

2014 Resource Allocations - Compute Canada Calcul Canada

Institution	Reseacher	Project	Allocation	Market Value
Acadia University	Richard Karsten	Site Characterization for Tidal Energy in Nova Scotia	1 680 000 processor hours 2 TB storage	\$170,650
Baycrest Centre for Geriatric Care	Tomas Paus	Toronto Trans-generational Brain & Body Database (TTBBD)	560 000 processor hours 45 TB storage	\$111,360
Brock University	Stuart Rothstein	Polarons and bipolarons in oligofuran - a quantum Monte Carlo study	320 000 processor hours	\$31,536
	Ping Liang	Systematic identification and characterization of genome structural variants in humans via large scale analysis of personal genome data	630 000 processor hours 170 TB storage	\$271,968
Carleton University	Frank Dehne	High Performance Protein Interaction Prediction (Continuation)	47 300 000 processor hours	\$4,730,400
Centre for Addiction & Mental Health	Mallar Chakravarty	Imaging-genetics using neuroanatomical phenotypes for neuropsychiatric disorders	3 500 000 processor hours 50 TB storage	\$411,840
Concordia University	Marius Paraschivoiu	Aerodynamic Simulations of Vertical Axis Wind Turbines	1 750 000 processor hours	\$175,200
	Guillaume Lamoureux	Computer modeling of metals in proteins	6 750 000 processor hours 5 TB storage	\$680,664
	Gilles Peslherbe	Applications of Quantum Chemistry and Molecular Dynamics Simulations to Materials Solvation and Biophysics	5 610 000 processor hours 7 TB storage	\$569,242
	Ali Dolatabadi	Numerical Simulation of Multiphase Flows	4 560 000 processor hours 5 TB storage	\$461,664
Dalhousie University	Christopher Beaumont	Modelling the three-dimensional dynamics of geologic systems: deformation of sub-sea salt and the exhumation of rocks from deep within the earth.	1 930 000 processor hours	\$192,720
	Randall Martin	Computational Resources to Interpret Satellite Observations of Atmospheric Composition for Air Quality and Climate Applications	14 430 000 processor hours 301 TB storage	\$1,812,641
	Katja Fennel	Biogeochemical simulations of coastal marine environments	1 320 000 processor hours 15 TB storage	\$150,883
École de Technologie Supérieure	Azzeddine Soulaïmani	Modélisation d'écoulements complexes dans les turbines hydrauliques et autour des fuselages d'avions	260 000 processor hours	\$26,280
École Polytechnique	Alain Rochefort	Propriétés électroniques et structurales de matériaux électroactifs	3 240 000 processor hours	\$324,120
	François Bertrand	Modélisation des écoulements de fluides et de solides pour des procédés du génie chimique	10 510 000 processor hours 4 TB storage	\$1,056,115
	Eric Laurendeau	CFD for aircraft stability and control	4 990 000 processor hours 1 TB storage	\$500,549
Hospital for Sick Children	John Parkinson	Functional Interrogation of Microbiomes Through Metatranscriptomics	1 050 000 processor hours 2 TB storage	\$107,578
	Michael Wilson	Multi-species analysis of transcription factor binding sites	10 000 processor hours 4 TB storage	\$5,791
	Régis Pomès	Large-Scale Computational Studies of Biomolecular Structure and Function	87 600 000 processor hours 380 TB storage	\$9,226,944
	Jason Lerch	Using Medical Imaging to Understand the Relationship Between Genetics Development and Disease	20 TB storage	\$25,190
Institut National de la Recherche Scientifique	Steve MacLean	Simulations of extreme laser light source interaction with matter	8 760 000 processor hours	\$876,000
Laurentian University	Chris Jillings	Analysis and Simulation of Data from DEAP-3600	2 100 000 processor hours 200 TB storage	\$456,000
McGill University	Eric Galbraith	Quantifying the global marine ecosystem	2 920 000 processor hours	\$291,708
	Erwin Schurr	Host genetics of mycobacterial disease	330 000 processor hours 15 TB storage	\$51,720

McGill University (cont.)	Eliot Fried	High-resolution a priori and a posteriori studies of regularization models for fluid turbulence	1 310 000 processor hours 2 TB storage	\$133,858
	Bruno Tremblay	Vertical ocean heat and nutrient flux in the Arctic Ocean with application to Arctic climate change	1 450 000 processor hours 10 TB storage	\$156,828
	Yi Huang	Simulating and understanding the variability of the Earth radiation energy budget	2 100 000 processor hours 200 TB storage	\$456,000
	Alan Evans	Canadian Brain Imaging Research Network (CBRAIN)	4 770 000 processor hours 59 TB storage	\$549,919
	Srikar Vengallatore	Design of Resonant Nanomachines for Applications in the Classical and Quantum Regimes	1 360 000 processor hours	\$135,780
