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: 2009/10/26

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)
Pottinger	Rachel	RA	290625

☐ 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: Assistant Professor

Department: Computer Science

Campus: Vancouver

Canadian postsecondary institution: British Columbia

Tenured or tenure-track academic appointment — Yes [X] No [ ]

Part-time appointment [ ] Full-time appointment [X]

- 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	Computer Science	Duke University	UNITED STATES	1997 / 05
Master's	Computer Science and Engineering	University of Washington	UNITED STATES	1999 / 12
Doctorate	Computer Science and Engineering	University of Washington	UNITED STATES	2004 / 08

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	1		5		6
Master's	2	1	5	2	10
Doctoral	2				2
Postdoctoral					
Others					
Total	5	1	10	2	18

Personal information collected on this form and appendices will be stored in the Personal Information Bank for the appropriate program.

PROTECTED WHEN COMPLETED

Version française disponible

Completed

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

Position held (begin with current)	Organization	Department	Period (yyyy/mm to yyyy/mm)
Assistant Professor	British Columbia	Computer Science	2004/09
Research Intern (summers only)	Microsoft	Database Research Group	2001/06 to 2003/09
Research Intern	Hewlett-Packard Labs	Storage Systems Program	1998/06 to 1998/09
Research Assistant	University of Washington	Computer Science and Engineering	1998/04 to 2004/08
Teaching Assistant	University of Washington	Computer Science and Engineering	1998/04 to 1999/12
Research Intern	Lucent Technologies	Information Sciences Research Center	1997/06 to 1997/08
Undergraduate Teaching Assistant	Duke University	Computer Science	1994/09 to 1997/05

Personal identification no. (PIN)	Family name
290625	Pottinger

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

Rachel Pottinger	Extending, Verifying, and Applying Metadata NSERC RGPIN (Discovery) 60 hours/month	22,000 22,000 22,000	2005 2006 2007
Jose Marti and 12 others	Decision coordination for critical linkages in a national network of infrastructures NSERC-PSEPC Joint Infrastructure Interdependencies Research Program	226,664 (0%) 339,996 (5%) 339,996 (5%) 113,332 (5%)	2005 2006 2007 2008
Rachel Pottinger	Data management techniques for unmanaged data NSERC Discovery Grant 40 hours/month	20,500 20,500	2008 2009

b) Support currently held

Rachel Pottinger	n/a University of British Columbia Startup Grant 0 hours/month	60,000	2004

PROTECTED WHEN COMPLETED

Personal identification no. (PIN)	Family name
290625	Pottinger

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.

b) Support currently held

Sheryl Staub-French and 3 others	ARTIFACT: Advanced Research, Techniques, and Informatics for Future Advantages in Construction NSERC Strategic 25 hours/month	147,500 (25%) 147,500 (25%) 147,500 (25%)	2007 2008 2009
Renée Miller and 14 others	NSERC Strategic Network on Business Intelligence Natural Sciences and Research Council of Canada (NSERC) Stra Strategic Network 25 hours/month	1,000,000 (5%) 1,000,000 (5%) 1,000,000 (5%) 1,000,000 (5%) 1,000,000 (5%)	2009 2010 2011 2012 2013
Iluju Kiringa and 2 others	Requirements-Driven Data Warehousing: A Preliminary Proof-of-Concept Study NSERC and Business Objects Collaborative Research Grant 20 hours/month	82,956 (20%) 54,356 (33%)	2009 2010

