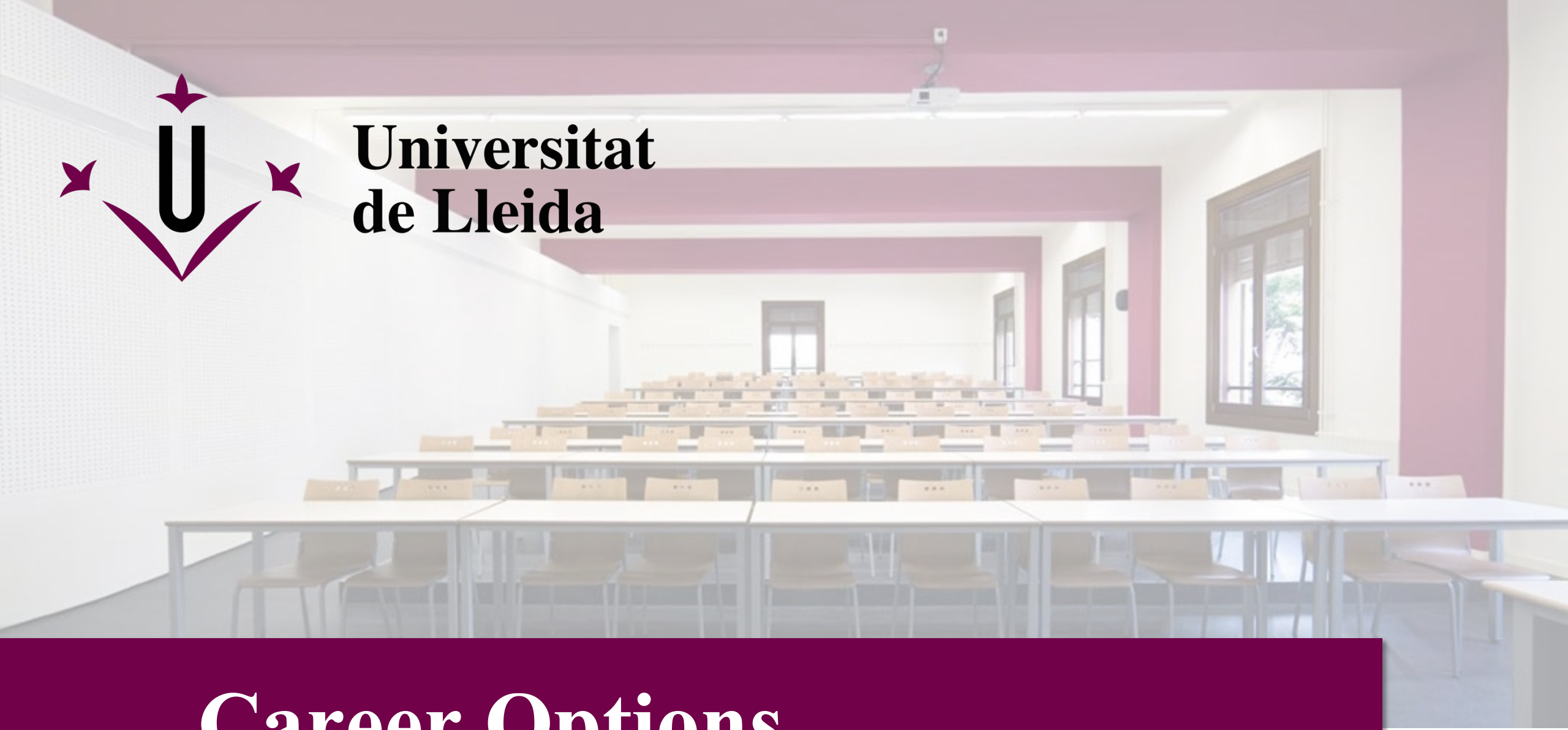

Universitat de Lleida

Career Options

HR EXCELLENCE IN RESEARCH

Content of the document

01 RESEARCH CAREER OUTLINE

02 RESEARCH CAREER OPTIONS

03 OPTIONS BEYOND THE ACADEMY

The **aim** of this Career Options manual is to provide information on employment options for researchers at the University of Lleida who wish to continue their research career after pre-doctoral and post-doctoral training.

