



FORM 100
Personal Data Form
PART I

Date

2013/06/13

Family name Zheng	Given name Bin	Initial(s) of all given names B	Personal identification no. (PIN) Valid 354200
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☐ 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	Tenured or tenure-track academic appointment Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Department Medicine and Dentistry, Faculty of	Part-time appointment <input type="checkbox"/> Full-time appointment <input checked="" type="checkbox"/>
Campus Edmonton	<ul style="list-style-type: none">For all non-tenured or non tenure-track academic appointment and Emeritus Professors, complete Appendices B & CFor life-time Emeritus Professor and part-time positions, complete Appendix C
Canadian postsecondary institution	

ACADEMIC BACKGROUND

Degree	Name of discipline	Institution	Country	Date yyyy/mm
Bachelor's	Medicine	First Military Medical University	CHINA	1986 / 07
Master's	Pediatrics	China Medical University	CHINA	1993 / 07
Doctorate	Kinesiology	Simon Fraser	CANADA	2005 / 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)		Total
	Supervised	Co-supervised	Supervised	Co-supervised	
Undergraduate					
Master's	1	2		1	4
Doctoral		2			2
Postdoctoral	1				1
Others	2				2
Total	4	4		1	9

Personal identification no. (PIN)

Valid 354200

Family name

Zheng

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	Alberta	Medicine and Dentistry, Faculty of	2011/10
Endowed Research Chair	University of Ablerta	Surgery	2011/10
Research Associate	University of British Columbia	Surgery	2008/09 to 2011/10
Research Associate; Human Factors Specialist	Legacy Health System, Portland, Oregon	Minimally Invasive Surgery	2005/02 to 2008/09
Research Assistant	Simon Fraser University	Kinesiology	2004/01 to 2004/04
Research Assistant	Simon Fraser University	Kinesiology	2003/01 to 2003/04
Research Assistant	Simon Fraser University	Kinesiology	2001/01 to 2001/08
Research Assistant	Simon Fraser University	Kinesiology	2000/05 to 2000/08
Teaching Assistant	Simon Fraser University	Kinesiology	1999/09 to 2000/04

Personal identification no. (PIN) Valid 354200		Family name Zheng	
ACADEMIC, RESEARCH AND INDUSTRIAL EXPERIENCE (use one additional page if necessary)			
Position held (begin with current)	Organization	Department	Period (yyyy/mm to yyyy/mm)
Surgeon	China Medical University	Pediatric Surgery	1991/08 to 1995/08
Resident Surgeon	The 202 Hospital, Shenyang, China	Surgery	1986/08 to 1990/07

Personal identification no. (PIN) Valid 354200		Family name Zheng	
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			
Bin Zheng and 4 others	Mind Control: The challenges of perception and manipulation in natural orifice surgery Natural Orifice Surgery Consortium for Assessment Research 80 hours/month	61,448(100%)	2007
Bin Zheng and 4 others	Spatial alignment between images, hands, and tools in single port access surgery: problems and solutions Society of American Gastrointestinal & Endoscopic Surgeons Research 40 hours/month	21,516(100%)	2009
Adrian Park and 4 others	Quantitative ergonomic assessment of NOTES: a study of physical and mental workload, body movement and posture Natural Orifice Surgery Consortium for Assessment Research 20 hours/month	86,750 (30%)	2009
b) Support currently held			
Bin Zheng and 4 others	Eye-tracking as an Educational Tool for Improving Laparoscopic Performance for Surgical Residents Royal College of Physicians and Surgeons of Canada Medical Education Research grant 16 hours/month	17,190 24,420 6,230	2010 2011 2012

Personal identification no. (PIN)

Valid 354200

Family name

Zheng

RESEARCH SUPPORTFamily name and initial(s)
of applicantTitle of proposal, funding source and program,
and time commitment (hours/month)Amount
per yearYears 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

Bin Zheng and 3 others

Enhancing Patient Safety by Teaching Vigilance
of Surgeons in Laparoscopic Procedures
Edmonton Civic Employees Charitable
Assistance Fund
Research Award

16 hours/month

10,000

2012

Bin Zheng

Simulation and virtual environment for surgical
training
Network of Centres of Excellence
GRAND (graphics, animation and new media)
CNI Allocations

