

Table 17. Summary of R&D personnel

Persons, Person-years

Year	R&D personnel							R&D personnel indicators		
	Total	Researchers		Technicians		Supporting staff		Resear- chers per 1,000 population	Resear- chers per 1,000 labor force	Annual R&D expenditure per researcher (Million NT\$)
		Female	Female	Female						
1999	134 845	67 165	13 307	51 754	11 633	15 926	8 025	3.0	7.0	2.84
2001	138 409	73 239	13 334	48 886	11 830	16 283	9 096	3.3	7.4	2.80
2006	212 483	126 168	25 820	67 715	17 828	18 600	10 889	5.5	12.0	2.43
2008	241 366	144 234	28 994	77 218	20 523	19 914	11 885	6.3	13.3	2.44
2009	256 252	154 949	31 857	80 433	22 479	20 870	11 689	6.7	14.2	2.37
2010	273 249	165 370	34 580	86 882	23 773	20 997	12 324	7.1	14.9	2.39
2011	288 311	174 341	37 544	91 618	25 028	22 352	13 453	7.5	15.6	2.38
2012	296 288	179 491	39 038	94 863	25 989	21 934	12 501	7.7	15.8	2.42
2013	300 514	179 975	39 482	98 356	26 507	22 183	13 147	7.7	15.7	2.55
2014	307 379	181 589	40 066	103 408	27 329	22 382	12 877	7.7	15.7	2.67
2015	312 923	183 022	40 574	106 822	28 019	23 079	13 070	7.8	15.7	2.80
2016	316 467	184 898	41 300	108 755	29 016	22 814	12 886	7.9	15.8	2.93
2017	321 877	187 971	42 393	110 428	29 977	23 478	13 525	8.0	15.9	3.06
2018	330 579	193 035	43 654	114 145	31 668	23 399	13 342	8.2	16.3	3.19
2019	342 476	199 144	45 115	118 973	32 702	24 360	13 708	8.4	16.7	3.32
Year	Researchers (Full time equivalent)									
	Total	By field of science and technology						By qualification		
		Natural sciences	Engi- neering & techno- logy	Medical sciences	Agricul- tural sciences	Humanities	Social sciences	Ph.D.	Master	Bachelor
1999	54 844	7 962	35 172	4 189	2 949	2 046	2 526	11 614	20 435	22 795
2001	59 656	8 692	38 874	4 433	3 037	1 588	3 033	12 797	24 825	22 034
2006	95 176	15 327	62 759	6 611	3 239	2 058	5 182	16 792	49 545	28 839
2008	110 461	18 489	73 077	7 375	3 216	2 524	5 779	19 580	58 157	32 725
2009	119 320	19 948	78 497	8 153	3 271	2 904	6 546	20 968	63 837	34 515
2010	128 135	21 209	84 900	8 828	3 583	2 984	6 632	22 451	68 290	37 394
2011	134 503	22 040	89 922	9 063	3 530	3 204	6 745	23 813	71 071	39 619
2012	139 763	22 944	93 486	9 541	3 496	3 187	7 109	24 978	73 858	40 927
2013	140 781	23 497	93 973	9 558	3 546	3 169	7 038	25 926	75 239	39 616
2014	142 458	23 725	95 369	9 877	3 380	3 203	6 905	26 077	76 900	39 482
2015	144 836	24 035	97 298	10 234	3 204	3 230	6 836	26 661	79 198	38 978
2016	147 141	24 162	99 600	10 338	3 125	3 122	6 794	26 884	81 447	38 810
2017	149 886	24 494	101 660	10 598	3 037	3 115	6 982	27 061	83 445	39 380
2018	153 998	24 617	105 136	11 109	3 152	3 045	6 939	27 096	85 892	41 010
2019	159 160	25 341	109 409	11 582	3 220	3 060	6 548	27 349	88 864	42 947
Business enterprise	113 300	16 728	90 885	3 339	568	247	1 532	7 107	67 269	38 924
Government	16 824	3 101	8 739	2 627	1 411	311	636	5 650	9 296	1 878
Higher education	28 793	5 493	9 744	5 540	1 186	2 500	4 330	14 470	12 195	2 129
Private non-profit	243	20	41	76	55	2	50	122	104	17

Note: R&D personnel do not include the personnel of defense from 1999 to 2001 and include the students of Ph. D. program from 2002.

Source: Ministry of Science and Technology