

# Thomson ISI Go8 NCR dataset: Go8 International Collaborations

Prepared by RADS, USyd, May 2010.

Thomson ISI Go8 NCR (National Citation Report) dataset:

- The bulk of the dataset is 1996-2008. There are a few papers from 1993-1995 and some dated 2009.
- All papers are articles in Thomson-indexed journals.
- Number of Go8 papers (papers with at least one Go8 affiliation) in the dataset: 255,130.
- Number of Go8 papers with at least one international collaboration in the dataset: 87,420.
- Proportion of Go8 papers with at least one international collaboration: 34.26%.

## Institutional summaries

Institution	Dataset coverage	Papers in dataset	Percentage of papers with international collaborations	Number of international collaborations	Number of collaborating countries	Year of highest international collaborations
Adelaide	1994-2008	17,767	33.82%	13,584	107	2008: 1,957
ANU	1995-2009	27,057	42.07%	25,135	127	2008: 2,853
Melbourne	1993-2009	39,119	33.08%	33,576	132	2007: 4,931
Monash	1994-2009	26,093	30.59%	17,263	120	2008: 2,782
UNSW	1993-2009	29,136	33.90%	22,013	117	2008: 2,768
UQ	1993-2009	51,997	32.28%	27,486	143	2008: 3,605
USyd	1993-2009	41,875	33.07%	36,058	133	2008: 5,405
UWA	1995-2009	22,086	36.53%	17,959	116	2008: 2,447
Go8	1993-2009	255,130	34.26%	193,074	178	2008: 26,448

## Countries with most collaborations, by institution

NOTE: one collaboration with a country is interpreted as at least one author from that country.  
(Eg: a paper with 3 authors from Sweden is counted as one collaboration with Sweden.)

Institution	1 <sup>st</sup> country	2 <sup>nd</sup> country	3 <sup>rd</sup> country	4 <sup>th</sup> country	5 <sup>th</sup> country
Adelaide	USA 3,264 – 24.02%	UK 1,912 – 14.08%	Germany 1,019 – 7.50%	Canada 767 – 5.65%	Japan 649 – 4.78%
ANU	USA 5,839 – 23.23%	UK 3,593 – 14.29%	Germany 2,237 – 8.90%	Canada 1,245 – 4.95%	Japan 1,220 – 4.85%
Melbourne	USA 8,043 – 23.95%	UK 4,096 – 12.20%	Germany 2,205 – 6.57%	Canada 1,792 – 5.34%	Japan 1,440 – 4.29%
Monash	USA 4,462 – 25.85%	UK 2,524 – 14.62%	Canada 1,156 – 6.70%	Germany 1,056 – 6.12	Japan 846 – 4.90%
UNSW	USA 5289 – 24.03%	UK 3,298 – 14.98%	Germany 1,553 – 7.05%	China 1,275 – 5.79%	Canada 1,097 – 4.98%
UQ	USA 6,291 – 22.89%	UK 4,521 – 16.45%	China 2,021 – 7.35%	Germany 1,420 – 5.17%	Canada 1,379 – 5.02%
USyd	USA 7,562 – 20.97%	UK 4,765 – 13.21%	China 2,411 – 6.69%	Germany 2,099 – 5.82%	Canada 1,668 – 4.63%
UWA	USA 4,020 – 22.38%	UK 2,958 – 16.47%	Germany 1,092 – 6.08%	Canada 1,057 – 5.89%	China 904 – 5.03%
Go8	USA 44,770 - 23.19%	UK 27,667 - 14.33%	Germany 12,681 – 6.57%	Canada 10,161 – 5.26%	China 10,133 – 5.25%

## Web of Science journal fields with most collaborations, by institution

Note: Web of Science journal fields are assigned by Thomson to journals.

