

Gender Equality in Academia and Research

Spain

COUNTRY: Spain

PROMOTING GENDER EQUALITY IN RESEARCH

Legal framework

Spain's legal framework on gender equality in higher education, science and research is precise and comprehensive.

The Organic Law for Effective Equality between Women and Men (3/2007) introduced gender equality as a basic principle for public action, applicable to universities and research centres. The Law made it compulsory for institutions and companies with more than 50 employees to adopt and implement gender equality plans.

In light of the urgent need to adopt measures to guarantee equal opportunities between women and men, the government approved decree RD 6/2019 in March 2019. Two subsequent decrees (RD 901/2020 and RD 902/2020) were approved in October 2020. These three decrees together develop and detail aspects of the Organic Law for Effective Equality (3/2007). RD 6/2019 extends the obligation to approve equality plans to all companies and institutions with more than 50 employees (previously >250 employees). It reinforces the rights of equal salary for equal work and work-life balance, and establishes equal (non-transferable) childbirth leave for both parents.

RD 901/2020, on the regulation and registration of Gender Equality Plans (GEPs), details the minimum content of a GEP, including a detailed gender diagnosis as a baseline. It establishes the deadlines for companies and institutions with at least 50 employees to approve and implement their GEPs. It also describes the procedure for negotiation, approval and public registration of GEPs, including participation of employees' and unions' legal representation.

RD 902/2020, on equal pay for women and men, establishes mechanisms to identify and correct discrimination in remuneration. It obliges all companies to have a salary register for all staff, including management and senior staff. Companies with a GEP must include a salary audit in their gender diagnosis. That audit should analyse whether the company's remuneration system, in a transversal and complete way, complies with the principle of equality between women and men.

The Basic Statute of Public Employees (Law 7/2007) established the need to adopt equality plans in public administrations. Law 4/2007 on Universities (LOMLU) made these mandates more explicit for universities, stating that "within their organisational structures, universities will feature equality units specifically for the promotion and implementation of tasks related to the principle of equality between women and men". The Science, Technology and Innovation Law (LCTI 14/2011) extended the mandate to adopt GEPs from universities to public research organisations.

The Organic Law for Effective Equality between Women and Men (3/2007) required all ministries to have a gender unit, dependent on their governing bodies. That unit is responsible for developing relevant functions related to the principle of equality between women and men.

In addition to equality units and plans, both LOMLU and LCTI establish gender equality as an overall goal of the Spanish System of Science, Technology and Innovation, setting out several requirements in respect of recruitment, promotion and decision-making. They foresee gender parity (40/60 %) in nominations to panels, advisory boards and committees. They set out the revision of selection and evaluation procedures for recruitment and accreditation, as well as for awarding financial grants, in order to eliminate gender bias, barriers and gaps. Provisions also seek to achieve greater participation of women in research groups and to integrate gender issues in research. They establish the units and tasks involved in monitoring gender equality practices within universities. Chief among these are the development of sex-disaggregated statistics (LOMLU, LCTI) and the involvement of key actors, such as the General Conference of University Policy (LOMLU).

Policy framework

The main research, development & innovation policy instruments in Spain are the "Spanish Science, Technology and Innovation Strategy (EECTI) 2021-2027" and the "State Scientific, Technical and Innovation Research Plan (PEICTI) 2021-2023".

The EECTI is the multiannual reference framework for promoting scientific, technical and innovation research, which establishes the objectives shared by all public administrations. It is developed within the scope of the national government through the multiannual PEICTI, which establishes its scientific-technical and social priorities.

A gender perspective is one of the four basic principles the EECTI 2021-2027 will use to guide the definition, planning and implementation of public research, development and innovation policy. Gender equality is also included in the key areas of strategy, on the attraction, retention and development of talent (no. 7) and on science for society (no. 14). The PEICTI 2021-2023 also includes the gender perspective as a basic principle and the complete plan has been reviewed by the Women and Science Unit (UMyC) to mainstream the gender approach.