PROTECTED WHEN COMPLETED

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
290625	Pottinger

Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Jamila Salari	Undergraduate (In Progress)	Supervised 2009 -	Managing and Querying Unstructured Data in AEC	Undergraduate, Computer Science, UBC
Moosavi, Ali	Master's (In Progress)	Co-supervised 2009 -	Automatically building an ontology from text data	Master's Student, Computer Science, UBC
Shakya, Dibesh	Master's (In Progress)	Supervised 2009 -	Creating a prototype top-down data driven data warehouse	Master's Student , Computer Science, UBC
April Webster	Master's (In Progress)	Supervised 2008 -	Integrating Spatial and Relational Data	Master's Student , Computer Science, UBC
Lawrence, Michael	Doctoral (In Progress)	Supervised 2007 -	Managing Data for Future Advantages in Construction	PhD Student, Computer Science, UBC
Zhang, Jiemin	Master's (Completed)	Supervised 2007 -	Managing Data for Future Advantages in Construction	Master's Student , Computer Science, UBC
Carbonetto, Andrew	Master's (Completed)	Co-supervised 2006 -	Matching Biomedical Ontologies using a meta ontology	Master's Student at UBC
Xu, Jian	Doctoral (In Progress)	Supervised 2006 -	Managing Disaster Management Data	PhD Student, Computer Science, UBC
Piam Kiarostami	Undergraduate	Supervised 2009 - 2009	Improving creation of biomedical web services workflows	Undergraduate, Computer Science, UBC
DiBernardo, Michael	Master's (Completed)	Supervised 2007 - 2007	Assistive Workflow Assembly for Web Service Composition	Taking a break before deciding whether to get a PhD in Bio.
Webster, April	Undergraduate (Completed)	Supervised 2007 - 2007	Integrating Spatial and Relational Data	Master's Student, Computer Science, UBC
Kwan, Clarence	Undergraduate (Completed)	Co-supervised 2006 - 2006	Improving display of integrated biological data in Bio-Moby	Unknown
Sun, Xun	Master's (Completed)	Supervised 2005 - 2006	Schema Reintegration Using Generic Schema Manipulation	Software Design Engineer at Microsoft
Wang, Shuan	Master's (Completed)	Co-supervised 2005 - 2006	Access Control in XML PDMS Query Answering	Oracle Corporation
Wang, Ting	Master's (Completed)	Supervised 2005 - 2006	SeMap: A Generic Schema Matching System	PhD student, Geogia Institute of Technology
Zhao, Jie	Master's (Completed)	Supervised 2005 - 2006	Schema Mediation and Query Processing in Peer Data Mgt.	Barclays Capital (Singapore)
Irmscher, Kevin	Undergraduate (Completed)	Supervised 2005 - 2005	Implementing MiniCon: a Query Reformulation Algorithm	Undergraduate, Computer Science, Universitat Passau
Shyr, Alex	Undergraduate (Completed)	Supervised 2005 - 2005	Schema Matching	PhD student, University of California at Berkeley

1 Most Significant Contributions to Research

1.1 Integrating Data in Real World Scenarios

The growing number of computer users, increasing amount of data, and proliferating data usage styles yield data that does not fit well within traditional data management solutions. As the number of computer users grow, there will be ever more of this data to be managed. My objective is to use traditional data management techniques to harness this unmanaged data, particularly heterogeneous data used by many parties. By talking to users about their data management problems and discovering where existing techniques fail classes of users, I recognize common threads. I seek out the more general research problem, which given appropriate prototyping and analysis, validates solutions, and also exposes new research challenges.

One such project is the ARTIFACT (Advanced Research, Techniques, and Informatics for Future Advantages in Construction Technology) project. ARTIFACT is joint work with Civil Engineer Dr. Staub-French, and Computer Supportive Collaborative Work researchers Dr. Booth and Dr. Tory to manage data used in creating a building. An initial study discovered that data flow inefficiencies make the task much harder and the overall process much less efficient. For example, suppose that the general contractor wants to save $50,000 by lowering the ceiling on a level 3 cm. The contractor must coordinate with those in charge of the other systems to determine the impact of this change. Today this is a slow, tedious and error-prone process. Industrial consortiums have attempted to solve this by creating standard XML schemas, but even systems that adhere to these standards fail easily allow the flow of information (Zhang, Webster, et al. 2010). My students and I are tackling this problem by examining where these standards fail to support integration of data in Civil Engineering applications. We have worked on a number of issues. The first issue is how to understanding how to easily query design data (Nepal, Zhang, et al., 2009; Nepal, Staub-French, et al. 2008), how to coordinate estimates with design data (Lawrence and Pottinger 2010) and how to visualize construction schedules (Huang, Tory et al., 2009).

I was also a member of a 13 investigator (from CS, Electrical Engineering, Civil Engineering, Business, Geography, and Health Care and Epidemiology) interdisciplinary project to improve disaster management. In addition to solving the data management problems necessary to build a large scale simulator for disaster management (Marti, Srivastava et al. 2006), exploring how Geographical Information Systems data integrates with relational data (Pottinger 2007), we also looked at data management specific issues. One aspect is coordination of data between agencies, which is exacerbated by the legal or moral imperatives that most of these sources have to not share their data until absolutely necessary. A student and I have determined metrics and procedures to allow users to create the smallest number of mappings between data sources while maximizing the flow of information, thus saving precious time during an emergency, and we have begun to look at how to answer aggregate queries in the same circumstances (Xu and Pottinger 2010).