Institution	1st field	2nd field	3rd field	4th field	5th field
<b>Adelaide</b>	Astronomy & Astrophysics 824 – 6.07%	Physics, Particles & Fields 655 – 4.82%	Genetics & Heredity 523 – 3.85%	Biochemistry & Molecular Biology 503 – 3.70%	Plant Sciences 376 2.77%
<b>ANU</b>	Astronomy & Astrophysics 3,003 – 11.95%	Geochemistry & Geophysics 1,196 – 4.76%	Geosciences, Multidisciplinary 1,013 – 4.03%	Biochemistry & Molecular Biology 733 – 2.92%	Physics, Nuclear 729 – 2.90%
<b>Melbourne</b>	Physics, Multidisciplinary 2,464 – 7.34%	Physics, Particles & Fields 1,541 – 4.60%	Astronomy & Astrophysics 1,437 – 4.28%	Biochemistry & Molecular Biology 1,314 – 3.91%	Neurosciences 1,136 – 3.38%
<b>Monash</b>	Biochemistry & Molecular Biology 765 – 4.43%	Immunology 505 – 2.93%	Neurosciences 487 – 2.82%	Materials Science, Multidisciplinary 431 – 2.50%	Cardiac & Cardiovascular Systems 411 – 2.38%
<b>UNSW</b>	Astronomy & Astrophysics 1,048 – 4.76%	Physics, Condensed Matter 784 – 3.56%	Physics, Applied 644 – 2.93%	Infectious Diseases 547 – 2.48%	Biochemistry & Molecular Biology 541 – 2.46%
<b>UQ</b>	Biochemistry & Molecular Biology 1,441 – 5.24%	Genetics & Heredity 883 – 3.21%	Neurosciences 640 – 2.33%	Cell Biology 615 – 2.24%	Ecology 549 – 1.20%
<b>USyd</b>	Astronomy & Astrophysics 2,951 – 8.18%	Physics, Multidisciplinary 2,309 – 6.40%	Physics, Particles & Fields 1,456 – 4.04%	Oncology 1,084 – 3.01%	Biochemistry & Molecular Biology 985 – 2.73%
<b>UWA</b>	Neurosciences 326 – 3.29%	Biochemistry & Molecular Biology 314 – 3.17%	Genetics & Heredity 309 – 3.12%	Geosciences, Multidisciplinary 283 – 2.86%	Immunology 266 – 2.68%
<b>Go8</b>	Astronomy & Astrophysics 10,072 – 5.22%	Biochemistry & Molecular Biology 6,935 – 3.59%	Physics, Multidisciplinary 6,543 – 3.39%	Neurosciences 4,699 – 2.43%	Genetics & Heredity 4,524 – 2.34%

## Overview of the data, by institution, by year

Number of Go8 publications in NCR dataset:

Year	Adel.	ANU	Melb.	Monash	UNSW	UQ	USyd	UWA	Go8
1993	0	0	1	0	1	4	1	0	7
1994	1	0	1	1	1	0	1	0	5
1995	125	258	218	151	200	271	279	137	1,639
1996	934	1,861	1,905	1,238	1,630	2,297	2,206	1,160	13,231
1997	1,091	1,841	1,973	1,327	1,674	2,465	2,240	1,255	13,866
1998	1,116	1,929	2,089	1,476	1,761	2,785	2,431	1,369	14,956
1999	1,120	1,918	2,185	1,472	1,785	3,010	2,681	1,476	15,647
2000	1,315	1,858	2,424	1,568	1,919	3,255	2,855	1,443	16,637
2001	1,363	1,803	2,584	1,690	1,964	3,249	2,817	1,496	16,966
2002	1,243	1,815	2,772	1,803	2,136	3,671	2,802	1,549	17,791
2003	1,453	1,960	3,016	2,038	2,305	4,136	3,158	1,870	19,936
2004	1,431	2,161	3,382	2,256	2,367	4,475	3,449	1,900	21,421
2005	1,534	2,281	3,698	2,483	2,731	4,995	3,689	1,970	23,381
2006	1,627	2,571	4,114	2,718	2,880	5,545	4,170	2,080	25,705
2007	1,710	2,378	4,448	2,889	2,917	5,921	4,574	2,229	27,066
2008	1,692	2,410	4,281	2,955	2,845	5,851	4,494	2,139	26,667
2009	12	13	28	28	20	67	28	13	209
TOTAL	17,767	27,057	39,119	26,093	29,136	51,997	41,875	22,086	255,130