	Nicolas Moitessier	Development of computational methods for drug discovery	1 050 000 processor hours	\$105,120
	Daniel Kirshbaum	Large-eddy simulation of topographically forced convective clouds	480 000 processor hours 3 TB storage	\$51,866
	Peter Bartello	Atmospheric and oceanic mixing by rotating stratified turbulence	2 100 000 processor hours	\$210,486
	Jacek Majewski	Next Generation Sequencing Applications in Human Health	1 450 000 processor hours 155 TB storage	\$335,004
	Hong Guo	Quantum Transport Modeling from Atomic First Principles	18 920 000 processor hours	\$1,892,160
	Linda Reven	Density functional theory calculations of halide ions on Au gold surfaces: Understanding shape evolution of Au nanoprisms	700 000 processor hours	\$70,080
	Kirk Bevan	Computational Design of Nanoelectronic Materials	1 050 000 processor hours 3 TB storage	\$108,806
	Jun Song	Nanoscale Mechanics and Physics of Defects in Materials	6 790 000 processor hours 3 TB storage	\$682,586
	Victoria Kaspi	Large-Scale Searches for Radio Pulsars	9 070 000 processor hours 55 TB storage	\$974,244
	Gil Holder	South Pole Telescope Data Analysis and Simulations	1 010 000 processor hours	\$100,740
	Sangyong Jeon	Comprehensive Investigation of Quark-Gluon Plasma in Relativistic Heavy Ion Collisions	8 760 000 processor hours 100 TB storage	\$998,880
	Guillaume Bourque	Large-scale processing and sharing of genomic and genetic data	12 610 000 processor hours 770 TB storage	\$2,207,616
	Siva Nadarajah	Unstructured High-Order Schemes for LES and Adjoint-Based Optimization of Multistage Turbomachinery	2 630 000 processor hours	\$262,800
	David Straub	Energetics of ocean circulation	2 280 000 processor hours 18 TB storage	\$249,878
	Sylvain Baillet	The role of nested oscillations in shaping long-range coupling in the human brain.	1 230 000 processor hours	\$122,640
	Timothy Merlis	Atmospheric circulations and climate change	530 000 processor hours 5 TB storage	\$58,704
	Constantin Polychronakos	Next-generation sequencing study on the T-cell receptor	530 000 processor hours 2 TB storage	\$55,018
	Carl Ernst	Psychiatric Genetics	1 580 000 processor hours 100 TB storage	\$280,560
	Wagdi Habashi	High Performance CFD for Multiphysics Analysis and Design of Aerospace and Civil Systems	9 370 000 processor hours	\$937,320
	Tomi Pastinen	High-throughput assessment of genetic and epigenetic population variation	390 000 processor hours 90 TB storage	\$150,012
	Luc Mongeau	Aero/Thermo-acoustic flow simulation using advanced numerical methods and high performance computing	3 150 000 processor hours 180 000 GPU hours 8 TB storage	\$512,830
	Jeffrey Bergthorson	High-fidelity simulations of flame propagation and pollutant formation for novel combustor design tool development	2 210 000 processor hours 2 TB storage	\$223,824

McGill University (cont.)	Man Kong Yau	Simulation of hurricanes	2 100 000 processor hours 55 TB storage	\$277,824
	Shirin Enger	Estimating dose variations in radiotherapy due to subcellular compartment sizes	1 580 000 processor hours	\$157,680
McMaster University	Bartosz Protas	Computational Exploration of Extreme Events in Fluid Mechanics	490 000 processor hours	\$49,056
	Ralph Pudritz	Simulating the formation of star clusters in galaxies	2 250 000 processor hours 20 TB storage	\$250,058
	Alison Sills	Large-Scale Simulations of the Dynamical Evolution of Globular Clusters	360 000 processor hours 2 TB storage	\$39,338
	Nicholas Kevlahan	Ultra high resolution adaptive wavelet simulation of ocean flows on the sphere	1 370 000 processor hours	\$137,182
	John Preston	Metal/semiconductor to oxide interfaces structure and heteroepitaxial growth modes	420 000 processor hours	\$42,048
	Jeffrey Hoyt	Atomistic Simulations of Interfaces in Materials	740 000 processor hours	\$73,584
	Paul Ayers	Tools for Modelling Molecular Structures and Reactivity	2 720 000 processor hours	\$271,998
	Nikolas Provatas	Phase Field Crystal Modeling of Recrystallization in Engineering Alloys	7 010 000 processor hours	\$700,800
	Stephen Tullis	Modeling wind turbine aerodynamics	630 000 processor hours 10 TB storage	\$75,360
	Hugh Couchman	MUGS2	3 500 000 processor hours	\$350,400
	James Wadsley	Molecular Cloud Formation in Galactic Discs	5 610 000 processor hours	\$560,640
Memorial University of Newfoundland	Christopher Rowley	Method Development for Computational Biophysical Chemistry	6 670 000 processor hours 160 000 GPU hours	\$832,200
