



Women & research: a challenge for Europe

(the case of Spain and Catalonia)

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Statistics help to identify problems and can monitor the effectiveness of remedies.

No statistics, no problems, no policy.

**Hilary Rose
Emeritus Professor.
University of Bradford, UK**

How many women scientists are there in Spain?

It varies depending on definition of dedication and disciplines!

Universities: 28,000 from 84,000 total

About 34%

Mean in the
EU public
system: 34%

Prácticas de Química. 1928 Clase de Puericultura. 1940



9% women in University

WOMEN IN UNIVERSITY

9 Women in 1890

345 in 1920 (174 in Madrid, 54 in Barcelona...)

1681 in 1930 (799 in Madrid, 229 en Barcelona...)

In 1973	79,287 women	31.1 %
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In 1983	23,3173	46.2 %
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In 1991	58,1284	51 %
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STUDENTS THAT FINISHED UNIVERSITY, BY SEX AND AREA OF KNOWLEDGE

YEAR 2000-2001

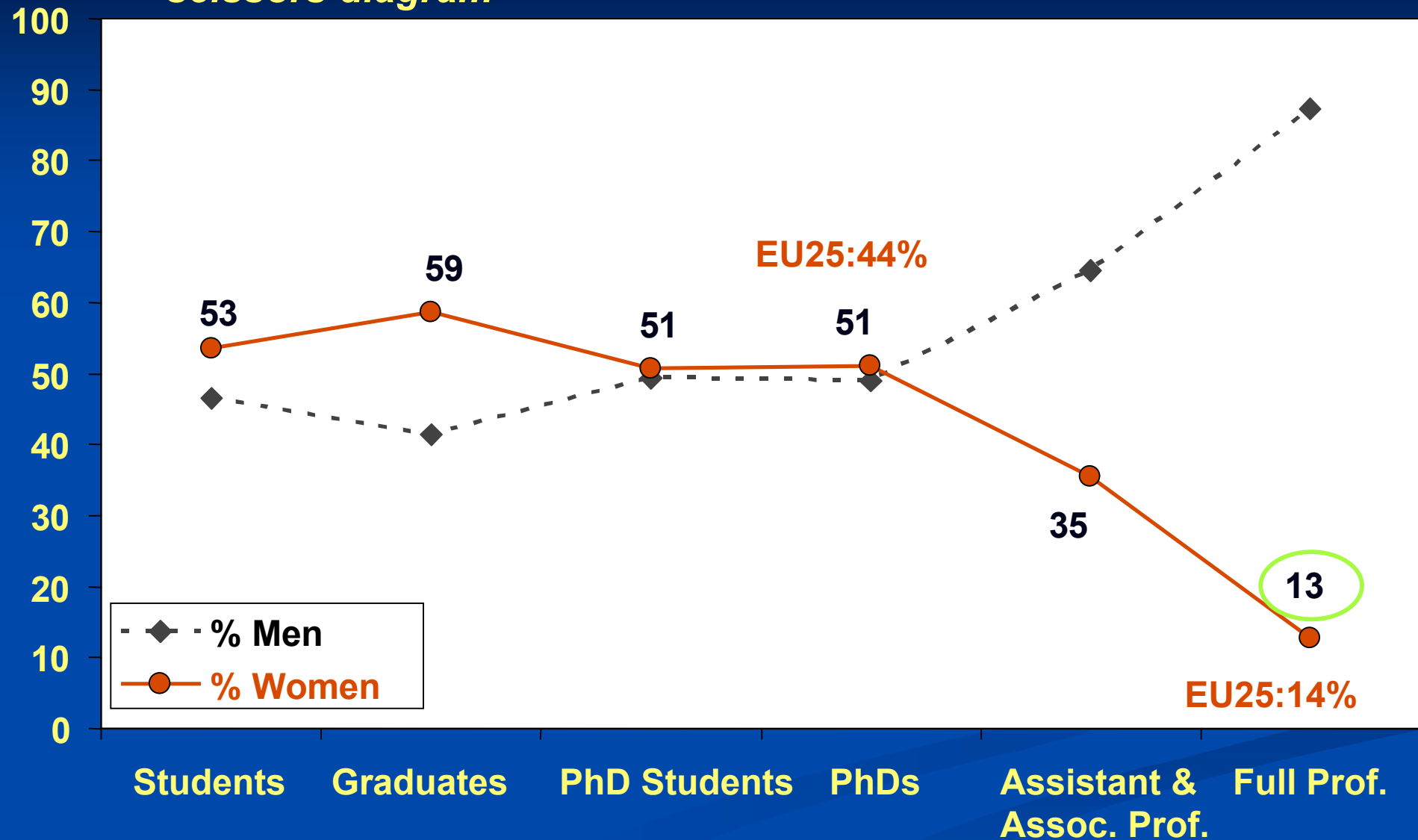
Total	Women	Men	% Wo
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All areas	208,338	122,816	85,522	58.95
Humanities	18,066	12,002	6,064	66.43
Social & Law Sciences	113,448	74,458	38,990	65.63
Experimental Sciences	15,352	8,917	6,435	58.08
Health Sciences	22,091	16,535	5,556	74.85
Tecnical Sciencies	39,381	10,904	28,477	27.69