Number of Go8 publications with international collaborations:

Year	Adel.	ANU	Melb.	Monash	UNSW	UQ	USyd	UWA	Go8
1993	0	0	0	0	0	1	0	0	1
1994	0	0	0	0	0	0	0	0	0
1995	30	74	51	27	35	54	35	21	327
1996	225	595	388	297	427	571	453	279	3,235
1997	276	639	467	305	449	655	524	325	3,640
1998	340	748	590	384	552	792	634	419	4,459
1999	363	725	611	403	501	895	701	465	4,664
2000	416	738	688	429	597	954	819	493	5,134
2001	469	765	833	530	641	1,026	913	572	5,749
2002	456	803	1,011	570	763	1,226	966	620	6,415
2003	502	894	1,010	626	790	1,406	1,075	729	7,032
2004	515	934	1,245	679	862	1,561	1,273	761	7,830
2005	555	1,023	1,255	789	1,009	1,717	1,371	750	8,469
2006	553	1,187	1,465	824	1,089	1,974	1,533	812	9,437
2007	649	1,062	1,653	1,012	1,064	2,184	1,681	922	10,227
2008	656	1,190	1,664	1,099	1,091	2,262	1,860	895	10,717
2009	4	6	10	9	9	29	13	4	84
TOTAL	6,009	11,383	12,941	7,983	9,879	17,307	13,851	8,067	87,420