	John Whitehead	Modelling and Simulation of Magnetic Materials on the Nanoscale	1 050 000 processor hours	\$105,366
	Entcho Demirov	Model study of interannual and decadal variability in the Subpolar North Atlantic	700 000 processor hours 4 TB storage	\$74,995
	Erika Merschrod	Optical response of sensor films	700 000 processor hours	\$70,080
Ouranos	Anne Frigon	Production d'un ensemble de simulations climatiques régionales à très haute résolution à Ouranos	3 500 000 processor hours 25 TB storage	\$381,120
Perimeter Institute for Theoretical Physics	Luis Lehner	Modeling General Relativistic Astrophysics: neutron stars and black holes	4 910 000 processor hours 20 TB storage	\$515,136
	Kendrick Smith	Cosmology from the microwave background and large-scale structure	450 000 processor hours	\$44,940
Queen's University	Art McDonald	DEAP and other SNOLAB Particle Astrophysics	4 100 000 processor hours	\$409,968
	Tucker Carrington	Refining a potential surface for methane and computing a rovibrational spectrum of CH ₅ ⁺	440 000 processor hours 5 TB storage	\$49,944
	Ugo Piomelli	Numerical simulation of turbulent flows	5 380 000 processor hours	\$538,214
	Nicholas Mosey	Simulations of Molecules and Materials Under High Stresses	3 370 000 processor hours	\$337,260
Royal Military College of Canada	Xiaohua Wu	Very-large-scale data-intensive direct numerical simulation of aeronautical fluid mechanics problems	5 120 000 processor hours 80 TB storage	\$609,888
Ryerson University	Seth Dworkin	Parallel Simulation and Model Development of Pollutant Formation in Biofuel Combustion	19 120 000 processor hours	\$1,912,483
	Ali Lohi	Modeling/Simulation of the Circulating Fluidized Bed for Biomass Gasification	260 000 processor hours	\$26,280
Simon Fraser University	George Kirzenow	Theoretical Studies of Nanoscale Systems	2 630 000 processor hours	\$262,800
	Fiona Brinkman	Bioinformatics for Combating Infectious Disease	530 000 processor hours 60 TB storage	\$126,288
	Peter Borwein	IRMACS	1 770 000 processor hours 12 TB storage	\$192,312
	Michael Eikerling	Computational Modeling of Electrochemical Materials for Energy Conversion and Storage	1 680 000 processor hours	\$168,192
	Mirza Faisal Beg	Computational Biomarkers for detection of Alzheimer's disease	700 000 processor hours 300 TB storage	\$438,720

Simon Fraser University (cont.)	Noham Weinberg	Theoretical studies of kinetic effects of high pressure	1 840 000 processor hours 30 TB storage	\$220,824
	Anoop Sarkar	Machine Learning for Statistical Machine Translation from Large Scale Data	210 000 processor hours 75 TB storage	\$113,184
	B. Mario Pinto	MD Simulations of Protein-Ligand Interactions	1 890 000 processor hours 110 000 GPU hours 3 TB storage	\$303,278
TRIUMF	Reda Tafirout	The ATLAS Experiment: Investigation of Fundamental Interactions and the Structure of Matter by the Study of Very High Energy proton-proton Collisions at the CERN Large Hadron Collider	27 390 000 processor hours 3041 TB storage	\$6,476,033
	Andy Miller	Biological radiation shield design for the new Ultra-Cold neutron facility at TRIUMF	1 580 000 processor hours	\$157,680
Université de Montréal	Philip Awadalla	Medical and Population Genomics of Disease Variation	960 000 processor hours	\$96,360
	Daniel Sinnott	Genetic and Genomic Determinants of Childhood Leukemia	1 050 000 processor hours 81 TB storage	\$204,653
	Normand Mousseau	Simulations de systèmes complexes : des matériaux aux protéines amyloïdes	6 220 000 processor hours	\$621,960
	Yoshua Bengio	Deep Learning Algorithms	3 550 000 processor hours 80 000 GPU hours 36 TB storage	\$481,799
	Paul Charbonneau	Simulation magnétohydrodynamique de la convection solaire	6 310 000 processor hours 4 TB storage	\$635,635
	Marie-Pierre Dube	Next Generation Gene Sequencing Data Analysis	700 000 processor hours	\$70,080
	Laurent Lewis	Physical properties of advanced materials - from the atom to large-scale structures	1 890 000 processor hours	\$189,216
	Michel Côté	Calculs de structure électronique pour l'étude de matériaux quantiques.	5 910 000 processor hours	\$591,300
	Radu Iftimie	Molecular mechanism of acid-base reactions in chemistry and biochemistry	3 500 000 processor hours 6 TB storage	\$357,773
	Pierre Lafaye de Micheaux	Statistical tools for imaging-genetics	260 000 processor hours	\$26,280
	Benjamin Haibe-Kains	Network inference for drug repositioning and IRCM Bioinformatics Core Facility	260 000 processor hours 20 TB storage	\$50,856
	Luis Barreiro	Mapping eQTLs that affect susceptibility to bacterial infections.	440 000 processor hours 25 TB storage	\$74,520