8 hours/month

8,000

7,000

2012

2013

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) Valid 354200	Family name Zheng
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Rositsa Bogdanova	Master's (In Progress)	Supervised 2013 - 2015	3D Vision for Image-guided Surgery	Year 1 student
Jiang, Xianta	Doctoral (In Progress)	Co-supervised 2010 - 2014	Blinks and pupil size as behavioral indicators for workloads	in progress
Caleb Leung	Summer Student (In Progress)	Supervised 2013 - 2013	Teaching Vigilance of Surgeons using Eye-tracking	Summer project June 2013- Aug 2013, funded by CIHR STudentsh
Joshua Butcher	Summer Student (In Progress)	Supervised 2013 - 2013	Dual eye-tracking for monitoring surgical team readiness	Summer project June 2013- Aug 2013, funded by UARE project
Wang, Xiaolin	Postdoctoral (In Progress)	Supervised 2012 - 2013	3D model for pre-surgery planning	Pediatric Surgeon at Tongji Hospital in China
Tien, Geoffrey	Doctoral (In Progress)	Co-supervised 2010 - 2013	Towards understanding expert eye-hand coordination behaviors	in progress
Rana S. A. Khan	Master's (In Progress)	Co-supervised 2010 - 2012	Analysis of Eye Gaze of expert surgeons in MIS surgery	Surgical Resident at UBC
Shenk, Jean	Master's (Completed)	Supervised 2010 - 2011	Assessing the experience of trainees undergoing simulation	Registered Nurse

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

Version française disponible

Canada

PROTECTED WHEN COMPLETED

1. Most Significant Contributions:

Combining my training in Surgery and Kinesiology, I took human factors principles to surgical education and technology innovation. Specifically, I study physician and surgeon' behaviors in the interaction with various healthcare instruments, examine their abilities and limitations in the stressful work environment. The goal of my studies is to enable surgeon, either as an individual or working in a team, to perform effectively so that patients received exceptional healthcare service when undergoing hospital visits. Knowing that increasing healthcare procedures are performed under video guidance, my recent research is focused on surgeons' performance in teleoperation. Eye- and motion-tracking devices have been used in my research to examine difference in eye-hand coordination between experts and novices. Evidence has been applied to the design of new training curriculum with simulation. Results have been published in medical journals and cited by surgeons and scientists.

1) **Eye-tacking and its application in surgery**

Akins MS, Tien, G, Zheng B, et al, (2013) What do surgeons see: eyegaze sensors for surgery applications, *Surgical Innovation* 20(3):241-8.

Zheng B, et al. (2011) Surgeon's vigilance in the operating room. *American Journal of Surgery*, 201(5):667-71 (RCPSC grant on gaze training)

Jiang X, Tien G, Huang D, **Zheng B**, & Atkins MS. Capturing eye blinks from video-based eye-tracking. *Behavioral Research Methods*, In Press, DOI: 10.3758/s13428-012-0294-x (Jiang: PhD student)

2) **Surgical tool design and evaluation**

Martinec DV, Zheng B, et al (2010). Tradeoff between flexibility and maneuverability: task performance with articulating laparoscopic instruments. *Surgical Endoscopy*, 23 (12): 2697-2701 (Martinec was my RA, NOSCART Research Grant)

Spaun GO, Zheng B, et al.(2009) Bimanual coordination in NOTES: Comparing conventional dual-channel endoscope, the R-scope and a novel direct drive system. *Gastrointestinal Endoscopy (GIE)*, 69(6):e39-45. (Dr. Spaun was a post-doc, NOSCART Research Grant)

3) **Remote manipulation with tool**

Zheng B & MacKenzie CL (2009) A comparison of human performance in grasping virtual objects by hand and with tools of different length ratios. In: *Proceedings of 53rd Human Factors and Ergonomics Society(HFES)* 1156-60 (Thesis Research, Funded by NSERC and MSFHR).

Zheng B & MacKenzie CL (2007) Kinematics of reaching and grasping with a tool. In: *Proceedings of 51st. HFES Conference* 1353-7. (Thesis Research, Funded by NSERC and MSFHR);

Zheng B & MacKenzie CL (2007) The control strategy for degrees of freedom in remote prehension with a tool. In: *Proceedings of 51st. HFES conference* 1358-62. (Thesis Research, Funded by NSERC and MSFHR)

4) **Surgical team and team training**

Zheng B, Panton ONM, Al-Tayeb TA, Meneghetti, AT, Qayumi AK, Panton ONM (2012) Impact of Surgical Team Size on Intraoperative Performance: Data from 2 Canada Hospitals, *Canadian Journal of Surgery*, 55(6):371-6

