CO-AUTHOR ASSESSMENT AS AN INDICATOR OF NATIONAL AND INTERNATIONAL COOPERATION

Sonia M. Dainesi & Moisés Goldbaum

Sonia Mansoldo Dainesi, MD, MBA
PhD student
Medical School
São Paulo University
HCFMUSP

Disclosure

- Graduation: Medicine at FMUSP
- Specialization: Endocrinology

- Pharmaceutical industry (1987-2005; dez/2007--):
  - Rhodia Farma
  - Sandoz
  - Aventis
  - Boehringer Ingelheim

- University (2005-2007):
  - NAPesq/HCFMUSP
  - PhD ongoing at Medicina Preventiva/FMUSP (mentor: Prof. Moisés Goldbaum)

Introduction

- The importance of scientific cooperation among different teams and institutions:
  - well recognized
  - became more evident and documented in the last years.

- Several medical literature databases… among them:
- SciELO (Scientific Electronic Library Online)
  - virtual library created in 1996
  - as a pilot project involving 10 Brazilian journals
  - product of a partnership between FAPESP and BIREME and since 2002, also supported by CNPq
  - largely used in Latin America and Caribbean countries.

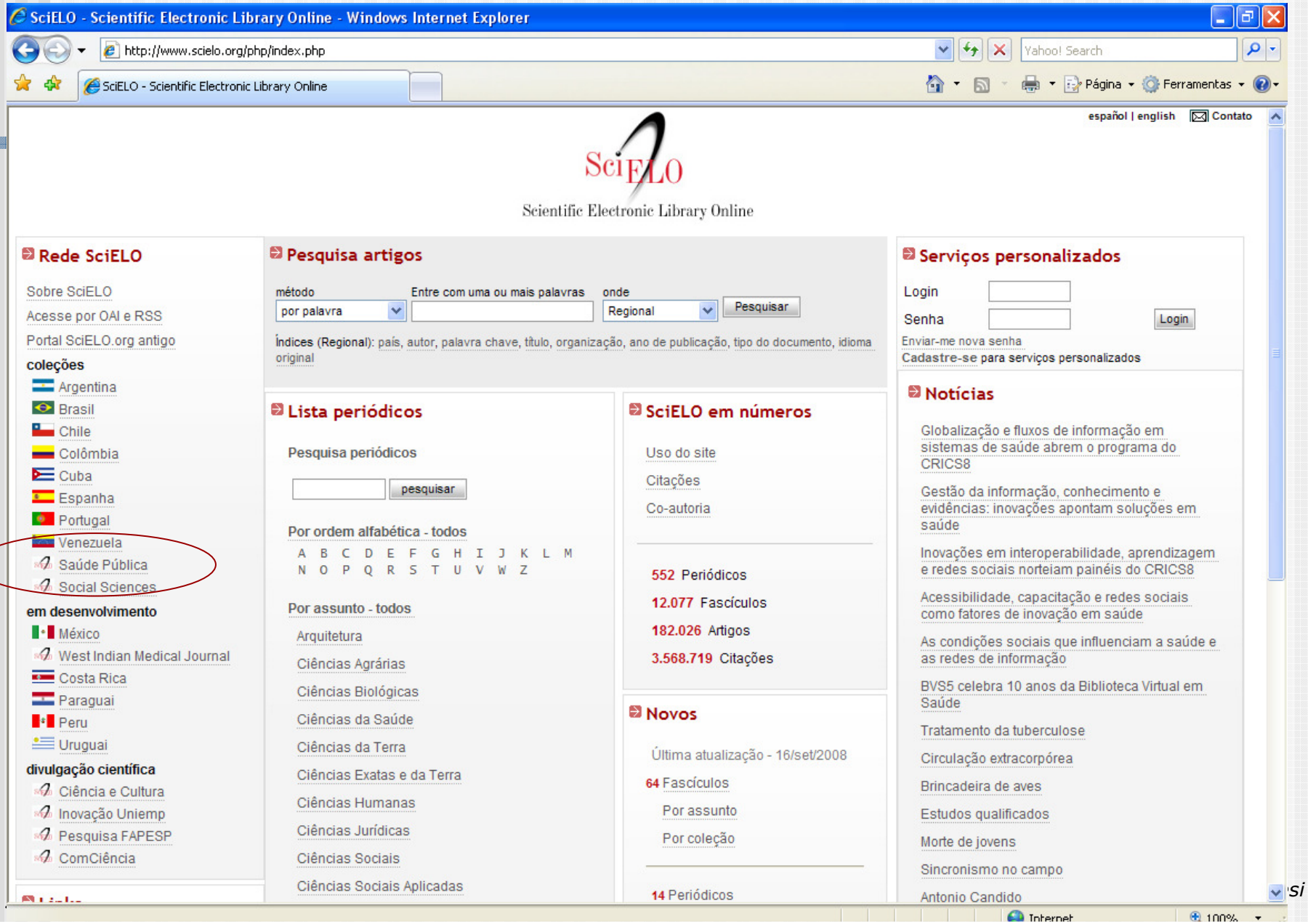
Objectives

- Assess the scientific productivity
  - of researchers in Public Health area
  - in the SciELO database
  - and evaluate the trends of cooperation and partnerships
  - among different institutions in Brazil and with other countries.

Methods

- The period of analysis covered 1997 to 2007
  - since the SciELO data base creation up to the last complete year
