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Detailed Chart 3.1B
Public institutions performing R&D activities by type – São Paulo State – 2008

Core R&D	Other
Comando Geral de Tecnologia Aeroespacial (CTA)	Coordenadoria de Controle de Doenças
Centro de Tecnologia da Informação Renato Archer (CTI)	Comissão Nacional de Energia Nuclear (CNEN)
Empresa Brasileira de Pesquisa Agropecuária (Embrapa)	Fundação Jorge Duprat Figueiredo de Segurança e Medicina do Trabalho (Fundacentro)
Instituto Agrônômico de Campinas (IAC)	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Ibama)
Instituto Adolfo Lutz	Instituto Butantan
Instituto Biológico	Instituto Dante Pazzanese de Cardiologia
Instituto de Botânica	Instituto de Economia Agrícola (EA)
Instituto Nacional de Pesquisas Espaciais (INPE)	Instituto de Pesquisas Tecnológicas (IPT)
Instituto Florestal do Estado de São Paulo	Instituto Pasteur
Instituto de Pesca	Fundação Seade
Instituto de Saúde (IS)	Superintendência de Controle de Endemias (SUCEN)
Instituto de Tecnologia de Alimentos (ITAL)	Fundação Pró-Sangue Hemocentro de São Paulo
Instituto de Zootecnia	Laboratório Nacional de Luz Síncrotron (LNLS)

Source: CNPq, Diretório dos Grupos de Pesquisa (queried in 2008).

Notes: 1. This survey covers only public institutions with at least one affiliated professional registered with CNPq's Research Group Census at the time of the survey.

2. It is most unlikely that any institution is dedicated exclusively to R&D, even if it is considered a core R&D performer. Most also provide technological services and technical assistance, produce certain goods (such as vaccines or seeds, for example) and/or collect information of various kinds, among other activities. Thus, as in the case of classifications of economic activity, these institutions are classified according to their main activity. In any event, the classification used here does not affect the findings, since in both types the criterion was having members of staff registered with CNPq's Research Group Census.

Detailed Chart 3.2B**Private nonprofit institutions performing R&D activities – São Paulo State – 2008****Private nonprofit institutions performing R&D activities**

Centro Brasileiro de Análise e Planejamento (Cebrap)
 Centro de Estudos de Cultura Contemporânea (Cedec)
 Centro de Estudos Rurais e Urbanos (Ceru)
 Fundação Centro de Pesquisa e Desenvolvimento em Telecomunicações (CpqD)
 ILPC – Instituto Ludwig de Pesquisa sobre o Câncer
 Centro de Radio-Astronomia e Aplicações Espaciais (Craae)
 Fundação Antônio Prudente (Fap)
 Fundação Carlos Chagas (FCC)
 Instituto Internacional de Ecologia
 Polis – Instituto de Estudos, Formação e Assessoria em Políticas Sociais

Source: CNPq, Diretório dos Grupos de Pesquisa (queried in 2008).

Notes: 1. This survey covers only public institutions with at least one affiliated professional registered with CNPq's Research Group Census at the time of the survey.

2. Double counting of researchers is highly likely, since many individuals affiliated with the same institution are registered as belonging to more than one research group.

3. There is a degree of ambiguity in the case of institutions that operate as universities, albeit with a different official identity.

Detailed Table 3.1B
Number of researchers (full-time equivalent) – Brazil, São Paulo State & selected countries – 1995-2008

Country/State	No. of researchers (FTE)													
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
France	151,249	154,827	154,742	155,727	160,424	172,070	177,372	186,420	192,790	202,377	202,507	210,591	215,755	-
UK	145,673	144,735	145,641	157,662	167,573	170,554	182,144	198,163	216,690	228,969	248,599	254,009	252,651	251,573
South Korea	100,456	99,433	102,660	92,541	100,210	108,370	136,337	141,917	151,254	156,220	179,812	199,990	221,928	236,137
Brazil	65,160	65,264	70,110	70,277	69,347	75,902	81,081	84,909	89,158	96,370	102,895	112,390	123,157	136,510
Spain	47,342	51,633	53,883	60,269	61,568	76,670	80,081	83,318	92,523	100,994	109,720	115,798	122,624	130,986
São Paulo State	24,875	24,584	26,865	27,698	27,236	27,808	31,346	32,955	33,423	35,654	39,080	42,307	46,788	50,544
Argentina	-	-	19,472	19,970	20,911	21,602	20,894	21,221	21,743	23,127	24,680	26,520	29,012	30,861
Chile	4,983	5,163	5,278	5,439	5,549	5,629	5,712	6,942	12,322	13,427	-	-	-	-

Source: This chapter (Brazil, São Paulo); RICYT (Argentina, Chile), Tabla personal de ciencia y tecnología; OECD, 2009 (other countries).