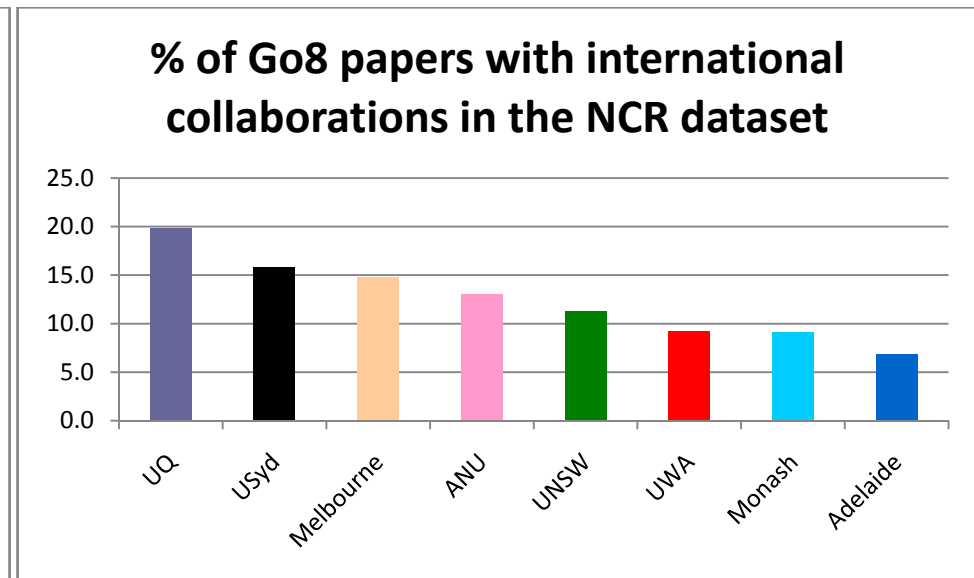
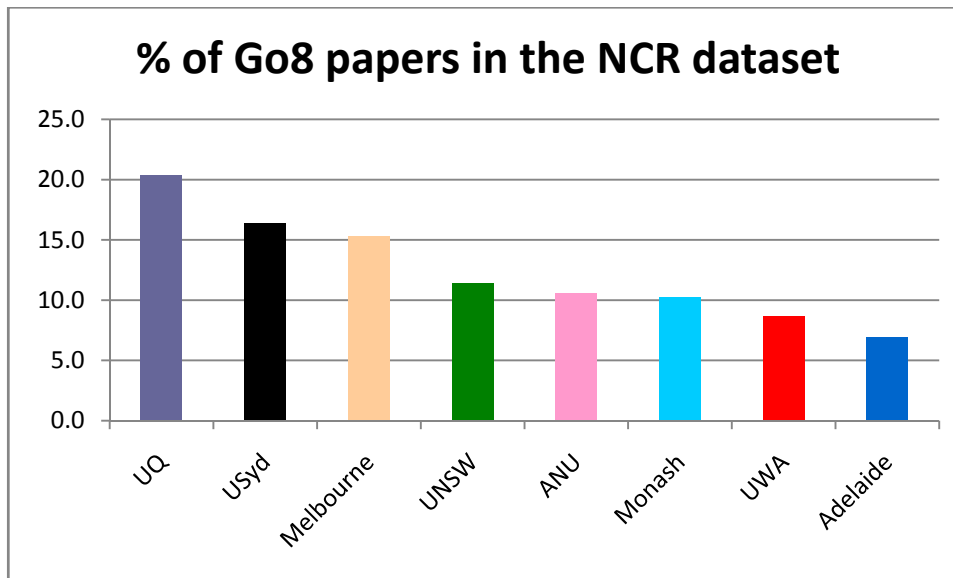
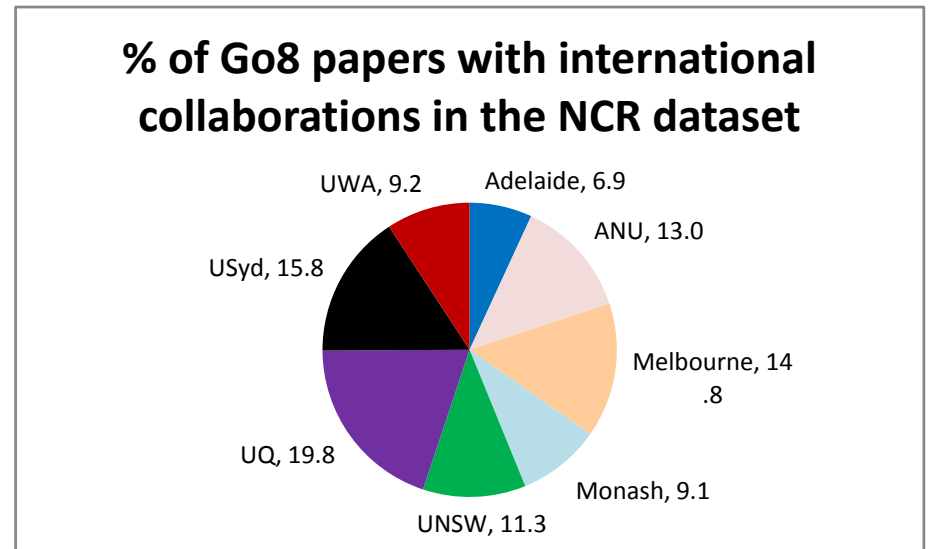
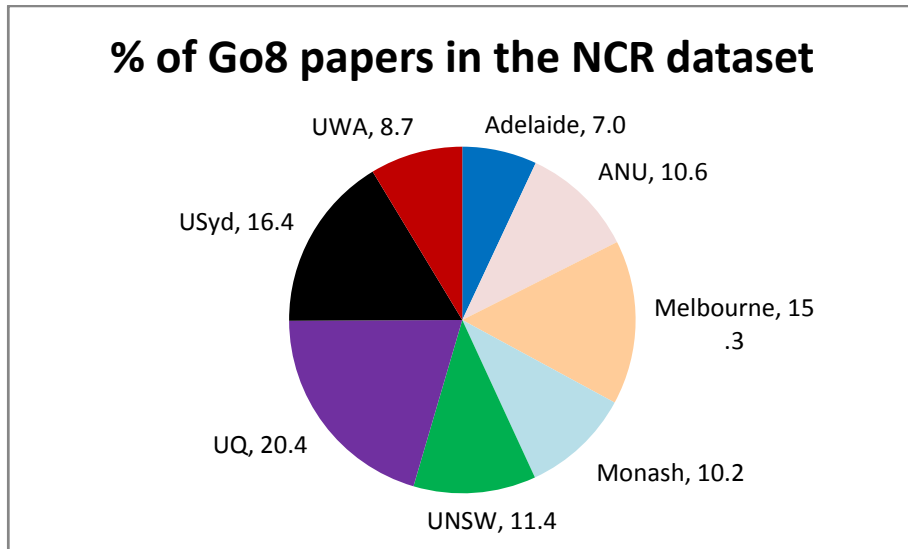
% of Go8 publications, by institution, by year:

