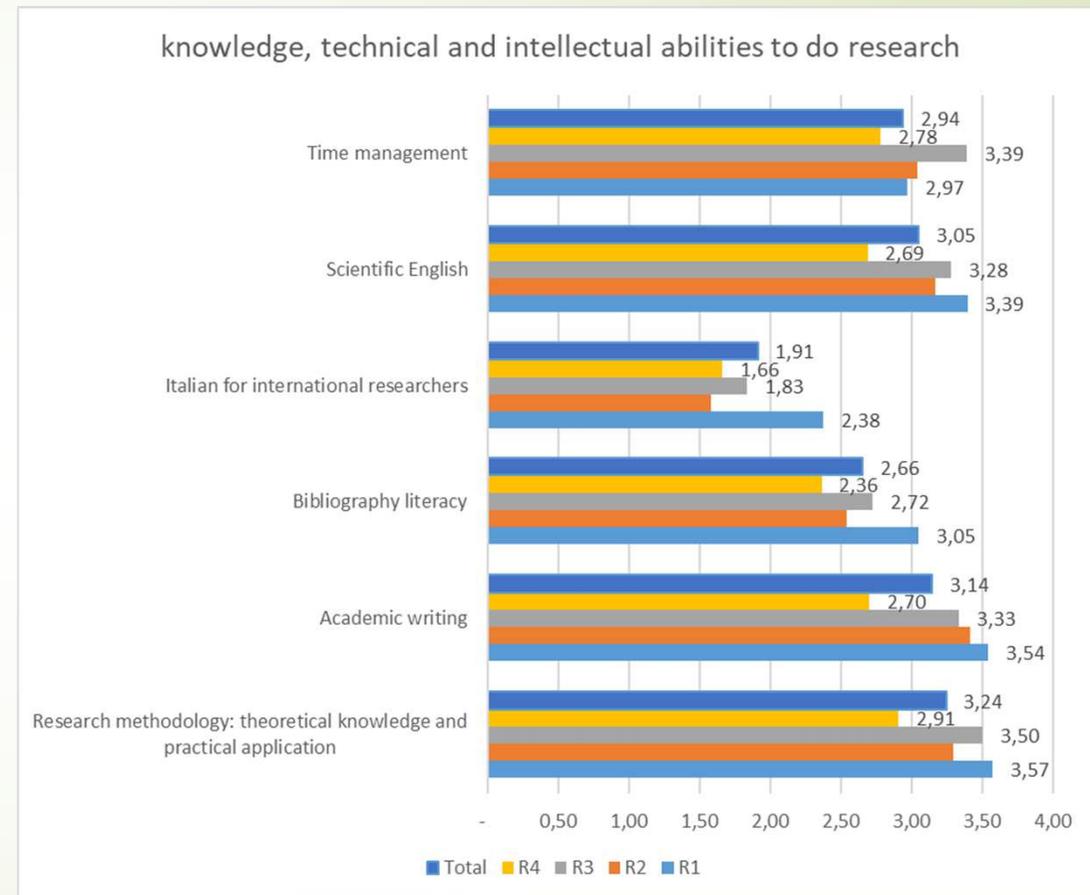
I think that this course it was not so useful because the H2020 is a project that has finished its life. In that course the instructor was not able to inform us about the future of these kind of funding programs.

It was about important subjects linked to my everyday job

## Problems

# Knowledge, technical and intellectual abilities to do research

Researcher's profile	Research methodology: theoretical knowledge and practical application	Academic writing	Bibliography literacy	Italian for international researchers	Scientific English	Time management
R1	3,57	3,54	3,05	2,38	3,39	2,97
R2	3,29	3,42	2,54	1,58	3,17	3,04
R3	3,50	3,33	2,72	1,83	3,28	3,39
R4	2,91	2,70	2,36	1,66	2,69	2,78
<b>Total</b>	<b>3,24</b>	<b>3,14</b>	<b>2,66</b>	<b>1,91</b>	<b>3,05</b>	<b>2,94</b>



7

Answers to question no. 7 (blank answers omitted)

Please, specify any other interest related to training on "knowledge, technical and intellectual abilities to do research"

New methodologies to manage better my experiments. Moreover, comparisons with other researchers is well known important aspect in training on knowledge, technical and intellectual abilities.

