# Randy Sitter: His Career, His Humour and His Many Accomplishments

Derek Bingham, Charmaine Dean, Richard Lockhart

Simon Fraser University

SSC — 1 June 2009

Outline

Rambling Disorganized Tribute

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• Where we came in?

- Where we came in?
- The beginning?

- Where we came in?
- The beginning?
- With Randy's cv?

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- Where we came in?
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- With a Review of Randy's web pge?
- With a proof of Theorem 2?

Randy Sitter was a Canadian statistical star and an international leader in sampling and industrial statistics. Randy was a pioneer in the development of re-sampling methods for variance estimation in complex surveys. An expert in design of experiments, he developed theory and algorithms to find and analyze many important designs. Randy supervised over 20 graduate students with 6 PhD students taking academic positions at prestigious institutions. We will highlight Randys research interests and talk about his superb career and generous, passionate and fun-loving nature.





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• No photograph.





- No photograph.
- Designed to make my life hard?



- No photograph.
- Designed to make my life hard?
- Every list should have at least 3 elements.

The Contents

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# Randy R. Sitter



Professor

Department of Statistics and Actuarial Science Simon Fraser University Burnaby, B.C. Canada V5A 1S6

E-mail: sitter@stat.sfu.ca

#### **Introduction**

As you can see, my webpage is not tremendously fancy. It does however give a reasonable amount of information that might be of interest ostudents that may be interested in pursuing graduate studies at SFU under my supervison. This is the primary reason for my taking the time to create this page, though anyone is welcome, of course. I have briefly

http://www.stat.sfu.ca/~sitter/

The Contents

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summarized some categories and linked their headings to more detailed information.

#### Education

Ph.D. University of Waterloo, Statistics, 1990
M.Sc. University of British Columbia, Statistics, 1986
B.Sc. University of British Columbia, Mathematics, 1984

#### **Academic Employment**

Professor. Statistics & Actuarial Science. Simon Fraser University, 09/2000-Associate Professor. Mathematics & Statistics. Simon Fraser University, 09/1996-08/2000 Statistics. Visiting Associate Professor, University of Michigan, 01/1999-04/1999 Assistant Professor, Mathematics & Statistics Simon Fraser University, 01/1995-08/1996 Associate Professor, Mathematics & Statistics. Carleton University, 07/1995-07/1996 (on leave) Assistant Professor Mathematics & Statistics Carleton University, 01/1995-07/1999 (on leave) Assistant Professor Mathematics & Statistics Carleton University, 01/1990-01/1995

### **Research Interests**

- · Analysis of complex survey data.
- · The design and analysis of experiments with emphasis on applications to industry,
- · Optimal design of experiments,
- Statistical Consulting

#### **Professional Service**

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- · Editorial boards,
- Committees.
- Conference organization.

#### **Student Supervision**

	PHD	MSC	BSC
Supervised	4	2	1
Presently Supervising	2	10	0
TOTAL	6	12	1

#### **Refereed Publications**

1989-pres	Statistics Journals	Subject Area Journals	Other	Total
Published	42	2	3	47
Accepted	5	0	0	5
Submitted	4	0	0	4
TOTAL	51	2	3	56

#### **Consulting**

· Various clients in industry and government, both domestic and international.

#### **Statistics Related Links**

http://www.stat.sfu.ca/~sitter/

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Chunfang Devon Lin, 2008. (Queen's University)



Thesis: New Developments In Designs For Computer Experiments And Physical Experiments

Chunfang Devon Lin, 2008. (Queen's University)

## Randy said:

I always have time for you.



Thesis: New Developments In Designs For Computer Experiments And Physical Experiments

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Crystal Linkletter, 2007. (Brown University)



Thesis: Spatial Process Models for Social Network Analysis

Crystal Linkletter, 2007. (Brown University)

Randy said:

Who are you?



Thesis: Spatial Process Models for Social Network Analysis

Wilson Lu, 2004. (Acadia University)



Thesis: Confidentiality and Variance Estimation in Complex Surveys

Wilson Lu, 2004. (Acadia University)

## Wilson said:

The relationship is made of many little steps.



Thesis: Confidentiality and Variance Estimation in Complex Surveys

Jason Loeppky, 2004. (UBC Okanagan)



Thesis title: Ranking Non-Regular Designs

Jason Loeppky, 2004. (UBC Okanagan)

## He said he said:

No "Hi, how are you" but rather something that was always to the point and always thinking about research.



Thesis title: Ranking Non-Regular Designs

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Changbao Wu, 1999. (University of Waterloo)



Title: The Effective Use of Complete Auxiliary Information from Survey Data

11

Changbao Wu, 1999. (University of Waterloo)

## Changbao said

I had never imagined that my PhD supervisor is someone with a pony-tail.