- Database SciELO, available at http://www.scielo.org (Feb 2008)
  - we looked for the collection related to Public Health and, then,
  - the co-authors, through the following way:
    - Brazilian authors,
    - which have publications with authors from any other countries,
    - in any scientific journals,
    - in all years available at the database.

SciELO webpage: www.scielo.org



About SciELO

About SciELO

SciELO Public Health

Methods

Co-autoria

autores do(a)
Brasil
que publicam com autores do(a)
qualquer país
na revista
qualquer revista
no(s) ano(s) de
soma de todos os anos

http://statbiblio.scielo.br/stat_biblio/index.php?state=17&server_action=%2Fcgi-bin%2Fstat_biblio%2Fxml%2Fscielo7.sh&lang=pt&CITED%5B%5D=all&PAIS1%5B%5D=BR&PAIS2%5B%5D=all&YNG%5B%5D=sum

Methods

Co-autoria

autores do(a)

Brasil

que publicam com autores do(a)

qualquer país

na revista

qualquer revista

no(s) ano(s) de

2007

Methods

País	2007	total
Autor individual	1415	**1415**
País não identificado	1174	**1174**
AFRICA DO SUL	1	**1**
ALEMANHA	34	**34**
ARGENTINA	27	**27**
AUSTRALIA	8	**8**
AUSTRIA	1	**1**
BELGICA	10	**10**
BOLIVIA	1	**1**
BRASIL	9405	**9405**
BULGARIA	1	**1**
CANADA	45	**45**
CHILE	14	**14**
CHINA	1	**1**
COLOMBIA	12	**12**
COREIA DO SUL	1	**1**
CUBA	5	**5**
EGITO	1	**1**
EQUADOR	2	**2**
ESPANHA	35	**35**
ESTADOS UNIDOS DA AMERICA	182	**182**
FEDERACAO RUSSA	1	**1**

Methods

Co-autoria.... Ano a ano

autores do(a)

Brasil

que publicam com autores do(a)