Detailed Table 3.2B
Population and number of researchers (full-time equivalent and per million inhabitants) –
São Paulo State & selected countries – 2007

Country/state	No. of researchers (FTE)	Population (millions)	Researchers per million inhabitants
USA	1,425,550	301.62	4,726
China	1,423,381	1,315.84	1,082
Japan	709,974	128.09	5,543
Russia	469,076	143.2	3,276
Germany	284,305	82.69	3,438
UK	252,651	61.11	4,134
South Korea	221,928	48.51	4,575
France	215,755	64.06	3,368
Canada	134,300	33.49	4,010
Spain	122,624	45.2	2,713
Brazil	123,157	189.74	649
Mexico	48,401	105.79	458
São Paulo State	46,788	40.81	1,147
Argentina	29,012	40.91	709
Portugal	27,986	10.6	2,640
Chile (2004)	13,427	16.6	809

Source: This chapter (Brazil, São Paulo); RICyT, Tabla personal de ciencia y tecnología (Argentina, Chile); OECD, 2009 (other countries).

Detailed Chart 3.3B
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations				
Group	Isco		CBO domiciliary (BGE)	CBO 2002 description
	Code	CBO 2002		
21	2111	2131	2131	Physicists
21	2111	2133	2133	Professionals in atmospheric & space sciences, astronomy
21	2112	2133	2133	Professionals in atmospheric & space sciences, astronomy
21	2113	2132	2132	Chemists
21	2114	2133	2133	Professionals in atmospheric & space sciences, astronomy
21	2114	2134	2134	Geologists, geophysicists
21	2121	2111	2111	Professionals in mathematics
21	2122	2112	2112	Professionals in statistics
21	2131	2123	2123	Administrators of networks, systems & databases
21	2131	2124	2124	Analysts of computer systems
21	2139	2122	2122	Computer engineers
21	2141	2141	2141	Architects, urban planners
21	2141	2629	2627	Tertiary-level interior designers
21	2142	2142	2142	Civil engineers, related
21	2143	2143	2143	Electrical and electronics engineers, related
21	2144	2143	2143	Electrical and electronics engineers, related
21	2145	2144	2144	Mechanical engineers
21	2146	2145	2145	Chemical engineers
21	2147	2146	2146	Metallurgical & materials engineers
21	2147	2147	2147	Mining engineers
21	2148	2148	2148	Surveying & cartographic engineers
21	2148	3123	3123	Geomatics technicians
21	2149	2012	2012	Professionals in weights & measures
21	2149	2012	2012	Professionals in weights & measures
21	2149	2021	2021	Mechatronics engineers
21	2149	2149	2149	Production, quality & safety engineers
21	2149	2525	2525	Professionals in economic & financial administration
21	2149	3012	3012	Bioengineering support technicians
22	2211	2011	2011	Professionals in biotechnology
22	2211	2131	2131	Physicists
22	2211	2211	2211	Biologists, related
22	2213	2221	2221	Agricultural & forestry engineers
22	2221	2231	2231	Physicians
22	2222	2232	2232	Dental surgeon
22	2223	2233	2233	Veterinarians and Zootechnicians
22	2224	2234	2234	Pharmacists