	Guy Rouleau	High Throughput Sequencing	1 050 000 processor hours 147 TB storage	\$285,754
	Hervé Philippe	Phylogénomique et usage des codons chez les virus	9 900 000 processor hours	\$990,126
Université de Sherbrooke	Pierre Harvey	Polymers and molecular assemblies for photonic applications	2 010 000 processor hours	\$201,480
	David Sénéchal	Quantum cluster methods for strongly correlated solids	960 000 processor hours	\$96,360
	Martin Aubé	Modélisation de la contribution et sensibilité à la pollution lumineuse pour plusieurs sites internationaux	840 000 processor hours	\$84,096
	André-Marie Tremblay	Strongly correlated superconductivity	11 040 000 processor hours 2 TB storage	\$1,106,709
	Andre Dieter Bandrauk	FAZST-FemtoAttoZeptoSecond Science and Technology	61 320 000 processor hours 60 TB storage	\$6,205,728
	Pierre Proulx	Modélisation mathématique de réacteurs multiphasés	530 000 processor hours 4 TB storage	\$57,475
	Claude Legault	Computational Organic Chemistry : Understanding the origin of selectivity	700 000 processor hours	\$70,080
	Alexandre Morin	Simulations Monte Carlo	1 270 000 processor hours 1 TB storage	\$128,249
	Elijah Van Houten	Elastography: Imaging Elastic Properties in Soft Tissue	610 000 processor hours	\$61,320
	Noureddine Atalla	Modélisation de la réponse vibroacoustique et aéroacoustique de structures complexes multimatériaux	880 000 processor hours 7 TB storage	\$96,202

Université de Sherbrooke (cont.)	Hugo Larochelle	Réseaux de neurones profonds pour données structurées	3 550 000 processor hours 210 000 GPU hours	\$575,532
	Pierre Lavigne	Étude du paysage énergétique du récepteur AT1 et de la liaison de ligands biaisés	1 230 000 processor hours	\$122,640
	Pierre-Étienne Jacques	Genetics and Genomics data analysis	390 000 processor hours	\$39,420
	Armand Soldera	Simulation multi-échelles de transitions de phases au sein de la matière molle	2 980 000 processor hours 15 TB storage	\$316,272
	Claude Bourbonnais	Application du groupe de renormalisation aux propriétés des systèmes électroniques quasi-unidimensionnels	530 000 processor hours	\$52,560
	Stéphane Moreau	Direct noise predictions for transport applications	20 500 000 processor hours 45 TB storage	\$2,105,136
	Martin Désilets	Modélisation de systèmes électrochimiques et de caloducs	440 000 processor hours 10 TB storage	\$56,088
Université du Québec à Montréal	Simon Guillotte	Estimation Nonparamétrique Bayésienne de Fonctions	1 050 000 processor hours 1 TB storage	\$106,349
	Laxmi Sushama	Regional climate modelling and process studies	10 510 000 processor hours 150 TB storage	\$1,235,520
	Alessandro Forte	Numerical Modelling of Thermal Convection in the Earth's Mantle	6 040 000 processor hours 2 TB storage	\$606,898
	Pierre Gauthier	Application of data assimilation to model validation	790 000 processor hours 45 TB storage	\$134,136
Université Laval	Christian Gagné	Ingénierie de systèmes intelligents distribués	660 000 processor hours	\$65,700
	Michel Piché	Accélération d'électrons à l'aide d'impulsions laser ultrabrèves et fortement focalisées à polarisation radiale	1 310 000 processor hours	\$131,400
	Luc Beaulieu	Effet des hétérogénéités dans les calculs de dose en radiothérapie en imagerie et en thérapie interne	1 840 000 processor hours	\$183,960
	Faiçal Larachi	Collector's selection and optimization to account for ores mineralogy in flotation processes	530 000 processor hours	\$52,560
	Guy Dumas	CFD for green energy production systems	2 670 000 processor hours 22 TB storage	\$294,214
	Patrick Lagüe	Computational studies of membrane-peptide interactions and functional mechanisms	3 640 000 processor hours	\$363,540
	Hugo Martel	Formation and evolution of galaxies.	1 230 000 processor hours	\$122,640
	Marcel Babin	Estimation of particulate organic carbon in the Mackenzie River plume using MODIS: time series analysis	260 000 processor hours 10 TB storage	\$38,568
	André Fortin	Chaire de calcul scientifique de haute performance	960 000 processor hours	\$96,360
	Jacques Corbeil	Meta omic research including machine learning implementations in infectious diseases	4 560 000 processor hours 60 TB storage	\$529,248
	Louis J. Dubé	Complex Systems Simulations: Photonics and Networks	1 050 000 processor hours	\$105,120
	Arnaud Droit	Computational biology resources for Early Detection of Breast Cancer	610 000 processor hours 36 TB storage	\$105,557