Within this strategy framework, gender equality policies in the science, technology and innovation system focus on two main areas: (1) visibility and dissemination (collection and dissemination of figures and statistical data, visibility of female researchers to promote science, technology, engineering and mathematics (STEM) vocations among girls); and (2) transformation and promotion (measures and resources to eradicate gender inequalities, boost progress towards real and effective gender equality, and integrate the gender dimension into science and innovation).

All public research bodies dependent on the Ministry of Science and Innovation have an equality unit or working group responsible for gender equality, and most have GEPS in place.

The Strategic Plan for Equal Opportunities 2014-2016^[1] is the Spanish government's overall policy framework for gender equality. It includes 13 measures addressing research performing organisations and research policy. These aim to ensure compliance with the legal and policy provisions on gender as a transversal concern in research, not only in guaranteeing equal participation of women in the science system, but also the promotion of gender-specific and gender-sensitive research (an update is pending, according to the Women Institute website^[2]).

The [III Public Administration Equality Plan](#) was approved in December 2020. It aims to comprehensively address gender equality within the General State Administration and to eradicate any form of discrimination. The key action areas are collecting data to: (1) improve and promote cultural change; (2) advance gender mainstreaming; (3) prevent and manage sexual and sexist harassment; (4) prevent gender and multiple discrimination; (5) support gender-based violence victims. The III Plan has six axes, with 68 transversal measures across all ministerial departments, and is thus applicable to the Ministry of Science and Innovation and its dependent public bodies.

Key actors

Three Spanish ministries have responsibility for gender and science.

The Ministry of Science and Innovation^[3] is the central government department responsible for executing government policy on scientific and technical research, technological development and innovation in all sectors. Gender equality is a policy priority for the Ministry of Science and Innovation, and is perceived as an important driver of quality and excellence in science and innovation.

Three structures in the Ministry of Science and Innovation implement gender equality policy:

The UMyC is responsible for applying gender mainstreaming in science, technology and innovation;

The Women, Science and Innovation Observatory (OMCI) is an interministerial collegiate body chaired by the Minister of Science and Innovation. It has 22 members, drawn from 10 ministries and the most relevant agents in the fields of science, technology, innovation and equality. Its goal is to advance gender equality in science, technology and innovation through balanced presence of women and men in all areas and levels, and integration of a gender dimension in innovation and research. The OMCI's [biannual work plan](#) establishes the five priority lines of action for 2021-2022: (1) collection, monitoring, evaluation and dissemination of data disaggregated by sex, as well as statistics and gender indicators in the field of research, development and innovation; (2) career and professional development of women researchers; (3) strengthening the cooperation and participation of all actors in science, technology and innovation to promote greater visibility of women and to advance towards a balanced presence in all areas and levels; (4) promoting structural change in gender equality to advance towards real and effective gender equality, removing obstacles and ending gender

bias; and (5) valuing the gender dimension as a specific area of study and research, as well as a transversal area in projects.

The Gender Equality Unit provides advice and support on effective application of the principle of equal opportunities between women and men in the competences of the Ministry (RD 259/2019).

Through the UMyC, the Ministry of Science and Innovation promotes and monitors the development and implementation of gender equality policy in public research bodies, agencies and attached bodies that participate in the management and financing of science and innovation. The following have a GEP in place: the State Research Agency (AEI) as a funding agency, the Centre for Industrial Technological Development (CDTI), focused on promoting business innovation, and the Institute of Health Carlos III (ISCIII), focused on health of all citizens through the promotion of research and innovation in Health Sciences and Biomedicine.

The Spanish Foundation for Science and Technology (FECYT) is a public foundation promoting scientific research of excellence. It approved its GEP in 2021 and its strategy includes the promotion of gender equality.