Year	Adelaide	ANU	Melbourne	Monash	UNSW	UQ	USyd	UWA
1993	0	0	14.29	0	14.29	57.14	14.29	0
1994	20.00	0	20.00	20.00	20.00	0	20.00	0
1995	7.63	15.74	13.30	9.21	12.20	16.53	17.02	8.36
1996	7.06	14.07	14.40	9.36	12.32	17.36	16.67	8.77
1997	7.87	13.28	14.23	9.57	12.07	17.78	16.15	9.05
1998	7.46	12.90	13.97	9.87	11.77	18.62	16.25	9.15
1999	7.16	12.26	13.96	9.41	11.41	19.24	17.13	9.43
2000	7.90	11.17	14.57	9.42	11.53	19.56	17.16	8.67
2001	8.03	10.63	15.23	9.96	11.58	19.15	16.60	8.82
2002	6.99	10.20	15.58	10.13	12.01	20.63	15.75	8.71
2003	7.29	9.83	15.13	10.22	11.56	20.75	15.84	9.38
2004	6.68	10.09	15.79	10.53	11.05	20.89	16.10	8.87
2005	6.56	9.76	15.82	10.62	11.68	21.36	15.78	8.43
2006	6.33	10.00	16.00	10.57	11.20	21.57	16.22	8.09
2007	6.32	8.79	16.43	10.67	10.78	21.88	16.90	8.24
2008	6.34	9.04	16.05	11.08	10.67	21.94	16.85	8.02
2009	5.74	6.22	13.40	13.40	9.57	32.06	13.40	6.22

% of Go8 publications with international collaborations:

Year	Adelaide	ANU	Melbourne	Monash	UNSW	UQ	USyd	UWA
1993	0	0	0	0	0	100.00	0	0
1994	0	0	0	0	0	0	0	0
1995	9.17	22.63	15.60	8.26	10.70	16.51	10.70	6.42
1996	6.96	18.39	11.99	9.18	13.20	17.65	14.00	8.62
1997	7.58	17.55	12.83	8.38	12.34	17.99	14.40	8.93
1998	7.63	16.78	13.23	8.61	12.38	17.76	14.22	9.40
1999	7.78	15.54	13.10	8.64	10.74	19.19	15.03	9.97
2000	8.10	14.37	13.40	8.36	11.63	18.58	15.95	9.60
2001	8.16	13.31	14.49	9.22	11.15	17.85	15.88	9.95
2002	7.11	12.52	15.76	8.89	11.89	19.11	15.06	9.66
2003	7.14	12.71	14.36	8.90	11.23	19.99	15.29	10.37
2004	6.58	11.93	15.90	8.67	11.01	19.94	16.26	9.72
2005	6.55	12.08	14.82	9.32	11.91	20.27	16.19	8.86
2006	5.86	12.58	15.52	8.73	11.54	20.92	16.24	8.60
2007	6.35	10.38	16.16	9.90	10.40	21.36	16.44	9.02
2008	6.12	11.10	15.53	10.25	10.18	21.11	17.36	8.35
2009	4.76	7.14	11.90	10.71	10.71	34.52	15.48	4.76

