Our future as history

Thomas A. Louis, PhD
Department of Biostatistics
Johns Hopkins Bloomberg SPH
tlouis@jhsph.edu
www.biostat.jhsph.edu/~tlouis
Introduction

• These are exciting and challenging times for the IBS and professional societies more generally

• IBCs are one of our “signature” activities

• Consider IBC-XXIII
  – We have a great venue, a great scientific and social program, excellent attendance
  – With over 800 attendees
  – All preceded by the very successful satellite conference, “Statistical and Epidemiological Methods for Oral Health Research”
Merci à

• Jim Hanley, and the local organizing committee
• Geert Verbeke, and the International Program Committee
• Judy Goldberg and the Short Course Committee
• Emmanuel LeSaffre and Jocelyene Feine for the satellite conference
• Pierre Lamoureux, for his organizational energy and skills
• The many volunteers
• McGill University, Montréal, Gouvernement du Québec and Canada
• Commercial and Educational Contributors
• Many, many others
And, thanks to

• Claire Shanley, IBS Executive Director, and Katleen Bartnek Gallagher for their anticipation, organization and energy

• Former and current IBS committee members and editors for serving the IBS and our discipline

• Geert Molenberghs, past President and Organizing President
Our future as history

• The future becomes the present and then history

• The progression, history ← present ← future occurs at warp speed

• Therefore, we need to plan our future so that we can create the desired history
Founded in 1947 and so we are in our 60th year

Founding regions
Australia, Benelux, France, India, Great Britain, Russia, Scandinavia, Eastern North American, Western North American

The first International Biometric Conference (I IBC)
1947 Woods Hole, Massachusetts, USA

We’ve been going strong ever since
IBCs are a big part of our history

1947 Woods Hole, Massachusetts
↓
1992 Hamilton, New Zealand
1994 Hamilton, Ontario
1996 Amsterdam, the Netherlands
1998 Cape Town, South Africa
2000 Berkeley, CA USA
2002 Freiburg, Germany
2004 Cairns, Australia
2006 Montreal, PQ Canada
2008 Dublin, Ireland

The full list of venues is testimony to our international reach
IBCs: first, current, next (and a few in-between)
Woods Hole Massachusetts
Woods Hole Massachusetts
Our First IBC:
Woods Hole 1947
Our Current IBC: Montreal
Our Current IBC: Montreal
≈800 attendees from 62 countries!
Our next IBC:
2008 in Dublin, Ireland (BIR)
XXIV\textsuperscript{th} International Biometric Conference

- Sunday 13\textsuperscript{th} to Friday 18\textsuperscript{th} July, 2008
- University College Dublin, Dublin, Ireland

- Hosted by the British and Irish Region
- More details in your delegate pack
XXIVth International Biometric Conference

Local Organising Committee
- Chaired by John Hinde (British and Irish Region, National University of Ireland, Galway)
- Visit us at Stand 9 in the exhibition

International Programme Committee
- Chaired by Jean-Louis Foulley (French Region)
- Suggestions for invited sessions welcome

Leave suggestions (including title, organiser, possible speakers) at Stand 9 by Thursday, 3pm

Or post-conference, send by email to jean-louis.foulley@jouy.inra.fr

Invited session proposal form available from Stand 9, and from the conference web-site
www.conferencepartners.ie/ibcdublin2008
Current Status of the IBS

• Approximately 5300 members (slight decrease over the past few years)

• From 19 regions and 20 national groups

• Engaged in a wide range of research, education, policy development and implementation
We have accomplished a great deal

Journals
• *Biometrics*: highly rated; high impact; reasonably cost
• *Biometric Bulletin*: our newsletter
• *JABES*: our joint initiative with the ASA

The IBC and regional/group/network meetings

Education
• Short courses, workshops, ...

Relations with other societies
• ISI, ISCB, ....
And, have more to do

Our current Strategic Plan
• Enhance Membership benefits
• Joint regional memberships
• Improve web as an information source and a “connecting” center
• Central dues collection for regions & members
• Outreach and enhancement
• Increase membership:
  students and in-career professionals
• …..

Our Committee on Strategic Plan will ensure that we have an evolving document and agenda
Some Questions to Consider

• Why have a professional society?
• Why join a professional society?