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01 RESEARCH CAREER OUTLINE

Professional development profiles

The **European Framework for Research Careers** (2011) distinguishes and describes **4 general profiles on the career development of research staff**, which are independent of any particular sector

Research career outline

The European Commission, in the framework of the Human Resources Strategy for Researchers (HRS4R) **classifies research staff in 4 levels**

STUDENTS		RESEARCH STAFF			
GRADE	MASTER	**R1**	**R2**	**R3**	**R4**
		Doctoral training	Postdoctoral stay	Independent researcher	Established researcher
		Junior researcher	Recognised researcher	Independent researcher	Lead researcher
		Thesis	Postdoctoral	Tenure track	Research officer, tenure
		Art. 21 LCTI*. Pre-doctoral contract. RD103/2019, Status of pre-doctoral research trainees.	Art. 22 LCTI*: Access Contract to the Spanish Science, Technology and Innovation System. RDL 8/2022, of urgent measures in the field of employment contracts in the Spanish Science, Technology and Innovation System.	Art. 23 LCTI*: Distinguished researcher contract.	Art. 25 LCTI*: Professional career of civil servant research staff.
4 years	**1-2 years**	**3-4 years**	**5 years**	**8 years**	**CONSOLIDATION**
		Docencia			
		Management			
		Transfer			
		Entrepreneurship			

*Law 14/2011, of 1 June, on Science, Technology and Innovation (BOE 02/07/2011).

Researcher R1

Stage I: Doctoral stage

RESEARCHER R1. STAGE I. DOCTORAL TRAINING STAGE.	
First stage for researchers. Research is carried out under supervision in universities, research institutes or industry. Includes pre-doctoral researchers.	
NECESSARY COMPETENCES ACHIEVED	**DESIRABLE COMPETENCES ACHIEVED**
• Carry out research under supervision • 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.	• Develops integrated language, communication and environment skills, especially in an international context. **REQUIREMENTS** 300 ECTS credits of which at least 60 must be at Master's level. Enrolment in a Doctoral Programme.

Researcher R2

Stage II: Post-doctoral stage

RESEARCHER R2. STAGE II. POSTDOCTORAL STAGE.	
Recognised researcher. Postdoctoral research staff who do not yet have a significant level of independence.	
NECESSARY COMPETENCES ASSIGNED	**DESIRABLE COMPETENCES ACHIEVED**
R1 plus the following: • 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 programme 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 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 workshop and conferences	• 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. **REQUIREMENTS** PhD degree.

Researcher R3

Stage III: Independent researcher stage

RESEARCHER R3. STAGE III. INDEPENDENT RESEARCHER STAGE.	
Established researcher. Researchers who have developed a level of independence.	
NECESSARY COMPETENCES ACHIEVED	**DESIRABLEAS COMPETENCES ACHIEVED**
R2 plus the following: • 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, organises workshop or conference sessions	• 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 his/her own career and acts as mentor for others.

Researcher R4

Stage IV: Established researchers, professors, directors, senior researchers

RESEARCHER R4. STAGE IV. CONSOLIDATED RESEARCHERS, PROFESSORS, DIRECTORS, SENIOR RESEARCHERS.	
Lead Researcher. Research personnel leading their area of research or field. This would include the team leader of a research group or the head of an industry R&D laboratory.	
NECESSARY COMPETENCES ASSIGNED	**DESIRABLE COMPETENCES ACHIEVED**
R3 plus the following: • 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 • Recognises the broader implications and applications of their research; • Publishes and presents influential papers and books, serves on workshop and conference organising committees and delivers invited talks	• 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