Specific courses on statistical softwares, e.g., Stata or R.

strategy for updating

Biostatistics and bioinformatics

Being tutored more specifically

how to find funding for reserch

Data management and Applied statistics

how to manage with the interactions between different disciplines

Grant and proposal writing

Teaching training

Research methodologies

Budget and economic evaluation of research project

Methodology related to funding applications

Statistical techniques; software used for research in social sciences (SPSS, ATLAS.TI, ecc.).

computer skills

Techniques for technology transfer in companies. Marketing: Promotion of services that implement scientific results.

How academia works, how to apply for positions, salaries, contracts etc...

group management grant writing paper reviewing

Capacità di creare network

How to get MONEY.

animal care and application

I indicated I'd be interested in research methodology, clearly only with regards to my specific field of research and methods.

I think it could be useful to organise courses for Phd students concerning Academic writing Bibliography literacy and Scientific English

Statistics applied to environmental engineering

To write a project proposal

Data collection and analysis

Statistics and Analysis of Scientific Data

Nothing more

experiment design, data analysis techniques, access to databases

Internationalization of research - synergy and collaboration with foreign research institutions.

# Standards, requirements and professionalism to do research

Researcher's profile	Integrity in research, plagiarism and copyright	IPR and patents	Clinical Ethics and biobanks	Writing research project proposals	Managing research grants	Animal welfare and protection in research activities and laboratories	Technological Transfer: entrepreneurship and spin-off	Income and funding generation	Data management in Research
R1	2,95	2,66	2,33	3,48	3,30	2,25	3,16	2,67	3,28
R2	2,79	2,33	1,88	3,83	3,63	2,13	3,25	2,50	3,08
R3	2,78	2,22	2,17	3,83	3,83	1,89	3,44	2,67	3,39
R4	2,71	2,43	1,90	3,29	3,10	1,56	2,97	2,64	2,92
<b>Total</b>	<b>2,81</b>	<b>2,47</b>	<b>2,07</b>	<b>3,48</b>	<b>3,31</b>	<b>1,90</b>	<b>3,12</b>	<b>2,63</b>	<b>3,11</b>

HRS4R: Training Plan for Researchers @ Uninsubria



### Answers to question no. 9 (blank answers omitted)

Please, specify any other interest related to training on "standards, requirements and professionalism to do research"

How to win a PRIN!

Bureaucratic aspects of research is not well known in young scientists and a smattering of these points could be a good way to complete the management of laboratories and grants themselves.