• Why have the IBS?
• Why join the IBS?

• Why did I join the IBS
• Why do I participate in the IBS?

See Geert M’s comments in the July-Sept 2005 Biometric Bulletin
• Historically the “glue” of a society, of our Society
  “I’ll join because it’s the only way I can get the journal”

• This is no longer the “draw” at the individual level
  “I can get the journal without joining”
The world needs high-quality, affordable journals
Societies produce these by setting standards, selecting editors and referees, ...

Trends are for open access, possibly with a delay
  – We now have “on line early” and a 0 months embargo
Internet only journals are growing in prevalence and quality
  – We are considering electronic only subscriptions
  – Issue of post-subscription access

Our Publication Review Committee and Editorial Advisory Committee are identifying and evaluating options for *Biometrics* and the *Biometric Bulletin*
Some Possibilities

• Encourage submissions on new topics
• Re-format for improved access: Science magazine’s success
• Include discussion papers and commentary in either Biometrics or the Biometric Bulletin
• Make a larger fraction of Biometrics articles accessible to more readers
• Or, keep the current level, but require an introduction and discussion that are broadly accessible
  – Not every article needs to be of interest or accessible to all readers
  – If each issue has one article of interest to each potential reader, we retain readers, and possibly add readers
• Publishing some “science” in the Biometric Bulletin
  – e.g., annotated reviews
EDUCATION

• We have modified the charge of our Education Committee
• And thank Jane Hutton and members of the previous committee

Possible educational initiatives
• Webcast or put on the web selected IBC sessions
• Provide scholarships for our short courses
• Offer mentoring
  – Advise on career choices and career development
  – Help with the final phase of manuscript preparation
• Science-based, visits to regions, universities and other institutions
  – Offer “on site” short courses & workshops
  – As has the ASA, develop a cadre of “Educational Ambassadors”
• Co-sponsor and staff masters programs in developing countries
Increase access to IBCs

Increase members’ ability to attend and participate
• This week’s Thursday night dinner is priced for access
• Short courses are “reasonably” priced
• But, members need to get to the meeting!
• So, an acute need to increase our funding for travel, short course attendance, …

For those who cannot attend
• Web cast or web-post some presentations and sessions
• Take some short courses “on the road”
• ……
Missions and Goals of selected societies
The International Biometric Society

• ...an international society promoting the development and application of statistical and mathematical theory and methods in the biosciences, including agriculture, biomedical science and public health, ecology, environmental sciences, forestry, and allied disciplines.

• The Society welcomes as members statisticians, mathematicians, biological scientists, and others devoted to interdisciplinary efforts in advancing the collection and interpretation of information in the biosciences.

• The Society publishes two journals, *Biometrics*, reporting communications consistent with the Society's mission, and, jointly with the American Statistical Association, the *Journal of Agricultural, Biological, and Environmental Statistics* (JABES).
Encourage the development and use of statistics and probability

• Help to develop a public awareness of the value of statistical thinking and the importance of statistics and statisticians in Canadian society
• Work to ensure that decisions affecting Canadian society are based on appropriate data and valid statistical interpretation
• Promote the highest possible standards for statistical education and practice in Canada
• Promote the development of statistical methodology;
• Promote a sense of community among all statisticians in Canada;
• Provide a forum for the exchange of ideas between theoreticians and practitioners of statistics.
To nurture the discipline of statistics by:
- publishing a Journal
- organising meetings
- setting and maintaining professional standards
- accrediting university courses and operating examinations

To promote the discipline of statistics by disseminating and encouraging statistical knowledge and good practice with both producers and consumers of statistics, and in society at large

To provide effective and efficient services to our members which will support their professional and academic interests and their endeavours to advance the other objectives of the Society
The International Statistical Institute

• The understanding, development and good practice of statistics
• **Worldwide support for the statistical community**
• Promote and disseminate research in the statistical sciences
• Promote and disseminate research and best practice in all forms of statistical education
• **Promoting public awareness of good statistical practice and its value to the community, supporting good practice**
• Support the development of young statisticians
• Encourage the ongoing participation of older members
Indian Statistical Institute

