

Curriculum Vitae

Pingzhao Hu, Ph.D.

A. Date Curriculum Vitae is Prepared: 02 September 2016

B. Biographical Information

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1. EMPLOYMENT

Current Appointments

2014 Feb – present Assistant Professor in Bioinformatics/Statistical Genetics
Department of Biochemistry & Medical Genetics
George & Fay Yee Centre for Healthcare Innovation
College of Medicine, University of Manitoba, Winnipeg, Canada

2015 Nov – present Adjunct Professor
Department of Electrical and Computer Engineering
Faculty of Engineering, University of Manitoba, Winnipeg, Canada

2014 Apr – present Scientist
Children's Hospital Research Institute of Manitoba, Canada

2013 Nov – present Assistant Professor (Status)
Division of Biostatistics, Dalla Lana School of Public Health
University of Toronto, Toronto, Canada

2016 Aug – present Associate Investigator
The Centre for Applied Genomics (TCAG)
The Hospital for Sick Children, Toronto, Canada

Previous Appointments

- 2006 Jan – 2014 Feb Manager
Statistical Analysis Facility of The Centre for Applied Genomics
The Hospital for Sick Children Research Institute, Toronto, Canada
Supervisors: Drs. Celia Greenwood, Joseph Beyene,
Andrew Paterson, Lisa Strug and Steve Scherer
- 2004 Jan – 2005 Dec Research Biostatistician
Program in Genetics and Genomic Biology
The Hospital for Sick Children Research Institute, Toronto, Canada
Supervisors: Drs. Celia Greenwood and Joseph Beyene
- 2003 Jan – 2003 Dec Research Biostatistician
The Lunenfeld-Tanenbaum Research Institute
Mount Sinai Hospital, Toronto, Canada
Supervisor: Dr. Shelley Bull
- 1997 Sep – 1998 Aug Research Assistant
The National Key Laboratory of LREIS
Chinese Academy of Sciences, Beijing, China
- 1990 Jul – 1994 Aug Geological Apprentice
The first geological team of Jiangxi Nonferrous Metal Geological
Exploration Bureau, Nanchang, China

2. EDUCATION

Degrees

- 2005 Sep – 2012 Apr PhD, Computer Science
Department of Computer Science and Engineering
York University, Toronto, ON, Canada
Supervisors: Dr. Hui Jiang, Dr. Andrew Emili (University of Toronto)
Dissertation: Machine Learning Approaches for Network-based
Prediction of Disease Outcomes and Protein Functions
- 2001 Sep – 2002 Dec Masters, Computer Science
Faculty of Computer Science
Dalhousie University, Halifax, NS, Canada
- 1999 Sep – 2001 Aug Masters, Quantitative Geography
Department of Geography
University of Saskatchewan, Saskatoon, SK, Canada
Completed eight core undergraduate courses in computer science

1994 Sep – 1997 Aug Masters, Mathematical Geology (Geostatistics)
College of Resource and Environmental Engineering,
University of Science and Technology Beijing, Beijing, China

Note: I was directly admitted into a training diploma program (see below) after three-year of junior high school (grade 8), therefore, bypassing senior high school and university undergraduate program.

Postgraduate, Research and Specialty Training

1998 Sep – 1999 Jul Postgraduate Diploma, Geostatistics
Centre de Geostatistique, Ecole des Mines de Paris, Paris, France

1986 Sep – 1990 Jun Diploma, Geology
Changsha Nonferrous Metal College, Changsha, Hunan, China
Admitted into the program after junior high school (grade 8)

Qualifications, Certifications and Licenses

2008 Jul Certificate, Informatics on High Throughput Sequencing Data
Canadian Bioinformatics Workshop (CBW), Toronto, ON, Canada

2004 Aug Certificate, Statistics Methods for Bioinformatics
American Statistics Association, USA

3. HONOURS AND CAREER AWARDS

International

2006 Jul **The BioC 2006 Developer-Contributor Award**
Bioconductor Foundation of North American
Fred Hutchinson Cancer Research Center, Seattle, USA
Total Amount: \$500 USD

2006 Jan **Scholarship for Statistical Genetics**
Advanced Study Institute of the Croucher Foundation
The University of Hong Kong, Hong Kong, China
Total Amount: \$5,000 HKD

1998 Sep **French Government Scholarship,**
Centre d'Etudes Superieures des Matieres Premieres, France,
Centre de Geostatistique, Ecole des Mines de Paris, Paris, France
Total Amount: \$55,000 FF (French Franc)

National

- 2015 Sep **CIHR-IG New Principal Investigator Travel Award**
Canadian Institutes of Health Research – Institute of Genetics (CIHR-IG), Montreal, Canada
Total Amount: \$1,500
- 2015 Jul **New Principal Investigator Award, Careers in Cancer Research Development Program (CCRDP)**
Canadian Institutes of Health Research – Institute of Cancer Research (CIHR-ICR) and Canadian Cancer Society Research Institute (CCSRI), Montreal, Canada
Total Amount: \$1,500
- 2015 Mar **Visiting Scientific Researcher Travel Award**
Thematic Program on Statistical Inference, Learning and Models for Big Data, The Fields Institute, University of Toronto
Total Amount: \$1,500
- 2014 Oct **Junior Investigator Grant Panel Travel Award**
Canadian Cancer Society Research Institute (CCSRI), Toronto, Canada
Total Amount: \$1,000

4. PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Professional Society

- 2016 Aug – present Member of American Society of Human Genetics
- 2016 Aug – present Member of Statistical Society of Canada
- 2015 Oct – present Member of International Society of Psychiatric Genetics
- 2006 Jan – present Member of International Society of Computational Biology

Editor Activities

- 2015 Sep – present Review Editor, Statistical Genetics and Methodology
Frontiers in Genetics journal
- 2015 Jul – 2016 Aug Lead Guest Editor for Integrative Analysis of Cancer Genomic Data,
Cancer Informatics journal

Conferences and Workshops

2017 June Chair of the invited session "Statistical Methods for High-throughput Big Omics Data", 2017 Annual Meeting of the Statistical Society of Canada, Winnipeg, Canada