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Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations				
Group	Isco		CBO domiciliary (BGE)	CBO 2002 description
	Code	CBO 2002		
22	2229	2236	2236	Physiotherapists, related
22	2229	2237	2237	Nutritionists
22	2229	2238	2236	Speech & hearing therapists
22	2230	2235	2235	Nurses
23	2310	1313	1220	Director & managers of educational institutions
23	2310	2341	2340	Tertiary-level teachers of mathematics, statistics, computing
23	2310	2342	2340	Tertiary-level teachers of physical & chemical sciences, related
23	2310	2343	2340	Tertiary-level teachers of architecture, urban planning, engineering, geophysics, geology
23	2310	2344	2340	Tertiary-level teachers of biological & health sciences
23	2310	2345	2340	Tertiary-level teachers of education
23	2310	2346	2340	Tertiary-level teachers of language & literature
23	2310	2347	2340	Tertiary-level teachers of human sciences
23	2310	2348	2340	Tertiary-level teachers of economic, administrative & accounting sciences
23	2310	2349	2340	Tertiary-level teachers of arts
23	2320	2321	2321	Secondary-level teachers
23	2320	2331	2330	Teachers in vocational education
23	2320	2332	2330	Instructors in vocational education
23	2331	2313	2313	Teachers with university degrees in primary schools, years 5-8
23	2331	2321	2321	Secondary-level teachers
23	2331	2331	2330	Teachers in vocational education
23	2332	2311	2311	Teachers with university degrees in pre-schools
23	2332	2312	2312	Teachers with university degrees in primary schools, years 1-4
23	2332	2313	2313	Teachers with university degrees in primary schools, years 5-8
23	2340	2392	2392	Special education teachers
23	2351	2394	2394	Education planners, evaluators, supervisors
23	2352	3341	3341	School attendance officers
23	2359	2312	2312	Teachers with university degrees in primary schools, years 1-4
23	2359	2332	2330	Instructors in vocational education
23	2359	2341	2340	Tertiary-level teachers of mathematics, statistics, computing
23	2359	3322	3322	Teaching assistants in vocational education
24	2411	2522	2522	Accountants, related
24	2412	2524	2524	Professionals in human resources
24	2419	2521	2521	Administrators
24	2419	2523	2523	Executive & bilingual secretaries
24	2419	2525	2525	Professionals in economic & financial administration
24	2419	2531	2531	Professionals in public relations, advertising, marketing, business

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Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations				
Group	Isco		CBO domiciliary (BGE)	CBO 2002 description
	Code	CBO 2002		
24	2419	3543	3543	Foreign trade Analysts
24	2421	2410	2410	Lawyers
24	2421	2412	2412	Prosecutors, public lawyers
24	2421	2422	2422	Other members of public prosecution offices
24	2421	2424	2422	Public defenders, legal aid lawyers
24	2422	1113	1113	Judges
24	2429	2412	2412	Prosecutors, public lawyers
24	2429	2413	3514	Notaries, registrars
24	2429	2423	2423	Police superintendents
24	2431	2613	2613	Archivists, museologists
24	2432	2612	2612	Information professionals
24	2441	2512	2512	Economists
24	2442	2511	2511	Professionals in sociological anthropological research & analyzis
24	2442	2513	2513	Professionals in geographical research & analyzis
24	2444	2514	2514	Philosophers
24	2444	2614	2614	Philologists, interpreters, translators
24	2445	2515	2515	Psychologists, psychoAnalysts
24	2446	2516	2516	Social workers, home economics professionals
24	2451	2515	2515	Psychologists, psychoAnalysts
24	2451	2611	2611	Journalists
24	2451	2615	2615	Writers
24	2451	2616	2616	Editors
24	2451	2617	2617	Radio/television announcers, commentators, reporters
24	2451	2628	2622	Dancers (except traditional/popular dancers)
24	2452	2624	2625	Visual artists, industrial designers
24	2453	2626	2624	Composers, arrangers, conductors, musicologists
24	2453	2627	2624	Performing musicians
24	2454	2628	2622	Dancers (except traditional/popular dancers)
24	2455	2611	2611	Journalists
24	2455	2621	2621	Impresarios, stage producers
24	2455	2622	2623	Stage directors, related
24	2455	2623	2627	Set & stage designers
24	2455	2625	2623	Actors
24	2460	2631	2631	Ministers of religion, missionaries, theologians, related
31	3111	3115	3115	Technicians in environmental control, utilities, effluent treatment
31	3111	3161	3161	Technicians in geology

