



RESEARCH CAREER PLAN

14 December 2021



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1. Presentation: objectives and conditioning factors

The CED is a center of the CERCA system and as such is subject to an external evaluation that does not include an individual evaluation of the research staff. According to the CERCA institution, the decisions and methods of individual evaluation of its personnel correspond to each center. For this reason, the 2007-2012 Contract Program signed with CED by the Generalitat de Catalunya established the periodic and individual evaluation of research personnel as an objective. The procedure drawn up at that time has been updated periodically.

The signing of adhesion by CED to the European Charter for Research and the Code of Conduct for the Recruitment of Research Staff in July 2014 and the subsequent awarding of the "hr" distinction for excellence in February 2016, has meant expanding and revising the protocols of the Center's Quality System, including the establishment of a research career in accordance with the legal and economic possibilities of the entity.

This document develops the human resources management protocol (P1) of the Quality System of the Center for Demographic Studies (CED), as it relates to the research career, by describing the criteria, requirements and process for managing the professional development of research personnel.

Research takes place in a competitive environment, with highly complex structures in terms of human and material resources that require highly specialized and interdisciplinary training with high levels of excellence and creativity. It is a highly professionalized activity that requires strong personal motivation and the ability to work as part of a team. Encouraging excellence also means recognizing it at the salary level. Developing a plan for the promotion and permanence of research personnel that is appropriate to the availability of each institution is a fundamental element for the good governance of research centers. With this objective in mind, this research career plan establishes the bases for access, permanence and promotion of structural or permanent positions at the CED, and describes the typology of temporary contracts for research personnel.

In drawing up this Plan, CED has adopted the principles of the *European Charter and the Code for Research* (see Annex 1). Specifically:

- principles 13 and 15, which establish an evaluation system for promotion that must be disclosed at the time of hiring,
- principle 21, especially in the case of recruitment at the postdoctoral level,
- principle 25, by promoting the stability of research and support personnel by designing their professional development strategy,
- Principle 30, which provides guidance to research personnel with regard to employment and growth opportunities, both within and outside the institution.

The present regulation of the research career refers to structural or permanent personnel, according to the list of positions approved by the CED's Governing Council, which are occupied by personnel with an indefinite contract or, eventually, temporary positions on an interim basis. The Plan expressly excludes temporary positions linked to external aid, whose salary conditions and permanence are determined by the same calls for proposals.¹ The CED encourages its participation in the system of external aid for hiring, within the framework of calls for proposals from the European Commission, the Spanish State or the Generalitat de Catalunya.

¹ Specifically, we refer especially to the Catalan (Research Training, Beatriz de Pinoso), Spanish (Research Staff Training, University Staff Training, Juan de la Cierva, Ramon y Cajal) and European (Marie Curie) programs, among others.

The conditions of access, permanence and promotion of CED research personnel are conditioned by three main factors:

- First, the characteristics of the researchers in terms of their academic trajectory and research merits, including publications, basic or applied research projects and other activities.
- Secondly, the institution's budget availability and vacancies. The hiring policy is subject to CED's medium and long-term² funding and budgetary possibilities. The Research Career Plan necessarily takes into account the small size of CED in comparison with other centers of the Catalan Research System, universities or other international organizations. As a public body, CED is subject to the directives of the Catalan Government and, consequently, is affected by the possible general restrictions that prohibit hiring or salary increases, regardless of the economic performance of the institution and the output of its research³ staff. These circumstances, external to the scope of CED's decisions, may eventually limit the possibilities of implementing an adequate and realistic research career plan.
- Thirdly, the CED is subject to current legal regulations: the Law on Science, Technology and Innovation, as well as the Statute of Workers, form the legal framework within which all hiring is carried out. The future approval of a collective agreement for research personnel in Catalonia would oblige the CED, if necessary, to revise the present Research Career Plan.