qualquer país

na revista

qualquer revista

no(s) ano(s) de

1997

Results

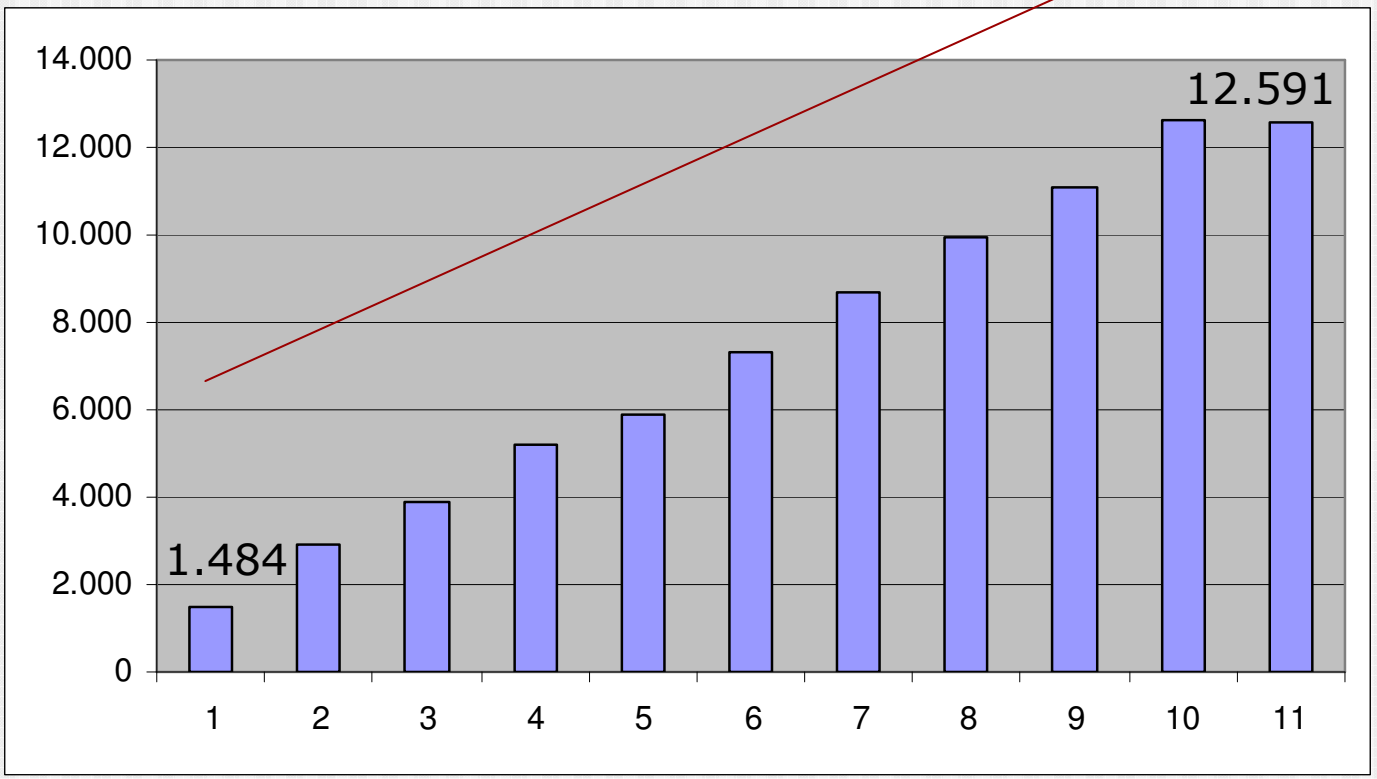
Year	Total of publicatins	Individual author	Individual author %	Co-authorship Brazil	Co-authorship Brazil (%)	Co-authorship Other countries			
1997	1.484	369	24,87	871	58,69	USA	Germany	UK	Spain/Arg
1998	2.896	455	15,71	1.859	64,19	USA	UK	Arg	Germ/Fr
1999	3.893	605	15,54	2.575	66,14	USA	UK/Fr	Germany	
2000	5.197	719	13,83	3.608	69,42	USA	UK	Fr	Arg
2001	5.900	835	14,15	4.176	70,78	USA	UK	Arg	Germany
2002	7.302	912	12,49	5.221	71,50	USA	Fr/UK	Arg	
2003	8.702	1.142	13,12	6.201	71,26	USA	Fr/UK	UK	Arg
2004	9.928	1.242	12,51	7.226	72,78	USA	UK	Arg	Fr
2005	11.102	1.439	12,96	8.091	72,88	USA	UK	Fr	Germany
2006	12.625	1.504	11,91	9.378	74,28	USA	UK	Spain	Can
2007	12.591	1.415	11,24	9.405	74,70	USA	UK	Can	Spain

