

Figures

1.1	The share of Finnish R&D expenditures by region: 2001 (%)	4
2.1	The conceptual framework	32
3.1	Growth of addresses originating from EU and US	47
3.2	Number of addresses per publication for the European Union (1988–2002) and the United States (1988–2001)	48
3.3	Geography (EU): number of collaborations at different spatial levels of analysis (3-year moving average)	49
3.4	Geography (US): number of collaborations at different spatial levels of analysis (3-year moving average)	49
3.5	Collaboration patterns among academia and non-academic organizations (EU)	50
3.6	Collaboration types among academia and non-academic organizations (US)	50
3.7	Geography of collaborations for all members of the European Union (all years)	52
3.8	Collaboration types for all members of the European Union (all years)	52
4.1	To what degree has the consultancy firm contributed to innovation related tasks in the firm? (N = 69)	72
6.1	Average number of years that are necessary for the training of a manager by Pavitt categories	96
6.2	Relation between firms's size class and the average number of years to reach knowledge maturity for a skilled blue-collar worker	97
6.3	Relationship between internal R&D and firm size – frequencies within size class (%)	98
6.4	Entrepreneurs' judgement on ICTs	103
6.5	Organizational changes within ICT users	103
6.6	Knowledge life cycles inside firms and territories	105
6.7	Relationship between firms' age and R&D	108
6.8	The importance of past experience and knowledge by firms' age	110
6.9	The 'territorial lung'	111
7.1	Factors favouring 'disintegrated' production/development	120

7.2	Turning knowledge into products: the pharmaceutical biotechnology value chain	123
7.3	Primary and secondary proximity benefits for small biotechnology firms	128
7.4	Development of Category I firm numbers in Germany	129
7.5	Distribution of biotechnology firms across German federal states, 2002	129
7.6	The German biotechnology map	132
7.7	Co-location patterns of research centres and research centres + biotechnology product developers	133
7.8	Co-location patterns of research centres and research centres + biotechnology service providers	134
7.9	The evolution of biotechnology in Berlin and Munich until 2002	136
9.1	Targeted sectors for investment since admission to the EEC	166
9.2	Distribution of employment in foreign-owned enterprises, 1991–2000	168
9.3	Persons in full-time education, 1970–2000	169
9.4	Total enrolment in tertiary education growth, 1999	170
9.5	Number of science graduates at university level	171
9.6	Technology balance of payments, 1999	173
11.1	Utilitarian conception of business conduct in a stakeholders' framework	204
11A.1	MCC organizational structure	215