2. Type of personnel hired

The Center for Demographic Studies is made up of doctoral research personnel, research trainees and research support personnel (technical, management and administrative). These personnel are divided into different levels and salary categories, according to their training, capacity and responsibility.

Table 1 shows the research categories of research personnel. Assignment to each level is made at the time of hiring and subsequently can be promoted in the scale according to the experience acquired, especially on the basis of research activity.

Table 1 Salary levels and job descriptions

Table 1: Salary levels and job descriptions

EU Nomenclature	Salary level	Category	Typology
R4A	Level 1	Distributed researcher	Structural worksites, indefinite-term contracts in interim
R4B	Level 2	Senior Researcher	
R3A	Level 3		
R3A	Level 4		
R3B	Level 5		
R3B	Level 6		
R2A	Level 7	Postdoctoral researcher	Non-structural worksites, temporary contracts linked to project recruitment grants
R2A	Level 8		
R2A	Level 9		
R2B	Level 10	Recent postdoctoral researcher	
R2B	Level 11		
R2B	Level 12		
R1A	Level 13	Researcher in training and collaboration grant holder	
R1B	Level 14		
R1B	Level 15		

² Depending on the year, the basal budget of the CED does not exceed 50% of its personnel costs and is usually not sufficient to cover the costs of the institution's structural positions.

³ In the Catalan research system, the creation of permanent or structural positions is restricted by law, so there are often structural positions covered by personnel with temporary contracts, on an interim basis. This interim situation should not be extended in time for periods longer than five years, the alternative is the hiring for equivalent periods in the framework of projects that ensure their funding.

The different categories of research personnel are classified according to the European nomenclature (R1, R2, R3, R4), which is linked to specific capabilities and responsibilities defined at European level (Annex 2).

3. Categories of research personnel

Access to the temporary categories is linked to obtaining contracting aid from public and private organizations in open competitive competition for a period of between two and five years. Contracts for lesser contracts may only be linked to projects with finalist financing.

To access the structural positions, restricted to levels R3 and R4, it will be necessary to meet the profile described for each level (Annex 2), and to be able to demonstrate research, dissemination and/or transfer and quality training activities.

Table 2. Access to the different categories of research personnel

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Non-structural contracts (temporary)	Researcher in training (R1)	(1) Open competitive recruitment grants (R1A) (2) Restricted Concurrence Project Grants (R1B)
	Postdoctoral Researcher (R2)	(1) Open competitive recruitment grants (R2A) (2) Restricted bidding project contracts (R2B)
Structural contracts (indefinite-term or stabilization contracts)	Researcher (R3)	(1) Project contracts for open competition (R3B) (2) Open competitive bidding contracting grants (R3B) (3) Stabilization and/or interim contracts (R3A)
	Leading group or distinguished researcher	(1) Stabilization and/or interim contracts (R4B) (2) Permanent or stabilized contracts (R4A)

3.1. Researcher in training R1A and R1B

Description: A person who is in the first stage of his or her research activity (less than 5 years since the completion of the master's degree) and who has not obtained a doctoral degree. He/she carries out his/her research under the supervision of a tutor or one or more directors and has the status of research trainee (student, scholarship holder and/or CED contract holder). He/she may eventually have a teaching activity as a trainee professor, only limited by the incompatibility regulations.

Table 3. Typology of R1A-R1B Contracts

Table Typology3. of contracts R1A-R1B

Open competitive recruitment grants (R1A)	Grants for the Training of Research Personnel (FI) of the Generalitat de Catalunya (Government of Catalonia)	These are contracts of between 3 and 4 years and are governed by the regulations of each call for proposals.
	Grants for the Training of Researchers (FPI) of the Ministry of Science and Innovation	
	Grants for University Teacher Training (FPU) from the Ministry of Education.	
	DEMOS grants in the framework of CED research projects	
	Other grants for research trainees from other organizations or the European Commission	
Grants and project contracts for restricted competition (R1B)	Scholarships and collaboration contracts	These are internship agreements or contracts for periods not exceeding one year.