Title: The Effective Use of Complete Auxiliary Information from Survey Data

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Actually I did find one picture of Randy



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But that picture is photoshopped from this one



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Derek Bingham, 1999. (Simon Fraser University)



Title: Design and Analysis of Fractional Factorial Split-Plot Experiments

Derek Bingham, 1999. (Simon Fraser University)

## Derek said

Say something like you said 5 years ago.



Title: Design and Analysis of Fractional Factorial Split-Plot Experiments

- Linda Lei, 2007
- 2 Cindy Feng, 2006
- Chungang Devon Lin, 2004
- Jacquie Gregory, 2003
- Crystal Linkletter, 2002
- Wilson Lu, 2000
- Jason Loeppky, 2000
- Wan-Lin Wei, 2000
- Heidi Kalbfleisch, 1997
- Barbara Forbes, 1994 (Carleton)
- Ilana Fainaru, 1994 (Carleton)
- Derek Bingham, 1994 (Carleton)

Education 14

• Basketball: Kelly Road Secondary School

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## One story - from the Province

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An avid athlete, Sitter played on the College of New Caledonia's basketball team, which won the B.C. championship and placed third in Canada. He remains a crucial component in the SFU basketball program.

Sitter continued his education at University of B.C., earning his bachelor's degree in mathematics and a master's degree in statistics, eventually earning a Ph.D. from the University of Waterloo in Ontario.

He paid his way through UBC by working as a carpenter and planting trees. As a future statistician, Sitter kept copious records of his accomplishments as a tree planter, and estimates he planted 300,000 seedlings, which converts to 300 hectares of forest land.

Compare to what I wrote: "Randy is also a crucial component in the basketball program in the Department of Statistics and Actuarial Science at Simon Fraser."

His Career

- Carleton, January 1990.
- SFU, September 1995.
- Editorial work.
- Professional service
- Conference organization
- Consulting
- Research

### **Editorial Work**

- 2004-2007 Editor, Technometrics.
- 2001-2003 Associate Editor, Technometrics.
- 2001-2003 Associate Editor, Canadian Journal of Statistics.
- 2000-2002 Associate Editor, Biometrics.
- 1997-1999 Associate Editor, Biometrics.
- 1996-2003 Associate Editor, Survey Methodology.
- 1996-1996 Special Associate Editor, Statistica Sinica.

### Professional Service

- 2005 Organizing Committee, Design and Analysis of Experiments Conference.
- 2002- Fellow of the American Statistical Association
- 2000- College of Reviewers of the Canada Research Chairs Program
- 2000-2005 American Statistical Association, Committee on Energy Statistics for the U.S. Energy Information Administration
- 1996-1999 NSERC Grants Selection Committee, Probability and Statististics.
- 1999-2000 Elections Committee of the SSC.
- 1998-1999 President of the Survey Methods Section of the SSC.
- 1996-1998 Research Committee of the SSC.
- 1994-1996 Ontario Representative on the Board of the SSC.
- 1993-1994 Vice-president of the Statistical Society of Ottawa.
- 1997- Adjunct Professor, University of Northern British Columbia.

- 2002-5 Los Alamos National Laboratories
- 2001-5 Westat, Washington, DC, USA
- 2001-4 California Health and Human Services Agency
- 1995-2002 Office for National Statistics
- 1997 MathSoft; Bootstrapping in Surveys Project.
- 1994 U.S. Postal Service. Statistical Parcel Tracking.
- 1992-1994 Schering-Plough Two-Stage Design of Experiments
- 1992 Health and Welfare Canada: Clustered Binary Data.
- 1991-1992 Wilson and Morganstern Quality Consultants: Simulation of a Lumber Remanufacturing Mill.
- 1987 Wisconsin Division of Health, Automated Monitoring System for Cancer Incidence.

• I have neither the intention nor the ability nor the time here today to do his research justice.

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• His publication rate is tapering off.

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Source: BIOMETRIKA Volume: 96 Issue: 1 Pages: 51-65 Published:

MAR 2009

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- 0000 M/H M/H

 2008: With Wilson; with Chunfang and Arden; with Bingham, Kelly and al; with Chunfang.

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- 2008: With Wilson; with Chunfang and Arden; with Bingham, Kelly and al; with Chunfang.
- The list goes on too long.



His Department

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- Our graduate program size has doubled.
- Our students have taken jobs all over the place.
- Our department is a great place to work.
- We know we owe much of this to Randy.

From Pritam



From Pritam



From Pritam



Saturday Night Breakthrough





# Saturday Nigl









Randy Sitter

25

From the basketball coach

Tall, but not that tall

Randy Sitter

25

From the mathematician

Good, but not that good

Randy Sitter

25

From all of us

"Gone, but not that gone."