Note: Includes 3 cycles

Data: INE ("Instituto Nacional de Estadistica" in Spain)

Relative proportion of women and men in Universities in Spain "scissors diagram"



Year 2003-04 up to PhD. Year 2001-02 public Universities Professors

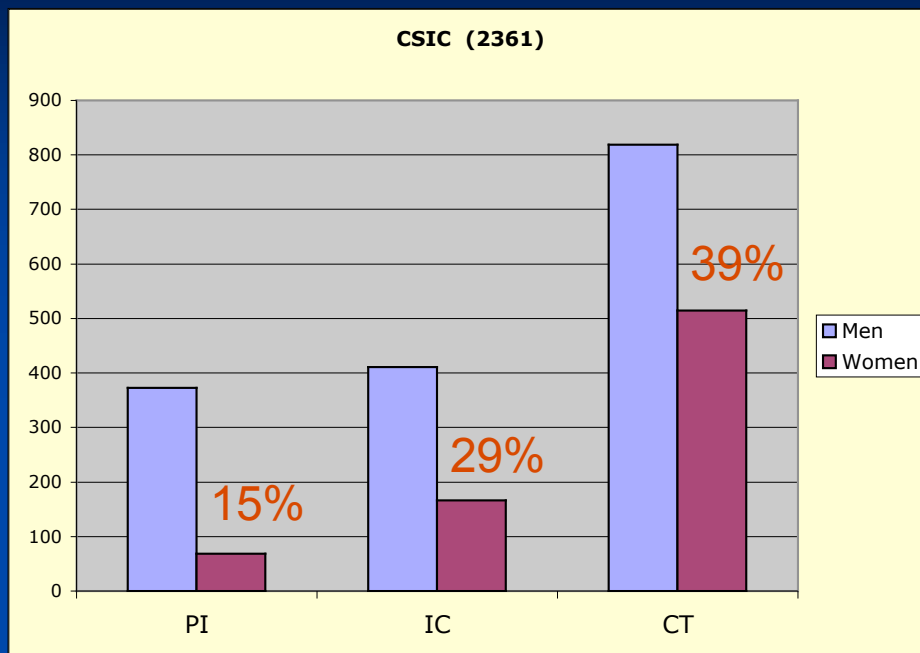


CSIC (Spanish Research Council) 2003:
2,361 staff scientists,
33% women (average in all 8 areas
and three levels)

1982: **1,318 staff scientists,**
 24% women



CSIC 2003: proportion of Women scientist at each level



PI: top level

("Profesor de Investigación")