This category cannot be of a permanent nature, the persons who obtain the doctorate are provided with the necessary advice to be eligible for grants for postdoctoral contracts of an international nature, preferably, which allow them to be eligible for subsequent grants for the reincorporation of research personnel.

3.2 Postdoctoral researcher (R2A and R2B)

Description: A person who has recently obtained a doctorate degree (less than 4 years) and is in a temporary period in which he/she is beginning his/her research career. He/she belongs to a work team of a program or line of research of which he/she is not the principal investigator. Eventually, he/she may carry out teaching activities only limited by the incompatibility regulations and tutor students. This category cannot be of a permanent nature, the contracted persons are provided with the necessary advice to be able to apply for aid in the recruitment of research personnel at both national and international level.

Table 4. Typology of R2A-R2B Contracts

Table Typology4. of R2A-R2B contracts

Open Competitive Recruitment Grants (R2A)	Juan de la Cierva-Training Grants of the Ministry of Science and Innovation	These contracts are for 2 to 3 years and are governed by the regulations of each call for proposals.
	Juan de la Cierva-Incorporation grants of the Ministry of Science and Innovation	
	Other grants for postdoctoral personnel from other European Commission agencies	
Project contracts for restricted concurrence (R2B)	Collaboration contracts linked to a project	The following are internship agreements or contracts for periods not exceeding one year.

3.3. Researcher (R3A i R3B)

Description: A person who performs a research task with specific contributions in terms of publication of research results and other scientific production. He/she has the capacity to direct doctoral students and to incorporate postdoctoral students in his/her research projects. It has its own research grants as principal investigator.

Table 5. Typology of contracts R3A-R3B

Table 5. Typology of contracts R3A - R3B

Project contracts for open competitive bidding (R3B)	Collaboration contracts linked to a project	These are contracts within the framework of projects with funding or for personnel support or collaborator, for periods not exceeding one year.
Open Competitive Contracting Grants (R3B)	Beatriu de Pinós Grants of the Generalitat de Catalunya	These contracts are for 4 to 5 years and are governed by the regulations of each call for proposals.
	Ministry of Science and Innovation	
	Ramón y Cajal Grants	
	Marie Curie Grants from the European Commission	
Stabilization and/or interim contracts (R3A)	Other grants for experienced research personnel from other agencies or the European Commission	These are permanent contracts, subject to public competition, or interim contracts pending the announcement of a vacancy approved by the Board of Directors. CED Government
	I3 Contracts	
	Contracts resulting from the award of a competitive project with its own financing as a PI and for a team of work.	

This category may derive permanent. It can have teaching activities that are only limited by the incompatibility regulations. In this category, the possibility of stabilizing grants, and complex with the required level of activity, with an indefinite contract. It will be necessary, however, that there

is budgetary availability and a position approved by the Governing Council of the CED. On the other hand, the position may be filled on an interim basis or as part of a funded project.

3.4. Group leader or distinguished researcher (R4 A i R4B)

Description: A person who leads a consolidated research area or group, publishes in reference journals and has an international reputation based on research excellence in his/her field, strategic vision and transfer of results of the projects he/she directs. He/she organizes working sessions and congresses and his/her teaching work is only limited by the incompatibility regulations.

Table 6. Typology of R4A-R4B Contracts

Table Typology6. of contracts R4A-R4B

Stabilization and/or interim contracts (R4B)	I3 contracts with the procurement of a competitive project with funding for a work team.	These are permanent contracts, subject to public competition, or interim contracts pending the announcement of a vacancy approved by the CED Governing Council.
	Contracts derived from obtaining a competitive self-funded project with PI and for a work team.	
Permanent or stabilized contracts (R4A)	Distinguished Researcher	
	ICREA Researcher	
	Head of consolidated CED research groups	

4. Access to permanent research staff positions

The CED has limited access to permanent positions with indefinite contracts to R3 and R4 level research personnel:

R1 and R2 categories are categories of trainee or postdoctoral research personnel who are encouraged and accompanied in the search for grants that allow their internationalization, as well as the enrichment of their academic and professional career outside the CED. Mobility is a merit that is considered positively in all competitive calls.