Peer Review Activities

GRANT REVIEWS

External Grant Reviewer

2016 May Grand Challenges Canada and Canadian Institute of Health Research (CIHR)

2016 Apr Research Manitoba's 2016 Masters Studentship Review Committee

2016 Mar Ontario Graduate Scholarship 2016-17 Masters Studentship

2016 Mar Collaborative Research and Development Grant, Natural Sciences and Engineering Research Council (NSERC)

2015 Apr Research Manitoba's 2015 Masters Studentship Review Committee

2013 Mar McLaughlin Centre 2013 Accelerator Grant Competition
University of Toronto

2011 Mar McLaughlin Centre 2011 Accelerator Grant Competition
University of Toronto

Internal Grant Reviewer

2012 Aug Genome Canada – CIHR 2012 Large-Scale Applied Research Project Competition in Genomics and Personalized Health

2011 Sep Canada Institute of Health Research Operating Grant

2009 Sep Canada Institute of Health Research Operating Grant

2009 Aug Ontario Research Fund – Global Leadership Round in Genomics & Life Sciences (ORF – GL²)

MANUSCRIPT REVIEWS

Reviewer

2016 Aug BMC Medical Genomics
2016 Aug BMG Genomics

2016 Jun	Frontiers in Genetics, section Statistical Genetics and Methodology
2016 Jun	BMC Bioinformatics
2016 Apr	BMC Genomics
2015 Dec	Plos One
2015 Dec	BMC Bioinformatics
2015 Nov	Scientific Reports
2015 Oct	BMC Bioinformatics
2015 Jun	Peer J
2015 May	Genetic Epidemiology
2014 Nov	Plos One
2014 Nov	Cancer Informatics
2014 Oct	The Protein Journal

Before February 2014

Plos One
The Scientific World Journal
Autism Research
BMC System Biology
Neurocomputing
G3: Genes, Genome, Genetics
Journal of Neurodevelopmental Disorders
Developmental & Comparative Immunology
BMC Bioinformatics
Molecular Genetics and Genomics
Bioinformatics
Cancer Informatics
Physiological Genomics

C. Research Funding

1. CURRENTLY HOLDING

2015 Apr – 2020 Mar	<p><u>Title:</u> Developing novel machine learning algorithms for network Biology.</p> <p><u>Funding agency:</u> Natural Science and Engineering Research Council of Canada (NSERC), Individual Discovery Grants (With Early Career Supplement).</p> <p><u>Principal Investigator:</u> HU, Pingzhao.</p> <p><u>Amount:</u> \$90,000 CAD.</p>
2015 Sep – 2018 Aug	<p><u>Title:</u> Improving breast cancer survival and drug response prediction based on mutated gene network.</p> <p><u>Funding agency:</u> Canadian Breast Cancer Foundation – Prairies/NWT Region, Research Grant</p> <p><u>Principal Investigator:</u> HU, Pingzhao.</p> <p><u>Amount:</u> \$217,050 CAD.</p>

2016 Sep – 2017 Dec	<p><u>Title:</u> Identification of copy number variation biomarkers in patients with inflammatory bowel disease.</p> <p><u>Funding agency:</u> Mitacs, Accelerate Program.</p> <p><u>Principal Investigator:</u> HU, Pingzhao.</p> <p><u>Co-principal Investigator:</u> BERNSTEIN, Charles</p> <p><u>Amount:</u> \$60,000 CAD.</p>
2015 Sep – 2017 Aug	<p><u>Title:</u> Identification of risk genes that modulate the severity of inflammatory bowel disease through copy number variation analysis.</p> <p><u>Funding agency:</u> Health Sciences Centre Foundation (HSCF), General Operating Grants.</p> <p><u>Principal Investigator:</u> HU, Pingzhao.</p> <p><u>Co-principal Investigator:</u> Dr. BERNSTEIN, Charles</p> <p><u>Co-Investigator:</u> Dr. SPRIGGS, Beth</p> <p><u>Amount:</u> \$70,000 CAD.</p>
2014 Aug – 2017 July	<p><u>Title:</u> Bioinformatics Approaches for Integrative Analysis of Omics Data for Translational and Personalized Medicine.</p> <p><u>Funding agency:</u> Manitoba Research Health Council (MHRC), Establishment Grant.</p> <p><u>Principal Investigator:</u> HU, Pingzhao.</p> <p><u>Amount:</u> \$99,699 CAD.</p>
2016 Jun – 2017 Mar	<p><u>Title:</u> Identifying disease genes and modeling their regulatory mechanism corresponding to inflammatory bowel disease.</p> <p><u>Funding agency:</u> Nara Institute of Science and Technology (Japan), Global Collaboration Project FY2016.</p> <p><u>Principal Investigator (Japan):</u> Md. Altaf-Ul-Amin</p> <p><u>Co-Investigator (Japan):</u> SATO, Tetsuo.</p> <p><u>Co-Principal Investigator (Canada):</u> HU, Pingzhao.</p> <p><u>Amount:</u> \$ 1,110,000 Yen (14,000 CAD).</p>
2014 Feb – 2017 Feb	<p><u>Funding agency:</u> University of Manitoba Office of the Vice-President (Research and International) and the Faculty of Medicine, Research Start-up Fund.</p> <p><u>Principal Investigator:</u> HU, Pingzhao.</p> <p><u>Amount:</u> \$150,000 CAD.</p>
2016 Apr – 2019 Mar	<p><u>Title:</u> Partek: A genomic data analytics software.</p> <p><u>Funding agency:</u> Department of Biochemistry and Medical Genetics, University of Manitoba.</p> <p><u>Principal Investigator:</u> HU, Pingzhao.</p> <p><u>Co-Investigators:</u> BEAVIS, Ronald; PEMBERTON, Trevor.</p> <p><u>Amount:</u> \$20,000 CAD</p>

2. PREVIOUSLY HOLDING

- 2014 Jul – 2016 Jun Title: Deciphering DNA methylome in metastatic prostate cancer.
Funding agency: Prostate Cancer Canada, Movember Discovery Grants.
Principal Investigator: BAPAT, Bharati.
Co-Investigators: JOSHUA, Anthony; FLESHNER, Neil; **HU, Pingzhao**; BADER, Gary.
Amount: \$185,900 CAD
- 2015 May – 2016 Apr Title: Epigenetic profiling in severe sepsis – (EPSIS).
Funding agency: McLaughlin Centre, University of Toronto, Accelerator grant in genomic medicine
Principal Investigator: DOS SANTOS, Claudia.
Co-Investigators: TSANG, Jennifer; BINNIE, Alexandra; LIAW, Patricia; **HU, Pingzhao**; CASTELO-BRANCO, Pedro
Amount: \$50,000 CAD
- 2015 Apr – 2016 Mar Title: Patient-specific pathway activations inferred from genomic data predict breast cancer survival.
Funding agency: Manitoba Medical Service Foundation (MMSF), Operating Grants.
Principal Investigator: **HU, Pingzhao**.
Amount: \$18,000 CAD.
- 2011 Jun – 2016 May Title: Neurocognitive-Phenome, Genome, Epigenome and Nutriome in Childhood Leukemia Survivors: N-PhenoGENICS.
Funding agency: Canada Institute of Health Research (CIHR), Team Grant: Childhood Cancer – Late Effects of Treatment.
Principal Investigator: ITO, Shinya.
Co-principal Investigators: GUGER, Sharon; HITZLER, Johann H; O'CONNOR, Deborah L; SCHACHAR, Russell J; SPIEGLER, Brenda; WEKSBERG, Rosanna.
Co-Investigators: CARLETON, Bruce C.
Collaborator: **HU, Pingzhao**
Amount: \$1,633,381 CAD.
- 2015 Mar – 2016 Feb Title: Immunogenetic markers of extreme clinical phenotypes of post-transplant lymphoproliferative disorder: a pilot project.
Funding agency: Enduring Hearts Inc., USA, Operating Grants.
Principal Investigator: ALLEN, Upton.
Co-Investigators: DIPCHAND, Anne; GRUNEBaum, Eyal; BEYENE, Joseph; PREIKSAITIS, Jutta; LEVINGS Megan; **HU, Pingzhao**; NG, Vicky.
Amount: \$35,000 USD (\$43,729 CAD).
- 2015 Feb – 2016 Feb Title: Machine learning techniques for identifying pathway

