Natural Sciences and Engineering Research Council of Canada
Conseil de recherches en sciences naturelles et en génie du Canada

FORM 100
Personal Data Form
PART I

Date: 2009/10/13

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)
Fraser	Donald	DAS	**Valid** 1363

☐ I hold a faculty position at an eligible Canadian college (complete Appendices B1 and C)

☐ I do not or will not hold an academic appointment at a Canadian postsecondary institution

Place of employment other than a Canadian postsecondary Institution (give address in Appendix A)

APPOINTMENT AT A POSTSECONDARY INSTITUTION

Title of position: Lifetime Professor Emeritus

Department: Statistics

Campus: Main

Canadian postsecondary institution: Toronto

Tenured or tenure-track academic appointment: Yes ☐ No ☒

Part-time appointment ☐ Full-time appointment ☒

- For all non-tenured or non tenure-track academic appointment and Emeritus Professors, complete Appendices B & C
- For life-time Emeritus Professor and part-time positions, complete Appendix C

ACADEMIC BACKGROUND

Degree	Name of discipline	Institution	Country	Date yyyy/mm
Bachelor's	Mathematics	Toronto	CANADA	1946 / 06
Master's	Mathematics	Toronto	CANADA	1947 / 06
Doctorate	Mathematics/Statistics	Princeton University	UNITED STATES	1949 / 06
Master's	Mathematics	Princeton University	UNITED STATES	1948 / 06

TRAINING OF HIGHLY QUALIFIED PERSONNEL

Indicate the number of students, fellows and other research personnel that you:

	Currently		Over the past six years (excluding the current year)		
	Supervised	Co-supervised	Supervised	Co-supervised	Total
Undergraduate	2				2
Master's	1		1	2	4
Doctoral	2		4	1	7
Postdoctoral		2	1	2	5
Others					
Total	5	2	6	5	18

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Completed

Personal identification no. (PIN)	Family name
Valid 1363	Fraser

ACADEMIC, RESEARCH AND INDUSTRIAL EXPERIENCE (use one additional page if necessary)

Position held (begin with current)	Organization	Department	Period (yyyy/mm to yyyy/mm)
Lifetime Professor Emeritus	Toronto	Statistics	1985/10
Visiting Professor	Swiss Federal Institute, Lausanne	Mathematics	2002/07 to 2003/06
Professor	York University	Mathematics and Statisics	1985/07 to 1995/07
Visiting Professor	Stanford University	Statistics	1982/07 to 1983/06
Visiting Professor	University of Geneva	Mathematics	1978/07 to 1979/06
Professor	University of Toronto	Statistics	1978/07 to 1985/06
Professor	University of Hawaii	mathematics	1969/07 to 1970/06
Visiting Professor	University of Wisconsin, Madison	Statistics	1965/01 to 1965/06
Visiting Professor	University of Copenhagen	Statistics	1964/01 to 1964/06

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ACADEMIC, RESEARCH AND INDUSTRIAL EXPERIENCE (use one additional page if necessary)

Position held (begin with current)	Organization	Department	Period (yyyy/mm to yyyy/mm)
Visiting Professor	Stanford University	Statistics	1961/07 to 1962/06
Professor	University of Toronto	Mathematics	1958/07 to 1978/06
Visiting Associate Professor	Princeton University	Mathematics	1955/01 to 1955/06
Associate Professor	University of Toronto	Mathematics	1953/07 to 1958/06
Assistant Professor	University of Toronto	Mathematics	1949/07 to 1953/06