Access to permanent positions in the R3 and R4 categories is determined by the structural possibilities in terms of availability of positions approved by the CED Governing Council and the medium and long term budget availabilities. Both consolidation paths are determined by the I3 program or by the opening of internationally competitive and open positions according to the OTM-R rules of the CED.

Exceptionally, research personnel who occupy a position on an interim basis may be offered a permanent position at the proposal of the CED's management, provided they have experience in the pursuit of quality for a minimum of 5 years after completing their doctorate and recognized leadership capacity. In any case, this decision must be endorsed by the positive evaluation of a committee composed of internal and external members of recognized prestige.

5. Research career and promotion

Each category has certain remuneration levels consisting of the base salary plus activity complements that place it on the high, medium or low side of the category, according to the characteristics of each contract, as established in the call for proposals. Subsequently, an evaluation carried out every six years (see the monitoring table in Annex 3) will provide the information necessary for the CED management, with the support it deems appropriate, to decide whether the researcher will be promoted to a higher level, maintain what he/she has, reorient his/her research or, in the worst case scenario, terminate the contract. All permanent positions at



CED are subject to this regular monitoring every 6 years. Access to the R4 category is subject to the availability of structural positions approved by the Governing Council.

Apart from the characteristics established internationally for each of the categories and the general criteria (Annex 2), the CED will also value commitment to research and transfer management, i.e., dedication to the leadership or coordination of central activities by the Center.

Finally, it should be noted that in the evaluation of research personnel, specific indicators will be used for those people who dedicate most of their activity to meeting the demands of external clients, whether public administrations or other public or private entities.

ANNEX 1. EUROPEAN CHARTER OF RESEARCHERS AND CODE. MAIN CAREER PRINCIPLES

"12. Recruitment

Employers and/or funders should ensure that the entry and admission standards for researchers, particularly at the beginning of their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career, including teachers (of any level) returning to a research career. Employers and/or funders of researchers should adhere to the principles set out in the Code of Conduct for the Recruitment of Researchers when appointing or recruiting researchers.

"13. Recruitment

Employers and/or funders should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised. Advertisements should give a broad description of knowledge and competencies required, and should not be so specialised as to discourage suitable applicants. Employers should include a description of the working conditions and entitlements, including career development prospects. Moreover, the time allowed between the advertisement of the vacancy or the call for applications and the deadline for reply should be realistic.

"15. Transparency

Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and the career development prospects. They should also be informed after the selection process about the strengths and weaknesses of their applications.

"18. Recognition of mobility experience

Any mobility experience, e.g. a stay in another country/region or in another research setting (public or private) or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage of the research career, or virtual mobility experience, should be considered as a valuable contribution to the professional development of a researcher.

"21. Postdoctoral appointments

Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including the maximum duration and the objectives of such appointments, should be established by the institutions appointing postdoctoral researchers. Such guidelines should take into account time spent in prior postdoctoral appointments at other institutions and take into consideration that the postdoctoral status should be transitional, with the primary purpose of providing additional professional development opportunities for a research career in the context of long-term career prospects.

"25. Stability and permanence of employment

Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts, and should therefore commit themselves as far as possible to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the EU Directive on Fixed-Term Work.

"28. Career development

Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.

"30. Access to career advice

Employers and/or funders should ensure that career advice and job placement assistance, either in the institutions concerned, or through collaboration with other structures, is offered to researchers at all stages of their careers, regardless of their contractual situation.