biomarkers.

Funding agency: Faculty of Science of University of Manitoba, Interdisciplinary/New Directions Research Collaboration Initiation Grants.

Principal Investigator: Wang, Yang.

Co-Principal Investigator: **HU, Pingzhao**.

Amount: \$8,000 CAD.

2015 Jan – 2015 Dec

Title: A gene-pair based enrichment testing approach for identifying pathway biomarkers in cancer studies.

Funding agency: University of Manitoba, University Research Grants Program (URGP).

Principal Investigator: **HU, Pingzhao**.

Amount: \$7,500 CAD.

2014 May – 2015 May

Title: Early detection of lung cancer using next generation sequencing technology.

Funding agency: McLaughlin Centre, University of Toronto, Accelerator grant in genomic medicine.

Principal Investigator: LIU, Geoffrey.

Co-principal Investigators: XU, Wei.

Co-Investigators: HUNG, Rayjean; **HU, Pingzhao**.

Amount: \$50,000 CAD.

D. Publications

* Equally contributed

1. PEER-REVIEWED PUBLICATIONS (TRAINEES)

Journal Articles

1. MJ Patton, S McCorrister, C Grant, G Westmacott, R Fariss, **P Hu**, K Zhao, M Blake, B Whitmire, C Yang, HD Caldwell, G McClarty. The Chlamydial Protease-like Activity Factor (CPAF) and T3S Proteins Cooperate in the Inhibition of p65 Nuclear Translocation. *mBio*. In Press.
2. CJ Walsh, J Batt, **P Hu**, CC Dos Santos (2016). Discovering microRNA-regulatory modules in multi-dimensional cancer genomic data: a survey of computational methods. *Cancer Informatics*. In Press.
3. CJ Walsh, J Batt, MS Herridge, S Mathur, GD Bader, **P Hu**, CCD Santos (2016). Transcriptomic analysis reveals dysregulation of skeletal muscle regeneration in survivors of critical illness with persistent muscle atrophy. *Scientific Reports*, 6:29334.
4. C Chi, R Ajwad, Q Kuang, **P Hu** (2016). A graph-based algorithm for detecting recurrent copy number variants in cancer studies. *Cancer Informatics*. Minor revisions.

5. FS Siddiqi, S Majumder, K Thai, M Abdalla, **P Hu**, SL Advani, KE White, BB Bowskill, G Guarna, CC dos Santos, KA Connelly, A Advani (2016). The histone methyltransferase EZH2 protects against podocyte oxidative stress and renal injury in diabetes. *Journal of the American Society of Nephrology*, 27:2021-2034.
6. U Allen, **P Hu**, SL Pereira, J Robinson, T Paton, J Beyene, N Khodai-Booran, A Dipchand, D Hebert, V Ng, T Nalpathamkalam, S Read (2016). The genetic diversity of Epstein-Barr virus in the setting of transplantation relative to non-transplant settings: a feasibility study. *Pediatric Transplantation*, 20:124-129.
7. PF Simon, S McCorrister, **P Hu**, P Chong, A Silaghi, G Westmacott, KM Coombs, D Kobasa (2015). Strains of highly pathogenic H5N1 and novel H7N9 influenza induces a more profound proteomic host response compared to those of seasonal and pandemic H1N1 influenza A viruses. *Journal of Proteome Research*, 14:4511-4523.
8. KL Wright, JR Adams, J Liu, AJ Loch, RG Wong, C Jo, LA Beck, DR Santhanam, L Weiss, X Mei, TF Lane, S Koralov, SJ Done, JR. Woodgett, E Zacksenhaus, **P Hu**, SE Egan (2015). Ras signaling is a key determinant of metastatic dissemination and poor survival of luminal breast cancer patients. *Cancer Research*, 75:4960-4972.
9. CJ Walsh, **P Hu**, J Batt, CC Dos Santos (2015). Microarray meta-analysis and cross-platform normalization: integrative genomics for robust biomarker discovery. *Microarrays*, 4:389-406.
10. R Johnson*, **P Hu***, C Fan, C Anders (2015). Gene expression analysis of “young adult type” breast cancer: a retrospective analysis. *Oncotarget* 6:13688-13702.
11. XQ Liu, J Fazio, **P Hu**, AD Paterson (2015). Identity-by-descent mapping for diastolic blood pressure in unrelated Mexican Americans. *BMC Proceedings*, In Press.
12. D Merico, N Sharfe, **P Hu**, J Herbrick, C Roifman (2015). RelB deficiency causes combined immunodeficiency. *LymphoSign Journal* 2:147-155.
13. N Kanwar, **P Hu**, P Bedard, M Clemons, D McCready, SJ Done (2015) Identification of genomic signatures in circulating tumor cells from breast cancer. *International Journal of Cancer* 137:332-344.
14. M Uddin, B Thiruvahindrapuram, S Walker, Z Wang, **P Hu**, S Lamoureux, J Wei, JR MacDonald, G Pellecchia, C Lu, AC Lionel, MJ Gazzellone, JR McLaughlin, C Brown, IL Andrusis, JR Knight, J Herbrick, RF Wintle, P Ray, DJ Stavropoulos, CR Marshall, SW Scherer (2015). A high-resolution copy number variation resource for clinical and population genetics. *Genetics in Medicine* 17:747-752.
15. KWK Lee, R Richmond, **P Hu**, L French, J Shin, C Bourdon, E Reischl, M Waldenberger, S Zeilinger, T Gaunt, W McArdle, S Ring, G Woodward, L Bouchard, D Gaudet, G Davey-Smith, C Relton, T Paus, Z Pausova (2015). Prenatal exposure to maternal cigarette smoking and DNA methylation: epigenome-wide association in a discovery sample of adolescents and replication in an independent cohort at birth through 17 years of age. *Environmental Health Perspectives* 123:193-199.
16. H Jiang, Z Pan, **P Hu** (2015). Discriminative learning of generative models: large margin multinomial mixture models for document classification. *Pattern Analysis and Applications* 18:535-551.
17. J Li, S Rohailla, N Gelber, J Rutka, N Sabah, RA Gladstone, C Wei, **P Hu**, RK Kharbada, AN Redington (2014). MicroRNA - 144 is a circulating effector of remote ischemic preconditioning. *Basic Res Cardiol.* 109:423-436.