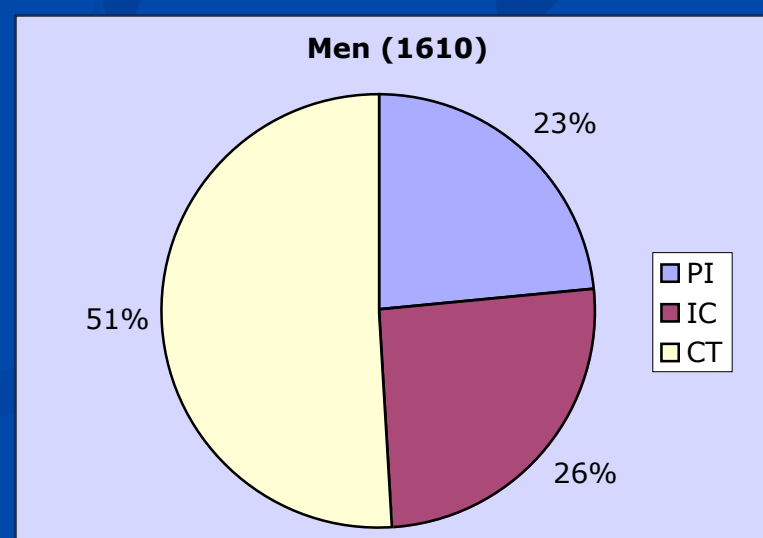
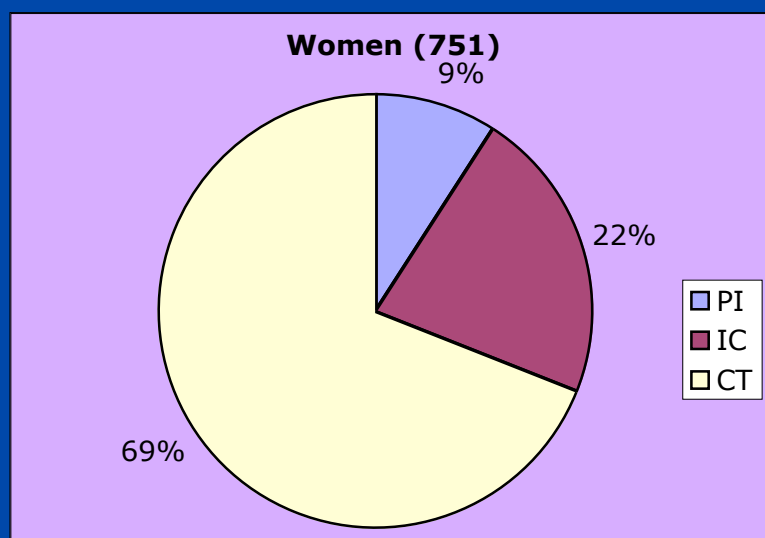
IC: medium level

("Investigador Científico")

CT: entry level

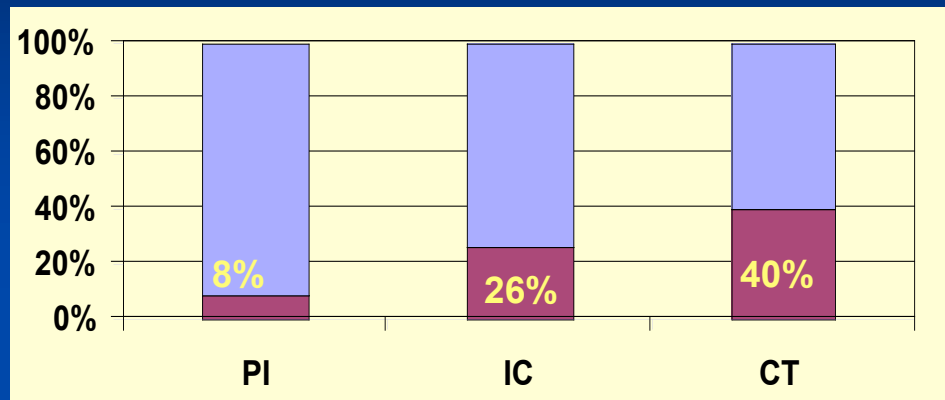
("Científico Titular")

J. Alvarez, J. Campabadal, 2003



CSIC CATALONIA

Proportion of Women scientist at each level



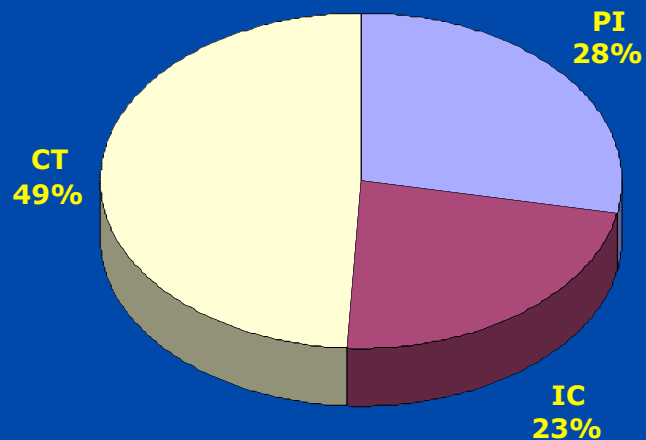
- Research staff: **284**
- **Women: 30%**
- **15** centers, only **6** scientific areas.