	Claire Deschenes	Numerical and experimental investigations of low-head turbines hydrodynamic for generation of greener hydro-electricity	3 110 000 processor hours	\$310,980
University Health Network	Frances Skinner	Neuron and Network Models in Hippocampus	3 410 000 processor hours 5 TB storage	\$346,908
University of Alberta	Lesley Harrington	Micro-CT of archaeological human dentitions from Later Stone Age sites in South Africa	15 TB storage	\$18,432
	Gane Ka-Shu Wong	1000 Plants and "Viral Discovery"	670 000 processor hours 11 TB storage	\$80,093
	Richard Marchand	Spacecraft - environment modelling	3 070 000 processor hours	\$306,600
	Paul Myers	Ocean/Sea-Ice Modelling for Studies of the Canadian North and Marine Forecasting	350 000 processor hours 23 TB storage	\$63,302

University of Alberta (cont.)	Jonathan Kertzer	Application	16 TB storage	\$19,661
	Sushanta Mitra	High Resolution Simulations of Droplet Coalescence in Shear	350 000 GPU hours 2 TB storage	\$370,992
	Duane Szafron	Computer Poker Research 2014	5 260 000 processor hours 6 TB storage	\$532,358
	Natalia Ivanova	Interacting stars	680 000 processor hours 320 000 GPU hours 1 TB storage	\$400,685
	Paul Stothard	Using whole genome sequencing to develop more effective tools for cattle breeding	55 TB storage	\$67,584
	Andriy Kovalenko	Multiscale theory modeling and simulation for rational design in nanochemistry nanoelectronics nanomaterials energy and health applications	14 150 000 processor hours 130 000 GPU hours 47 TB storage	\$1,605,120
	Thian Yew Gan	Intensity-Duration-Frequency (IDF) curves of Edmonton and (2) Possible Climate Change impact to Nile River Basin of Africa	13 TB storage	\$15,974
	Martin Mueller	Massively Parallel Depth-first Monte Carlo Tree Search and Applications	1 050 000 processor hours	\$105,132
	Yunjie Xu	Spectral Signatures of Chirality and Chirality Recognition	2 000 000 processor hours	\$199,728
	Darren Grant	IceCube data analysis and PINGU Monte Carlo simulation	3 500 000 processor hours 560 000 GPU hours 30 TB storage	\$975,936
	Martyn Unsworth	3-D imaging of Earth structure using magnetotellurics	840 000 processor hours	\$84,096
	Andrew Bush	Regional climate modeling with applications to alpine glaciers in the Canadian Cordillera the Andes and the Himalaya	24 TB storage	\$29,491
	Jos Derksen	Simulations of dispersion formation in liquid-liquid turbulent flows	1 580 000 processor hours	\$157,680
	Robert Fedosejevs	Laser Fusion Energy - Fast Ignition and Shock Ignition	2 440 000 processor hours 35 TB storage	\$287,132
	Moritz Heimpel	Modelling planetary fluid flow and magnetic field generation	2 800 000 processor hours 25 TB storage	\$311,040
	Alex Brown	Designing new biofluorophores and materials	2 100 000 processor hours	\$210,240
	Michael Houghton	Design of Highly Specific and Effective Viral Polymerase Inhibitors by Screening for Off-Target Interactions with Human Polymerases	2 390 000 processor hours 4 TB storage	\$243,800
	Gino DiLabio	New Density-Functional Theory Based Methods for the Simulation of Nanosystems	3 000 000 processor hours	\$299,592
	Robert Driver	Progressive Collapse Resistance of Steel Structures	1 580 000 processor hours 4 TB storage	\$162,595
	David Westaway	Prion Disease pathogenesis and the Centre for Prions and Protein Folding Diseases	23 TB storage	\$28,262
	Mathieu Dumberry	Quasi-Geostrophic models of convection in planetary interiors	700 000 processor hours 1 TB storage	\$71,309
	Satyapal Rathee	Radiation Dose Calculation in inhomogenous media with applied magnetic field	420 000 processor hours 5 TB storage	\$48,192
	Andriy Nahachewsky	Ukrainian Cultural Heritage Repository (UCHR)	15 TB storage	\$18,432
	Robert Grant	Development and Application of the Terrestrial Ecosystem Model ecosys	210 000 processor hours 2 TB storage	\$24,096
	Gabriel Hanna	Ab initio molecular dynamics studies of carbonic acid in different aqueous environments	1 160 000 processor hours	\$115,632
	Frederick West	Transition State Modelling for Ammonium Ylides and the Nazarov Reaction	530 000 processor hours	\$52,560
	Tian Tang	Multi-scaling Modeling and Simulation of Nano-biomolecular Hybrid Materials	1 580 000 processor hours	\$157,680
	Witold Krzymien	Efficient Signal Processing and Radio Resource Management for Broadband Heterogeneous MIMO Cellular Networks	630 000 processor hours	\$63,072
	Carsten Krauss	Neutrino Physics and Dark Matter Search at SNOLAB with SNO+ and PICO	1 490 000 processor hours 84 TB storage	\$251,525