Personal identification no. (PIN)	Family name
Valid 1363	Fraser

RESEARCH SUPPORT

Family name and initial(s) of applicant	Title of proposal, funding source and program, and time commitment (hours/month)	Amount per year	Years of tenure (yyyy)
List all sources of support **(including NSERC grants and university start-up funds)** held as an applicant or a co-applicant: a) support held in the past four (4) years but now completed; b) support currently held, and c) support applied for. For group grants, indicate the percentage of the funding directly applicable to your research. Use additional pages as required.			
a) Support held in the past 4 years			
Donald AS Fraser	Incisive inference for discrete and continuous data NSERC Discovery grants 150 hours/month	40,000 40,000 40,000 40,000	2005 2006 2007 2008
b) Support currently held			
Donald AS Fraser	Incisive inference for discrete and continuous data NSERC Discovery grants 150 hours/month	40,000	2009
c) Support applied for			
Donald AS Fraser	Likelihood Based Theory for Applications NSERC Discovery grants-individual	94,700 91,200 91,200 91,200 91,200	2010 2011 2012 2013 2014

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Highly Qualified Personnel (HQP)

Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

Personal identification no. (PIN)	Family name
Valid 1363	Fraser

Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Ji, K	Master's	Supervised 2009 -	Likelihood theory	Master UToronto
Mallo, M	Doctoral	Supervised 2009 -	Likelihood and Bayes	Doctoral student
Thinniyam, R	Doctoral	Supervised 2009 -	likelihood analysis	Doctoral student
Chouldechova O.	Master's	Co-supervised 2008 - 2009	Likelihood application	Doctoral Washington
Iglesias-Gonza Sigfri	Postdoctoral (Completed)	Supervised 2008 - 2009	Higher order likelihood	Post Doctoral
Cai, Tara	Res. Associate	Supervised 2007 - 2009	Asymptotic analysis	Doctoral UBC
Jin, Zi	Doctoral	Co-supervised 2007 - 2009	Likelihood asymptotic	Doctoral UToronto
Plante, Jean-Francois	Postdoctoral (Completed)	Supervised 2007 - 2009	Higher order likelihood	Asst Prof. HEC Montreal. July, 2009
Sun, Ye	Postdoctoral (In Progress)	Supervised 2007 - 2009	Higher order likelihood	Post Doctoral
Steinberg, A	Doctoral (In Progress)	Supervised 2005 - 2009	Economics of inventions	Doctoral
Cao, Yun S.	Doctoral	Co-supervised 2007 - 2008	Likelihood theory	Doctoral UToronto
Faye, Laura	Master's (Completed)	Supervised 2006 - 2008	Likelihood inference	Doctoral student, Biostatistic
Iglesias-Gonza S	Doctoral	Co-supervised 2006 - 2008	Likelihood asymptotic	Scientist CIMAT
Soltys, Barbara	Res. Associate (In Progress)	Supervised 2005 - 2007	Likelihood inference	Finance, Toronto
Wang, Jin	Master's	Supervised 2004 - 2006	likelihood analysis	NA
Genyk, Myron	Res. Associate (Completed)	Supervised 2004 - 2004	Asymptotic expansions in statistics	Graduate student, Economics, York Univ
Li, Bin	Res. Associate (Completed)	Supervised 2004 - 2004	Cauchy in statistical analysis	NA
Manios, Georgina	Doctoral (Completed)	Supervised 2003 - 2004	Bayes-frequentist interface	Teaching
Lai, Jeff	Doctoral (Completed)	Supervised 2001 - 2004	Testing vector parameters; discrete case	Finance, Toronto
Yuan, Xiaobin	Doctoral (Completed)	Supervised 1999 - 2004	Default Bayesian priors	Biostatistic US

CONTRIBUTIONS: NSERC, full/only funding source; joint work, fully shared

1. Most Significant Contributions to Research

1.1. Conditioning for inference

Statistical methodology centers around two extremes: evaluations that are fully conditional on observed data as in the Bayesian methodology and evaluations that are fully marginal on an assessment statistic as in the standard and the Bootstrap approaches. But curiously the original Bayes proposal concerned a flat prior with a location model and the results exactly coincide with conditioning on ancillary information with its related confidence which thus presents an intermediate position. Recent differential analysis [1] then uses continuity in the model as a primary ingredient and generates general conditioning procedures in the same spirit. This focusses on the intermediate and accordingly less extreme approach of partial conditioning which places it between the major extremes just mentioned. Background aspects for this may be found in [3], [7],]21], [22]. But the triggering element was that third order inference quite generally is fully conditional on model form in the neighborhood of observed data; key aspects of this were developed in