18. M Uddin, K Tammimies, G Pellecchia, B Alipanahi, **P Hu**, Z Wang, D Pinto, L Lau, T Nalpathamkalam, CR. Marshall, BJ Blencowe, BJ Frey, D Merico, R Yuen, SW Scherer (2014). Brain-expressed exons under purifying selection are enriched for *de novo* mutations in autism spectrum disorder. *Nature Genetics* 46: 742-747.
19. **P Hu**, AD Paterson (2014). Dynamic pathway analysis of genes associated with blood pressure using whole genome sequence data. *BMC Proceedings* 8(Suppl 1): S106. Special issue of Genetic Analysis Workshop (GAW18), Stevenson, WA, USA, October 2012.
20. W Xu, S Cohen-Woods, Q Chen, A Noor, J Knight, G Hosang, SV Parikh, V de Luca, F Tozzi, P Muglia, J Forte, A McQuillin, **P Hu**, HMD Gurling, JL Kennedy, P McGuffin, A Farmer, J Strauss, JB Vincent (2014). Genome-wide association study of bipolar disorder in Canadian and UK populations corroborates disease loci including SYNE1 and CSMD1. *BMC Medical Genetics* 15:2.
21. MMG Seno*, FG Gwadry*, **P Hu**, SW Scherer (2013). Neuregulin 1-alpha regulates phosphorylation, acetylation and alternative splicing in lymphoblastoid cells. *Genome*. 56:619-625.
22. **P Hu**, AM Muise, X Xiang, JH Brumell, MS Silverberg, W Xu (2013). Association between a multi-locus genetic risk score and inflammatory bowel disease. *Bioinformatics and Biology Insights* 7:143-152.
23. JD Mills, T Nalpathamkalam, HIL Jacobs, C Janitz, D Merico, **P Hu**, M Janitz (2013). RNA-Seq analysis of parietal cortex in Alzheimer's disease reveals alternatively spliced isoforms related to lipid metabolism. *Neuroscience Letters* 536:90-95. [C]
24. P Moffatt, M Ben-Amor, FH Glorieux, P Roschger, K Klaushofer, JA Schwartzenruber, AD Paterson, **P Hu**, C Marshall, FORGE Canada Consortium, S Fahiminiya, J Majewski, CL Beaulieu, KM Boycott, F Rauch (2013). Metaphyseal dysplasia with maxillary hypoplasia and brachydactyly is caused by a duplication in RUNX2. *American Journal of Human Genetics* 92:252-258.
25. **P Hu***, X Wang*, JJ Haitsma, S Furmli, H Masoom, M Liu, AS Slutsky, J Beyene, CM Greenwood, CC dos Santos (2012). Microarray meta-analysis identifies acute lung injury biomarkers in donor lungs that predict development of primary graft failure in recipients. *Plos One* 7:e45506.
26. **P Hu**. Machine learning approaches for network-based prediction of disease outcomes and protein functions (Doctoral Dissertation, Collected by ACM Digital Library, ISBN: 978-0-494-90125-0). York University, Canada ©2012.
27. **P Hu**, S Bull, H Jiang (2012). Gene network modular-based classification of microarray samples. *BMC Bioinformatics* 13 (Suppl 10): S17.
28. CC dos Santos, S Murthy, **P Hu**, Y Shan, JJ Haitsma1, SHJ Mei, DJ Stewart, WC Liles (2012). Network analysis of transcriptional responses induced by mesenchymal stem cells treatment of experimental sepsis. *American Journal of Pathology* 181:1681-1692.
29. W Wang, W Hu, F Hou, **P Hu**, Z Wei (2012). SNVerGUI: A desktop tool for variant analysis of next-generation sequencing data. *Journal of Medical Genetics* 12:753-755.
30. PC Havugimana*, GT Hart*, T Nepusz*, H Yang*, AL Turinsky, Z Li, PI Wang,, DR Boutz, V Fong , S Phanse, M Babu, SA Craig, **P Hu**, C Wan, J Vlasblom, V Dar, A Bezginov, GW Clark, GC Wu, SJ Wodak, ERM Tillier, A Paccanaro, EM Marcotte, A Emili (2012). A census of human soluble protein complexes. *Cell* 150:1068-1081.