University of British Columbia	Gren Patey	Molecular Level Simulations of Complex Physical Systems	5 260 000 processor hours	\$525,600
	Matthew Choptuik	Studies in numerical relativity	1 580 000 processor hours 39 TB storage	\$205,603
	Holger Hoos	Programming by Optimisation: Automated Configuration and Selection of Algorithms for Challenging Computational Problems	5 260 000 processor hours	\$525,600
	Gregory Lawrence	Modeling of stratified flow instabilities at high Reynolds and Prandtl numbers	30 TB storage	\$36,864
	Leonard Foster	Protein complex atlas of mouse tissues	15 TB storage	\$18,432
	Hirohisa Tanaka	Computing for the T2K Neutrino Oscillation Experiment	5 360 000 processor hours 180 TB storage	\$757,296
	Ludovic Van Waerbeke	Weak Lensing N-body Simulations for KiDS and RCS2 Surveys	75 TB storage	\$92,160
	Douglas Bryman	Rare Decay Experiments and Applied Physics Projects	260 000 processor hours 270 TB storage	\$358,056
	Erik Rosolowsky	Calibrating Simulations of Star Formation	1 470 000 processor hours 27 TB storage	\$180,346
	Quentin Cronk	PopCan: large scale genomic research on poplar	35 TB storage	\$43,008
	Steven Plotkin	Computational approaches to protein misfolding protein evolution and lead compound design	3 150 000 processor hours 14 TB storage	\$332,563
	Kris Sigurdson	Computing for the Canadian Hydrogen Intensity Mapping Experiment (CHIME)	5 060 000 processor hours 215 TB storage	\$770,345
	Philip Austin	Large eddy simulations of cloud entrainment and detrainment	980 000 processor hours	\$98,726
	Matthias Militzer	Quantum mechanical/molecular mechanical simulations of grain boundaries	500 000 processor hours	\$50,458
	Corey Nislow	Precision Pharmacogenomics	50 TB storage	\$61,440
	Ingrid Stairs	Renewal of Radio Telescope Pulsar Data Repository - 2014	13 TB storage	\$15,974
	Steven Hallam	Global scale metabolic pathway reconstruction from environmental genomes	6 200 000 processor hours 3 TB storage	\$623,894
	William Hsiao	Public Health Microbial Genomics and Metagenomics	790 000 processor hours 50 TB storage	\$140,280
	Loren Rieseberg	Assembly of Sunflower Genome	130 000 processor hours 10 TB storage	\$24,902
	Joseph Henrich	The co-evolution of brain size and cultural complexity: explaining the human brain expansion during the Pleistocene	710 000 processor hours 12 TB storage	\$85,702
University of Calgary	Tom Ziegler	The development of new density functional based methods and their application to catalysis	880 000 processor hours	\$87,600
	Peter Tieleman	Computational studies of biological membranes	55 190 000 processor hours 250 000 GPU hours 205 TB storage	\$6,037,446
	Peter Vize	Xenbase genomic systems	10 TB storage	\$12,288
	Dennis Salahub	Towards the multiscale modeling of (bio)catalytic systems	15 770 000 processor hours	\$1,576,800
	Eric Donovan	Remote Sensing the Near Earth Space Environment	120 TB storage	\$147,456
	Sergei Noskov	MULTI-SCALE MODELS OF MEMBRANE TRANSPORT	25 320 000 processor hours 150 TB storage	\$2,715,960
	Russ Taylor	CyberSKA and the GALACTIC ALFA Continuum Transit Survey	770 000 processor hours 130 TB storage	\$237,007
	Arvi Rauk	Research into the chemistry of Alzheimer's disease	1 940 000 processor hours 17 TB storage	\$215,362
	Carey Williamson	Backup Storage for ELISA Networking Lab	25 TB storage	\$30,720
University of Guelph	Susan Brown	30TB Storage for the Canadian Writing Research Collaboratory	30 TB storage	\$36,864
University of Lethbridge	Stacey Wetmore	DNA Damage and Repair: From Conformational Heterogeneity to Repair Mechanisms	1 090 000 processor hours 250 000 GPU hours 19 TB storage	\$389,515

University of Lethbridge (cont.)	Hans-Joachim Wieden	Communication and signal transmission in ribosome-dependent molecular switches	390 000 processor hours 18 TB storage	\$60,662
University of Manitoba	Michelle XiaoQing Liu	Genetic analysis of autism spectrum disorders	28 TB storage	\$33,792
	Jesko Sirker	Quantum dynamics out of equilibrium	1 420 000 processor hours	\$141,912
	Scott Ormiston	Computational Fluid Dynamics Analysis of Two-phase and Supercritical Water Flows	590 000 processor hours 2 TB storage	\$61,325
	H. Georg Schreckenbach	Quantum Chemistry Applied to Solar and Nuclear Energy Problems	1 050 000 processor hours	\$105,120
	Bing-Chen Wang	Large-Eddy Simulation of Turbulent Scalar Transport in Boundary-Layer Flows	2 100 000 processor hours 10 TB storage	\$222,528
	David Kuhn	Direct Numerical Simulation of Hemodynamics in Abdominal Aortic Aneurysms	660 000 processor hours 3 TB storage	\$69,386
