# SIMON BONNER

# Department of Statistics and Actuarial Science Simon Fraser University, Burnaby, BC V5A 1S6

E-mail: sbonner@stat.sfu.ca Phone: 604-422-0056 / 604-268-7071

# **EDUCATION**

#### Ph.D. Statistics, Simon Fraser University

Sep 2004 – Present

Topic: Bayesian Analysis of Mark-Recapture Data

Supervisor: Dr. Carl Schwarz

Expected Graduation Date: December, 2007

#### M.Sc. Statistics, Simon Fraser University

Sep 2001 – Apr 2003

Topic: Incorporation of Continuous Covariates into the Cormack-Jolly-Seber Mark-Recapture Model

Supervisor: Dr. Carl Schwarz

# **B.Sc. Hons. Mathematics, McGill University**

Sep 1997 – Apr 2001

Topic: Detection of Changes in Brain Morphology using Multiple MRI

Supervisors: Dr. Keith Worsley and Dr. D. Louis Collins

# RESEARCH EXPERIENCE

Statistical Consultant Jan 2005 – Aug 2006

Statistical Consulting Service, Department of Statistics and Actuarial Science, Simon Fraser University

Statistical Analyst Sep 2003-Sep 2004

BC Centre for Excellence in HIV/AIDS, St. Paul's Hospital

Research Assistant Apr 2003- Aug 2003

Department of Statistics and Actuarial Science, Simon Fraser University

Research Assistant Sep 2000 – Aug 2001

Brain Imaging Centre, Montreal Neurological Institute

NSERC Undergraduate Summer Research Assistant May 2000 – Aug 2000

Department of Mathematics and Statistics, McGill University

Field Research Assistant May 1999 – Aug 2000

Department of Biology, University of Missouri at Columbia

Volunteer Field Ornithologist May 1998 – Sep 1998

Long Point Bird Observatory

# TEACHING EXPERIENCE

#### **Sessional Instructor**

Department of Statistics and Actuarial Science, Simon Fraser University

STAT450 – Statistical Theory Sept – Dec 2005 STAT101 – Introduction to Statistics Apr – Aug 2003

### **Teaching Assistant**

Department of Statistics and Actuarial Science, Simon Fraser University

Statistics Workshop	Sept 2001 – Apr 2002
STAT350 – Linear Models in Applied Statistics	May – Aug 2001
STAT430 - Statistical Design and Analysis of Experiments	Sept – Dec 2002
STAT403 – Intermediate Sampling and Experimental Design	Sept – Dec 2004
STAT650 - Quantitative Analysis in Resource Management and	Sept – Dec 2004
Field Biology	

# SCHOLARSHIPS AND AWARDS

MITACS Internship, Simon Fraser University and Rescan Environmental Services	Apr 2007 – Aug 2007
NSERC CGSB, Simon Fraser University	Apr 2005 – Apr 2007
Scott Paper Limited Bicultural Graduate Entrance Fellowship, Simon Fraser University	Sep 2004 – Sep 2005
Special Graduate Entrance Scholarship, Simon Fraser University	Sep 2004 – Sep 2005
NSERC PGSA-1, Simon Fraser University	May 2002 – Apr 2003
Graduate Fellowship Award, Simon Fraser University	May 2002
Graduate Entrance Scholarship, Simon Fraser University	Sep 2002
NSERC USRA, McGill University	May 2000
James McGill Scholarship, McGill University	Sep 1997 – Apr 2001

# WORKSHOPS AND COURSES ATTENDED

Program MARK Workshop

June 2005

Department of Fishery and Wildlife, Colorado State University

Certificate Program in University Teaching and Learning Sep 2004 – Apr 2005

Learning and Instructional Development Centre, Simon Fraser University

Instructional Skills Workshop Apr 2003

Learning and Instructional Development Centre, Simon Fraser University

# **Service Activities**

Web Designer

4<sup>th</sup> SFU/UBC Joint Student Statistics Workshop

2<sup>nd</sup> SFU/UBC Joint Student Statistics Workshop

Nov 2005

**Chair** Sep 2002-Aug 2003,Sep 2004-Aug 2005

Statistics and Actuarial Science Graduate Student Caucus, SFU

# REFEREED PUBLICATIONS

- Lampinen, TM, Bonner, SJ, Rusch, M, and Hogg, RS. (2007) High Prevalence of Smoking Among Urban-Dwelling Canadian Men Who Have Sex with Men. *Journal of Urban Health*. 83(6): 1143-1150.
- Hogg RS, Bangsberg DR, Lima VD, Alexander C, Bonner S, Yip B, Wood E, Dong WW, Montaner JS, Harrigan PR. (2006) Emergence of Drug Resistance Is Associated with an Increased Risk of Death among Patients First Starting HAART. *PLoS Med.* 3(9) [E-publication ahead of print]
- Bonner, SJ and Schwarz, CJ. (2006) An extension of the Cormack-Jolly-Seber model for continuous covariates with application to *Microtus pennsylvanicus*. *Biometrics*. 62(1): 142-149.
- Bonner, SJ and Schwarz, CJ. (2004) Continuous Time-Dependent Individual Covariates and the Cormack-Jolly-Seber Model. *Animal Biodiversity and Conservation*. 27: 149-155.
- Wood, E, Hogg, RS, Bonner, S, Kerr, T, Li, K, Palepu, A, Guillemi, S, Schechter, MT, Montaner, JSG. (2004) Staging for Anti-Retroviral Therapy among HIV-infected Drug Dsers. *Journal of the American Medical Association*. 292: 1175a-1177a.