31. R Ribeiro, C Monteiro, V Catalán, **P Hu**, V Cunha, A Rodriguez, J Gómez-Ambrosi, A Fraga, P Príncipe, C Lobato, F Lobo, A Morais, V Silva, J Sanches-Magalhães, J Oliveira, F Pina, C Lopes, R Medeiros, G Frühbeck (2012). Obesity and prostate cancer: gene expression signature of human periprostatic adipose tissue. *BMC Medicine* 10:108.
The findings were reported on The Toronto Star (<http://www.healthzone.ca/health/newsfeatures/article/1262462--fat-feeds-aggressive-prostate-tumours-study-finds>)
32. D Picard, S Millar, CE Hawkins, E Bouffet, HA Rogers, TSY Chan, SK Kim, YS Ra, J Fangusaro, A Korshunov, H Toledano, H Nakamura, JT Hayden, J Chan, L Lafay-Cousin, **P Hu**, X Fan, KM Muraszko, SL Pomeroy, CC Lau, HK Ng, C Jones, TV Meter, SC Clifford, C Eberhart, A Gajjar, SM Pfister, RG Grundy, A Huang (2012). Markers of survival and metastatic potential in childhood CNS primitive neuro-ectodermal brain tumors: an integrative genomic analysis. *Lancet Oncology* 13:838-848.
33. L Smeding, HL Poi, **P Hu**, Y Shan, JJ Haitisma, E Horvath, S Furmli, H Masoom, JW Kuiper, AS Slutsky, TG Parker, FB Plötz, CC dos Santos (2012). Salutary effect of Resveratrol on sepsis-induced myocardial depression. *Critical Care Medicine* 40:1896-1907.
34. AM Muise, W Xu, CH Guo, T Walters, VM Wolters, R Fattouh, GY Lam, **P Hu**, R Murchie, M Sherlock, JC Gana, NEOPICS, RK Russell, M Glogauer, RH Duerr, J Cho, CW Lees, J Satsangi, DC Wilson, AD Paterson, AM Griffiths, MS Silverberg, JH Brumell (2012). NADPH oxidase complex and IBD candidate gene studies: identification of a rare variant in NCF2 that results in reduced binding to RAC2. *Gut* 61:1028-1035.
35. **P Hu**, W Xu, L Chen, X Xing, AD Paterson (2011). Pathway-based joint effects analysis of rare genetic variants using Genetic Analysis Workshop 17 exon sequence data. *BMC Proceedings* 5(Suppl 9):S45. Special issue of Genetic Analysis Workshop (GAW17), Boston, Massachusetts, USA, October 2010.
36. Z Wei, W Wang, **P Hu**, GJ Lyon, H Hakonarson (2011). SNVer: a statistical tool for variant calling in analysis of pooling or individual next-generation sequencing data. *Nucleic Acids Research* 39:e132.
37. EJ Parra, JE Below, S Krithika, A Valladares, JL Barta, NJ Cox, CL Hanis, N Wachter, J Garcia-Mena, **P Hu**, MD Shriver, The DIAGRAM Consortium, J Kumate, PM McKeigue, J Escobedo, M Cruz (2011). Genome-wide association study of type 2 diabetes in a sample from Mexico city and a meta-analysis of a Mexican-American sample from Starr county, Texas. *Diabetologia* 54:2038-2046.
38. RF Wintle, AC Lionel, **P Hu**, SD Ginsberg, D Pinto, B Thiruvahindrapduram, J Wei, CR Marshall, J Pickett, E Cook, SW Scherer (2011). A genotype resource for postmortem brain samples from the Autism Tissue Program. *Autism Research* 4:89 – 97,
39. MMG Seno, **P Hu**, FG Gwadry, D Pinto, CR Marshall, G Cassallo, SW Scherer (2011). Gene and miRNA expression profiles in autism spectrum disorders. *Brain Research* 1380:85-97.
40. L Chen, **P Hu**, J Sykes, M Pintilie, G Liu, W Xu (2011). A pathway-based association analysis model using common and rare variants. *BMC Proceedings* 5(Suppl 9):S85. Special issue of Genetic Analysis Workshop (GAW17), Boston, Massachusetts, USA, October 2010.
41. B Kabakchiev, D Turner, J Hyams, D Mack, N Leleiko, W Crandall, J Markowitz, A Otley, W Xu, **P Hu**, A Griffiths, MS Silverberg (2010). Gene expression changes associated with resistance to intravenous corticosteroid therapy in children with severe ulcerative colitis. *Plos One* 5:e13085.

42. SD Molyneux*, MD Grappa*, AG Beristain, TD McKee, DH Wai, J Paderova, M Kashyap, **P Hu**, T Maiuri, SP Narala, V Stambolic, J Squire, J Penninger, O Sanchez, TJ Triche, GA Wood, LS Kirschner, R Khokha (2010). PRKAR1A is an Osteosarcoma tumor suppressor and defines a molecular subclass in mice. *Journal of Clinical Investigation* 120:3310-3325.
43. MMG Seno, C Trollet, T Athanasopoulos, IR Graham, **P Hu**, G Dickson (2010). Transcriptomic analysis of dystrophin RNAi knockdown reveals a central role for dystrophin in muscle differentiation and contractile apparatus organization. *BMC Genomics* 11:345.
44. **P Hu**, H Jiang, A Emili (2010). Predicting protein functions by relaxation labeling protein interaction network. *BMC Bioinformatics* 11(Suppl):S64.
45. E Parkhomenko, D Tritchler, M Lemire, **P Hu**, J Beyene (2009). Using a higher criticism statistic to detect modest effects in a genome-wide study of rheumatoid arthritis. *BMC Proceedings* 3(Suppl7):S40. Special issue of Genetic Analysis Workshop (GAW16), St. Louis, Missouri, USA, September 2008.
46. J Beyene, **P Hu**, JS Hamid, E Parkhomenko, AD Paterson, D Tritchler (2009). Pathway-based analysis of measures of explained variation in a genome-wide case-control association study of rheumatoid arthritis. *BMC Proceedings* 3(Suppl7):S128. Special issue of Genetic Analysis Workshop (GAW16), St. Louis, Missouri, USA, September 2008.
47. **P Hu**, CMT Greenwood, J Beyene (2009). Using the ratio of means as the effect size measure in combining results of microarray experiments. *BMC System Biology* 3:106.
48. **P Hu***, SC Janga*, M Babu*, JJ Diaz-Mejia*, G Butland*, W Yang, O Pogoutse, X Guo, S Phanse, P Wong, S Chandran, C Christopoulos, A Nazarians-Armavil, NK Nasser, G Musso, M Ali, N Nazemof, V Eroukova, A Golshni, A Paccanaro, JF Greenblatt, G Moreno-Hagelseib, A Emili (2009). Global functional atlas of Escherichia coli encompassing previously uncharacterized proteins. *PLoS Biology* 7:e96.
49. U Allen, M Barton-Forbes, J Beyene, **P Hu**, N Khodai-Booran, D Héber, A Diphchand, V Ng, M Soloman, D Grant, A Fecteau, B Ngan, S Read, M Zielenska, S Weitzman (2009). Gene expression using microarrays in transplant recipients at risk of EBV lymphoproliferation after organ transplantation: preliminary proof of concept. *Pediatric Transplantation* 13:990-998.
50. A Hossain, J Beyene, A Willan, **P Hu** (2009). A flexible approximate likelihood ratio test for detecting differential expression in microarray data. *Computational Statistics and Data Analysis* 53:3685-3695.
51. JS Hamid, **P Hu**, NM Roslin, V Ling, CMT Greenwood, J Beyene (2009). Data integration in genetics and genomics: methods and challenges. *Human Genomics and Proteomics*: Article ID 869093.
52. IH Sung, TH Kim, SY Bang, TJ Kim, B Lee, L Peddle, P Rahman, CMT Greenwood, **P Hu**, RD Inman (2009). IL -23R polymorphisms in patients with ankylosing spondylitis in Korea. *The Journal of Rheumatology* 36:1003-1005.
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67. **P Hu**, CMT Greenwood, J Beyene. Pathway-based models for predicting prostate cancer by integrative analysis of gene expression data. BioC2006-Where Software and Biology Connect. Seattle, WA, USA, August 2006.
68. N Khodai-Booran, J Beyene, M Barton-Forbes, **P Hu**, D Hébert, A Dipchand, V Ng, D Grant, A Fecteau, M Soloman, B Ngan, S Read, S Weitzman, U Allen. Preliminary assessment of gene expression profiling using DNA microarray technology in patients at risk of epstein-barr virus (EBV) Lymphoproliferation after Transplantation. American Journal of Transplantation 6(Suppl. 2), 869. Presented at World Transplant Congress. Boston, MA, USA, July 2006.