	David Barber	Nucleus for European Modelling of the Ocean (NEMO) and its use in the ArcticNet Integrated Regional Impact Study (IRIS) process	350 000 processor hours 8 TB storage	\$44,520
University of Northern British Columbia	Brian Menounos	High Performance Computing for Cyrospheric Science	880 000 processor hours 60 TB storage	\$162,029
University of Ontario Institute of Technology	Isaac Tamblyn	The water electrode interface	6 310 000 processor hours 2 TB storage	\$633,178
University of Ottawa	Thomas Brabec	Ab initio modelling of light-matter interaction	880 000 processor hours 10 TB storage	\$99,888
	Vladimir Pestov	A new classifier for large-scale genomic data based on the mass transportation distance	140 000 processor hours 25 TB storage	\$44,736
	Lora Ramunno	Computational electrodynamics for ultrafast laser-matter interaction	6 310 000 processor hours	\$630,720
	Tom Woo	Virtual Screening of Advanced Materials for Clean Energy Applications	3 330 000 processor hours 15 TB storage	\$351,662
University of Saskatchewan	Yuanming Pan	Theoretical modeling of paramagnetic defects in minerals and other materials	3 500 000 processor hours	\$350,400
	Doug Degenstein	Atmospheric Species Retrievals From Limb Scattered Sunlight Data Collected by the Canadian OSIRIS Satellite Instrument	2 630 000 processor hours	\$262,800
	Howard Wheeler	Saskatchewan River Basin: a large scale observatory for new water science	12 TB storage	\$14,746
	Raymond Spiteri	Towards real-time heart simulation	1 120 000 processor hours	\$112,128
	John Tse	Computational Materials Science	4 120 000 processor hours	\$411,720
	Barbara Szpunar	MODELING PROPERTIES OF NUCLEAR MATERIALS	1 050 000 processor hours 2 TB storage	\$107,578
	Kathryn McWilliams	SuperDARN International Data Distribution Facility	35 TB storage	\$43,008
	Tomasz W. Wysockinski	The Biomedical Imaging and Therapy Beamlines Facility at the Canadian Light Source	30 TB storage	\$36,864
	Richard Bowles	Theory and Simulation of Soft Condensed Matter	850 000 processor hours 9 TB storage	\$95,856
	Igor Morozov	Data maintenance at the University of Saskatchewan Seismic Research Lab	3 TB storage	\$3,686
	Chris Soteris	Lattice models of polymer entanglements and applications to DNA topology	560 000 processor hours 20 TB storage	\$80,026
	Alexander Moewes	Probing new materials with Density Functional calculations and synchrotron-based spectroscopy	1 770 000 processor hours 1 TB storage	\$178,619
	Jerzy Szpunar	First Principles Simulation of Thermal Conductivity	840 000 processor hours	\$84,096
University of Toronto	Hue Sun Chan	Order and Disorder in Protein Folding and Interactions	4 260 000 processor hours	\$425,736
	Ulrich Fekl	Discovering New Catalysts and New Materials using Density Functional Theory	390 000 processor hours	\$38,544
	John Polanyi	Atomic Motions Underlying Chemical Reaction	2 430 000 processor hours	\$242,652
	Joaquim Martins	High-Fidelity Multidisciplinary Design Optimization for the Next Generation of Aircraft	2 230 000 processor hours	\$223,380
	John Dubinski	Two Studies of the Formation of Dynamical Systems: The Origins of the Moon and Elliptical Galaxies	1 310 000 processor hours	\$131,400

University of Toronto (cont.)	David Steinman	Prevalence and Importance of "Turbulent" Flows in Cerebral Aneurysms	1 710 000 processor hours 45 TB storage	\$226,379
	Hans-Arno Jacobsen	Large-Scale Publish/Subscribe-Based Event Processing and Content Dissemination	590 000 processor hours	\$58,867
	David Zingg	High-Fidelity Numerical Optimization for Future Aircraft Design	37 670 000 processor hours 5 TB storage	\$3,772,944
	Sabine Stanley	Numerical Simulations of Planetary Dynamos	1 970 000 processor hours 31 TB storage	\$235,018
	Francis Dawson	Quantum Mechanical Modelling of the Electrode/Electrolyte Interface	5 210 000 processor hours 3 TB storage	\$524,906
	Raymond Kapral	Dynamics of Chemically Powered Nanomotors and Protein Machines	2 720 000 processor hours 120 000 GPU hours 8 TB storage	\$405,563
	Chandra Veer Singh	Computational Materials Science	3 780 000 processor hours 35 TB storage	\$421,440
	Paul Kushner	Cryosphere-Climate Interactions Decadal Prediction and Atmospheric Composition: A Community Climate Model Approach	4 800 000 processor hours 76 TB storage	\$574,139
	William Navarre	Predicting the mechanism of H-NS binding to DNA	1 400 000 processor hours	\$140,160
	Aimy Bazylak	High-performance computing to investigate multiphase transport in porous media for clean energy technologies and processes	2 400 000 processor hours	\$240,199