A unique institution devoted to the research, teaching and application of statistics, natural sciences and social sciences
• Be a world leader in promoting statistical practice, applications, and research;
• Publish statistical journals
• Improve statistical education
• Advance the statistics profession
The purpose of the Institute is to foster the development and dissemination of the theory and applications of statistics and probability.
La Société Française de Statistique

Ces rencontres ont pour objectif :

• de favoriser les échanges entre jeunes statisticiens de leur permettre d'exposer leurs travaux dans un contexte convivial
• de leur donner une vision plus large de la Statistique
• de leur présenter de nouveaux domaines d'application
• de les aider à préciser leur projet professionnel
European Epidemiology Association

• To facilitate communication among epidemiologists in Europe, to improve the quality of epidemiological research, to update ethical standards and credentials for epidemiology, and to foster the use of epidemiological research in the domains of public health and of clinical medicine

• Organizing IEA European Epidemiology Federation meetings, focused seminars and workshops, training and educational programmes

• Offering consulting aids and support in areas of Europe with special needs

• The Federation type of structure explicitly recognizes the dynamic role of epidemiological societies active within Europe and intends to promote their collaboration within the IEA framework
The IBS is also a "federal" system
With many advantages

• The ability for regions, groups and networks to involve many members in meetings, short courses and other fora at relatively low expense

• Identification with an organization that is “close to home”
  – In many ways the bigger regions are societies unto themselves
  – Smaller regions have a closer connection to the many benefits of the IBS

• Successes should be applauded and encouraged
But, our federal system presents some challenges

Though it is logical and desirable that members have their primary identity with and allegiance to the national/group/network, identification with and the role of the full IBS need to be enhanced

• The IBS should come in a close second

Success will confer increasing benefits for all while enhancing,

• The effectiveness of regions/groups/networks
• The professional and interpersonal experiences for all
• The visibility and impact of our Society and profession
Internal “fusion” activities

- Networks: The new Channel Network
- Connections: Sri Lanka part of the IR
- British and Irish Region
- Central dues collection
- IBCs and regional conferences
- Joint membership in regions
- Educational initiatives
- Public Presence
- IBCs

Regional visits by IBS officers and others
Geert in Argentina, 2005
Well, here he is engaging in a favorite activity
Bangalore, India 2005
Our Web: Internal & External Roles

Our web is improving, but still has a long way to go

- We can surely increase usage
  - In the IBO Survey, of the 95 respondents to “Have you contacted the web?”
    63 NO  18 Yes  14 NA  (77 NO + NA)
- Webs have become the “face” of an organization
- Our face needs some upgrading
  - Not botox treatment, but enhancements
- We need it to connect us internally and present us externally
- Provide a resource for information to and of members
- Provide a resource to non-members on societal resources
- Attract/retain members
- A good website is not a panacea, but is necessary
- We do need to be aware that there are technical and political limitations to full reliance on the web
Our web as a resource and the “face” of the IBS

• Serve as the website for smaller regions/groups
• Serve as a nexus for all regions/groups
• Post “News and Notes”
• Establish chat centers
• Facilitate
  – membership renewal
  – meeting registration
  – voting for Council
  – voting on Council circulars

• Resources for the media, policy-makers, other stakeholders
Our International Business Office

- Our IBO is central to our success & effectiveness
  - Its activities in preparing for this IBC would fill several slides

With the goal of quality improvement, we have initiated an annual, two-way review

- Jane Pendergast and her inaugural IBO Review Committee are analyzing questionnaire responses from a pilot survey

- Claire and her staff are conducting a self-study which will include an evaluation of our interactions with the IBO
Connections with other societies

With the International Statistical Institute
• JABES editors are working with the program committee for the Conference on Agricultural Statistics, Beijing, October 2007
• Biometrics editors are organizing an invited paper meeting for the 56th session of the ISI, Lisbon, August 2007

With the Mexican Statistical Association
• Announce meeting in the Biometric Bulletin
• Discussion of other connections

With the International Society of Clinical Biostatistics
• Hotlinks to each society’s webpage and distributing announcements

With the American Statistical Association
• Some overtures

Possibilities with these and other societies
• Joint membership at a reduced rate
• Collaborate on educational activities
• Collaborate on public statements and other “activism”
• Support for the international community
Organize a *Biometrics* or a JABES session at regional and network meetings

Propose a *Biometrics* or JABES session for the meetings of other societies

At the 2005 JSM (and now in *Biometrics*)