Fraser, D.A.S., and Reid, N. (1995). Ancillaries and third order significance. *Utilitas Mathematica* **47**, 33-53;

this paper was initially reviewed by Biometrika which was positive but recommended that it be rewritten in two or three smaller papers for possible reconsideration; it was then directly accepted by Utilitas based on the Biometrika reviews (smaller journals play a key role in expediting new material that departs from the topical form of major journals). The assessment of vector parameters by contrast is in general limited to second order and the key theory is currently evolving from

Fraser, D.A.S., and Massam, H. (1985). Conical tests: Observed levels of significance and confidence regions. *Statistische Hefte* **26**, 1-17;

another instance of a smaller journal providing key support for ideas too non-topical for larger journals. These two types of conditioning are providing intrinsic influences on current likelihood asymptotics.

1.2. p-values

The conditioning just described typically reduces the dimension of the effective variable to the dimension of the full parameter. The higher-order assessment of an interest parameter then requires marginalization and can not be obtained by conditioning except with models having strong symmetry such as the normal; some development of this is recorded in [21] with further details as part of continuing research. The definitive assessment of a scalar parameter was initiated by Barndorff-Nielsen (1986) and by Daniels (1987), with extensions from the cumulant generating function context in

Fraser, D.A.S., Reid, N., and Wu, J. (1999). A simple general formula for tail probabilities for frequentist and Bayesian inference. *Biometrika* **86**, 249-264;

and to the discrete context in [16]. The modification of a proposed statistic to give third order p-value assessment is developed in [11] which has parallels to the triple parametric Bootstrap. Extensions to vector parameters are currently in progress building on

Fraser, D.A.S. and Reid, N. (2006). Assessing a vector parameter. *Student*, **5**, 247-256,

and references therein. A major technical issue was resolved in [12] with shared analysis involving graduate, undergraduate and summer NSERC students. This methodology joint with the preceding Conditioning 1.1 provides a widely applicable and definitive adhering to model continuity resolution for the assessment of scalar parameters; key applied problems have been resolved accordingly; see[13] and [6] for the Behrens-Fisher and Box and Cox problems for example.

1.3. Likelihood for interest parameters

A central problem of inference is to assemble the information concerning a parameter of interest: the p-value provides one type of information as just describe; and likelihood provides complementary information. Profile likelihood gives such likelihood information to first order, but more accurate information requires fine details from higher order likelihood theory. Second order likelihoods were developed in Cox & Reid (1987) and Barndorff-Nielsen (1987); a third order modification was obtained [30] as part of removing the dependence on the sample space metric. This provides a close connection to the p-values in **1.2** and is surveyed in the recent discussion paper [6] and has extensions that make use of recent research [2].

1.4. Default priors for Bayesian analysis

Priors for Bayesian analysis tend to fall under one of three possible groupings: the original Bayes (1763) giving a flat prior for a location model with generalization here called default priors; the priors that present views, evaluations, or assessments of an investigator; and the priors that present frequency information concerning the source of the value in an application; we address the first as a widely used approach with various recent concerns as for example:
Stainforth, D. A., Allen, M. R., Tredger, E. R. and Smith, L. A. (2007). Confidence, uncertainty and decision-support relevance in climate predictions. *Phil. Trans. Roy. Soc.* A, **365**, 2145-2162. See also: Gambling on tomorrow. Modelling the Earth's climate mathematically is hard already. Now a new difficulty is emerging. *Economist.* August 18, 2007, p69.
Jeffreys (1939, 1946), Bernardo (1979) and others have proposed modifications. Various background technical issues have been explored in
Fraser, D.A.S., and Reid, N. (2002) Strong matching of frequentist and Bayesian parametric inference. *Journal of Statistical Planning and Inference.* **103**, 263-285.
In [1] a differential approach based on continuity in the model obtains default priors in quite general models with second and third order accuracy; these priors agree with the familiar and widely used right invariant priors when they are available and extend them with high accuracy to quite general model contexts giving results consistent with the frequentist approach. This is a key theoretical step towards bridging the differences between Bayesian and frequentist methodologies.