Total publication & Individual authorship

Year	Publication (total)		Individual author	Individual author %	
1997	1.484		369	24,87	
1998	2.896		455	15,71	
1999	3.893		605	15,54	
2000	5.197	**Increase**	719	13,83	**Decrease**
2001	5.900		835	14,15	
2002	7.302		912	12,49	
2003	8.702		1.142	13,12	
2004	9.928		1.242	12,51	
2005	11.102		1.439	12,96	
2006	12.625		1.504	11,91	
2007	12.591		1.415	11,24	

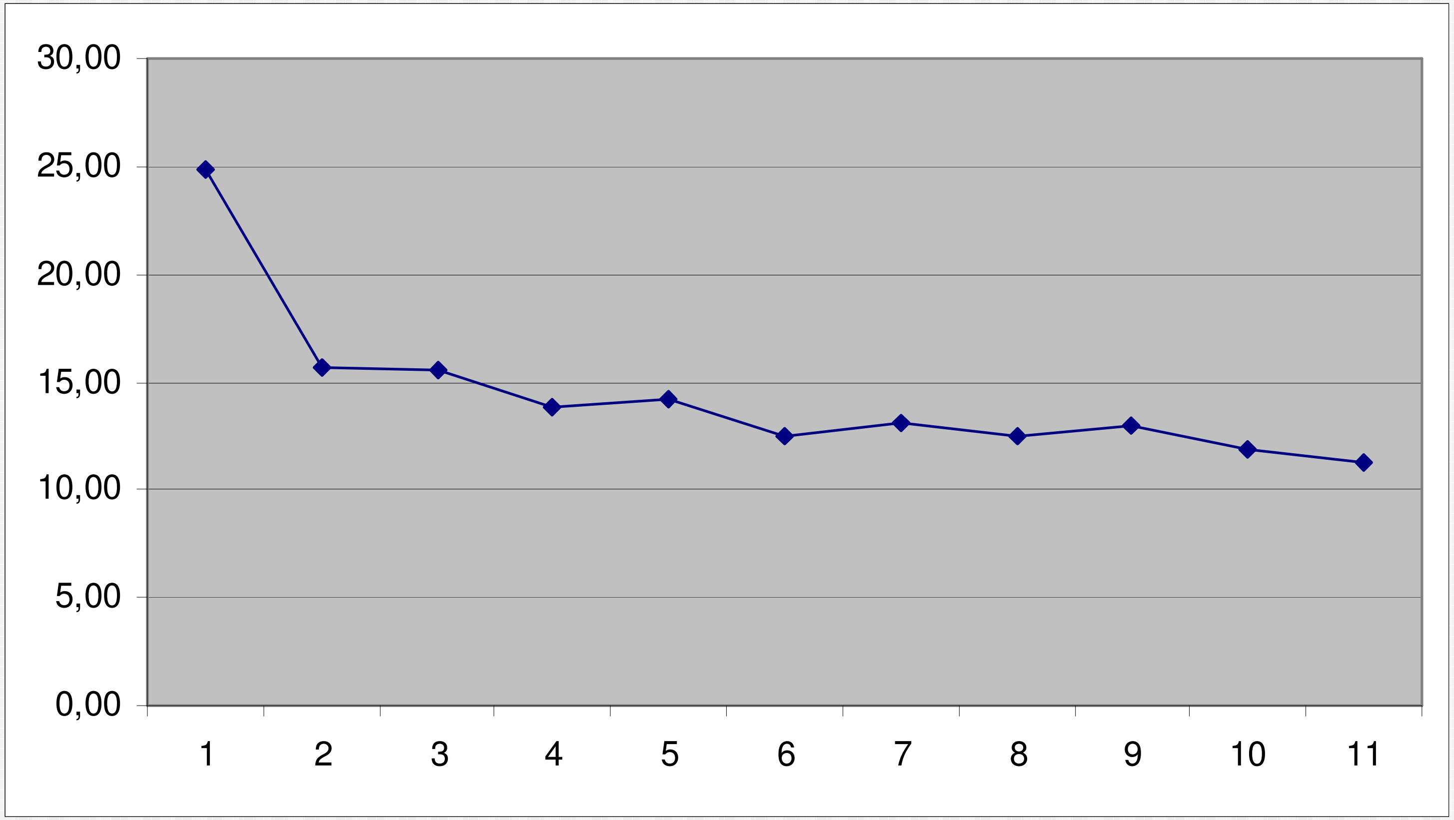
Total publication by year

748 % or
24% per year



1997 >>>>>>>>>>>>>>>>>>>>>>>>> 2007

Individual Author (%)