“Statistical Issues Arising in the Women’s Health Initiative”
``Prediction is a very delicate art, especially with regard to the future''

(Science, 1980)
Predictions that are most certainly correct

1. The future lies ahead

2. The only certainty is uncertainty

3. The future will be exciting and challenging
   – For society in general
   – For professional societies

4. I could be wrong
Our Present and Our Future

- The importance and impact of biometry and biometricians in science and policy burgeons
- Public awareness is increasing, but lags behind reality
- Challenges in applications energize methodologic development, enhancing applied activity
- Exciting new opportunities complement those in historically active domains
- Computing advances enable implementation of complicated statistical analyses by biometricians and others

Sociological, psychological and political factors are important determinants of the future of biometry and biometricians
Therefore, we must

• Operate with a clear view of professional roles and goals
• Ensure that projects are properly staffed, structured and resourced
• Promote respect and synergy between methods development and applications
• Energize and creatively modify continuing education within and outside our disciplines
• Accelerate recruitment of the next generation of biometricians

Promote and support our discipline and colleagues, while maintaining high standards
Takeovers of “Biometrics”

• The undersupply of biometricians and the availability of user-friendly software induces both benefits and risks
  – Benefits include increased awareness of what is possible
  – Risks include increased prevalence of sub-par design, conduct, analysis and reporting
• Data are “mined” and knowledge is “discovered”

“Biometrics” is no longer uniquely our brand name
• Most think of facial recognition, retina scans (recall the display while waiting to clear passport control at even at Trudeau airport!), fingerprint matching, ....
• They don’t think of design, conduct, analysis and reporting of statistical & simulation studies, of mathematical evaluations

Even a spa promotes “Biometrics” as a route to wellness and health!
Enhance our influence

Not, by trying to establish a monopoly
• We must avoid a “Sign of the Rose” approach

Rather, we must:
• Rapidly respond to important issues
• Anticipate upcoming issues
• Create, advocate and propagate state of the art biometrical concepts and methods
• Promote our “heads and hands” competitive advantage

Be scientifically and socially responsible, but not shy
We need to increase visibility, access and impact

Open source computer code
A very important cultural and scientific movement
bioconductor, R, linux, redhat

Collaborate to create and disseminate open source:
• Educational Materials (open courseware)
• Professional Mentoring

Promote & operationalize reproducible research
http://www.ihapss.jhsph.edu/data/data.htm
The Johns Hopkins Bloomberg School of Public Health’s OPENCOURSEWARE (OCW) project provides access to content of the School’s most popular courses. As challenges to the world’s health escalate daily, the School feels a moral imperative to provide equal and open access to information and knowledge about the obstacles to the public’s health and their potential solutions.

To learn more about the School and for credit classes, we invite you to explore our website: [www.jhsphs.edu](http://www.jhsphs.edu)
The Open Courseware Consortium

http://www.ocwconsortium.org/

- USE
  - Find Course Materials
- SHARE
  - Share Your University's Courses
- SUPPORT
  - Support the OCW Movement

OPEN SHARING, GLOBAL BENEFITS

NEWS
23 March 2006 MIT OpenCourseWare Update, Vol. 4, Issue 3: The monthly email newsletter for users and friends of MIT OpenCourseWare
Reproducible Research
iHAPSS at Hopkins

Mortality, weather, and air pollution data for selected metropolitan areas in the United States are available here. The data are from public sources:

- Air pollution data from the **AirData database** maintained by the U.S. Environmental Protection Agency.
- Daily mortality counts were obtained from the **National Center for Health Statistics**.
- Weather data is from the **National Climatic Data Center**.
- Census data from the United States **Census Bureau**.