Applications

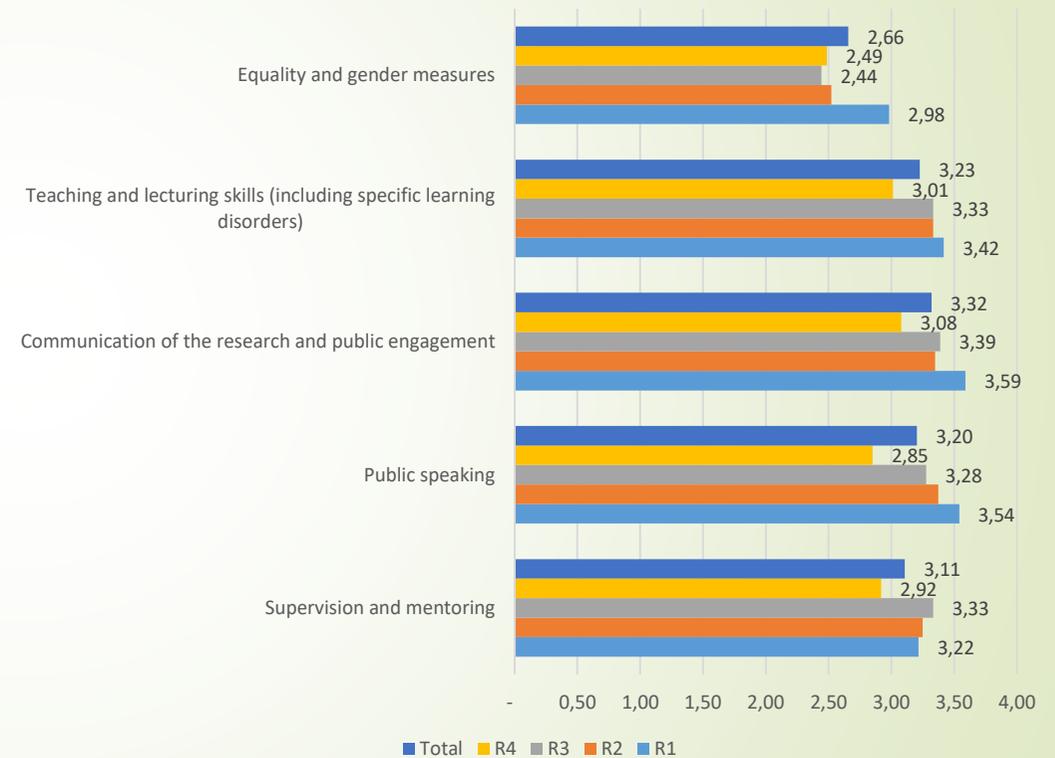
Meritocracy and evaluation within academic field

Statistical data analysis

privacy in data collection (es. via experiments)

# Knowledge, and skills to work with others and ensure the wider impact of research

Researcher's profile	Supervision and mentoring	Public speaking	Communication of the research and public engagement	Teaching and lecturing skills (including specific learning disorders)	Equality and gender measures
R1	3,22	3,54	3,59	3,42	2,98
R2	3,25	3,38	3,35	3,33	2,52
R3	3,33	3,28	3,39	3,33	2,44
R4	2,92	2,85	3,08	3,01	2,49
<b>Total</b>	<b>3,11</b>	<b>3,20</b>	<b>3,32</b>	<b>3,23</b>	<b>2,66</b>



Answers to question no. 11 (blank answers omitted)

Please, specify any other interest related to training on "knowledge, and skills to work with others and ensure the wider impact of research"

How to create connections with other countries' researchers

Some training regarding approaching researchers in your field or related fields, and in organising collaboration