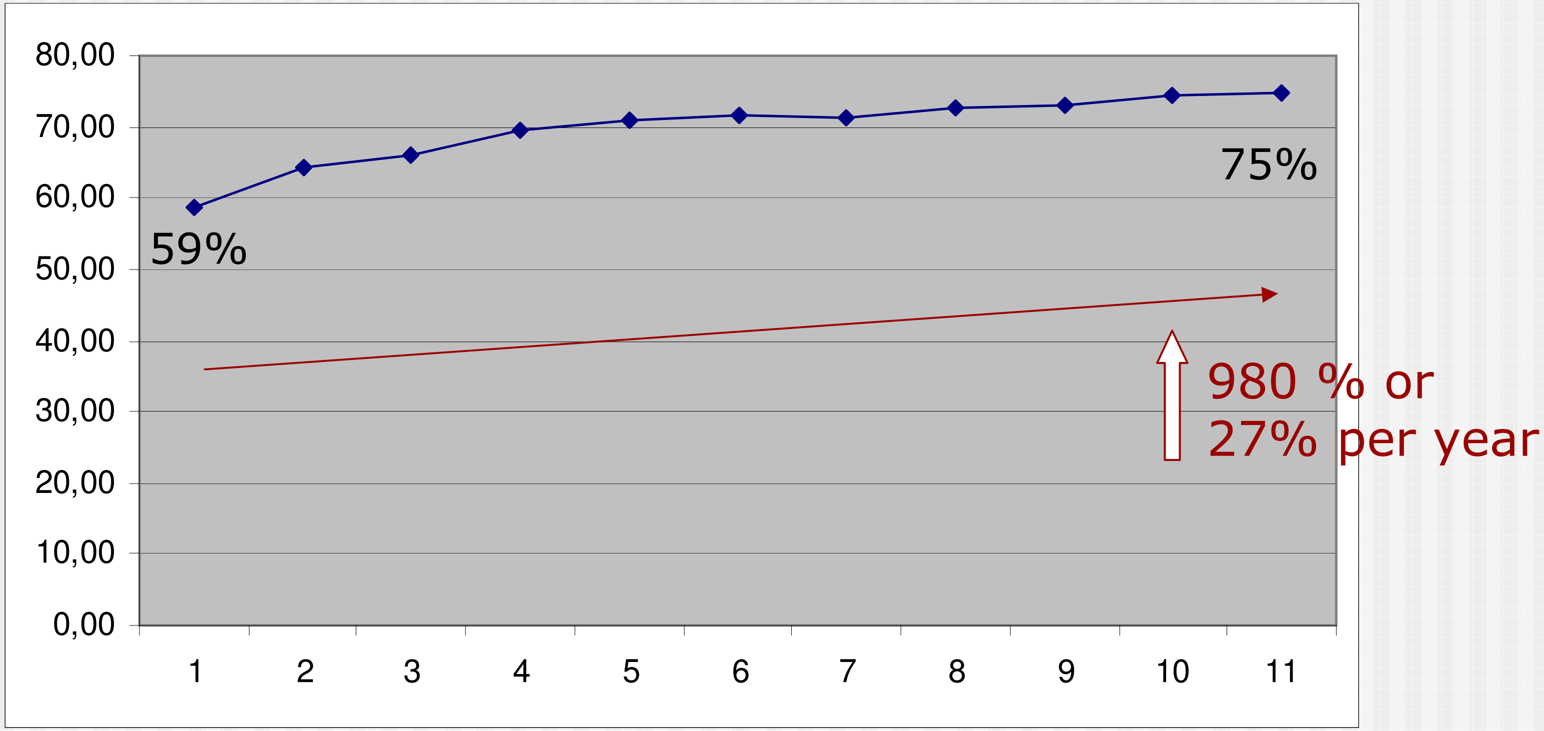
1997 >>>>>>>>>>>>>>>>>>>>>> 2007

Sonia M. Dainesi

Co-authorship among Brazilian authors

Year	Co-authorship Brazil	Co-authorship Brazil (%)
1997	871	58,59
1998	1.859	64,19
1999	2.575	66,14
2000	3.608	69,42
2001	4.176	70,78
2002	5.221	71,50
2003	6.201	71,26
2004	7.226	72,78
2005	8.091	72,88
2006	9.378	74,28
2007	9.405	74,70

Co-authorship among Brazilian authors



1997 >>>>>>>>>>>>>>>>>>>>>> 2007

(871) (9405)

Sonia M. Dainesi

Co-authorship with other countries

Year	Co-authorship			
	Other countries			
	1st	2nd	3rd	4th
1997	EUA	Germany	UK	Spain/Arg
1998	EUA	UK	Argentina	Germ/Fr
1999	EUA	UK/Fr	Germany	
2000	EUA	UK	France	Argentina
2001	EUA	UK	Argentina	Germany
2002	EUA	Fr/UK	Argentina	
2003	EUA	Fr/UK	UK	Argentina
2004	EUA	UK	Argentina	France
2005	EUA	UK	France	Germany
2006	EUA	UK	Spain	Canada
2007	EUA	UK	Canada	Spain

(1,3 to 1,8%)

Results

- The total of publications per year, by Brazilian authors, is clearly increasing:
  - 1,484 publications in 1997 to
  - 12,591 in 2007

(increase of almost 750% in 10 years!)

Results

- The data analysis showed that

  a) the mean of publications by Brazilian authors with no co-authorship, between 1997 and 2007, was 14.4% (11-25%), with a decreasing trend in this period.

  b) the mean of publications of Brazilian authors with other Brazilian researchers was 69,7% (58-74%), with an increasing trend.

(increase of almost 980% in 10 years!)

Results

- The data analysis showed that
  - c) International co-authorship of Brazilian authors was most with USA (mean 1,5%, range 1,3-1,8%), followed by United Kingdom and, afterwards, France, Germany and Argentina