The Higher Council for Scientific Research (CSIC) is the largest public research institution in Spain. It has been committed to gender equality since 2002, when the Women and Science Committee was founded. In 2011, the CSIC approved its first GEP, reflecting the advancement of gender equality laws. Since 2018, it has launched an annual call for the Gender Equality Accreditation Seal to recognise CSIC centres or institutes that promote gender equality.

The Ministry of Equality^[4] is responsible for general equality policies between women and men, the prevention and eradication of different forms of violence against women, and the elimination of all forms of discrimination. Within its remit, the Women's Institute (IM)^[5] is an autonomous body charged with promoting and developing the application of gender mainstreaming and the principle of equal treatment and opportunities between women and men. The IM has funded research in gender and science since the early 1980s. It opens two annual calls, one to fund research on women's and gender studies, and the other to carry out official postgraduate courses in Gender Studies. The IM supports and finances complementary actions, such as congresses or publications, and supports the activities of universities' Gender Equality Units.

The Ministry of Universities^[6] is responsible for policy on universities and their activities. Gender equality is a priority for the Ministry of Universities and focuses on three lines of action: (1) incorporation of the principle of gender equality in laws and regulations; (2) cultural transformation of teaching focusing on the production and transfer of knowledge; and (3) specific actions in evaluation, accreditation, scholarships and aids for research. The Ministry of Universities also participates in the OMCI.

The Ministry's Gender Equality Unit implements gender equality policy and is responsible for applying the principle of equal opportunities between women and men in the competences of the Ministry (RD 259/2019). There is a network of equality units in the public bodies and entities linked to the Ministry of Universities.

The Ministry's Gender and Universities Board proposes measures and promotes debate among experts, specialised organisations and institutions about gender inequality in the university environment. It meets regularly, with interested ministries, institutions, experts and civil society organisations all participating^[7].

The National Agency for Quality Assessment and Accreditation (ANECA)^[8] is attached to the Ministry of Universities. Crucially, it is responsible for the evaluation, certification and accreditation of teaching staff, teachers, university institutions and centres. Both the Ministry of Universities and the ANECA implement measures to reduce gender inequalities in professors' career development, particularly those resulting from caring duties or the health effects of gender-based violence (e.g. reflected in criteria for evaluating professors). ANECA also organises training on gender equality for evaluators and promotes gender parity on evaluation commissions.

Each regional government in Spain develops its own policies on research, development and innovation and gender equality. Some regions have their own IMs, which have developed important measures such as financial support for University Equality Units or for gender research.

The Conference of Rectors of Spanish Universities (CRUE) was established in 1994 and comprises 76 Spanish universities (50 public, 26 private). Its Delegation for Equality Policies highlights the importance of gender equality in university policy and places gender issues on the agendas of many Spanish rectors. In November 2018, the I Summit of Spanish Female Rectors was organised, where equality policy in universities was discussed. The seven rectors then signed a manifesto to prioritise gender issues in university policy^[9].

The Network of Equality Units for Excellence in Universities ([RUIGEUE](#)) is a space that facilitates debate and proposals, as well as promoting visibility of gender issues in university and scientific policy. The Network coordinates the Gender Equality Units of 53 Spanish universities. It meets annually to share experiences, debate specific issues and discuss the advancements and shortcomings of current strategies.

Other stimulatory initiatives

The Association of Women Scientists and Technologists (AMIT) is dedicated to promoting the equal participation of women in science, research and technology. Founded in 2002 and with more than 500 associates, AMIT fosters debate and awareness, and lobbies for effective implementation of the legal and policy provisions on gender issues. It has created a complete, comprehensive and regularly updated database of women researchers in order to promote the visibility of women in science and networking^[10]. AMIT promoted the #Nomorematildas campaign^[11], which publicised the negative impact of the so-called Matilda Effect and sought to include the findings of women scientists in textbooks. The campaign includes online materials, such as an annex for primary education textbooks with short biographies of women scientists who were not properly recognised, yet who can serve as inspirational role models for young girls today.