Zheng B, et al. (2008) An observation on surgery-related activities between surgeon and nurse during laparoscopic surgery. *The America Journal of Surgery* 197(4):497-502. (Legacy RAC Grant)

Zheng B, et al (2007) Building an efficient surgical team using a bench model simulation: construct validity of the legacy inanimate system for endoscopic team training (LISSETT), *Surgical Endoscopy*, 22(4): 930-7 (SAGES Research Grant)

5) **Workload assessment of surgeon**

Zheng B, et al. (2012) Quantifying Mental Workloads of Surgeons in Performing NOTES Procedures, *Surgical Endoscopy*, 26(5):1352-8

Zheng B, et al. (2010) Measuring mental workload during the performance of advanced laparoscopic tasks. *Surgical Endoscopy*. 24(1):45-50.

2. Research Contributions and Practical Applications

Articles in refereed publications (HQP):

1. Jiang X, **Zheng B**, Tien G, Atkins MS (2013). Pupil response to precision in surgical task execution. *Stud Health Technol Inform.*184:210-4.
2. Tien G, Atkins MS, Jiang X, Khan RS, **Zheng B** (2013). Identifying Eye Gaze Mismatch during Laparoscopic Surgery. *Stud Health Technol Inform.*184:453-7.
3. Atkins MS, Tien G, **Zheng B**, Khan RS, Meneghetti AT, (2012) What do surgeons see: eyegaze sensors for surgery applications, *Surgical Innovation* 20(3):241-8.
4. Jiang X, Tien G, Huang D, **Zheng B**, & Atkins MS (2013). Capturing eye blinks from video-based eye-tracking. *Behavioral Research Methods*, In Press, DOI: 10.3758/s13428-012-0294-x
5. Cassera MA, **Zheng B**, Swanström LL (2012) Data-based self-study guidelines for the Fundamentals of Laparoscopic Surgery (FLS) examination, *Surgical Endoscopy* 26(12):3426-9
6. Cassera MA, **Zheng B**, Spaun GO & Swanström LL, (2012) Optimizing surgical approach for natural orifice transluminal endoscopic procedures, *Surgical Innovation*, 19(4):433-7
7. **Zheng B**, Jiang X, Tien G, Meneghetti AT, OMN Panton, Atkins MS (2012). Workload assessment of surgeons: correlation between NASA TLX and blinks. *Surgical Endoscopy*.26(10): 2746-50
8. Qayumi AK, Donn S, **Zheng B**, Young L. Dutton J. Adamack M. Cheng A. (2012) BC Interprofessional Model for Simulation in Interprofessional Health Education: A Network of Simulation Sites, *Simulation in Healthcare*, 2012 7(5): 295-307
9. Khan RS, Tien G, Atkins MS, **Zheng B**, Panton ON, Meneghetti AT (2012) Analysis of eye gaze: Do novice surgeons look at the same location as expert surgeons during a laparoscopic operation? *Surgical Endoscopy*. 26(12):3536-40
10. Meneghetti AT, Pachev G, **Zheng B**, OMN Panton, Qayumi K (2012), Objective Assessment of Laparoscopic Skills: Dual-Task Approach, *Surgical Innovation*, 19(4):452-9
11. **Zheng B**, Panton ONM, Al-Tayeb TA, Meneghetti, AT, Qayumi AK, Panton ONM (2012) Impact of Surgical Team Size on Intraoperative Performance: Data from 2 Canada Hospitals, *Canadian Journal of Surgery*, 55(6):371-6
12. **Zheng B**, Erwin R, Cassera MA, Lee Gynsung, Martinec DV, Panton ONM, Park A. Swanström LL. (2012) Quantifying Mental Workloads of Surgeons in Performing NOTES Procedures, *Surgical Endoscopy*, 26(5):1352-8
13. **Zheng B**, Swanström LL, Meneghetti A, Panton ON, Qayumi AK (2011) Quantifying surgeon's contribution to team effectiveness on a mixed team with a junior surgeon. *Surgery*.149(6):761-5.
14. **Zheng B**, Tien G, Atkins SM, Meneghetti AT, Qayumi AK & Panton ONM (2011) Surgeon's vigilance in the operating room. *American Journal of Surgery*, 201(5):667-71
15. Hur HC, Arden D, Dodge LE, **Zheng B**, Ricciotti HA (2011) Fundamentals of Laparoscopic Surgery: A surgical skills assessment tool in gynecology. *Journal of Society of Laparoendoscopic Surgeons (JSLS)* 15:21-26
16. Tien G, **Zheng B**, Atkins MS, (2011) Quantifying surgeon's vigilance during laparoscopic operations using eye-tracking. *Studies in Health Technology and Informatics* 126:658-62
17. Spaun GO, **Zheng B**, Martinec DV, Arnold BN, Swanström LL (2010) A comparison of early learning curves for complex bimanual coordination with open, laparoscopic, and flexible endoscopic instrumentation. *Surgical Endoscopy* 24(9):2145-55.
18. **Zheng B**, Cassera MA, Martinec DV, Spaun GO & Swanström LL (2010) Measuring mental workload during the performance of advanced laparoscopic tasks. *Surgical Endoscopy*. 24(1):45-50.
19. **Zheng B**, Hur HC, Johnson S Swanström LL (2010) Validity of Using Fundamental Laparoscopic Surgery (FLS) Program to Assess Laparoscopic Competence for Gynecologists. *Surgical Endoscopy*. 24(1):152-60