    - This trend was interrupted in the last two years, when Spain and Canada become main players in this co-authorship scenario, after USA and UK
    - It reflects increased interchange among these countries, through PhD programs, post-doc trainings and inter-institutional contacts (eg, Bahia/Canada), Health Promotion Programs (Canada) and Pharmacoepidemiology activities (Spain).

Conclusion

- The results suggest that
  - in the Public Health area, where sometimes a more nationalistic tendency is seen, looking for answers for local priorities,
  - the publications are also following the movement observed in other areas, of doing partnerships with other institutions and also other countries
  - including, more recently, countries such as Spain and Canada, besides the traditional cooperation with USA, UK, France and Germany.

References

- Deiheizelin D & Caramelli B. *Rev Assoc Med Bras* 2007.
- Goldbaum M. *Cad Saúde Públ* 2004.
- Meneghini R & Packer. *An Acad Bras Cienc* 2006.
- Pereira JCR et al. *Scientometrics* 2000.
- Morel CM, *Nature* 2007.
- Wuchty S. *Science* 2007.
- http://www.abrasco.org.br/noticias/noticia_int.php?id_noticia=298
  Projeto de Avaliação da Pós-graduação na área de Saúde Coletiva. Access on Mar 26, 2008.

Sonia Mansoldo Dainesi

sdainesi@gmail.com

Thank you!
Gracias!
Grata!

XVIII IEA WORLD CONGRESS OF EPIDEMIOLOGY
VII BRAZILIAN CONGRESS OF EPIDEMIOLOGY

EPIDEMIOLOGY IN THE CONSTRUCTION OF HEALTH FOR ALL:
TOOLS FOR A CHANGING WORLD

SEPTEMBER 20 - 24, 2008 - FIERGS - PORTO ALEGRE - RS - BRAZIL