	J. Richard Bond	The Early Universe and Large Cosmic Structures	8 670 000 processor hours 35 TB storage	\$910,248
	Edward Sargent	Computational design of materials and device architectures for thin-film optoelectronic devices	5 910 000 processor hours 1 TB storage	\$592,529
	Harald Pfeiffer	Compact object simulations in support of Gravitational Wave Astronomy	29 490 000 processor hours 20 TB storage	\$2,974,068
	Clinton Groth	Multi-Scale Adaptive Modelling and Numerical Methods for Turbulent Reactive Flows	31 540 000 processor hours 50 TB storage	\$3,215,040
	Norman Murray	Galaxy Star and Planet Formation	3 770 000 processor hours	\$376,680
	ALberto Leon-Garcia	Large-Scale Smart Transportation Modeling and Control Algorithms for the GTHA network	1 360 000 processor hours	\$135,605
	Hae-Young Kee	Discovery of New Quantum Materials	1 400 000 processor hours	\$140,160
	Cristina Amon	Nanoscale Thermal Transport in 2D Nanomaterials	6 130 000 processor hours 39 TB storage	\$660,510
	Ue-Li Pen	Computational Cosmology	19 250 000 processor hours 10 TB storage	\$1,937,386
	Richard Peltier	Atmospheric and Geophysical Fluid Dynamics	24 090 000 processor hours 400 TB storage	\$2,900,520
University of Victoria	Andrew Weaver	Research using The UVic Earth System Climate Model	130 000 processor hours	\$13,140
	Ben Koop	Genomics in Fish Biology	880 000 processor hours 10 TB storage	\$99,888
	Randy Sobie	Belle-II HEP Experiment	1 400 000 processor hours 40 TB storage	\$189,312
	Irina Paci	Self-assembly and properties of complex materials	3 740 000 processor hours	\$373,526
	Caren Helbing	Informatics on Sentinels of the Environment (INFO-SENSE)	350 000 processor hours 12 TB storage	\$49,786
	Boualem Khouider	Stochastic and deterministic parameterizations for clouds and precipitation processes and their impact on the climate system	3 150 000 processor hours 31 TB storage	\$353,453
	Arif Babul	Computing the Universe: Unified Modeling of the Evolution of Galaxies and Hot Diffuse X-ray Emitting Gas in Cluster Environments	6 310 000 processor hours	\$630,720
	Falk Herwig	Multi-physics simulations of the origin of the elements	4 790 000 processor hours 57 TB storage	\$549,389

University of Victoria (cont.)	Christopher Pritchett	Canadian Advanced Network for Astronomical Research	5 760 000 processor hours 1330 TB storage	\$2,210,362
	Benoît Pirene	Ocean Networks Canada Data Stewardship	150 TB storage	\$184,320
	Juergen Ehling	Quantitative transcriptome analysis in Douglas fir.	220 000 processor hours	\$21,725
	Olaf Niemann	Multisensor Data Integration and Modelling.	45 TB storage	\$55,296
	Ned Djilali	Modeling of PEM Fuel Cells Transport in Complex Porous Media and Hydrogen Dispersion	420 000 processor hours 15 TB storage	\$60,480
University of Waterloo	Hans De Sterck	Large-Scale Simulation of Planetary Environments using Cubed-Sphere Grids	3 330 000 processor hours 9 TB storage	\$343,939
	Scott Hopkins	Determining the Chemical and Physical Properties of Nanoclusters	2 100 000 processor hours	\$210,240
	Roger Melko	Simulations of Entanglement in Quantum Many-Body Systems	3 240 000 processor hours	\$324,120
	James E. Taylor	Dark and Luminous Matter in Galaxy Clusters	1 050 000 processor hours	\$105,120
	Khuzaima Daudjee	Evaluation of a library for parallel recursive backtracking	6 570 000 processor hours 1 TB storage	\$658,229
University of Western Ontario	Styliani Conostas	Macromolecular Ion-Solvent Interactions in Droplets and Bulk Solution	1 310 000 processor hours	\$131,400
	Mikko Karttunen	Simulating Biomolecules at Interfaces	35 040 000 processor hours 50 TB storage	\$3,565,440
University of Windsor	Robin Gras	Analysis of an artificial evolving ecosystem	1 970 000 processor hours 81 TB storage	\$296,633
	James Gauld	Using Multi-Scale Computational Enzymology to Elucidate the Chemistry Properties and Power of Biocatalysts and Important Biomolecules	2 630 000 processor hours	\$262,800
University of Winnipeg	Seyed Moghadas	Strategies for Protecting Vulnerable Canadian Populations from Emerging Infectious Diseases	7 010 000 processor hours 30 TB storage	\$737,664
Wilfrid Laurier University	Ian Hamilton	Gold Nanostructures and Clusters Toxic metals in the Environment	530 000 processor hours	\$52,560
York University	Yongsheng Chen	Ensemble Methods for Storm Prediction and Regional Climate Simulation	1 580 000 processor hours	\$157,680
			1 162 460 000 processor hours 2 720 000 GPU hours 12 442 TB storage	\$134,373,362