20. **Zheng B**, Swanström LL (2009) Video analysis of anticipatory movements performed by the surgeons during laparoscopic procedures. *Surgical Endoscopy*, 23(7):1494-8
21. Spaun GO, **Zheng B**, Swanström LL (2009) A multitasking platform for NOTES; a bench top comparison of a new device for flexible endoscopic surgery and a standard dual channel endoscope, *Surgical Endoscopy*. 23 (12):2720-7
22. Martinec DV, Gatta P, **Zheng B**, Denk PM, Swanström LL (2009) Tradeoff between flexibility and maneuverability: task performance with articulating laparoscopic instruments. *Surgical Endoscopy*, 23 (12): 2697-2701
23. Cassera MA, **Zheng B**, Martinec DV, Swanström LL (2009). Surgical time independently affected by surgical team size, *The American Journal of Surgery* 198(2):216-22
24. Spaun GO, **Zheng B**, Martinec DV, Cassera MA, Dunst CM, Swanström LL.(2009) Bimanual coordination in NOTES: Comparing conventional dual-channel endoscope, the R-scope and a novel direct drive system. *Gastrointestinal Endoscopy (GIE)*, 69(6):e39-45.
25. **Zheng B**, Taylor MD & Swanström LL (2008) An observation on surgery-related activities between surgeon and nurse during laparoscopic surgery. *The American Journal of Surgery* 197(4):497-502.
26. **Zheng B**, Martinec DV, Cassera MA & Swanström LL (2008) A quantitative study of disruption in the operating room during laparoscopic anti-reflux surgery. *Surgical Endoscopy*. 22(10): 2171-7
27. Chang S, Waid E. **Zheng B**, Matinec DV, & Swanström LL (2008) Impacts of verbal feedback on laparoscopic team performance. *Surgical Innovation*, 15(2):143-7
28. Swanström LL & **Zheng B** (2008) Spatial Orientation and Off-Axis Challenges for NOTES. *Gastrointestinal Endoscopy Clinics of North America*. 18(2):315-24.
29. **Zheng B**, Swanström LL & MacKenzie CL (2008) A laboratory study on anticipatory movement in laparoscopic Surgery: a behavioral indicator for team collaboration. *Surgical Endoscopy* 21:935-40

Conference Proceedings (HQP)

- 1) Tien G, Atkins MS, **Zheng B** (2012) Measuring gaze overlap on videos between multiple observers. In *Proceedings of the Eye Tracking Research and Applications (ETRA)*; 2012; 309-312.
- 2) Atkins MS, Jiang X, Tien G, Meneghetti A, **Zheng B** (2012) Saccadic delays on targets while watching videos. In *Proceedings of the Eye Tracking Research and Applications (ETRA)*; 2012; 405-409.
- 3) Tien G, Atkins MS, **Zheng B**, Swindells C (2010) Measuring situation awareness of surgeons in laparoscopic training. In *Proceedings of Eye Tracking Research and Applications*. 2010:149-152.
- 4) **Zheng B** & MacKenzie CL (2009) A comparison of human performance in grasping virtual objects by hand and with tools of different length ratios. In: *The Proceedings of 53rd. Human Factors and Ergonomics Society Annual Meeting* 1156-1160.
- 5) **Zheng B** & MacKenzie CL (2007) Kinematics of reaching and grasping with a tool. In: *The Proceedings of 51st. Human Factors and Ergonomics Society Annual Meeting* 1353-1357.
- 6) **Zheng B** & MacKenzie CL (2007) The control strategy for degrees of freedom in remote prehension with a tool. In: *The Proceedings of 51st. Human Factors and Ergonomics Society Annual Meeting* 1358-1362.