ANNEX2 : EUROPEAN DEFINITIONS

First Stage Researcher (R1)

This profile includes individuals doing research under supervision in industry, research institutes or universities. It includes doctoral candidates.

Researchers with this profile will:

- Carry out research under supervision
- Have the ambition to develop knowledge of research methodologies and discipline
- Have demonstrated a good understanding of a field of study
- Have demonstrated the ability to produce data under supervision
- Be capable of critical analysis, evaluation and synthesis of new and complex ideas
- Be able to explain the outcome of research and value thereof to research colleagues

Desirable competences

- Develops integrated language, communication and environment skills, especially in an international context.

Recognised Researcher (R2)

This profile includes:

- Doctorate degree (PhD) holders who have not yet established a significant level of independence,
- Researchers with an equivalent level of experience and competence.

Necessary competences

All competences of 'First Stage Researcher' plus:

- Has demonstrated a systematic understanding of a field of study and mastery of research associated with that field
- Has demonstrated the ability to conceive, design, implement and adapt a substantial program of research with integrity
- Has made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, innovation or application. This could merit national or international refereed publication or patent.
- Demonstrates critical analysis, evaluation and synthesis of new and complex ideas
- Can communicate with their peers: be able to explain the outcome of their research and value thereof to the research community
- Takes ownership for and manages own career progression, sets realistic and achievable career goals, identifies and develops ways to improve employability.
- Co-authors papers at workshops and conferences

Desirable competences

- Understands the agenda of industry and other related employment sectors
- Understands the value of their research work in the context of products and services from industry and other related employment sectors.
- Can communicate with the wider community and with society generally, about their areas of expertise
- Can be expected to promote, within professional contexts, technological, social or cultural advancement in a knowledge based society
- Can mentor First Stage Researchers, helping them to be more effective and successful in their R&D trajectory.

Established Researcher (R3)

This framework describes the necessary and desirable competences for established researchers (those who have developed a level of independence).

Necessary competences

All necessary and most desirable competences of the 'Recognized Researcher' plus:

- Has an established reputation based on research excellence in their field
- Makes a positive contribution to the development of knowledge, research and development through co-operations and collaborations
- Identifies research problems and opportunities within their area of expertise
- Identifies appropriate research methodologies and approaches
- Conducts research independently which advances a research agenda
- Can take the lead in executing collaborative research projects in cooperation with colleagues and project partners
- Publishes papers as lead author, organizes workshop or conference sessions

Desirable competences

- Establishes collaborative relationships with relevant industry research or development groups
- Communicates their research effectively to the research community and wider society
- Is innovative in their approach to research
- Can form research consortia and secure research funding / budgets / resources from research councils or industry
- Is committed to professional development of their own career and acts as mentor for others.

Leading researcher (R4)

The EU framework for research careers describes a leading researcher (R4) as a researcher leading their research area or field with the following necessary and desirable competences:

Necessary competences

All necessary and most desirable competences of 'Established Researcher' plus:

- Has an international reputation based on research excellence in their field
- Demonstrates critical judgment in the identification and execution of research activities
- Makes a substantial contribution (breakthroughs) to their research field or spanning multiple areas
- Develops a strategic vision on the future of the research field
- Recognizes the broader implications and applications of their research
- Publishes and presents influential papers and books, serves on workshop and conference organizing committees and delivers invited talks

Desirable competences

- Is an expert at managing and leading research projects
- Is skilled at managing and developing others
- Has a proven record in securing significant research funding / budgets / resources
- Beyond team building and collaboration, focusing on long-term team planning (e.g. career paths for the researchers and securing funding for the team positions)
- Is an excellent communicator and networker within and outside the research community [creating networks].
- Is able to create an innovative and creative environment for research
- Acts as a professional development role model for others.