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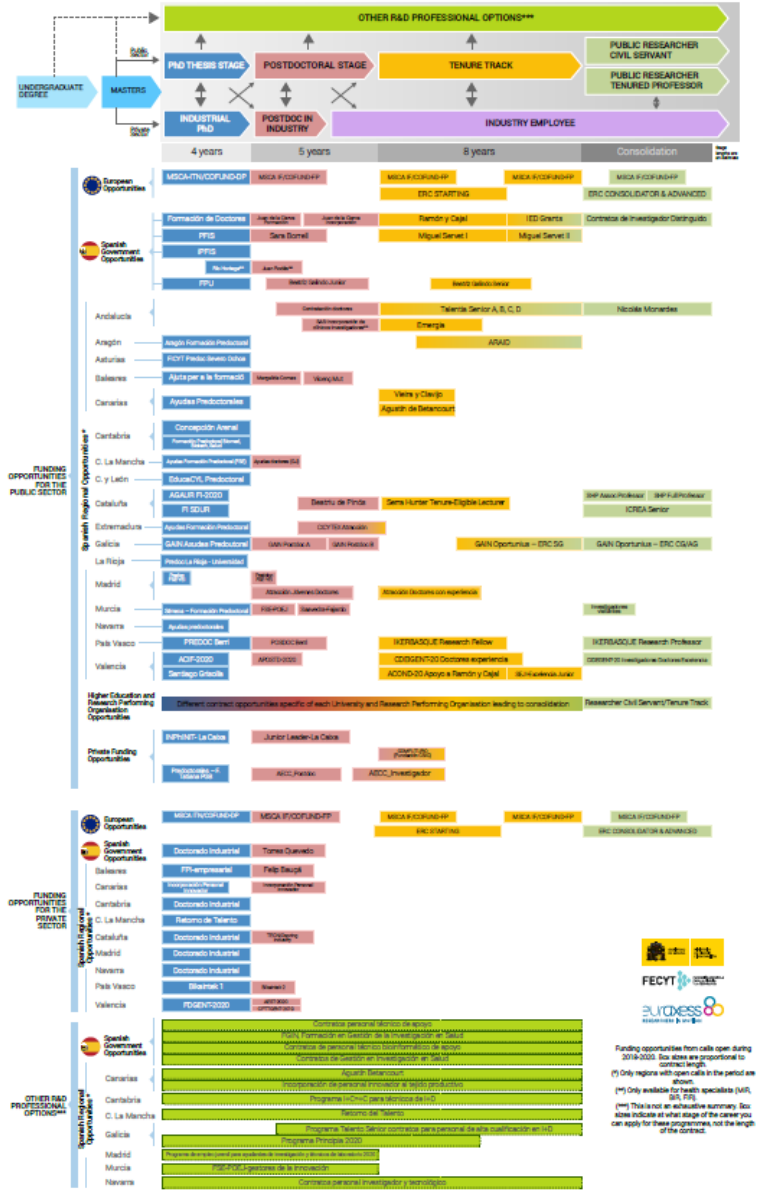
02

RESEARCH CAREER OPTIONS

Research career options

The Spanish Foundation for Science and Technology (FECYT) periodically produces a **complete and updated diagram of all the stages of the research career** in which the **different calls for grants that can be applied for at any given time are identified.**

In addition, the document contains **links** to further **information on each of the calls for proposals.**