Non-refereed contribution: Invited Presentation

- 1) **Zheng B**, (2013) Measure mental workloads of surgeon. Surgery Grand Round, University of Alberta, Jan 4, 2013
- 2) **Zheng B**, (2012) Surgical Education under Simulated and Virtual Training Environment. Invited Presentation at Canada's GRAND Digital Wave Workshop, Nov 6, 2012
- 3) **Zheng B**, (2012) Simulation in MIS Skills Training. Invited Speech at 4th China MIS Conference, Aug 31, 2012 Chengdu, China

- 4) **Zheng B**, (2012) Simulation in MIS Team Training. Invited Speech at 4th China MIS Conference, Sept 02, 2012 Chengdu, China
- 5) **Zheng B**, (2012) Workload assessment of surgeons: Correlation between NASA TLX and blinks. Oral Presentation at SAGES March 8, 2012
- 6) **Zheng B**, (2012) Surgical team composition and its impact on procedure time. Surgery Grand Round, University of Alberta, Jan 6, 2012
- 7) **Zheng B**, (2011) Quantifying mental workload of surgeons performing NOTES procedure. Presentation at SAGES April 1, 2011
- 8) **Zheng B** (2010) Human Factors in Minimally Invasive Surgery. Invited Oral Presentation at Canadian Medical & Biological Engineering Society 33rd Conference, Jun18, 2010, Vancouver, BC
- 9) **Zheng B** (2010) Simulation for Skills Acquisition in Surgery. Invited Oral Presentation at City-Wide Round, Feb 2, 2010, UBC Surgery
- 10) **Zheng B** (2010) Team Cooperation for Patient Safety in the Operating Theatre. Invited Oral Presentation at City-Wide Round, Jan 20, 2010, UBC Surgery
- 11) **Zheng B** (2009) Learning Process of NOTES Procedure. Invited Presentation at General Surgery Update, Dec 6, 2009, UBC Surgery
- 12) **Zheng B**, Pachev G (2009) Advancing a Research Agenda in Simulation. Invited Oral Presentation at International Conference on Residency Education, Sept 24, 2009, Victoria, BC.
- 13) **Zheng B** (2009) Team Cooperation for Patient Safety in the Operating Theatre. Invited Oral Presentation at Canadian Surgery Forum, Sept 12, 2009, Victoria, BC.
- 14) **Zheng B**, (2009) Measuring mental workload during the performance of advanced laparoscopic tasks. Oral Presentation at SAGES April 24, 2009
- 15) **Zheng B**, (2008) Human Factors in Surgery. Invited presentation at UBC General Surgery Update. Dec 5-6, 2008, Vancouver, BC
- 16) **Zheng B**, Swanström LL (2008) When surgery stops: A quantitative video analysis of workflow during laparoscopic surgery. Oral presentation at SAGES Philadelphia, PA., April 10, 2008

Contributions to Practical Applications of Knowledge.

A list of collaborators and their institutions

Outside U of Alberta:

- Dr. Sidney Fels, Professor, Electrical and Computer Engineering, UBC (GRAND-NCE PNI)
- Dr. Roy Eagleson, University of Western Ontario (GRAND-NCE PNI)
- Dr. Garnette Sutherland, Neurosurgery, University of Calgary. Program director of NeuroArm Surgical Robot. 1 CFI grant for surgical robot.
- Dr. Lee Swanström, Director of Minimally Invasive Surgery, Clinical Professor of Oregon Health and Science University, world-leader in minimally invasive surgery. 4 grant awards, 12 publications.
- Dr. Karim Qayumi, Director of Centre of Excellence for Simulation Education and Innovation, University of British Columbia, world leader in surgical simulation. 2 grant awards, 8 publications, co-supervisor for 2 graduate students
- Dr. M. Stella Atkins, Direct of Medical Imaging. Computing Science, Simon Fraser University. Pioneer in eye-tracking of surgeons. 1 grant award, 7 publications, co-supervisor for 3 graduate students

Within U of Alberta:

- Dr. Pierre Boulanger, Director of the Advanced Man-Machine Interface Laboratory, Faculty of Engineering, 2 grant application, sharing research facilities
- Dr. Jonathan White, Tom Williams Endowed Chair in Surgical Education, leader in undergraduate surgical education, 2 grant applications

- Dr. Daniel Birch, Director of Center of Advanced Minimally Invasive Surgery. Leader in minimally invasive surgery and surgical simulation. 1 grants application.
- Dr. Mahdi Tavakoli, Director of the Telerobotic & Biorobotic Systems, Faculty of Engineering, 1 NSERC CHRP project under development.
- Dr. Weimin Mou, Director of the Virtual Reality and Spatial Cognition Lab, Dept. of Psychology

3. Other Evidence of Impact and Contributions

○ Awards

<i>Date</i>	<i>Awarding Organization</i>	<i>Type and Value</i>
2013	Digital Alberta Award (combined software and hardware)	
2012	Edmonton Civil Employees Charitable Assistance Fund Award	\$10,000
09/2004	President's Ph.D. Research Stipend SFU	\$6,000
2001- 2003	Michael Smith Foundation for Health Research (MSFHR)	Doctoral Trainee Award (\$22,500 per yr)
05/2002	Institute for Robotics and Intelligent Systems (IRIS)	Best Poster Award (\$500)
09/2001	Graduate Fellowship, Applied Science, SFU	\$5,000

4. Delays in Research Activity: N/A

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

Name	Type of Training and status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Consent Received From Individual(s)				
Rositsa Bogdanova	Master (In progress)	Supervised 2013-2015	3D vision in image-guided surgery	
Xiaolin Wang	Post-doc (In Progress)	Supervised 2012-2013	3D model for pre-surgery planning	Pediatric surgeon in China
Xianta Jiang	PhD. (In progress)	Co-Supervised 2010-	Blinks and pupil size as an behavioral indicator for mental stresses of surgeons	
Geoffrey Tien	PhD. CS (In progress)	Co-Supervised 2010-	Towards understanding eye-hand coordination behaviors in MIS surgery	
Rana Khan	M. Surg (In Progress)	Supervised 2010-2012	Analysis of eye gaze between surgeons-in-training and expert surgeons during laparoscopic procedures	4 th Year Surgical Resident at UBC
Jean Shenk	M. A.	Co-Supervised 2010-2011	Assessing the experience of trainees undergoing a novel training for surgical skills	Register Nurse at Prince George, BC



**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 2013/06/13											
Family name Zheng	Given name Bin	Initial(s) of all given names B	Personal identification no. (PIN) Valid 354200								
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 3-002F Li Ka Shing Centre 8440 - 112 St. NW Edmonton AB T6G2E1 CANADA			If address is temporary, indicate: Starting date Leaving date								
Telephone number 1 (780) 4926963	Facsimile number	E-mail address bin.zheng@ualberta.ca									
Telephone number (alternate) 1 (780) 7085216	Give an alternate telephone number only if you can be reached at that number during business hours.		Gender (completion optional) <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female								
LANGUAGE CAPABILITY											
<table><tr><td>English</td><td>Read <input checked="" type="checkbox"/></td><td>Write <input checked="" type="checkbox"/></td><td>Speak <input checked="" type="checkbox"/></td></tr><tr><td>French</td><td>Read <input type="checkbox"/></td><td>Write <input type="checkbox"/></td><td>Speak <input type="checkbox"/></td></tr></table>				English	Read <input checked="" type="checkbox"/>	Write <input checked="" type="checkbox"/>	Speak <input checked="" type="checkbox"/>	French	Read <input type="checkbox"/>	Write <input type="checkbox"/>	Speak <input type="checkbox"/>
English	Read <input checked="" type="checkbox"/>	Write <input checked="" type="checkbox"/>	Speak <input checked="" type="checkbox"/>								
French	Read <input type="checkbox"/>	Write <input type="checkbox"/>	Speak <input type="checkbox"/>								
I wish to receive my correspondence: in English <input checked="" type="checkbox"/> in French <input type="checkbox"/>											
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). Human Factors, Ergonomics, Motor learning and control, Sensorimotor integration, Simulation-based Education, Workload assessment, Eye-hand coordination, Image-guided surgery, Computer-human interaction			Research subject code(s) Primary 9000 Secondary 6311								



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 Zheng, Bin B	
Department Medicine and Dentistry, Faculty of	Postsecondary Institution Alberta
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 <i>Privacy Act</i> , 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.	