ANNEX 3: ACTIVITY MONITORING TABLE

Monitoring Plan of the Centre d'Estudis Demogràfics, 2017-2021



Researcher

Position:

PhD in

AREAS OF RESEARCH:



PUBLICATIONS, 2017-2021 *Articles, book chapters, books*

	Articles Q1 (JCR - SJR) / Author_1	Articles Q1-Q4 (JCR - SJR) / Author_1	Total articles (indexed and non-indexed) / Author_1	Book chapters / Author_1
2017 - 2021				
2021				

Cites in Google Scholar (/ 2021) | H_Index Google Scholar

5 MOST RELEVANT PUBLICATIONS, 2017-2021

- 1.
- 2.
- 3.
- 4.
- 5.

FUNDING ID, 2017-2021 *Research and individual grants as principal investigator and funding amount*

- 1.
2. ...

THESIS SUPERVISION AND MENTORSHIP, 2017-2021



CED
Centre d'Estudis
Demogràfics

Completed Ph.D. Supervision:

Ongoing Ph.D. supervision:

Completed post-doctoral mentorship:

Ongoing post-doctoral mentorship:

Completed pre-doctoral mentorship:

**ONGOING WORK** *Indicate collaborations and status*

- 1.
2. ...

FUNDING ID, 2017-2021 *Research and individual grants as principal investigator and funding amount*

- 1.
2. ...

GRANTS UNDER EVALUATION

- 1.
2. ...

KNOWLEDGE TRANSFER AND SOCIAL IMPACT OF YOUR RESEARCH**OTHER ACHIEVEMENTS** *(300 characters max.)*



ANNEX 4. SUMMARY TYPOLOGY OF CONTRACTS R1 TO R4

Researcher in training (R1)	Open competitive recruitment grants (R1A)	Personnel Training Grants Grants for the Training of Researchers Teacher Training Grants DEMOS support in the framework of CED research projects Other grants for research trainees from other organizations or the European Commission	These are contracts of between 3 and 4 years and are governed by the regulations of each call for proposals.
	Grants and contracts for competitive projects (R1B)	Scholarships and collaboration contracts	These are internship agreements or contracts for periods not exceeding one year.
Postdoctoral Researcher (R2)	Open Competitive Recruitment Grants (R2A)	Juan de la Cierva-Training Grants of the Ministry of Science and Innovation Juan de la Cierva-Incorporation Grants from the Ministry of Science and Innovation Other grants for postdoctoral personnel from other agencies or the European Commission	These contracts are for 2 to 3 years and are governed by the regulations of each call for proposals.
	Competitive bidding project contracts (R2B)	Collaboration contracts linked to a project	Contracts within the framework of projects financed by collaborating or support personnel, for periods not exceeding one year.
Researcher (R3)	Competitive bidding project contracts (R3B)	Collaboration contracts linked to a project	Contracts within the framework of projects financed by collaborating or support personnel, for periods not exceeding one year.
	Open Competitive Contracting Grants (R3B)	Beatriu de Pinós Grants of the Generalitat de Catalunya Ministry of Science and Innovation Ramón y Cajal Grants Marie Curie Grants from the European Commission Other grants for experienced research personnel from other agencies or the European Commission	These contracts are for 4 to 5 years and are governed by the regulations of each call for proposals.
	Stabilization and/or interim contracts (R3A)	I3 Contracts Contracts resulting from the award of a competitive project with own financing as a PI and by a work team.	These are permanent contracts, subject to public competition, or interim contracts pending the announcement of a vacancy approved by the CED Governing Council.
Leading group or distinguished researcher (R4)	Stabilization and/or interim contracts (R4B)	I3 contracts with procurement of a competitive project with own funding as a PI and by a working team Contracts resulting from the award of a competitive project with own financing as a PI and by a work team.	These are permanent contracts, subject to public competition, or interim contracts pending the announcement of a vacancy approved by the CED Governing Council.
	Permanent or stabilized contracts (R4A)	Distinguished Researcher	
		ICREA Researcher	
		Heads of consolidated research groups at CED	