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Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations					
Group	Isco		CBO 2002	CBO domiciliary (BGE)	CBO 2002 description
	Code				
31	3112		3121	3121	Technicians in construction (buildings)
31	3112		3122	3122	Technicians in construction (infrastructure)
31	3112		3123	3123	Technicians in geomatics
31	3112		3185	3189	Design draftspersons in construction & architecture
31	3113		3131	3131	Technicians in electricity & electronics
31	3113		3187	3189	Design draftspersons in electronics
31	3114		3001	3001	Technicians in mechatronics
31	3114		3003	3003	Technicians in electromechanics
31	3114		3132	3134	Technicians in electronics
31	3114		3133	3135	Technicians in telecommunications
31	3114		3134	3136	Technicians in calibration & instrumentation
31	3114		3135	3137	Technicians in photonics
31	3114		3187	3189	Design draftspersons in electronics
31	3114		3425	3425	Technicians in air transport
31	3115		3001	3001	Technicians in mechatronics
31	3115		3141	3141	Mechanical engineering technicians in manufacturing/assembly of machinery, systems, instruments
31	3115		3142	3142	Mechanical engineering technicians (tools)
31	3115		3143	3143	Technicians in motor vehicle mechanics
31	3115		3144	3144	Mechanical engineering technicians in maintenance of machinery, systems, instruments
31	3115		3186	3189	Design draftspersons in mechanical engineering
31	3116		3011	3011	Industrial laboratory technicians
31	3116		3112	3112	Production technicians in chemical & petrochemical plants, refineries, gas plants, related
31	3116		3113	3113	Technicians in materials, ceramics, glass
31	3116		3114	3114	Technicians in manufacturing of plastics, rubber
31	3116		3115	3115	Technicians in environmental control, utilities, effluent treatment
31	3116		3116	3116	Technicians in textiles
31	3117		3146	3146	Technicians in metalworking (metal structures)
31	3117		3147	3147	Technicians in steelmaking
31	3117		3163	3163	Technicians in mining
31	3118		3180	3189	Technical draftspersons in general
31	3118		3181	3189	Technical draftspersons in construction & architecture
31	3118		3182	3189	Technical draftspersons in mechanics
31	3118		3183	3189	Technical draftspersons in electricity, electronics, electromechanics, HVAC
31	3118		3184	3189	Technical draftspersons of sundry products & services
31	3119		3123	3123	Technicians in geomatics
31	3119		3191	3191	Technicians in apparel

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Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations					
Group	Isco		CBO 2002	CBO domiciliary (BGE)	CBO 2002 description
	Code				
31	3119		3192	3192	Technicians in furniture, related
31	3119		3252	3252	Technicians in food production, conservation, quality
31	3119		3421	3421	Technicians in multimode transport logistics
31	3119		3516	3516	Technicians in occupational safety
31	3119		3713	3713	Technicians in graphic arts
31	3119		3911	3911	Technicians in production planning & control
31	3121		3171	3171	Technicians in systems & applications development
31	3122		3132	3134	Technicians in electronics
31	3122		3172	3172	Technicians in computer operation & monitoring
31	3131		2618	3722	Professional photographers
31	3131		3131	3131	Technicians in electricity & electrotechnics
31	3131		3721	3721	Moving image recording equipment operators
31	3131		3741	3741	Sound technicians
31	3131		3742	3742	Technicians in scenography
31	3131		3744	3742	Technicians in film/video montage, editing, finishing
31	3131		6134	6139	Producers of useful animals & insects
31	3132		3722	3172	Teleprocessing network operators, related
31	3132		3731	3731	Technicians in radio broadcasting operations
31	3132		3732	3732	Technicians in television & video production system operations
31	3132		3742	3742	Technicians in scenography
31	3132		3743	3743	Technicians in projection equipment operations
31	3132		3744	3742	Technicians in film/video montage, editing, finishing
31	3133		3241	3241	Technicians in medical & dental equipment
31	3139		3721	3721	Moving image recording equipment operators
31	3141		2152	2152	Merchant marine engineers
31	3142		2151	2151	Ships' deck officers, related
31	3142		3412	3412	Marine/river technicians & fishing crews
31	3142		3413	3413	Marine/river engineering technicians
31	3143		2153	2153	Aircraft pilots
31	3143		3411	3411	Commercial airline pilots, flight engineers, related
31	3144		3425	3425	Technicians in air transport
31	3152		2543	3515	Occupational health & safety inspectors
31	3152		3912	3912	Technicians in production control
31	3152		7618	7618	Textile production inspectors/checkers
32	3211		3201	3201	Technicians in biology
32	3211		3242	3242	Technicians & technical assistants in clinical pathology