Language teaching

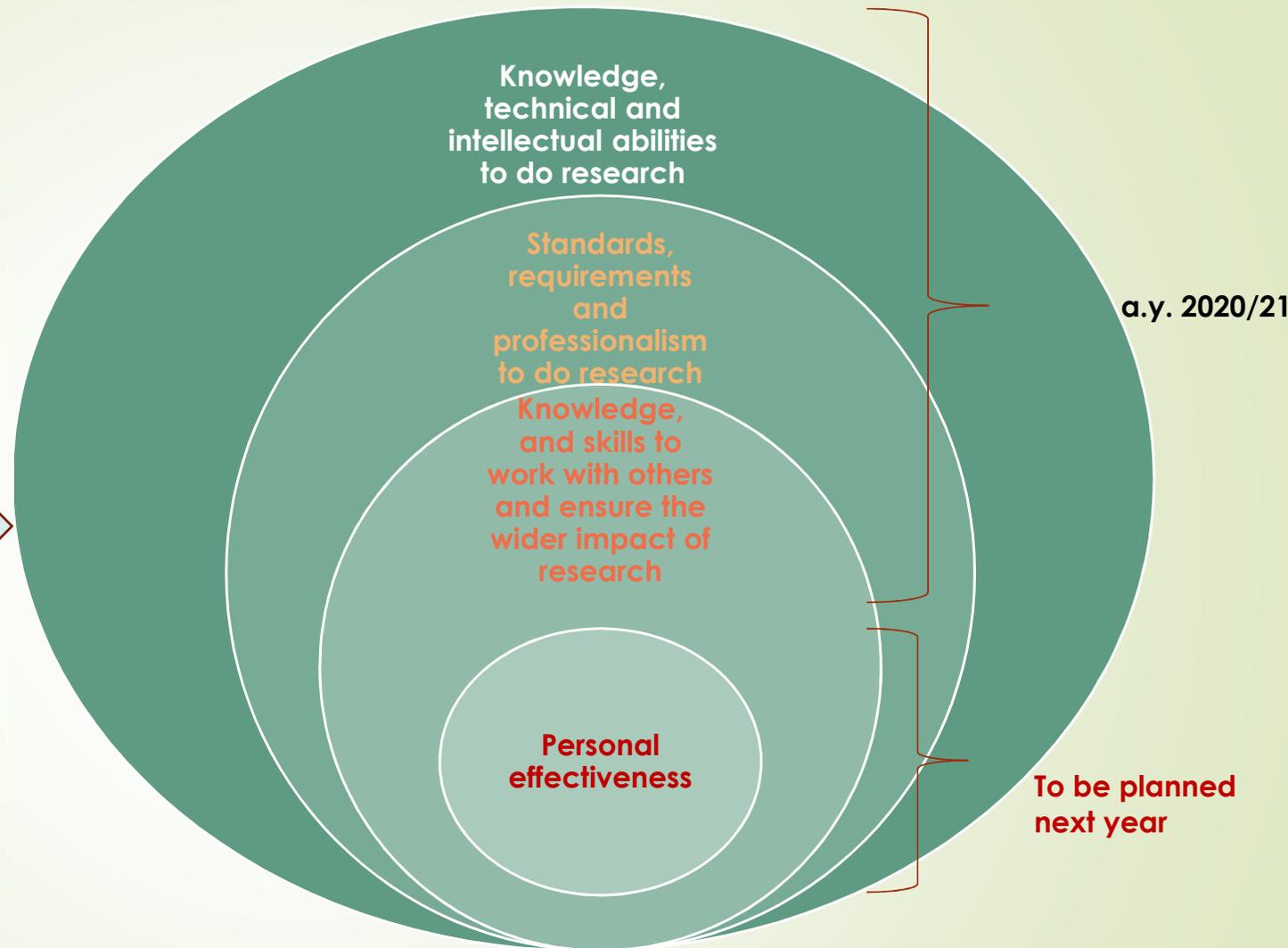
Outreach initiatives

managing a Ted Talk Video of Short conference

increase time for study and discussion

Framework: from knowledge/technical abilities that may interest a wide audience, to support to individual abilities which will interest only some researchers

(and which will, therefore, be dealt with in a second training plan, once the wide-range training actions have been systematized)



# «Basic» Training Plan Hypothesis

Low impact on  
the budget

(already  
"established" training  
courses which fall on  
the endowment of the  
individual structures or  
HRS4R budget quota?)