FIFTH EDITION OF THE RESEARCH CAREER IN SPAIN

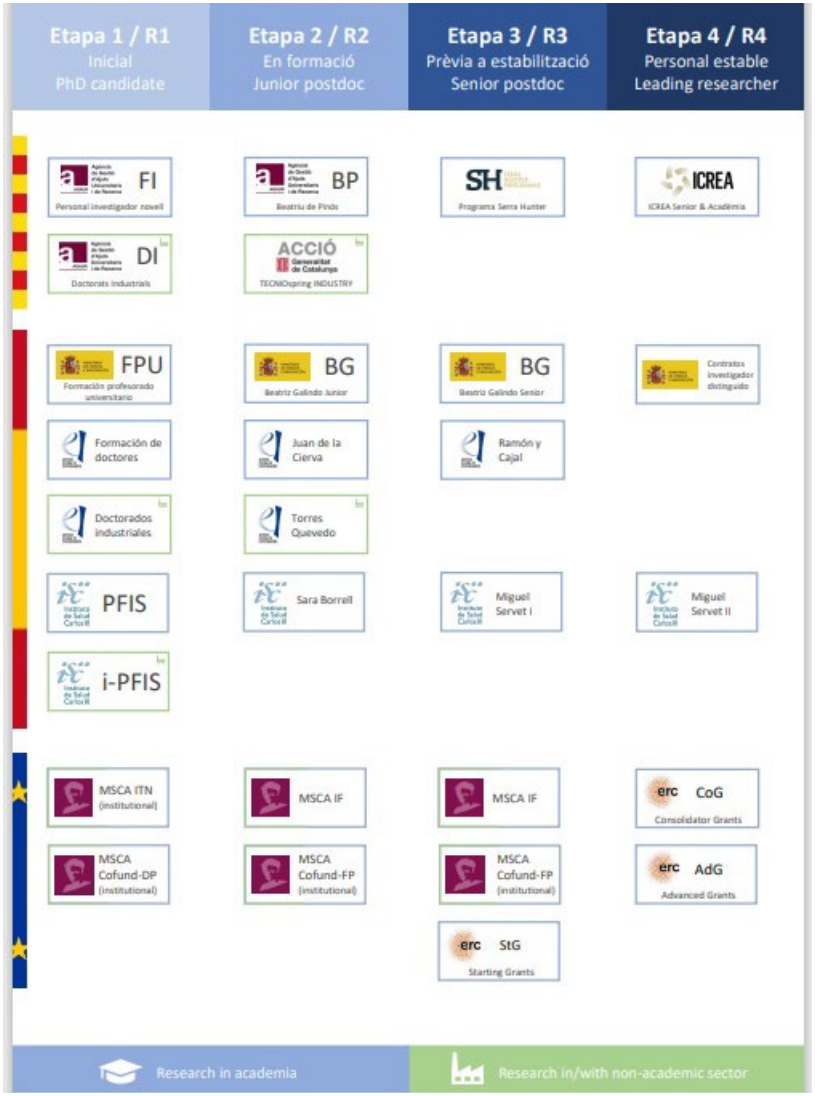
October 2020

FECYT

FUNDACIÓN ESPAÑOLA PARA LA CIENCIA Y LA TECNOLOGÍA

Research career options

The Agency for the Management of University and Research Grants (**AGAUR**) of the Government of Catalonia has drawn up an **outline with information on the main grants for the mobility and professional development of research staff.**



All the information is available on the website with direct links to each of the aids mentioned.

October 2020

03 OPTIONS BEYOND THE ACADEMIA

Options beyond the academia

A common **misconception** about scientific careers is that **they all involve only the possibility of staying in a laboratory doing research**.

This could not be further from the truth...

... there is a wide range of alternative options

R&D&I management

This type of work involves using scientific knowledge to support the research of others. Typical activities include managing grant applications, monitoring and justifying projects and advising applicants..

Some of the most relevant positions in the field of research management, at national level, can be found in the **Ministry of Science**, the **State Research Agency**, the **Spanish Science and Technology Foundation** (FECYT), **regional administrations**, **science and technology parks** and the main funding agencies, such as the **CDTI**. It is also possible to work in universities, research centres or technology centres as part of research management teams.

Scientific policy

Scientific knowledge can be used to inform and assist policy making. Workers can do this work in both the **public and private sectors**.

The work consists of identifying and analyzing policy issues, collecting information on scientific issues, drafting reports and advisory and support documents.

Policy-makers use the results of research and analysis to advise government, lobbyists and business..

Consultancy

Management consultants help organisations solve problems, create value, maximise growth and improve business performance. They use their knowledge to provide advice and expertise from an objective point of view and help the organisation develop specialised competencies.

The main occupations are **strategy**, **structure**, **management** and **operations of a company**. The role is to identify options for the organisation and suggest recommendations for change, as well as advise on additional resources to implement solutions.

Management consultancy is open to all graduates, although degrees in social sciences, engineering or science are particularly desirable.

Consultancy firms range from those offering end-to-end solutions to smaller firms or those specialising in particular sectors.

HR Management

Knowledge of the scientific field can be used in the **recruitment and selection sector**, where it is possible to work as a **recruitment consultant** and match the skills of candidates to the needs of the scientific profile.

In this field, it is possible **to work for specialized recruitment agencies**.