1.2 Metadata Management: Schema Merge and Mapping Creation

Managing metadata is integral to creating database applications, yet metadata functionality is often built from scratch for each new application. My work on metadata management (Bonifati, Chang, et al. 2009; Pottinger and Bernstein 2009; Pottinger and Bernstein 2008; Wang and Pottinger 2008; Pottinger 2004; Pottinger and Bernstein 2003) has focused on merging two schemas and creating mappings showing the relationships between them. Merge combines two input models based on a

mapping between them. For instance, suppose two banks are merging and must combine customer databases. Though potentially very similar, these representations can contain many differences. Consider customers' names. One bank might store FirstName and LastName while the other stores simply Name. How should names be represented in the merged database? In addition, suppose that one bank uses a relational database and the other uses XML; now the merge must be performed across different data models. Although this example uses database schemas, Merge is designed for other data models such as ontologies as well.

Previous merging algorithms either concentrated on resolving data-model-specific conflicts (e.g., a column in a relational model cannot have sub-columns) or used data models that were not rich enough to express relevant conflicts. We created a Merge that was generic enough to be useful in many different data models yet specific enough to resolve application-specific conflicts. To do so we worked at three levels of detail. At the most abstract level, we defined the input, output, and desired properties of Merge with respect to typical merging scenarios. At a more detailed level we developed a representation for models and showed that Merge in this representation, when used with other metadata operators, subsumes many previous merging algorithms (Pottinger and Bernstein 2003). Even though the previous algorithms were designed specifically for the data models from different merging problems (e.g., view integration and ontology merging), Merge can subsume them.

At the most detailed level, we showed how Merge interacts with the semantics of the applications in which it will be used (Pottinger and Bernstein 2008). In particular, we looked at data integration, and showed how the relationships between source schemas impact not only what the common schema will be, but also how the common schema can be related to the sources. This, in turn, impacts the kinds of queries that can be answered in the system.

Additionally, I worked on finding and using complex mappings, both generic and XML based. First, the mapping needed for Merge is semantically richer typical mappings; in particular, it can specify that elements are related in a complex fashion (e.g., in the example above, that FirstName and LastName are sub-components of Name). These mappings are difficult to find, since they require determining not only that the elements are related, possibly in a non one-to-one fashion, but also determining the relationship types. A student and I created an algorithm that can find such mappings (Wang and Pottinger 2008). In a separate project, we explored how to take simple correspondences, and automatically generate XML query translation mechanisms (Bonifati, Chang et al. 2005; Bonifati, Chang et al. 2009.).

1.3 Bio-informatics Ontologies and Workflows

One source of interesting data management problems is that of bio-informatics data. I have worked on three separate approaches to managing bio-informatics ontologies and workflows. In (Mork, Pottinger et al. 2004), we created a simple mapping between two large anatomy ontologies, as well as showing that the more complex mappings in Section 1.2 are necessary to fully express the relationships between schemas. A separate project created mappings between biological ontologies (Carbonetto, Ouellette et al. 2007). In this case, we created a mapping between protein-protein interaction ontologies. Because such ontologies use data that is often incorrect or conflicting, the typical methods of using the structure of the ontologies cannot be used. Instead, we rely on the fact that many bio-informatics ontologies have a domain ontology – a separate ontology that defines the terms used – to help create the mapping.

Bio-informaticians are also keen users of web based services. These web-based services can be linked together to form complicated analyses. However, choosing the web services to use is time-

consuming and often frustrating, since typical web service composition architectures may have hundreds of services to choose from, yet they offer little guidance as to which services should be used. In (DiBernardo, Pottinger et al. 2008) we show that paring the choices based on input and output types as well as organizing the choices based on previous users' service choices can substantially decrease the number of services that a user must look through.

2 Research Contributions and Practical Applications

Refereed Journal Papers

Bonifati, A., **E. Chang**, **T. Ho**, L.V.S. Lakshmanan, R. Pottinger, **Y. Chung** (2009). Schema Mapping and Query Translation in Heterogeneous P2P XML Databases. VLDB JOURNAL. To appear.

DiBernardo, M., R. Pottinger and M. Wilkinson (2008). Assisted Workflow Assembly for Life-Sciences Web Service Composition in the BioMoby Semantic Web Framework. Journal of Biomedical Informatics 41(5). 837-847.

Zhang, J., **A. Webster**, **M. Lawrence**, **M. Nepal**, R. Pottinger, S. Staub-French, and M. Tory (2010) Usability of XML Standards: A Call to Action. Submitted to Information Systems Journal.

Refereed Conference Papers

Nepal, M., **J. Zhang**, **A. Webster**, S. Staub-French, R. Pottinger and **M. Lawrence** (2009). Querying IFC-based Building information Models to Support Construction Management Functions. Construction Research Congress. 506-515.