The University Association for Women's Studies ([AUDEM](#)) coordinates 20 research centres and institutes on Women's Studies and Gender Studies. AUDEM organises relevant dissemination activities, conferences and publications.

The Vives Network of Universities (*Xarxa Vives d'Universitats*) is a non-profit organisation that represents and coordinates the joint work of 22 universities in Catalonia, the Valencian Region, the Balearic Islands and other territories with shared geographical, historical, cultural and linguistic links. Its Gender Equality Working Group organises annual forums on gender equality policy and develops research and training activities. It has prepared guidelines on incorporating the gender perspective in university teaching in 11 different areas of knowledge (available online)^[12]. Its website also features GEPs, protocols for the prevention of sexual and sexist harassment, and other university regulations on gender equality.

INITIATIVES FOR GENDER EQUALITY BY RESEARCH PERFORMING ORGANISATIONS

In line with the Equality Law and Law on Universities, since 2007, 96 % of public universities and 70 % of private universities have developed GEPs. Some are now developing a second or even third generation of plans. Evaluation processes remain limited, however, and a culture of monitoring and evaluation of GEPs has yet to be developed.

Most universities' GEPs include awareness-raising of gender equality, training on gender equality, training on integrating the gender dimension into the content of research and teaching, measures on collecting data and gender statistics, and actions to promote the visibility of women researchers. Most have sexual harassment protocols and awareness campaigns (96 % of public universities and 73 % of private universities). Measures for balancing personal, work and family life are common, such as flexible schedules or priority to choose teaching schedules given to professors with caring responsibilities or permits to accompany family members to medical visits. Actions to integrate the gender approach into teaching content and measures or protocols to guarantee the gender perspective in selection and evaluation processes are still rare^[13].

According to the Law of Science, Technology and Innovation (2011), large nationally-owned public research organisations were expected to develop their own plans no later than two years after the law was enacted. According to the report, *Científicas en Cifras 2021*, 75 % of public research bodies have adopted a GEP - 67 % are implementing their second plan, 17 % are preparing their third, and 17 % are preparing their second (data as of 31 December 2020^[14]).

Horizon 2020 promotes gender equality, in particular by supporting projects on structural change in the organisation of research institutions and in the content and design of research activities. It has had a substantial impact on science, innovation and universities in Spain, with numerous public and private institutions coordinating or taking part in consortia.

The Ministry of Science and Innovation participates in GENDER equality in the ERA Community To Innovate policy implementation (GENDERACTION), Supporting the Promotion of Equality in Research and Academia (SUPERA) and ERA-NET Cofund Promoting Gender Equality in H2020 and the ERA (GENDER-NET). The AEI also participates in GENDER-NET and in Leading Towards Sustainable Gender Equality Plans in Research Performing Organisations (LeTSGEPs). The CSIC participates in GRant AllocatioN Disparities from a gender perspective (GRANteD) and CIEMAT, while the Instituto de Astrofísica de Canarias participates in Gender Equality Network in the European Research Area (GENERA).

Universidad Complutense de Madrid coordinates SUPERA, with the Ministry of Science and Innovation as partner. *Universidad Politécnica de Madrid* coordinates the Gender Equality in Science, Technology and Innovation Bilateral and Multilateral Dialogues (GENDER STI) project. *Universidad de Deusto* coordinates Gender Equality Actions in Research Institutions to traNsform Gender ROLES (GEARING ROLES), with FECYT as its partner. *Universitat Oberta de Catalunya (UOC)* coordinates the Communities of PrACTice for Accelerating Gender Equality and Institutional Change in Research and Innovation across Europe (ACT) project, with the participation of Notus and the Centre for Genomic Regulations (CRG) as partners. UOC also coordinates the consortium of Gender Diversity Impact (Improving research and innovation through gender diversity) and participates as a partner in the Certification-Award Systems to Promote gender Equality in Research (CASPER) and in Evaluation Framework for Promoting Gender Equality in Research and Innovation (EFFORTI). The CRG coordinates the Leading Innovative measures to reach gender Balance in Research Activities (LIBRA) consortium. A Spanish consultancy firm, CONSULTA EUROPA, coordinates the consortium of the project, Implementing gender equality plans to unlock research potential of research organisations and funding organisations in Europe (ATHENA), with participation of the *Universidad de Las Palmas de Gran Canaria* and the Regional Government of Canarias as partners. ESADE coordinates the Gender Equality Standards for AHMSSBL institutions throughout Europe (EQUAL4EUROPE) project.