1.4. Parameter curvature and Bayesian-frequentist calibration

The familiar Bayes flat priors that can lead to the concerns expressed by Stainforth et al (2007) as cited above can be highly appropriate for certain parameters which can be described as linear and then depart substantially with parameter curvature. In certain normal models this kind of curvature can agree with the Efron curvature but with departure fromdistributional normality can diverge substantially. In [4] a modified curvature is developed and its use for adjusting the bias in the standard Bayes analysis is explored, verifying the feasibility of basing corrections on the modified curvature measure. This is an on going investigation.

2. Research Contributions

2.1. Articles in refereed publications:

[1] Fraser, A.M., Fraser, D.A.S. and **Staicu, A.-M.** (2009). The second order ancillary: A differential view with continuity. *Bernoulli*, accepted with minor changes, September 2009.

[2] Reid, N, and Fraser, D.A.S. (2009). Mean likelihood and higher order inference. *Biometrika*;

accepted, September 2009.

[3] Ghosh, M., Reid, N. and Fraser, D.A.S. (2009). Ancillary statistics: A review. *Statistica Sinica*, accepted, May, 2009.

[4] D.A.S. Fraser and **Sun, Y.** (2009). A correction for Bayes bias. *Parkistan J. of Statist.*; accepted: June 2009.

[5] Fraser, D.A.S., Reid, N., **Marras, E.** and Yi, G.Y. (2009). Default priors for Bayesian and frequentist inference. *J. Royal Statist. Soc. B*, revision requested.

[6] Fraser, D.A.S., Wong, A. and **Sun, Ye** (2009). Three enigmatic examples and inference from likelihood. *Canadian Journal of Statistics*, **37**, 161-181.

[7] Fraser, D.A.S. and **Staicu, Ana-Maria**. (2009). Second order ancillary is rotation based. *J. Statist. Plann. Inference*; accepted: September 14, 2009.

[8] Fraser, D.A.S.(2009). Is Bayes posterior just quick and dirty confidence? *Statistical Science*; in review.

[9] Yi, G.Y. and Fraser, D.A.S. (2009). Higher Order Asymptotics: An Intrinsic Difference between Univariate and Multivariate Models. Journal of Statistical Research, 41, 1-20.

[10] **Bédard, M.** and Fraser, D.A.S., (2008). On a directionally adjusted Metropolis-Hastings algorithm. *International Journal Statistical Science*, accepted, August 22, 2008.

[11] Fraser, D.A.S. and Rousseau, J. (2008). Studentization and deriving accurate p-values. *Biometrika*, **95**, 1-16.

[12] Fraser, D.A.S., **Faye, L., Cai, T., Ji, K., Mallo, M., and Thinniyam, R** (2008). Is r* linear in r? Jour. Statist. Res., accepted, August 21, 2008.

[13] **Bédard, M.**, Fraser, D.A.S. and Wong, A. (2008). Higher accuracy for Bayesian and frequentist inference: Large sample theory for small sample likelihood. *Statistical Science* **22**, 301-321.

[14] Fraser, D.A.S. and Naderi, A. (2007). Minimal sufficient statistics emerge from the observed likelihood function. *Int. J. Statist.Sc.*, **6**, 55-61.

[15] Fraser, D.A.S. and Reid, N. (2006). Assessing a vector parameter. *Student*, **5**, 247-256.

[16] Davison, A.C., Fraser, D.A.S. and Reid, N. (2006). Improved likelihood inference for discrete data. *J. Royal Statist. Soc.***B 68**, 495-508.

[17] Fraser, D.A.S., **Rekkas, M.**, Wong, A. (2005). Highly accurate likelihood analysis for the seemingly unrelated regression problem. *Journal of Econometrics.* **127**, 17-33.

