

10 July 2007

### Statistics on Biotechnology Use

Provisional results. Year 2005

# The number of companies that carry out Biotechnology R&D increased 34.9% in the year 2005

# Expenditure on domestic Biotechnology R&D rose to 667 million euros, 32.4% more than in 2004

Almost 400 companies carried out Biotechnology Research and Development (R&D) activities during the year 2005, which represented an increase of 34.9% in comparison with the previous year.

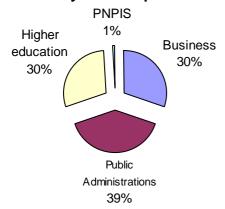
Domestic expenditure on Biotechnology Research and Development (R&D) in Spain rose to 667 million euros, which was 6.5% of total expenditure on domestic R&D activities and an increase of 32.4% as compared to 2004.

By fields of operation, the Public Administration sector exhibited the highest percentage over domestic Biotechnology R&D expenditure (39.4%), followed by the Business (30.1%) and University (29.7%) sectors.

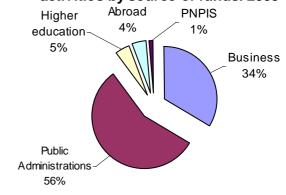
Biotechnology R&D expenditure in the Public Administration sector reached 263 million euros in 2005, for an interannual increase of 43.5%. On the other hand, investment in Biotechnology R&D in the Business sector was 201 million euros, that is, 31.8% more.

Biotechnology R&D activities were mainly financed by the Public Administration (56.2%) and Business (33.6%). The funds from Higher education, abroad and Private Non-Profit Institutions (PNPI) financed the remaining 10.2%.

# Domestic expenditure on Biotechnology R&D activities by field of operations. 2005



## Domestic expenditure on Biotechnology R&D activities by source of funds. 2005



## Biotechnology R&D activities employed 6.6% of the total personnel dedicated to R&D.

Biotechnology R&D activities employed 11,572 persons on a full-time equivalent during the year 2005. This figure implied 6.6% of the total personnel working in R&D and an increase of 22.5% in comparison with the year 2004.

Companies employed 2,564 persons on a full-time equivalent, which represented 3.4% of the total personnel working in R&D and an interannual increase of 7.4%.

The number of researchers on a full-time equivalent rose to 8,211 (7.5% of the total R&D researchers), for an increase of 27.4% as compared to 2004.

Companies employed 1,488 researchers on a full-time equivalent (4.2% of the total). This figure represented an increase of 11%.

### More than half of the Biotechnology R&D personnel were women.

53.8% of the personnel employed in Biotechnology R&D activities in 2005 were women, which represented a 20.2% increase from the previous year. The highest percentages of female participation in Biotechnology R&D activities were in the PNPI (67.2%) and Business (55.9%) sectors.

# Personnel employed in Biotechnology R&D by field of operations and according to occupation and sex. 2005

On a full-time equivalent

Field of operations	Total		Researchers	
	Total	Women	Total	Women
TOTAL	11,572	53.9	8,211	50.8
Public Administration	4,947	55.2	3,590	51.3
Higher education	3,979	50.6	3,089	48.3
Business	2,564	55.9	1,488	54.3
PNPI	82	67.1	45	60.0

#### Expenditure on domestic Biotechnology R&D in the Business sector

The industry dedicated 50% of total expenditure on Biotechnology R&D carried out by the Business sector in 2005. 40.3% of this expenditure corresponded to the Services sector, while Agriculture represented the remaining 9.7%.

By branches of activity, the highest concentration of Biotechnology R&D activities was observed in the chemical and pharmaceutical industries and in R&D services companies.

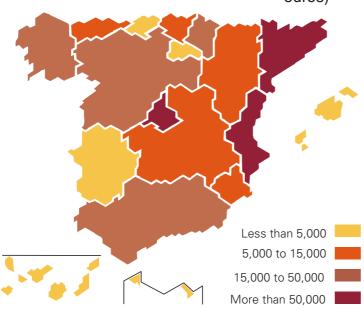
## Cataluña and Madrid, the Communities with the highest expenditure on Biotechnology R&D

The Autonomous Communities that presented the largest number of companies with Biotechnology activities in 2005 were Cataluña and Comunidad de Madrid, followed by Comunitat Valenciana, País Vasco, Andalucía and Galicia.

Press Release

On the other hand, the Autonomous Communities that incurred the greatest expenditure on Biotechnology R&D activities were Cataluña and Comunidad de Madrid, followed by Comunitat Valenciana, Andalucía and Castilla y León.

## **Expenditure on Biotechnology R&D** (thousands of euros)



## Expenditure on Biotechnology R&D

(thousands of euros) by field of operations and according to **Autonomous Communities.** 

	TOTAL	Remaining	Companies
		sectors *	
Andalucía	36,024	26,663	9,361
Aragón	8,344	6,337	2,007
Asturias	10,399	8,964	1,435
Balears (Illes)	629	386	243
Canarias	4,690	4,117	573
Cantabria	729	102	627
Castilla y León	35,664	26,029	9,635
Castilla-La Mancha	8,203	8,103	100
Cataluña	200,135	133,474	66,661
Comunitat Valenciana	92,446	81,753	10,693
Extremadura	1,217	814	403
Galicia	18,020	14,299	3,721
Madrid	197,321	128,862	68,459
Murcia	10,916	3,839	7,077
Navarra	27,130	21,081	6,049
Pais Vasco	14,935	1,003	13,932
Rioja	360	222	138

 $<sup>^{\</sup>star}$  Remaining sectors: Public Administrations, PNPIs and Higher education

For further information see INEbase-www.ine.es All press releases at: www.ine.es/prensa/prensa.htm

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### Methodological note

The Statistics on Biotechnology Use were prepared following the methodological guidelines of the OECD.

The information was collected, in the case of Business, through an additional module annexed to the Technological Innovation in Companies Survey, and aimed at all those units that were potentially linked to biotechnology. In the case of the Public Sector, the information was collected through a module annexed to the Statistics on R+D Activities and was aimed at all those units that carry out R&D statistics, whether Universities, Public Administrations or PNPIs.

The main aggregates for quantifying the national effort invested in Biotechnology R&D activities are: domestic Biotechnology R&D expenditure, which includes current expenditure and the capital corresponding to activities undertaken within the state throughout the year, and the personnel working on Biotechnology R&D tasks, which includes all of the persons that have worked in the country throughout the year, on a full-time equivalent (FTE).