Spanish research organisations also participate in the following consortiums: Notus in TARGET; Fundació Institut de Recerca Biomèdica (IRB) Barcelona in the CALIPER project; *Centro de Investigaciones Científicas y Tecnológicas de Extremadura* in the Science Management of Agriculture and life sciences, including Research and Teaching (Gender-SMART) project; CTAG Automotive Technology Centre of Galicia in the project, Modifying Institution by Developing Gender Equality Plans (MINDtheGEPs); *Universidad Politécnica de Madrid* in Gender Equality (GE) Academy; *Universitat Politècnica de Catalunya* in Gender Equality in Engineering through Communication and Commitment (GEECCO); NanoGune in the programme, Pilot experiences for improving gender equality in research organisations (R&I PEERS); *Fundación La Caixa* in GENDER-NET; and Mondragon University and ELHUYAR in the project, Promoting gender balance and inclusion in research, innovation and training (PLOTINA).

Spain shows a clear evolution of equality policy in research, development and innovation. This was driven by regulations, especially as a consequence of Organic Law 3/2007 for the effective equality of women and men, and also by the directives, initiatives and recommendations in the framework of the European Union(EU).

The report *Científicas en Cifras* identifies some positive trends in its most recent publication in 2021: a greater presence of female researchers (41 %); a greater presence of women at the highest levels of research careers in both universities and public research bodies (Grade A: 24 % in 2019 vs. 21 % in 2016; Grade B: 44 % in 2019 vs. 42 % in 2016); and a greater presence of women in decision-making positions (in 2020, 23 % female rectors in universities and 50 % directors of public research bodies, compared to 2018 data of 22 % and 38 %, respectively). However, the report also observes that gender gaps have persisted and even increased in some cases. There are fewer students in STEM áreas (especially engineering and technology), women drop out of their scientific careers more frequently than men, and women's careers progress more slowly than those of their men colleagues. Women researchers receive less research funding and have a lower success rate in research calls. Notwithstanding efforts and inspiring practices, there is a lack of inclusion of the gender dimension in research and innovation projects. Similarly, despite regulatory advances, not all universities and public research bodies have equality units, GEPs and protocols for the prevention of sexual and sexist harassment. Finally, the evaluation and monitoring culture remains inadequate to improve policy and impacts.

RELEVANT EXAMPLES OF PRACTICES

Women and Science Committee in the CSIC

In 2002, the CSIC Governing Board approved the Women and Science Committee. The Committee advises the presidency of the CSIC on issues related to recruitment and career promotion of women researchers, identifies problems and analyses causes hindering women's access and career progression. It also analyses historical biases and gaps due to the deficit of women in scientific institutions and in their management bodies, and proposes corrective measures where appropriate. The Committee produces the annual "Report on Women Researchers", which monitors the situation of women scientists at CSIC.

The CSIC was Spain's first public or private research organisation to create a Committee for Women and Science. Since 2002, there has been a rapid and transformative evolution in gender equality law and policy, prompting the creation of gender equality units and bodies in public and private research institutions. As a pioneer, the Committee supported these structures in the institutes attached to the CSIC and promoted networking and recognition through the annual call for its Gender Equality Certification. The Women and Science Committee has evolved to become a reference structure for the promotion of equality in Spain's science, research and innovation system.