[18] Andrews, D.F., Fraser, D.A.S., and Wong, A. (2005). Computation of distribution functions from likelihood information near observed data. *Journal Statist. Plann. Inference*, **134**, 180-193.

[19] Eaton, Morris and Fraser, D.A.S. (2005). Studentization and prediction in a multivariate normal setting. *Statistica Neerlandica* **59**, 268-276.

[20] Fraser, D.A.S., Reid, N. and Wong, A. (2004). Inference for bounded parameters. *Physics Review D*, **69**, 033002.

[21] Fraser, D.A.S. (2004). Ancillaries and conditional inference, with discussion. *Statistical Science* **19**, 333-369.

[22] Fraser, D.A.S. (2004). On the discussion of ancillaries and conditional inference. *Statistical Science.* **19**, 363-369.

[23] Reid, N., Mukerjee, R., Fraser, D.A.S. (2004). Some aspects of matching priors. *Mathematical Statistics and Application: Festschrift for Constance Van Eeden* IMS Lecture Notes-Monograph Series. **42**, 31-43.

[24] Fraser, D.A.S., Wong, A. and **Wu, J.** (2004). Simple accurate and unique: The methods of modern likelihood theory. Pakistan Journal of Statistics, **20**, 173-192.

[25] Fraser, D.A.S., Wong, A. (2004). Algebraic extraction of the canonical asymptotic model:

scalar case. *Journal of Statistical Studies.* **1**, 29-49.

[26] Fraser, D.A.S., Reid, N. & Wong, A. (2004). What a model with data says about theta. *International Journal Statistical Science*, **3**, 163-177.

[27] Fraser, D.A.S., Reid, N., **Li, R.** and Wong, A.(2003). p-value formulas from likelihood asymptotics: Bridging the singularities. *J. Statist. Research.*, **37**, 1-15.

[28] Reid, N. and Fraser, D.A.S. (2003). Likelihood inference in the presence of nuisance parameters. In *Proceedings of PHYSTAT2003*, L. Lyons, R. Mount, R. Reitmeyer, eds. SLAC e-Conf C030908, 265–271.

[29] Fraser, D.A.S., Reid, N., Wong, A., and Yun Yi, G.(2003). Direct Bayes for interest parameters. *Valencia 7*, 529-533.

[30] Fraser, D.A.S. (2003). Likelihood for component parameters. *Biometrika* **90**, 327-339.

[32] Fraser, D.A.S. & Reid, N. (2003). Discussion of what is a statistical model. *Annals Statist.* **30**, 1283-1286.

[33] Fraser, D.A.S., and Yi, G. Y. (2003). Location reparameterization and default priors for statistical analysis. *Jour. Iranian Statist. Soc.* **1**. 55-78.

2.2. Other refereed contributions:

[34] Fraser, D.A.S. (2009). Bayesian inference. *Wiley Interdisciplinary Reviews: Computational Statistics*, to appear.

[35] Fraser, D.A.S., (2009). Fiducial inference. *The New Palgrave Dictionary of Economics, 2nd Edition* to appear.

[36] Fraser, D.A.S. (2004). Fiducial and structural statistical inference. *International Encyclopedia of Social and Behavioral Sciences.* 5616–5620.

[37] Fraser, D.A.S. (2002). Statistics, Foundations. *Encyclopedia of Physical Science and Technology.* **15**, 843-849.

2.3. Non-refereed contributions: Conference presentations

Curvature for the Bayes-frequentist disconnect. Canadian Mathematical Society, Winter meeting, Windsor, Canada. December 6, 2009.

Can theory calibrate the tools in the statistical toolbox? Montreal Statistical Colloquium, University of Montreal, Montreal, Canada. November 6, 2009.

Yanling Cai, Jean-François Plante, Ramya Thinniyam, D.A.S. Fraser. r vs r* – Magic from Taylor Expansions. Statistical Society of Canada, Vancouver, June 2, 2009.

Bayes linearity and confidence. Department of Statistics, Columbia University, NYC. November 24, 2008.