Huang, D., M. Tory, S. Staub-French and R. Pottinger (2009). Visualization Techniques for Schedule Comparison. EuroVis. 951-958.

Nepal, M., S. Staub-French, **J. Zhang**, Rachel Pottinger and **M. Lawrence** (2008). Deriving Construction Features from an IFC Model. Canadian Society for Civil Engineering Conference.

Pottinger, R. and P.A. Bernstein (2008). A Generic Mapping Construction System. Extending Database Technology (EDBT). 73 - 84.

Wang, T. and R. Pottinger (2008). SeMap: A Generic Schema Matching System. Extending Database Technology (EDBT). 97 - 108.

Bounif, H. and R. Pottinger (2006). Schema Repository for Database Schema Evolution. Second International Workshop on Data Management in Global Data Repositories (GRep).

Bounif, H., S. Spaccapietra and R. Pottinger (2006). Requirements Ontology and Multi-Representation Strategy for Database Schema Evolution. VLDB Workshop on Ontologies-Based Techniques for Databases and Information Systems.

Mork, P., R. A. Pottinger and P. A. Bernstein (2004). Challenges In Precisely Aligning Models of Human Anatomy. American Medical Informatics Association Annual Symposium.

Pottinger, R. A. and P. A. Bernstein (2003). Merging Models Based on Given Correspondences. Very Large Data Bases Conference (VLDB).

Xu, J., and R. Pottinger (2010). The Decomposition Aggregation Query for Semantic Integration. Submitted to Extending Database Technology (EDBT).

Lawrence, M. and R. Pottinger (2010). Coordination of Data in Heterogeneous Domains. Submitted to 2nd International Workshop on Trends in Information Integration (NTII).

Refereed Conference Posters

Bonifati, A., **E. Chang**, **T. Ho**, L. Lakshmanan and R. Pottinger (2005). HePToX: Marrying XML and Heterogeneity in your P2P Databases (Poster). International Conference on Very Large Databases (VLDB).

Carbonetto, A., F. Ouellette and R. Pottinger (2007). Ontology Alignment on Biological Systems using Domain Taxonomy (Poster). Canadian Genetic Diseases Network (CGDN) Annual Scientific Meeting.

Lawrence, M. and R. Pottinger (2007). A system for Integration of Lossy and Unstructured Data in Large Building Projects (Poster). The 20th Canadian Artificial Intelligence Conference.

Other Publications

Pottinger, R. and P.A. Bernstein (2009). "Associativity and Commutativity in Generic Merge". Conceptual Modeling: Foundations and Applications, Essays Dedicated to John Mylopoulos on the Occasion of His 65th Birthday. Springer Lecture Notes in Computer Science. 5600:254-272.

Pottinger, R. (2007). Database Schema Integration. Encyclopedia of Geographic Information Science. S. Shekhar and H. Xiong, Springer.

Marti, J. R., K. D. Srivastava, C. Ventura, J. Jatskevitch, R. Pottinger, K. Beznosov, G. Poole, B. Klinkenberg, C. Woo, P. Kruchten, K. Booth, R. Rosenberg, L. Bartram, J. Hollman, **K. Thibert**, **J. Xu**, **A. Cervantes**, **M. Armstrong**, **L. Liu**, **Q. Han**, **H. Juarez**, **N. Ozog**, **H. A. Rahman**, **C. Jiang**, **M. Sotoodeh**, **K. Monu**, **A. Clarkson** and **M. Ilich** (2006). The I2Sim Simulator for Disaster Response Coordination in Interdependent Infrastructure Systems, Technical Report to British Columbia Transmission Corporation, Telus Corporation, Greater Vancouver Regional District, and Vancouver International Airport Authority: 194.

Pottinger, R. A. (2004). Processing Queries and Merging Schemas in Support of Data Integration. Computer Science and Engineering. PhD Dissertation. Seattle, University of Washington: 229.

3 Other Evidence of Impact and Contributions

Awards:

The Anita Borg Institute for Women and Technology's Inaugural Denice Denton Emerging Leader Award, 2007

Microsoft Research Graduate Research Fellowship, 2001-2004

National Science Foundation Graduate Research Fellowship, 1997-2000

Achievement Rewards for College Scientists Foundation Fellowship, 1997-2000

Lucent Technologies Graduate Research Program for Women Grant, 1997-2000

Journal Reviewer: ACM Computing Surveys, ACM Transactions on Database Systems, ACM Transactions on the Web, AI Communications, Communications of the ACM, Data & Knowledge Engineering, IBM Systems Journal, IEEE Transactions on Knowledge and Data Engineering, Information Systems Journal, Journal of Computer Science Education, Journal of Data Management Research, Theoretical Computer Science, Very Large Databases (VLDB) Journal.