69. **P Hu**, J Beyene, CMT Greenwood. Genetic analysis of gene expression variation in human cell lines. Statistical Genetics: From Haplotype Maps to Disease Susceptibility Genes. The University of Hong Kong, Hong Kong, February 2006.
70. J Beyene, **P Hu**, CMT Greenwood. Data Integration Method for High-throughput Data. Joint Statistical Meetings (JSM). Minneapolis, USA, August 2005.
71. **P Hu**, CMT Greenwood, J Beyene. Identifying prognostic gene expression signatures by meta-analysis of microarray data sets for improved prediction of prostate cancer. Donnelly CCBR/MaRS Joint Opening Scientific Symposium on Computational & Chemical Biology. Toronto, September 2005.

E. Presentations and Special Lectures

1. INTERNATIONAL

- 2014 Aug **Oral Presenter.** A Graph based algorithm to identify recurrent runs of homozygosity variants in a Mexican American sample. Genetic Analysis Workshop 19. Vienna, Austria.
- 2013 Dec **Oral Presenter.** Machine learning approaches for network-based prediction of protein functions and disease outcomes. College of Information Science and Technology, Beijing Normal University. Beijing, China.
- 2013 Dec **Oral Presenter.** Meta-analysis of microarray studies. Oncology division of Qilu Hospital, Shangdong University. Jinan, Shangdong, China.
- 2012 Oct **Oral Presenter.** Dynamic pathway analysis of genes associated with blood pressure using whole genome sequence data. Genetic Analysis Workshop (GAW18). Stevenson, WA, USA. Co-authors: AD Paterson.
- 2012 May **Oral Presenter.** Machine learning approaches for network-based prediction of protein functions and disease outcomes. Department of Computer Science, University of New Orleans, LA, USA.
- 2011 May **Oral Presenter.** Gene network models-based linear discriminant analysis of microarray expression data. 7th International Symposium on Bioinformatics Research and Applications (ISBRA'11). Changsha, Hunan, China. Co-authors: S Bull, H Jiang.
- 2011 Apr **Oral Presenter.** Integrative analysis of biomedical data: algorithms and applications. Department of Pathology, University of Alabama at Birmingham, AL, USA.
- 2010 Oct **Oral Presenter.** Pathway-based joint effect analysis of rare genetic variants using GAW17 exom sequence data. Genetic Analysis Workshop (GAW17). Boston, Massachusetts, USA. Co-authors: W Xu, L Chen, AD Paterson.

- 2010 Jan **Oral Presenter.** Predicting protein functions by relaxation labelling protein interaction network. Asia Pacific Bioinformatics Conference (APBC2010). Bangalore, India. Co-authors: H Jiang, A Emili.
- 2009 Nov **Oral Presenter.** A topology-sharing based method for protein function prediction via analysis of protein functional association networks. IEEE International Conference on Bioinformatics and Biomedicine (BIBM' 09) Workshops. Washington DC, USA. Co-authors: H Jiang, A Emili.
- 2009 Oct **Oral Presenter.** Scoring of ChIP-seq experiments by modeling large-scale correlated tests. The International Conference for the Critical Assessment of Massive Data Analysis (CAMDA09). Chicago, USA. Co-authors: Z Wei, Z Wang, AD Paterson, J Beyene, SW Scherer.
- 2006 Jun **Oral Presenter.** Serum Diagnosis of Chronic Fatigue Syndrome Using Array-based Proteomics. The Sixth International Conference for the Critical Assessment of Microarray Data Analysis (CAMDA 2006). Durham, USA. Co-authors: W Le, S Lim, B Xing, CMT Greenwood, J Beyene.
- 2006 Sep **Oral Presenter.** Integrating Affymetrix microarray data sets using probe-level test statistic for predicting prostate cancer. 2006 IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB'06). Toronto, ON, Canada. Co-authors: CMT Greenwood, J Beyene.
- 2004 Nov **Oral Presenter.** Chromosomal clustering of periodically expressed genes in plasmodium falciparum. The Fifth International Conference for the Critical Assessment of Microarray Data Analysis (CAMDA). Durham, USA. Co-authors: CMT Greenwood, J Beyene.

2. NATIONAL

- 2015 Nov **Oral Presenter.** Genetic dissection of pandemic influenza-associated severe respiratory illness and bioinformatics of host-pathogen interactions in influenza A infections. Department of Medical Microbiology, University of Manitoba, Winnipeg, Manitoba, Canada.
- 2015 Oct **Oral Presenter.** Gene Set Analysis of Omics Data. Division of Biostatistics, Dalla Lana School of Public Health, University of Toronto. Toronto, Ontario, Canada.
- 2015 Sep **Oral Presenter.** Bioinformatics for infectious disease. Joint meeting between The Centre for HealthCare Innovation and Guandong (China) Centre for Disease Control and Prevention. Winnipeg, Manitoba, Canada.
- 2015 Apr **Oral Presenter.** Epigenome-wide scan identifies prenatal smoke exposure-associated differential DNA methylation during adolescence. Research Rounds of The Children's Hospital Research Institute of Manitoba. Winnipeg, Manitoba, Canada.

- 2015 Mar **Oral Presenter.** Analysis of DNA methylation data: a tutorial. Division of Biostatistics, Dalla Lana School of Public Health, University of Toronto. Toronto, Ontario, Canada.
- 2014 Nov **Oral Presenter.** Computational biology in translational research. Research Grand Round of The Centre for HealthCare Innovation. Winnipeg, Manitoba, Canada. Jointly presented the talk with Dr. Ron Beavis.
- 2014 Nov **Oral Presenter.** Machine learning approaches for predicting protein functions and disease outcomes using omics data. Department of Statistics, University of Manitoba. Winnipeg, Manitoba, Canada.
- 2014 Jan **Oral Presenter.** Integrative analysis of omics data: a bioinformatics perspective. Division of Biostatistics, Dalla Lana School of Public Health, University of Toronto. Toronto, Ontario, Canada.
- 2013 Sep **Oral Presenter.** Integrative analysis of omics data: a bioinformatics perspective. Faculty of Medicine, University of Manitoba, Manitoba, Winnipeg, Canada.
- 2013 Sep **Graduate Lecturer.** Differential gene expression analysis. Faculty of Medicine, University of Manitoba, Manitoba, Winnipeg, Canada.
- 2013 Jun **Oral Presenter.** Integrative analysis of omics data: a bioinformatics perspective. College of Medicine, University of Saskatchewan, Saskatchewan, Saskatoon, Canada.
- 2013 Jun **Undergraduate Lecturer.** The BLAST algorithm: how it works and how to use it effectively. College of Medicine, University of Saskatchewan, Saskatchewan, Saskatoon, Canada.
- 2011 Oct **Oral Presenter.** A comparative analysis of statistical approaches for biomarker discovery using microbiome data. Methods to Study the Human Microbiome: Workshop II, Toronto, Canada.
- 2008 Nov **Oral Presenter.** Genome-wide copy number analysis: A tutorial. Statistical Methods for Genomics Group at University of Toronto. Toronto, Canada.
- 2008 Feb **Oral Presenter.** Block-Diagonal Linear Discriminant Analysis for Disease Classification Using Gene Expression Profiling. Statistical Methods for Genomics Group at University of Toronto. Toronto, Canada. Co-authors: S Bull.
- 2007 Mar **Oral Presenter.** Critical review of published microarray studies for cancer outcome. Biostatistics Methodology Unit (BMU) of The Hospital for Sick Children. Toronto, ON, Canada.
- 2007 Jan **Oral Presenter.** Copy number variation in the human genome. Statistical Methods for Genomics Group at University of Toronto. Toronto, Canada.