Some thoughts on the Bayesian-frequentist divergence. XLI Congreso Nacional de la Sociedad Matematica Mexicana, Valle de Bravo, Mexico. October 22, 2008.

The quantile function in statistical inference. Texas A. & M. University, May 12, 2008.

Overview of parameter curvature. University of Wales, Gregynog, April 19, 2008.

Parameter curvature and the Bayesian frequentist divergence. University of Wales, Gregynog, April 18, 2008.

Bayesian posterior probability is just confidence and inconveniently needs linearity. McMaster University, April 1, 2008.

The Bayes myth - Probabilities. Or just approximate confidence. University of Western Ontario, London, Feb 7, 2008.

Default priors for frequentist and Bayesian inference. Joint Statistical Meetings, Salt Lake City, Utah July 31, 2007.

Data-based probability for parameter values, ORFE, Princeton University, Princeton, New Jersey February 13, 2007.

Pivot or prior: the Bayesian-frequentist choice, Dept of Statistics, Simon Fraser University, Vancouver, B.C. November 17, 2006.

Combining p-values from independent sources. International Conference on Nonparametric Statistics, Carleton University, Ottawa, Canada. September 15, 2006.

Default priors for Bayesian and frequentist inference. Valencia 8, ISBA 2006, Benidorm, Spain. June 6, 2006.

Should Bayesians and frequentists calibrate their parameters? Dept of Statistics, University of Western Ontario. London, Canada. December 8, 2005.

Some thoughts on model based priors. Dept of Statistics, University of Waterloo, Waterloo, Canada. November 17, 2005.

What model information is appropriate for the Bayesian paradigm? Statistical Society of Canada, Annual meeting. Saskatoon, Saskatchewan. June 15, 2005.

Objective and other priors. OBayes 5, Branson, Missouri. June 8, 2005.

Why a prior? Dept of Statistics, Univ of Toronto, Munk Centre, April 28, 2005.

Neutral priors. COBAL2, Baja, California, Mexico. February 6-10, 2005.

Is there statistical inference? The Bayesian-frequentist divergence. Dept. of Statistics, Case Western Reserve University October 1, 2004.

Assessing vector parameters. Conference for Sir David Cox, Neuchatel, July 16, 2004.

Model with data; What does it say? Dept of Statistics, University of Toronto. April 1, 2004.

Statistical models and the implications. Dept of Statistics, University of Western Ontario. February 5, 2004.

Is there total inference? Saddlepoint and beyond. Dept of Mathematics, University of British Columbia, January 15, 2004.

Recent likelihood analysis. Dept of Computer Science, University of Fribourg. May 23, 2003.

Likelihood analysis and the SUR model. Dept of Econometrics, University of Geneva May 16, 2003.

Recent likelihood theory: Analysis as simple as the Normal location scale case. University of Geneva. January 30, 2003.

Student analysis and higher order likelihood theory. EPFL Lausanne. January 17, 2003

3. Other Evidence of Impact and Contributions: Prestigious invited lecture

Likelihood, p-values, ancillaries and the vector quantile function. Statistical Laboratory, University of Cambridge, May 5, 2009.

5. Contributions to the training of HQP

With the NSERC supported research described in Section 1 and the related publications in Section 2 there have arisen various technical issues that can be addressed by the group involvement of undergraduates and graduates and post-Doctoral fellows. Summer study sessions and continuing in term seminars have been regularly organized and the participants introduced to analytic and symbolic computations. These have been hugely successful with students enthusiastic and excited about participation in a meaningful way in on-going research activity and then included in the subsequent publication; see the HPQ section and the high-lighted student participants in the list of research publications (Section 2).

SEND ONE ORIGINAL ONLY DO NOT PHOTOCOPY

APPENDIX A
Personal Data
(Form 100)

Complete this appendix (i) if you are an applicant or co-applicant applying for the first time; (ii) if you need to update information submitted with a previous application; or (iii) if you do not hold an appointment at a Canadian postsecondary institution. For updates, include only the revised information in addition to the date, your name and your PIN.