ID	Topic	Framework	Responsible Unit	Target	Methodology
1	<b>Academic writing</b> in Social Sciences and Humanities (SSH)	Knowledge, technical and intellectual abilities to do research	To be defined	R1-R2	
2	<b>Academic writing</b> in Life Sciences, Physical Sciences and Engineering (LS + PE)	Knowledge, technical and intellectual abilities to do research	To be defined	R1-R2	
3	<b>Italian for international researchers</b>	Knowledge, technical and intellectual abilities to do research	International Relations Office	R1-R2-R3-R4	
4	<b>Innovation Camp: From the business idea to the execution</b>	Standards, requirements and professionalism to do research	Research and Innovation Office		2 sessions face to face + 1 workshop/lab
5	<b>Writing a successful proposal</b> in H2020 and Horizon Europe (+ focus on inner procedures)	Standards, requirements and professionalism to do research	Research and Innovation Office through APRE	R1-R2-R3-R4	on line
6	<b>Managing research grant</b> (+ focus on inner procedures)	Standards, requirements and professionalism to do research	Research and Innovation Office through APRE	R1-R2-R3-R4	on line
7	<b>IPR and entrepreneurship</b> (+ focus on inner procedures)	Standards, requirements and professionalism to do research	Research and Innovation Office through DayOne	R1-R2-R3-R4	in-house workshop
8	<b>Info day: Funding researchers and research projects</b>	Standards, requirements and professionalism to do research	Research and Innovation Office	R1-R2-R3-R4	in-house workshop
9	<b>Animal welfare and protection</b> in research activities and laboratories	Standards, requirements and professionalism to do research	Applied Research Office - OPBA		streaming
10	<b>Innovating University teaching:</b> Innovation in training and didactic planning, Learning processes and active methodologies, Student involvement, Learning disorders, Evaluation	Knowledge and skills to work with others and ensure the wider impact on research	Teaching Committee - USAQ Quality Assurance System Office	R3-R4	7 sessions
11	<b>Supervising and mentoring</b>	Knowledge and skills to work with others and ensure the wider impact on research	To be defined	R3-R4	Tutorial?
12	What we already do @Uninsubria for « <b>Communication of the research and Public engagement</b> »	Knowledge and skills to work with others and ensure the wider impact on research	To be defined	R1-R2-R3-R4	Tutorial?

# «Advanced» Training Plan Hypothesis in addition to «Basic» Training

Ad hoc  
«Research  
Training»  
budget  
request

ID	Topic	Framework	Responsible Unit	Target	Methodology
1	<b>Scientific English</b>	Knowledge, technical and intellectual abilities to do research	To be defined	R1-R2	
2	<b>Bibliography literacy</b>	Knowledge, technical and intellectual abilities to do research	To be defined	R1-R2	tutorial?
3	<b>Research methodology</b>	Knowledge, technical and intellectual abilities to do research	To be defined	R1-R2	
4	<b>Time management</b>	Knowledge, technical and intellectual abilities to do research	To be defined	R1-R2-R3-R4	tutorial?
5	<b>Research Data management and Applied statistics</b>	Standards, requirements and professionalism to do research	To be defined	R1-R2-R3-R4	
6	<b>New Ethical Code:</b> integrity of research, plagiarism, ethical committee on research projects, biobanks	Standards, requirements and professionalism to do research	To be defined	R1-R2-R3-R4	in-house workshops
7	<b>Teaching and lecturing skills - starting level</b>	Knowledge and skills to work with others and ensure the wider impact on research	To be defined	R1-R2	
8	<b>Public speaking</b>	Knowledge and skills to work with others and ensure the wider impact on research	To be defined	R1-R2-R3-R4	
9	<b>Communication of the research and Public engagement</b>	Knowledge and skills to work with others and ensure the wider impact on research	To be defined	R1-R2-R3-R4	
10	<b>Equality and gender measures</b>	Knowledge and skills to work with others and ensure the wider impact on research	To be defined	R1-R2-R3-R4	

The training may be provided following different methods (lectures, intranet tutorials, online courses) and using both internal and external experts for in-house training.

The possibility to totally or partially reimburse the expenses for training courses with external institutions for individual researchers or for selected groups of researchers (from PhD students to full-professors according to the several training needs and available budget) should be taken into consideration.

- ▶ Arrangement of an internal monitoring and evaluation plan of the effectiveness of these courses in terms of the participants' degree of satisfaction and of the achievement of the training objectives.

# Plan validation procedure

## Stage 1: proposal draft, sharing and opinion gathering

submitted

- Proposal arranged by the Research and Innovation Office
- HRS4R Implementation Committee opinion
- Researchers Focus Group opinion
- Research Committee and Teaching Activities Commission opinion

## Stage 2: departmental embedding

- AIQUA-R
- Directors of the Departments

## Stage 3: Collegial Bodies involvement

- Official communication:
- Senate for contents
  - Board of Directors for budget