# SUBMITTED PUBLICATIONS

- Bonner, SJ, Thomson, D, and Schwarz, CJ. (2007) Time-Varying Covariates and Semi-Parametric Regression in Capture-Recapture: an Adaptive Spline Approach. *Ecological and Environmental Statistics*. (Under Review)
- Gimenez, O, Bonner SJ, King R, Parker, RA, Brooks, SP, Jamieson, LE, Grosbois, V, Morgan, BJT, Newson, S, and Thomas, L. (2007) WinBUGS for Population Ecologists: Bayesian Modeling using Markov Chain Monte Carlo (MCMC) methods. *Ecological and Environmental Statistics*. (Under Review)

# CONFERENCE PRESENTATIONS

- Bonner, SJ, Thompson, DT, and Schwarz, CJ. (2007) Time-Varying Covariates and Semi-Parametric Regression in Capture-Recapture: an Adaptive Spline Approach. 2007 EURING Technical Meeting, Dunedin, New Zealand.
- Bonner, SJ and Schwarz, CJ. (2003) Continuous Individual Time-Dependent Covariates in the Cormack-Jolly-Seber Model 2003 EURING Technical Meeting, Radolfzell, Germany.

# POSTERS AND OTHER CONTRIBUTIONS

- Bonner, SJ, King, R, and Morgan, BJT. (2007) Comparison of Methods for Incorporating Covariates in Mark-Recapture-Recovery Analysis. Poster at 2007 EURING Technical Meeting. Dunedin, New Zealand, January 21-28, 2007.
- Gimenez, O, Bonner SJ, King R, Parker, RA, Brooks, SP, Jamieson, LE, Grosbois, V, Morgan, BJT, Newson, S, and Thomas, L (2007) Assessing Population Dynamics using WinBUGS. Computing Workshop at 2007 EURING Technical Meeting.. Dunedin, New Zealand, January 21-28, 2007.
- Bonner, SJ. (2006) Time-dependent Covariates in Mark-Recapture. Presentation at 3<sup>rd</sup> SFU/UBC Joint Student Statistics Workshop, University of British Columbia. Vancouver, May 24, 2006.
- Bonner, SJ, Rusch, M, Lampinen, TM, Miller, ML, Devlin, B, Hogg, RS. (2004) Smoking Behaviour Among Men Who Have Sex with Men. Poster at 13<sup>th</sup> Annual Canadian AIDS/HIV Research Conference. Montreal, May13-16, 2004.

- Bonner, SJ, Hogg, RS, Geller, J, Yip, B, Gataric, N, Montaner, JSG. (2004) Concordance Between Two Measures of Adherence to Anti-Retroviral Therapy. Poster at 13<sup>th</sup> Annual Canadian AIDS/HIV Research Conference. Montreal, May13-16, 2004.
- Guillemi, S, Alexander, CS, Bonner, S, Ting, L, Harris, M, Harrigan, PR, Montaner, JSG.(2004) Lopinavir Through Concentration Remains Consistent for Adult Patients Regardless of Age. Poster at13<sup>th</sup> Annual Canadian AIDS/HIV Research Conference. Montreal, May13-16, 2004.
- Harris, M, Zalunardo, N, Bonner, S, Werb, R, Valyi, M, Montaner, JSG. (2004) Use of Estimated Glomerular Filtration Rate (GFR) to Predict Renal Toxicity in Patients Receiving Tenofovir DF (TDF). Poster at11th Conference on Retroviruses and Opportunistic Infections. San Francisco, CA, USA, February 8-11, 2004.
- Harris, M, Alexander, C, Bonner, S, Ting, L, McNabb, K, Harrigan, PR, Montaner, JSG. (2004) Soft Gel and Hard Gel Formulations Offer Similar Exposure to Saquinavir in Ritonavir-boosted Regimens. Poster at 5<sup>th</sup> International Workshop on Clinical Pharmacology of HIV Therapy. Rome, Italy, March 11-13, 2004.
- Harris, M, Alexander, C, Bonner, S, Ting, L, McNabb, K, Harrigan, PR, Montaner, JSG. (2004) Soft Gel (SGC) and Hard Gel (HGC) Formulations Offer Similar Exposure to Saquinavir (SQV) in Ritonavir (RTV)-boosted Regimens. Poster at 13<sup>th</sup> Annual Canadian AIDS/HIV Research Conference. Montreal, May13-16, 2004.
- Hogg RS, Bonner SJ, Daniel M, Harrigan PR, Yip B, Braitstein P, Wood E, Montaner JSG. (2004) Impact of Depression on All Cause Mortality among Men and Women Initiating HAART. Presentation at 15<sup>th</sup> International AIDS Conference, Bangkok, July 11-16, 2004.
- Bonner, SJ. (2005) An Introduction to Capture-Recapture. Presentation at 1<sup>st</sup> SFU/UBC Joint Student Statistics Workshop, University of British Columbia. Vancouver, May 13, 2005.

# OTHER RESEARCH ACTIVITIES

During my PhD I have refereed papers for the following journals:

- Biometrics
- Ecological and Environmental Statistics
- Journal of Applied Ecology
- Journal of Field Ornithology
- Journal of Wildlife Management
- North American Journal of Fisheries Management