This information will be used by NSERC primarily to contact applicants and award holders. It may also be used to identify prospective reviewers and committee members, and to generate statistics. It will not be seen or used in the adjudication process.

Date: 2009/10/13

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)
Fraser	Donald	DAS	**Valid** 1363

Position and complete mailing address if your primary place of employment is not a Canadian postsecondary institution or if your current mailing address is temporary

Department of Statistics
100 St. George St
TORONTO ON M5S3G3
CANADA

If address is temporary, indicate:

Starting date

Leaving date

Telephone number	Facsimile number	E-mail address
1 (416) 978 4448	(416) 978 5133	dfraser@utstat.toronto.edu

Telephone number (alternate): 1 (416) 482 3452

Give an alternate telephone number only if you can be reached at that number during business hours.

Gender (completion optional): [X] Male [ ] Female

LANGUAGE CAPABILITY

	Read	Write	Speak
English	X	X	X
French	X		

I wish to receive my correspondence: in English [X] in French [ ]

AREA(S) OF EXPERTISE

Provide a maximum of 10 key words that describe your area(s) of expertise. Use commas to separate them. If you have expertise with particular instruments and techniques, specify which one(s).

Likelihood, p-values, Higher-order-approximations, Conditioning, Marginalization, Bayesian-frequentist interface, Interest-parameters, Marginal-likelihood, Discrete-data-analysis, Simulations

Research subject code(s)

Primary: 3009

Secondary: 3001

Natural Sciences and Engineering Research Council of Canada | Conseil de recherches en sciences naturelles et en génie du Canada

SEND ONE ORIGINAL ONLY DO NOT PHOTOCOPY

APPENDIX B (Form 100)
Eligibility Questionnaire for University Faculty

Complete this appendix if you are an applicant or co-applicant holding a position at a Canadian university that is not a tenured, tenure-track or life-time professor emeritus position at the time of application. **The information you provide must be for the position you will hold at the time the grant is awarded.** If you are not currently in that position, you must have a written firm offer. You may append any relevant information. See the eligibility criteria in the *Program Guide.*

The information will be used by NSERC staff to determine your eligibility to hold an NSERC grant. It will not be seen or used in the adjudication process.

Date: 2009/10/13

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)
Fraser	Donald	DAS	**Valid** 1363

Title of position at Canadian university

Propfessor Emeritus

Is this an academic appointment?

[X] Yes [ ] No

If you currently have a firm written offer of a tenured or tenure-track position, but have not taken up the position at the time of application, specify the expected start date of the appointment. The offer must meet the requirements stated in the NSERC *Program Guide*

Expected start date of the appointment (yyyy/mm)

If you currently hold, or have a firm offer of, a non-tenured or non-tenure-track position, complete the following information. The offer must meet the requirements stated in the NSERC *Program Guide,* under eligibility.

Is this a position of a limited duration?

[ ] Yes [X] No

If yes, specify the period of the appointment (yyyy/mm)

From / To /

If you answered no, explain the terms of your appointment.

Continuing Professor Emeritus Appointment

If your position offer is not yet confirmed by the university, provide an explanation

CERTIFICATION AND SIGNATURES

We attest that during tenure of the grant:

- the position will require the applicant to engage in research that is not under the direction of another individual, and authorize the applicant to supervise or co-supervise students registered in an undergraduate or graduate degree program or postdoctoral;
- if the applicant lives abroad or holds a position of any kind outside of Canada, he/she must spend a minimum of six months per year at an eligible Canadian institution;
- the applicant's salary will not be paid out of NSERC (or other federal granting council) grant funds and the applicant will not hold a federal granting council fellowship or scholarship (for exceptions, see eligibility in the NSERC *Program Guide);*
- the applicant will not be enrolled in a graduate program in the natural sciences or engineering.