PI: top level

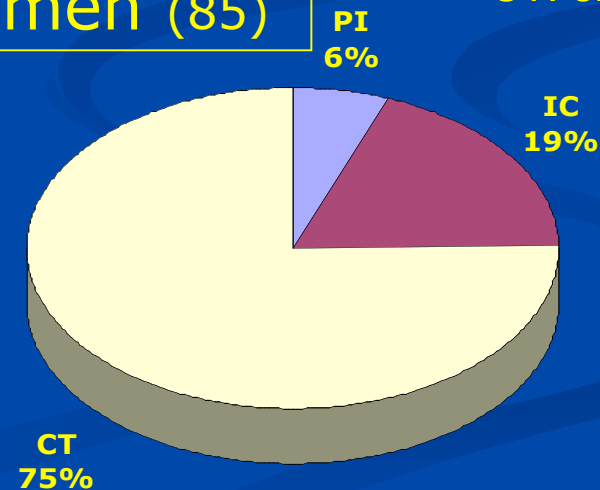
IC: medium level

CT: entry level

Men (199)



Women (85)



1 PI for each **1.75** CT

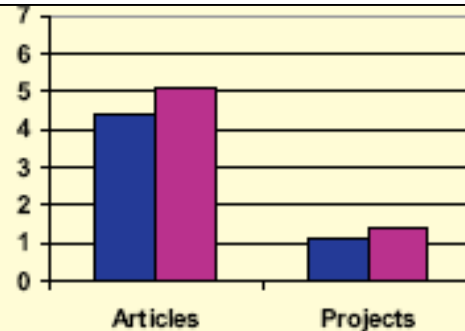
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1 PI for each **13** CT

Top level (PI)



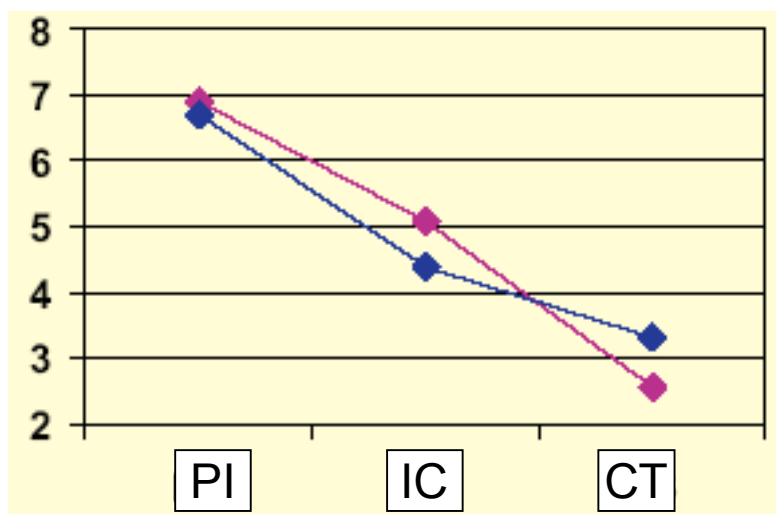
Intermediate level (IC)



Entry level (CT)



Comparison of production rate between men and women at each level



**CSIC Scientists in Catalonia:
PRODUCTION RATE (1999-2002)**

Women **Men**

Articles (average per year and per capita)



Women Scientists in the CSIC:



Rhythm too slow... There is not
the expected natural advance

To go backwards is possible !!!

There is no correspondence
with productivity when studied

Women Together for Science



2001

ASOCIACIÓN DE MUJERES
INVESTIGADORAS Y TECNÓLOGAS

*Association of Women
Investigators and Technologists*

Flora de Pablo



- **1st. Woman Professor of Medicine in Spain: 1980**
- **Today: 3 Women University Presidents
among over 70**
- **Women in Royal Academies related to science:**

Sciences: 2/42

Medicine: 1/50

Pharmacy: 5/50

AIMS OF AMIT

**To promote full and equal participation
of Spanish Women in Research and Science**

**Request sex-disaggregated statistics
Demand women in Committees
Cultivate role models
Promote science education**

www.amit-es.org

a challenge

"Half of the intelligence of humans
is in the heads of women"

"It is crucial to evolve from
equal rights (theory) to actual
equal opportunities (practice)"