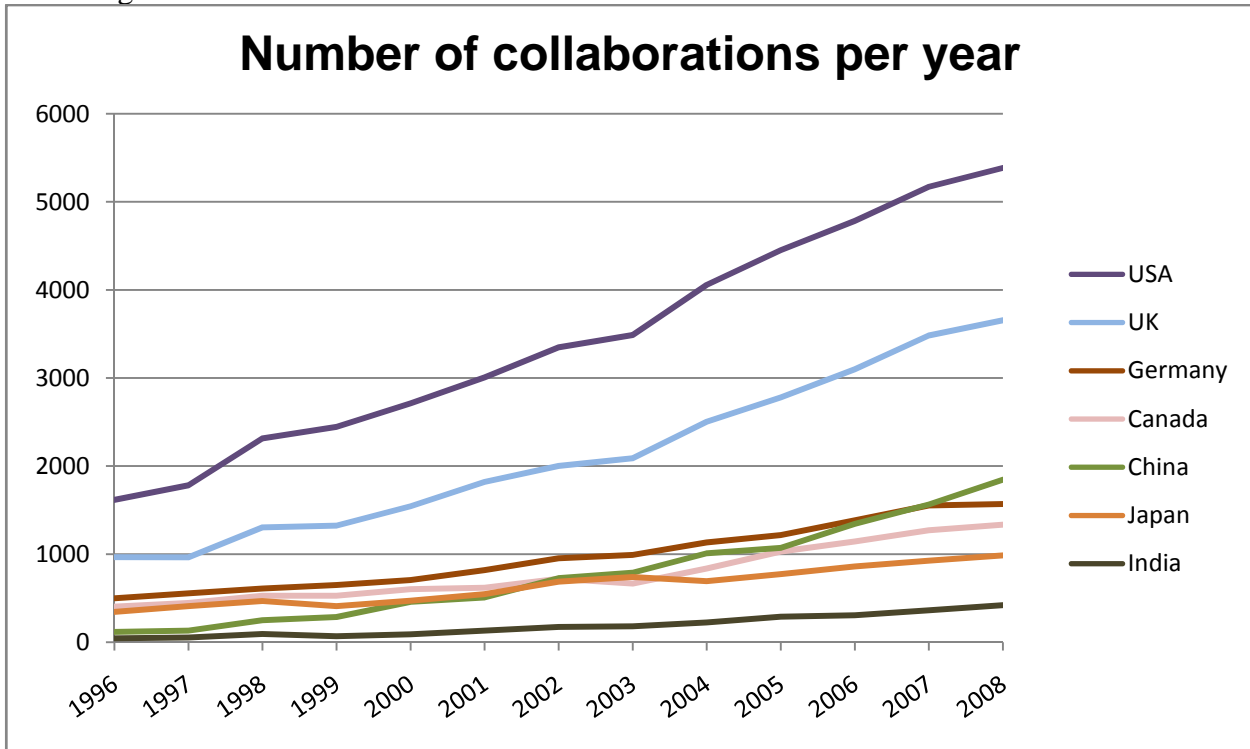
Go8 papers in the NCR dataset by institution