- 2005 Dec **Oral Presenter.** Quantification of the quality of Affymetrix microarray data and its application to identifying significantly expressed genes. Affymetrix User Group Meeting. Toronto, Canada. Co-authors: CMT Greenwood, J Beyene.
- 2005 Mar **Oral Presenter.** Statistical analysis of the plasmodium falciparum periodically-expressed gene expression data. University of Toronto Microarray Interest Group (MIG). Toronto, Canada. Co-authors: CMT Greenwood, J Beyene.
- 2004 Oct **Oral Presenter.** Quality-adjusted modeling of inter-study variation in gene expression profiles. The Third Canadian Working Conference on Computation Biology (CCCB), IBM Center for Advanced Studies, Toronto, Canada. Co-authors: CMT Greenwood, J Beyene.

F. Training of Highly Qualified Personnel (HQP)

1. POSTDOCTORAL FELLOWS AND VISITING PROFESSORS

- 2016 Sep – Now **Supervisor.** Dr. Svetlana Frenkel. Postdoctoral Fellow (Department of Biochemistry and Medical Genetics, University of Manitoba). Co-supervisor: Dr. Charles Bernstein, Department of Internal Medicine, University Manitoba.
- 2016 Sep – Now **Supervisor.** Dr. Yan Cheng. Visiting Professor (Department of Biochemistry and Medical Genetics, University of Manitoba).

2. MASTER AND PHD STUDENTS

- 2016 Sep – Now **Supervisor.** Jiaying You. M.Sc. Candidate (Department of Electrical and Computer Engineering, University of Manitoba). Co-supervisor: Dr. Bob McLeod, Department of Electrical and Computer Engineering, University Manitoba.
- 2016 Sep – Now **Supervisor.** Ye Tian. M.Sc. Candidate (Department of Electrical and Computer Engineering, University of Manitoba). Co-supervisor: Dr. Bob McLeod, Department of Electrical and Computer Engineering, University Manitoba.
- 2016 Aug – Now **Supervisor.** Md. Mohaiminul Islam. M.Sc. Candidate (Department of Computer Science, University of Manitoba). Co-supervisor: Dr. Yang Wang, Department of Computer Science, University Manitoba.
- 2015 Sep – Now **Supervisor.** Rasif Ajwad. M.Sc. Candidate (Department of Computer Science, University of Manitoba). Co-supervisor: Dr. Michael Domaratzki, Department of Computer Science, University Manitoba.
- 2015 May – Now **Supervisor.** Chen Chi. M.Sc. Candidate (Department of Biochemistry and Medical Genetics, University of Manitoba).

- 2014 Feb – Now **Bioinformatics Advisor.** Chris Walsh. Ph.D. Candidate. (Faculty of Medicine, University of Toronto). Supervisor: Dr. Claudia Santos, Faculty of Medicine, University of Toronto.
- 2014 Sep – 2016 Aug **Supervisor.** Kaiqiong Zhao. MSc. Candidate (Department of Biochemistry and Medical Genetics, University of Manitoba). Current Position: PhD Candidate in Biostatistics in McGill University.
- 2015 Oct – 2016 Jan **Supervisor.** Bingqing Shen. MSc Candidate (Biostatistics Division, University of Toronto). Current Position: Research assistant in The Hospital for Sick Children, Toronto.
- 2014 Feb – 2015 Sep **Bioinformatics Advisor.** Philippe Simon. Ph.D. Candidate. (Department of Medical Microbiology, University of Manitoba). Supervisor: Dr. Darwyn Kobasa. Current Position: Medical student in University Laval.
- 2014 May – 2014 Aug **Co-supervisor.** Cynthia Kpekpen. Summer Student and M.Sc. Candidate (Department of Statistics, University of Manitoba). Supervisor: Dr. Lisa Lix, University of Manitoba.
- 2006 May – 2006 Aug **Co-supervisor.** Hui Lan. Summer Student and Ph.D. Candidate (Department of Computer Science, University of Toronto), Supervisor: Dr. Celia Greenwood, The Hospital for Sick Children.

3. UNDERGRADUATE STUDENTS

- 2016 Jun – 2016 Sep **Supervisor.** Linfan Zhang in Statistics (Zhejiang University, China).
- 2015 May – 2016 Apr **Supervisor.** Jessica Bondoc in Statistics and Computer Science (University of Manitoba). Co-supervisor: Dr. Kevin Coombs, University of Manitoba.
- 2015 Jan – 2015 Aug **Supervisor.** Huyen Le in Mathematics (University of Manitoba). Co-supervisor: Dr. Yang Wang, Department of Computer Science, University of Manitoba. Current Position: Research Assistant at Field Institute for Research in Mathematical Sciences, University of Toronto.
- 2015 Jun – 2015 Aug **Supervisor.** Xiaohui Ding in Mathematics and Statistics (Huazhong University of Science and Technology, China).
- 2015 May – 2015 Aug **Supervisor.** Masami Ando Kuri in Genome Science (Universidad Nacional Autónoma de México UNAM).
- 2010 May – 2012 May **Supervisor.** Xiang Xing in Computer Science (University of Toronto).
- 2008 May – 2008 Aug **Co-supervisor.** Xinchen Wang in Medical Genetics (University of Toronto). Supervisor: Dr. Claudia Santos, St. Michael's Hospital.

Current Position: Ph.D. Candidate in Bioinformatics in Massachusetts Institute of Technology (MIT).

2005 Jun – 2005 Dec **Co-supervisor.** Jun Yan in Statistics (University of Toronto). Supervisor: Dr. Joseph Beyene, The Hospital for Sick Children.