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Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations				
Group	Isco		CBO domiciliary (BGE)	CBO 2002 description
	Code	CBO 2002		
32	3211	3251	3251	Pharmacy technicians
32	3211	3253	3253	Biotechnology support technicians
32	3211	3281	3281	Autopsy technicians, taxidermists
32	3212	3211	3211	Agricultural technicians
32	3212	3212	3213	Forestry technicians
32	3212	3213	3214	Aquaculture technicians
32	3212	3231	3231	Livestock technicians
32	3212	3951	3911	R&D support technicians
32	3222	3522	3522	Health & environment agents
32	3224	3223	3223	Technicians in optics & optometry
32	3225	3224	3224	Technicians in dentistry
32	3226	3225	3225	Orthotic & prosthetic technicians
32	3229	3221	3221	Acupuncturists, podiatrists, chiropractors, related
32	3229	3226	3225	Orthopedic cast technicians
32	3231	3222	3222	Nursing technicians, nursing aides
32	3242	2151	2151	Ships' deck officers, related
33	3320	3311	3311	Secondary-level teachers in pre-schools
33	3340	3312	3312	Secondary-level teachers in primary schools
33	3340	3313	3313	Secondary-level teachers in vocational education
33	3340	3321	3321	Lay teachers in primary schools
33	3340	3331	3331	Instructors/teachers in non-credit courses
33	3340	3714	5162	Recreation leaders
34	3411	2533	3531	Brokers/dealers of securities, commodities, derivatives
34	3412	3517	3517	Technicians in insurance, related
34	3412	3545	3545	Insurance brokers
34	3413	3546	3546	Estate agents
34	3414	3548	3548	Technicians in tourism
34	3415	3541	3541	Technicians in specialist sales
34	3415	5201	5201	Sales/service supervisors
34	3416	3542	3542	Buyers
34	3417	3544	3544	Auctioneers, appraisers
34	3421	3547	3547	Freelance sales representatives
34	3422	3422	3422	Customs brokers
34	3423	3513	3513	Technicians in administration
34	3431	3511	3511	Technicians in accounting
34	3431	3711	3711	Technicians in library science

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Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations				
Group	Isco		CBO domiciliary (BGE)	CBO 2002 description
	Code	CBO 2002		
34	3431	3712	3712	Technicians in museology, related
34	3432	3514	3514	Court clerks, related
34	3433	3511	3511	Technicians in accounting
34	3434	3511	3511	Technicians in accounting
34	3434	3513	3513	Technicians in administration
34	3434	4241	4241	Interviewers, census workers
34	3439	2523	2523	Executive & bilingual secretaries
34	3439	4241	4241	Interviewers, census workers
34	3442	2541	3515	Federal tax examiners, revenue agents/technicians
34	3442	2544	3515	State & municipal tax examiners
34	3443	2542	3515	Social security inspectors
34	3444	3522	3522	Health & environment agents
34	3449	3523	3523	Weights & measures/quality inspectors
34	3449	3524	3524	Copyright professionals, media evaluation professionals
34	3450	2041	3518	Criminalists, forensic scientists
34	3450	3518	3518	Investigation & identification agents
34	3471	2623	2627	Stage/set designers
34	3471	3751	3751	Interior designers, window dressers, visual merchandisers (secondary level)
34	3472	2617	2617	Radio/television announcers, commentators, reporters
34	3472	3763	3764	Presenters of shows, events & programs
34	3473	3761	3761	Traditional & popular dancers
34	3474	3762	3763	Circus artists
34	3475	2241	2391	Professionals in physical education
34	3475	3771	3772	Professional athletes
34	3475	3772	3773	Sports umpires/referees
122	1221	1221	1220	Directors of production & operations in agricultural, fishing, aquaculture & forestry companies
122	1222	1222	1220	Directors of production & operations in extractive/manufacturing companies & utilities
122	1223	1223	1220	Directors of site operations in construction companies
122	1224	1224	1220	Directors of operations in retail companies
122	1225	1225	1220	Directors of service operations in travel, hospitality & catering companies
122	1226	1226	1220	Directors of service operations in warehousing, transport & telecommunications companies
122	1226	1416	1310	Managers of service operations in transport, communications & logistics companies (warehousing & distribution)
122	1227	1227	1220	Directors of service operations in financial institutions
122	1229	1311	1220	Directors & managers of operations in personal, social & cultural service companies
122	1229	1312	1220	Directors & managers of operations in healthcare companies
122	1229	1313	1220	Directors & managers of educational institutions