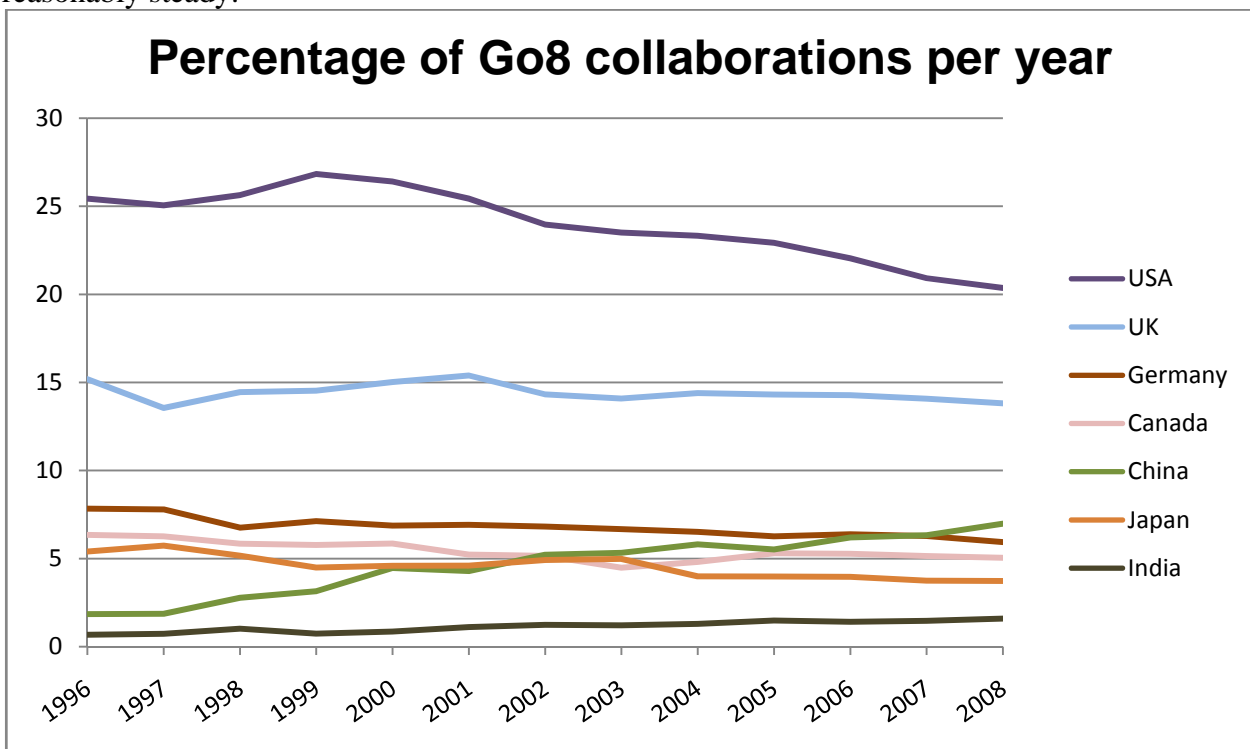
## Collaborating countries

Analysis of collaborations over time with the top 6 collaborating countries across the Go8 (1.USA, 2.UK, 3.Germany, 4.Canada, 5.China, 6.Japan) and a rising new-comer: India (ranked 17<sup>th</sup>).

Collaborations with the USA and the UK remain the most numerous across the Go8 and are increasing in numbers:



In terms of the percentage of Go8 collaborations, however, the USA is decreasing; the UK remains reasonably steady:



When we consider the difference in percentage of all collaborations over time (in this case, 5-year overlapping periods), we see that India and China (and to a lesser degree, Canada) are the only countries whose proportion of Go8 collaborations is increasing. As highlighted earlier, this signifies that the proportion of papers with at least one author from China or India is increasing, not that there are proportionately more authors from China or India.

Percentage difference over 5-year overlapping periods: proportional increases are shaded green

Country	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008
USA	3.83%	1.51%	-6.53%	-12.39%	-11.67%	-9.87%	-7.99%	-11.04%	-12.69%
UK	-1.08%	13.57%	-0.86%	-3.08%	-4.19%	-7.03%	-0.32%	-0.01%	-3.98%
Germany	-12.29%	-11.18%	0.95%	-6.29%	-5.22%	-9.49%	-6.39%	-5.90%	-8.94%
Canada	-7.74%	-16.46%	-11.77%	-22.45%	-17.84%	1.28%	2.22%	14.82%	4.93%
China	142.18%	131.06%	88.05%	69.47%	30.12%	28.62%	18.88%	18.83%	20.24%
Japan	-15.05%	-19.79%	-4.80%	11.00%	-13.10%	-13.59%	-19.39%	-24.91%	-6.53%
India	26.61%	51.55%	21.43%	65.04%	50.34%	33.86%	13.90%	20.31%	23.30%