4. RESEARCH ASSOCIATES

2014 Dec – Now **Supervisor.** Qin Kuang. MD, Data Coordinator. University of Manitoba.

2014 Jul – 2015 May **Supervisor.** Justin Zhang. B.Sc., Bioinformatician. Co-supervisor: Dr. Ron Beavis, University of Manitoba.

5. ADVISORY MEMBERS

2016 Sep – Now **Committee Member.** Eu Wern Teh. MSc Candidate. (University of Manitoba). Supervisors: Dr. Yang Wang, Department of Computer Science, University of Manitoba.

2016 Mar – Now **Committee Member.** Neil Vincent Reyes. MSc Candidate. (University of Manitoba). Supervisors: Dr. Hezhao Ji and Dr. T. Blake Ball, Department of Medical Microbiology, University of Manitoba.

2015 Dec – 2016 Jul **Committee Member.** Md. Atiqur Rahman. MSc Candidate. (University of Manitoba). Supervisors: Dr. Yang Wang, Department of Computer Science, University of Manitoba.

6. STUDENT'S HONORS AND AWARDS

2016 Sep **International Graduate Student Entrance Scholarship (IGSES)**
University of Manitoba
Jiaying You, MSc student in Department of Electrical and Computer Engineering
Total Amount: \$5,400 CAD

2016 Jul **2016 Charles J. Epstein Trainee Award for Excellence in Human Genetics Research – Semifinalist**
American Society of Human Genetics
Chen Chi, MSc student in Department of Biochemistry and Medical Genetics

2016 Jul **The 66th Annual Meeting of the American Society of Human Genetics Travel Award**
American Society of Human Genetics
Chen Chi, MSc student in Department of Biochemistry and Medical Genetics

Total Amount: \$750 USA

- 2016 May **Mindel and Tom Olenick Research Studentship in Medicine**
University of Manitoba
Chen Chi, MSc student in Department of Biochemistry and Medical Genetics
Total Amount: \$6,256 CAD
- 2016 May **Faculty of Graduate Studies (FGS) Travel Award**
University of Manitoba
Chen Chi, MSc student in Department of Biochemistry and Medical Genetics
Total Amount: \$750 CAD
- 2015 Dec **Globalink Research Internship Award**
Mitacs, Canada
Linfan Zhang. Undergraduate Student in Statistics, Zheijiang University, China
Total Amount: \$6,000 CAD
- 2015 Sep **International Graduate Student Entrance Scholarship (IGSES)**
University of Manitoba
Rasif Ajwad, MSc student in Department of Computer Science
Total Amount: \$5,400 CAD
- 2015 Mar **Computational Biology Undergraduate Summer Student Health Research Award**
Canadian Institutes of Health Research (CIHR), Canada
Jessica Bondoc. Undergraduate Student in Statistics and Computer Science, University of Manitoba
Total Amount: \$5,000 CAD
- 2014 Dec **Globalink Research Internship Award**
Mitacs, Canada
Xiaohui Ding. Undergraduate Student in Mathematics and Statistics, Huazhong University of Science and Technology, China
Total Amount: \$6,000 CAD
- 2014 Dec **Globalink Research Internship Award**
Mitacs, Canada
Masami Ando Kuri. Undergraduate Student in Genome Science, Universidad Nacional Autónoma de México UNAM
Total Amount: \$6,000 CAD
- 2014 Sep **International Graduate Student Entrance Scholarship (IGSES)**
University of Manitoba

Kaiqiong Zhao, MSc student in Department of Biochemistry and Medical Genetics
Total Amount: \$5,400 CAD

G. Teaching

1. GRADUATE TEACHING

2016 Jan – May BGEN 7070 (Credit: 3.0), Special Topics in Human Genetics

2015 Jan – May BGEN 7070 (Credit: 3.0), Special Topics in Human Genetics

2. WORKSHOP

2016 May 25 Pharmacogenomic analysis on cancer studies: methodology and applications
George & Fay Yee Centre for Healthcare Innovation, Winnipeg, Canada
Speaker: Dr. Wei Xu, Princess Margaret Cancer Centre / University of Toronto
Organizer: **Pingzhao Hu**

2016 Jan 25/26 Genomic Variant Annotation and Prioritization with ANNOVAR and wANNOVAR
George & Fay Yee Centre for Healthcare Innovation, Winnipeg, Canada
Speaker: Dr. Kai Wang, University of Southern California
Organizer: **Pingzhao Hu**

2015 May 26/27 Gene Set Analysis of Omics Data
Centre for Healthcare Innovation, Winnipeg, Canada
Speaker: **Pingzhao Hu**
Organizers: **Pingzhao Hu**, Justin Zhang, Ron Beavis

3. GUEST LECTURE

2015 Mar **COMP4360: Machine Learning (Course Lecturer: Dr. Yang Wang).** Machine learning approaches for predicting disease outcomes and protein functions using omics data. Department of Computer Science, University of Manitoba. Winnipeg, Manitoba, Canada.

2014 May **CHL 7001: Statistical Models on Complex Human Genetic Diseases (Course Lecturer: Dr. Wei Xu).** Epigenome-wide analysis identifies DNA methylation markers in adolescents exposed prenatally to maternal cigarette smoking. Division of Biostatistics, Dalla Lana School of Public Health, University of Toronto. Toronto, Ontario, Canada.

4. SUMMER SCHOOL

2016 Jun **Data Analysis and Visualization Using R.** Lecture 3: Feature selection and model evaluation in high throughput studies. George & Fay Yee Centre for Healthcare Innovation, Winnipeg, Manitoba, Canada.

5. JOURNAL CLUB

2014 Oct - Now Organizer of Webinars of CIHR STAGE Monthly International Speaker Seminar Series in the University of Manitoba Site.

H. University Committees and Organizations

2016 Jun Poster Judge of CIHR National Poster Competition at the Health Research Forum

2015 Oct Poster Judge of University Undergraduate Poster Competition

2015 Sep Member of Terry Fox Research Institute Prairie Node, Canada

2015 Aug Chair and Organizer of Summer Student Research Symposium, George & Fay Yee Centre for Healthcare Innovation (CHI), Manitoba

2015 Jun Chair of Mr. Amarnath Pisipati's PhD oral defence in the Department of Medical Microbiology

2014 Dec - Now Member of Biomedical Youth Program (BYP), University of Manitoba

2014 Dec - Now Member of Manitoba Epigenetics Network, University of Manitoba

2014 Oct Poster Judge of University Undergraduate Poster Competition

2014 May Chair of Ms. Meika Elizabeth Ivy Richmond's PhD oral defence in the Department of Medical Microbiology

2014 May Poster Judge of Cancer Care Manitoba Research Day.