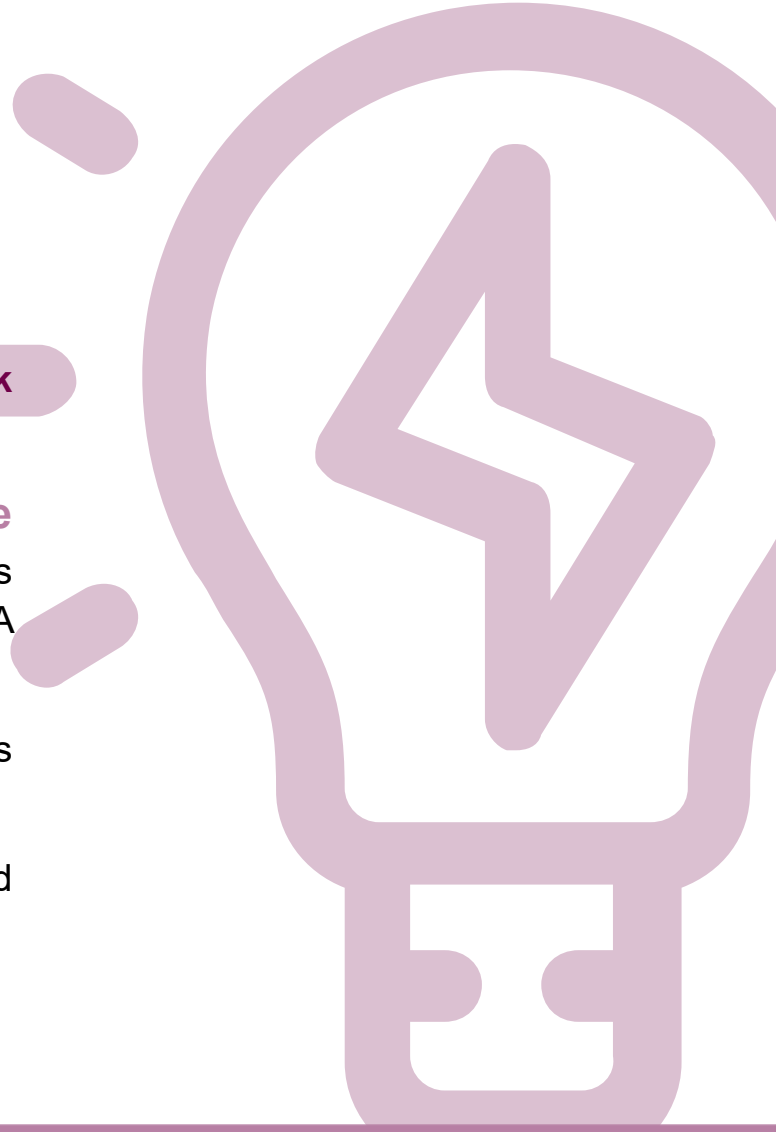
Protection of results and patent agent

Scientists may consider a career as a **patent agent, patent examiner, patent attorney or trademark attorney.**

Patent agents **assess whether inventions are new and innovative and therefore eligible for patenting**. Generally, a degree in a science, engineering, technical or mathematical subject is required. Patent examiners use their technical and legal knowledge to assess patent applications. A degree in science, engineering, mathematics or computer science is required for this position.

Complementary training in areas such as intellectual property and specific areas of law, among others, is desirable to develop these activities.

Some well-known companies that use these profiles are: RCD, Pons Patentes & Marcas, Clarke and Modet, Baker & McKenzie, etc.



Communication and outreach

This area of work consists of **sharing scientific knowledge and information with non-experts and explaining or presenting it in a way that is easy to understand**.

Science communicator: conveying science news to the general public through the media and publications.

Outreach in museums: working in museums and science centres to explain scientific concepts to visitors.

Science event manager: organising science-related events or meetings for professionals, companies, students or the general public.

Scientific publishing: focuses on the production of books, scientific journals, textbooks and review guides. Jobs can be found in production, proofreading and editing.

Some state and European universities offer specific training in science communication.

Education

If the aim is to **share a passion for science** with future generations, teaching in schools or colleges can be considered.

- **Primary school teachers**
- **Secondary school teachers**

Additional qualifications are required to become a teacher, so it is advisable to find out about the **different access routes to teaching.**

Commercial agent

Sales representatives or sales agents can work in different sectors: medical, industrial, scientific equipment, etc.

One example is medical sales representatives who may work for pharmaceutical companies and sell drugs, instruments and medical equipment to health professionals.

It is a profession with attractive starting salaries and **huge growth potential.**

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Soporte Técnico
www.effectia.es

Las imágenes e iconos perteneces a la empresa
https://www.freepikcompany.com

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