Data from selected U.S. cities between the years 1987 and 2000 are available as compressed text files:

- [Frequently asked questions](#) about the NMMAPS data
- [Download](#) data (including metadata)
- [The NMMAPS data package for R](#)
- [Documentation](#)
- City-specific descriptive statistics
- How the mortality data were put together
- How the pollution data were put together

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Activism and Taking Stands

Position Papers and opinion pieces in Biometrics, the Biometric Bulletin, letters to the editor, OpEd pieces

- Example: Our 2005 letter regarding the JAMA policy on, Conflicts of Interest and Independent Data Analysis in Industry-Funded Studies
  “We are writing as representatives of the International Biometric Society”

- Web content for the general public and identified stakeholders

- Rapid response to issues such as the use of “Biometrics”
  “In the Montreal Gazette of 14 July, ‘Biometrics’ was used to refer to ...”
The Society for Clinical Trials Takes a Stand in their journal

The Society for Clinical Trials opposes US legislation to permit marketing of unproven medical therapies for seriously ill patients

Society for Clinical Trials Board of Directors
The Visa Issue

• Members planning to attend an IBC have encountered visa problems
• We are by no means alone in confronting this issue
• In February 2006, the United States denied a visa to Professor Goverdhan Mehta, a chemist from Bangalore India
• Professor H. Sridhara, President of the IBS Indian Region, reports that the Paris-based, International Council for Science issued the statement, “Non-discrimination and equity are the essential elements of the Principle of the Universality of Science. Respect to this principle and for individual scientist is a normal expectation in any democratic Society.”
• Due to the ICSU and other action, the visa denial was reversed
The IBS can take a stand

• Issue a strong statement on the visa issue
  – This is an ideal context for joint action with other societies

• Follow the suggestion of ISI President, Niels Keiding and schedule meetings in locations with relatively open access

• Facilitate obtaining visas and other travel needs
  – The LOC and our Business office did an excellent job for this IBC
Rapid response

• Pre-clear some generic statements that can be tuned to a situation
• Rapidly clear a statement with Council
• Empower the Executive Committee to respond to a pre-identified set of issues

Occasionally, the EC may need to seek forgiveness, in place of obtaining permission
The global imperative

• Ever increasingly, through our professional and personal lives, we need to generate and nurture respect & understanding, community & communication

• As professionals, we need to be leaders in improving the human condition through sound science and policy

• Our IBS must be involved
Finances

• All the foregoing activities, and others we can imagine, require financial support and investment of our time, energy and creativity
• Due to the efforts and skills of Norm Breslow, Geert Molenberghs, Jeff Wood, Jane Pendergast and our Finance Committee, Claire Shanley and many others, we are leaving the financial danger zone
• To be well out of the danger zone, we need to build up reserves
  – Fundraising
  – Successful IBCs
  – Effective money management
• However, we can begin to imagine additional initiatives
  
  We must spend our resources carefully and efficiently on the highest priority, feasible initiatives
Success depends on more than money

It depends on
• Funds
• Ideas
• Energy
• Commitment
• Volunteerism
• Amplifying, not stultifying, infrastructure and procedures
• The good deeds of volunteers and our paid staff

So, participate
• In the last Council election, only 20% of our members voted

And volunteer!
• Let the IBS and your Region/Group/Network know of your interest in serving on committees, serving as an associate editor, running for office
Why join the IBS and participate?

• It is not sufficient to argue that it is a “good thing”
• Individuals and groups have to get something out of membership
• However, joining and participating does depend on some altruism; some support of the discipline; some caretaking of the commons

General support for our discipline
• Create a public presence and make a case for biometry
• Create and nurture a culture
• Education
• Connections
• Ensuring that high-quality journals and short courses exist
• Service to the Society and to society
What if the IBS didn’t exist?

There would be no:
- Biometrics
- Biometric Bulletin
- IBCs
- IBS/IBC short courses

There would be:
- Reduced facilitation of international interaction and collaboration
- Dramatic reduction in aids to “navigation”
  for Biometrics and Biometricians
  – A less effective compass
  – A less effective anchor
Our future is bright

• Our collaborators, future collaborators, policymakers are increasingly aware of the benefits of (traditional) Biometry and Biometricians

• Our roles and impact in science and policy increase

• The dramatic increase in attendance at short courses and tutorials, registration for intermediate-level “service” courses and the modestly increasing number of applicants for graduate studies are very good signs
Sam Pitroda, who transformed India’s telecom system and now chairs India’s new Knowledge Commission, to help India emerge as a hub for innovation and knowledge-generation has stated:

“In India, you have to aim at the moon to touch the roof”
Let's lead by example

The respect conferred by others to Biometry and Biometricians will be no greater than the respect we convey and confer
Let's ..... Enjoy creating our future, which will become our present and then our history
Thank you