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Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations					
Group	Isco		CBO 2002	CBO domiciliary (BGE)	CBO 2002 description
	Code				
123	1231		1231	1230	Administrative & financial directors
123	1232		1232	1230	Directors of human resources & labor relations
123	1232		1422	1320	Managers of human resources & labor relations
123	1233		1233	1230	Directors of sales & marketing
123	1233		1423	1320	Managers of sales, marketing & communication
123	1233		1424	1320	Managers of supply, related
123	1234		1423	1320	Managers of sales, marketing & communication
123	1235		1234	1230	Directors of supply, related
123	1236		1236	1230	Directors of computer services
123	1236		1425	1320	Managers of information technology
123	1236		1426	1320	Managers of R&D
123	1239		1237	1230	Directors of R&D
123	1239		1238	1230	Directors of maintenance
123	1239		1423	1320	Managers of sales, marketing & communication
123	1239		1427	1320	Managers of maintenance
131	1311		1411	1310	Managers of production & operations in agricultural, fishing, aquaculture & forestry companies
131	1312		1412	1310	Managers of production & operations in extractive/manufacturing companies & utilities
131	1313		1413	1310	Managers of site operations in construction companies
131	1314		1414	1310	Managers of commercial operations & technical assistance
131	1315		1415	1310	Managers of service operations in travel, hospitality & catering companies
131	1317		1417	1310	Managers of service operations in financial institutions
131	1318		1311	1220	Directors & managers of operations in personal, social & cultural service companies
131	1318		1312	1220	Directors & managers of operations in healthcare companies
131	1318		1313	1220	Directors & managers of educational institutions
21	2113		2031	-	Researchers in natural & exact sciences
21	2114		2031	-	Researchers in natural & exact sciences
21	2121		2031	-	Researchers in natural & exact sciences
21	2132		2031	-	Researchers in natural & exact sciences
21	2142		2032	-	Researchers in engineering & technology
21	2143		2032	-	Researchers in engineering & technology
21	2145		2032	-	Researchers in engineering & technology
21	2146		2032	-	Researchers in engineering & technology
21	2147		2032	-	Researchers in engineering & technology
21	2149		2032	-	Researchers in engineering & technology
22	2211		2030	-	Researchers in biological sciences
22	2211		2034	-	Researchers in agricultural sciences

(CONTINUED ON NEXT PAGE)

Detailed Chart 3.3B (continued)
Conversion table: HRST occupations ISCO-88 / CBO 2002 / CBO Domiciliary

HRST occupations				
Group	Isco Code	CBO 2002	CBO domiciliary (BGE)	CBO 2002 description
22	2213	2034	-	Researchers in agricultural sciences
22	2221	2033	-	Researchers in health sciences
22	2221	2034	-	Researchers in agricultural sciences
22	2223	2033	-	Researchers in health sciences
22	2229	2033	-	Researchers in health sciences
23	2310	2035	-	Researchers in social & human sciences
24	2419	2035	-	Researchers in social & human sciences
24	2441	2035	-	Researchers in social & human sciences
24	2443	2035	-	Researchers in social & human sciences
24	2445	2035	-	Researchers in social & human sciences
22	2212	-	-	Pharmacologists, pathologists, related
31	3123	-	-	Technicians in industrial robot control
31	3145	-	-	Technicians in aeronautical safety
31	3151	-	-	Inspectors of buildings & technicians in fire prevention & investigation
32	3213	-	-	Agricultural & forestry counsellors
32	3221	-	-	Medical assistants, other healthcare workers
32	3223	-	-	Technicians in dietetics & nutrition
32	3227	-	-	Veterinary technicians & assistants
32	3228	-	-	Pharmaceutical technicians & assistants
32	3232	-	-	Obstetric technicians (secondary level)
32	3241	-	-	Traditional medicine practitioners
33	3310	-	-	Secondary-level teachers in primary education
33	3330	-	-	Secondary-level teachers in special education
34	3419	-	-	Professionals in financial operations (secondary level) not elsewhere classified
34	3429	-	-	Commercial agents & brokers not elsewhere classified
34	3441	-	-	Customs & border inspectors
34	3460	-	-	Social workers (secondary level)
34	3480	-	-	Lay religious associates & preachers
122	1228	-	-	Directors of departments of production, operations & services in personal care, cleaning, related
123	1237	-	-	Directors of R&D departments
131	1316	-	-	Managers of transport, warehousing & communications companies
131	1319	-	-	Managers of companies not elsewhere classified

Source: <http://www.mtecbo.gov.br/index.htm>.