Gender Coefficient in the Full Professor Programme

Universitat Politècnica de Catalunya (UPC) is a public research and higher education institution in engineering, architecture, science and technology. Gender stereotypes mean that UPC has a low percentage of women students (less than 30 % of BSc and MSc students). This percentage is similarly low across all categories of academic career, falling to its lowest percentage in the full professor category. In 2010, UPC established a Promotion Plan, which internally evaluates all professors qualifying for full professors according to ANECA. This evaluation is used to decide the departments in which full professor positions will be created.

After several calls, a glass ceiling was identified in the highest category in 2016, with women accounting for only 8.6 % of full professors. UPC approved an affirmative measure to correct the inequalities and structural obstacles that hinder the equal development of women's academic careers. The Full Professor Programme applies a gender coefficient, which is a correction coefficient in the final scores of women candidates. The gender coefficient is calculated on the basis of the percentage of women professors in the lower category, and the goal is to reach the same percentage of women full professors (category A) as the percentage in category B.

In 2017, a coefficient of 1.15 was applied, which has since been maintained or increased. In addition, in 2021, 5 % of the full professor positions opened were guaranteed to women candidates and the coefficient applied was 1.25.

This measure immediately increased the numbers of women promoted to full professor, with 12.9 % of women in this category in 2021. The measure also promotes a greater presence of women in decision-making positions by having more women in the higher categories. Finally, it has an important impact on organisational culture, including acceptance of transformative and structural measures to promote gender equality.

Protocol against gender-based violence

The Basque Country University (UPV/EHU) undertook a one-year participatory process to design a protocol against gender-based violence that responds to the needs and reality of the university community. In June 2018, the protocol was approved, with the goal of promoting a safe environment for all in the university community.

The protocol has several innovative aspects. Its broad definition of gender-based violence covers all sexist violence, including violence against LGBTIQ+ persons. The protocol can be activated when someone in the university community experiences gender-based violence, whether on or off campus. It can be initiated by a person other than the affected person or by university services (with the consent of the affected person) and a police or judicial report is not necessarily required. The protocol features a support process for victims to seek reparation and to ensure that they can continue their lives and academic or professional careers. A specially trained Gender Violence Advisor is dedicated full-time to both the protocol and preventive awareness-raising actions. A Commission on Gender-Based Violence has also been created, bringing together the Gender Equality Office, security, labour risk prevention service, and employees' legal representation.

These innovations have successfully offset the key issue of underreporting and the protocol has become an inspiring practice for other universities.

Footnotes

[1] https://eige.europa.eu/sites/default/files/equal_opps_strat_plan_peio201...

[2] <https://www.inmujeres.gob.es/areasTematicas/AreaPlanificacionEvaluacion/...>

[3] <https://www.ciencia.gob.es/en/Ministerio/mision-y-organizacion.html;jses...>

[4] <https://www.igualdad.gob.es/ministerio/Paginas/index.aspx>, Royal Decree 455/2020

[5] <https://www.inmujeres.gob.es/areasTematicas/AreaEstudiosInvestigacion/Co...>

[6] <https://www.universidades.gob.es/portal/site/universidades/menuitem.78fe...>

[7] With the participation of experts, representatives of the Ministry of Universities, Ministry of Equality, Ministry of Science and Innovation, ANECA, CRUE, the University Platform for feminist studies and of gender (EUFEM), AMIT and RUIGEU.

[8] <http://www.aneca.es/ANECA/Quienes-somos/Marco-legal>

[9] <https://canal.ugr.es/noticia/i-cumbre-de-rectoras-declaracion-de-castellon/>

[10] <https://cientificas.amit-es.org/>

[11] <https://www.nomorematildas.com/en>

[12] <https://www.vives.org/programes/igualtat-genere/guies-docencia-universit...>

[13] <https://www.ciencia.gob.es/en/Secc-Servicios/Igualdad/cientificas-en-cif...>

[14] *ibid.*