

Patterns of Diversity

A comparison of each nation's total scientific output between 1981 and 1990 (gold bars) and quality, measured by mean citations per paper (blue bars) reveals some patterns in Europe's diversity. Four groupings stand out: the small-output, high-quality nations (the three Nordic nations, Finland, Holland, and Switzerland), the massive-output, good-quality, great scientific powers (France, Germany,

and Britain), the low-output, less-cited nations (Ireland, Spain, and the Central and southern European nations), and, in a class of its own, as always, Italy, hovering between the southern nations and its more productive neighbors to the north.

Science's reporters went to a nation (or nations) from each of the groups to ask how they saw the future. Their reports follow.

FRANCE

GDP: \$1,270 billion
Population: 57 million
GDP per head: \$22,350
Nobel Prizes:
1952-1971 4
1972-1991 3



Salaries:
Postdoc \$19,000
Asst. professor \$32,400
Professor/director \$70,800

GERMANY

GDP: \$1,600 billion
Population: 78.5 million
GDP per head: \$25,500
Nobel Prizes:
1952-1971 5
1972-1991 13



Salaries:
Postdoc \$35,000
Assoc. professor \$44,000
Professor \$104,000

SWITZERLAND

GDP: \$244 billion
Population: 6.8 million
GDP per head: \$35,810
Nobel Prizes:
1952-1971 0
1972-1991 4



Salaries:
Postgrad \$23,000
Postdoc \$52,000
Asst. professor \$116,000
Professor \$137,000

UK

GDP: \$1,102 billion
Population: 57.7 million
GDP per head: \$17,710
Nobel Prizes:
1952-1971 17
1972-1991 12



Salaries:
Postgrad \$10,500
Lecturer \$28,300
Senior lecturer \$48,200
Professor \$60,800

ITALY

GDP: \$1,180 billion
Population: 57.9 million
GDP per head: \$20,300
Nobel Prizes:
1952-1971 1
1972-1991 2



Salaries:
Young researcher \$22,500
Assoc. professor \$31,400
Professor \$45,000

Note: Nobel data is for prizes in physics, chemistry, and medicine and physiology only classified according to the most recent nationality of the winner.