Applicant

Head of department

President of university
(or representative)

APPENDIX C (Form 100)
Description of Applicant's Activities

This information is collected to provide peer reviewers with additional information on your activities at the postsecondary institution and/or your main place of employment. Complete this appendix if:

i) you hold a part-time academic appointment at a Canadian postsecondary institution. This would include applicants or co-applicants holding an adjunct professor position, professor emeritus or part-time position, **or**

ii) you hold an academic appointment at a Canadian postsecondary institution which is not a tenured or tenure-track appointment.

Family name	Given name	Initial(s) of all given names	Date / Personal identification no. (PIN)
Fraser	Donald	DAS	Date: 2009/10/13
			PIN: **Valid** 1363

DESCRIPTION OF ACTIVITIES AT CANADIAN POSTSECONDARY INSTITUTION

Outline the nature of your 1) research, 2) teaching, 3) training, 4) administrative and 5) other activities. Each of these aspects must be addressed. Indicate the time typically spent on location at the postsecondary institution on each of these activities (e.g., 1 day every week, 2 weeks every 4 months).

Teaching, senior undergraduate and graduates: Three half days / week.
Administration: Two hours / week.
Research and Doctoral supervision: Four days / week.
Regular academic involvement.

DESCRIPTION OF ACTIVITIES AT PLACE OF EMPLOYMENT OTHER THAN CANADIAN POSTSECONDARY INSTITUTION (if applicable)

Place of employment other than Canadian postsecondary institution, including self-employment

I do not hold a position outside a Canadian postsecondary institution: X

Outline the nature of your research program and other activities at your other place of employment. Also describe the relationship between your research program at this organization and the proposed research. Refer to the institution's involvement in research and development, if possible.

Appendix D (Form 100)
Consent to Provide Limited Personal Information About Highly Qualified Personnel (HQP) to NSERC

NSERC applicants are required to describe their contributions to the training or supervision of highly qualified personnel (HQP) by providing certain details about the individuals they have trained or supervised during the six years prior to their current application. HQP information must be entered on the Personal Data Form (Form 100). This information includes the trainee's name, type of HQP training (e.g., undergraduate, master's, technical etc.) and status (completed, in-progress, incomplete), years supervised or co-supervised, title of the project or thesis, and the individual's present position.

Based on the federal *Privacy Act* rules governing the collection of personal information, applicants are asked to obtain consent from the individuals they have supervised before providing personal data about them to NSERC. In seeking this consent, the NSERC applicant must inform these individuals what data will be supplied, and assure them that it will only be used by NSERC for the purpose of assessing the applicant's contribution to HQP training. To reduce seeking consent for multiple applications, applicants will only need to seek consent one time for a six-year period. If the trainee provides consent by e-mail, the response must include confirmation that they have read and agree to the text of the consent form.

When consent cannot be obtained, applicants are asked to not provide names, or other combinations of data, that would identify those supervised. However, they may still provide the type of HQP training and status, years supervised or co-supervised, a general description of the project or thesis, and a general indication of the individual's present position if known.

An example of entering HQP information on Form 100 (with and without consent):

Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Consent Received from Marie Roy				
Roy, Marie	Undergraduate (Completed)	Supervised 1994 - 1997	Isotope geochemistry in petroleum engineering	V-P (Research), Earth Analytics Inc., Calgary, Alberta
Consent Not Obtained from Marie Roy				
(name withheld)	Undergraduate (Completed)	Supervised 1994 - 1997	Isotope geochemistry	research executive in petroleum industry - western Canada

Consent Form

Name of Trainee	
Applicant Information	
Name Fraser, Donald DAS	
Department Statistics	Postsecondary Institution Toronto

I hereby allow the above-named applicant to include limited personal data about me in grant applications submitted for consideration to NSERC for the next six years. This limited data will only include my name, type of HQP training and status, years supervised or co-supervised, title of the project or thesis and, to the best of the applicant's knowledge, my position title and company or organization at the time the application is submitted. I understand that NSERC will protect this data in accordance with the *Privacy Act*, and that it will only be used in processes that assess the applicant's contributions to the training of highly qualified personnel (HQP), including confidential peer review.

Trainee's signature ____________________ Date ____________________

Note: This form must be retained by the applicant and made available to NSERC upon request.