Conference Program Committee Member: International Conference on Data Engineering (ICDE), 2010, Workshop on Enabling Real Time Business Intelligence (BIRTE), 2009, Very Large Data Bases (VLDB), 2009, International Conference on Conceptual Modeling (ER), 2009, International Conference on Data Engineering (ICDE), 2009, Very Large Data Bases (VLDB), 2008; International Conference on Data Engineering (ICDE), 2007; Very Large Data Bases (VLDB), 2007; Very Large Databases (VLDB) PhD Workshop, 2007; Workshop on Databases, Information Systems and Peer-to-Peer Computing (DBISP2P), 2007; The International Workshop on Web Information and Data Management (WIDM), 2006; The International Workshop on Database Interoperability (InterDB), 2006; International

Conference on Data Engineering (ICDE), 2006; The International Conference on Management of Data (COMAD), 2006; International Conference on Data Engineering (ICDE) PhD Workshop, 2006; Workshop on Databases, Information Systems and Peer-to-Peer Computing (DBISP2P), 2006; Very Large Databases (VLDB) PhD Workshop, 2005; Workshop on Databases, Information Systems and Peer-to-Peer Computing (DBISP2P), 2005.

Invited Keynote speaker: "Current Trends in Metadata Management Research: Taxonomies and Ontologies" at: Joint meeting of Society for Technical Communicators, Canada West Coast Chapter and Content Management Professionals, Canada West Community

4 Delays in Research Activity

I was on maternity leave from October 27, 2007 to April 26, 2008.

5 Contributions to the Training of Highly Qualified Personnel (HQP)

My seven MSc students who have graduated have all found employment within the field or continued on in graduate school. Michael DiBernardo, Andrew Carbonetto (co-supervised with Francis Ouellette), Xun Sun, and Shuan Wang (co-supervised with Laks Lakshmanan) are continuing to work in traditional software development at Novell, MDA, and Microsoft. Jiemin Zhang, who worked on ARTIFACT as a graduate student shows that the work that she did with CAD models transfers to skills necessary to analyze financial documents. Jie Zhao has recently completed an MBA in order to better understand the needs of business. Ting Wang is working on a PhD at the Georgia Institute of Technology.

Currently I have two PhD students and three MSc students. PhD student Michael Lawrence working on ARTIFACT (see Section 1.1), as is MSc student April Webster. Jian Xu is working on JIIRP (see Section 1.1). The remaining two students are doing work related to a new Business Intelligence Strategic Network.

I have supervised five undergraduate projects. One student, April Webster, is now a MSc student with me, and another, Jamila Salari, will start her MSc in the spring.

In the past four years I have published eight refereed papers and three refereed posters with students. Two students have additionally published posters on our work for student poster sessions at the Grace Hopper Celebration of Women in Computing. Some of these are papers with students who I have worked with outside of formal supervisory roles – I work with some students who I am neither their supervisor nor on their committees. These papers span computer science, bioinformatics, and civil engineering, showing that these students are trained inside computer science and beyond it as well.

I also bring my research into the classroom, both at the undergraduate and graduate level. When teaching the introduction to relational databases course for undergraduates, I always describe the current research in data integration. I find that the students are always attentive and appreciative, even though I explicitly state that it will not be on the final. At the graduate level, I bring this type of research in both through papers that we read and through class discussions. I have had a number of students who were not previously interested in data management research become interested through this class, and a number of other students incorporate the ideas that they have learned through their classes into their own projects, which is one reason why I am or have been members of four PhD committees (from Computer Science, Electrical and Computer Engineering, and Civil Engineering) and been members of an additional five MSc students' committees. I anticipate continuing with this trend; thus this grant will contribute to the training of more than the students explicitly mentioned in this proposal.

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 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: 2009/10/26

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)
Pottinger	Rachel	RA	290625

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

If address is temporary, indicate:

Starting date

Leaving date

Telephone number	Facsimile number	E-mail address
1 (604) 822-0436	(604) 822-5484	rap@cs.ubc.ca

Telephone number (alternate)

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

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

LANGUAGE CAPABILITY

English	Read [X]	Write [X]	Speak [X]
French	Read [ ]	Write [ ]	Speak [ ]

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).

databases, data integration, metadata management, data management

Research subject code(s)

Primary: 2711

Secondary: 2800

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: Pottinger, Rachel RA

Department	Postsecondary Institution
Computer Science	British Columbia

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.