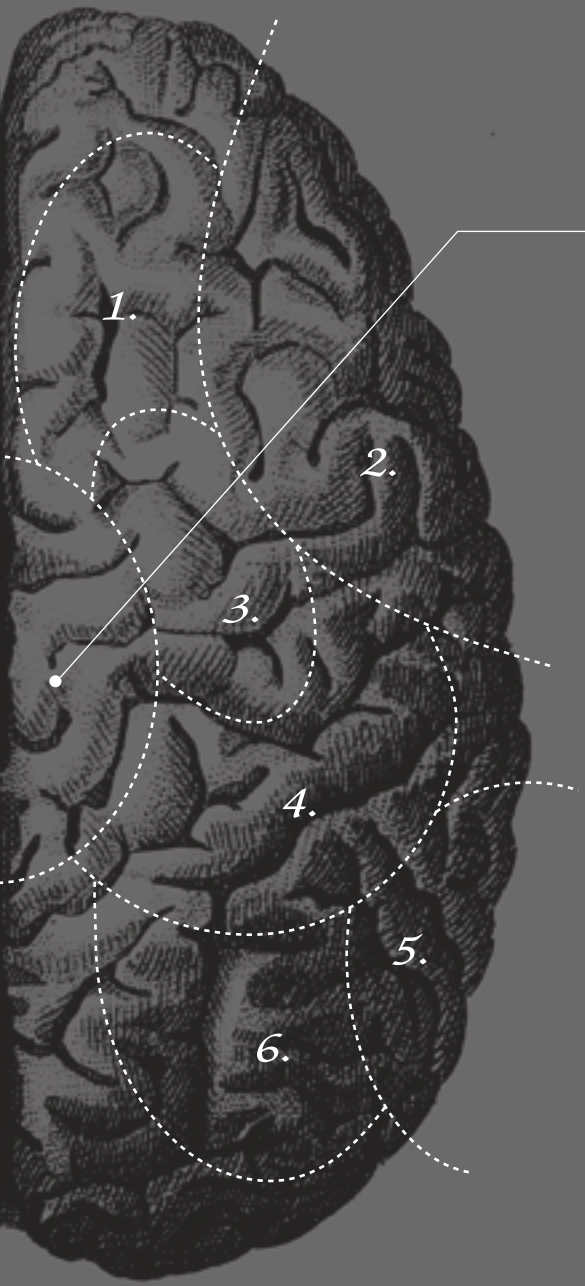


iCORE YEAR IN REVIEW 2002-03

fig. 1

SIGNIFICANT ACHIEVEMENTS

1. 13 research teams are in place, which include 34 faculty members and 179 graduate students and postdoctoral fellows.

2. An additional 138 of Canada's best graduate students (recipients of federal Natural Sciences and Engineering Research Council [NSERC] awards) are currently funded by iCORE and 290 have been supported to date.

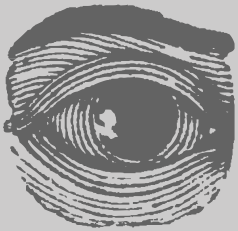
3. Alberta's percentage of Canada's NSERC graduate student awards in information and communications technology (ICT) has increased from 12% when we started in 1999-2000 to 24% in 2002-03 – a doubling in three years. Alberta now attracts one quarter of Canada's best graduate students in ICT.

4. iCORE has granted $27.8 million in awards. This funding has attracted an additional $71 million to date where an iCORE Chair has been the prime investigator ($30.2 million federal, $18.4 million provincial, $22.4 million industry), and $120.6 million where the iCORE Chair has been a significant contributing influence ($60.2 million federal, $60 million provincial, $0.4 million industry).

5. iCORE Chairs and their teams have created substantial intellectual property in the form of research papers, patents, and partnerships.

6. iCORE Chairs hold six Canada Research Chairs, have held three Steacie Memorial Fellowships, two are fellows of the Institute of Electrical and Electronics Engineers (IEEE), one is a fellow of the American Association for Artificial Intelligence (AAAI), and two have been inducted into the Royal Society of Canada.

A CLEAR FOCUS,



CREATING A RESPONSIVE PROCESS, BUILDING A CRITICAL MASS, AND DEVELOPING EXTENSIVE PARTNERSHIPS

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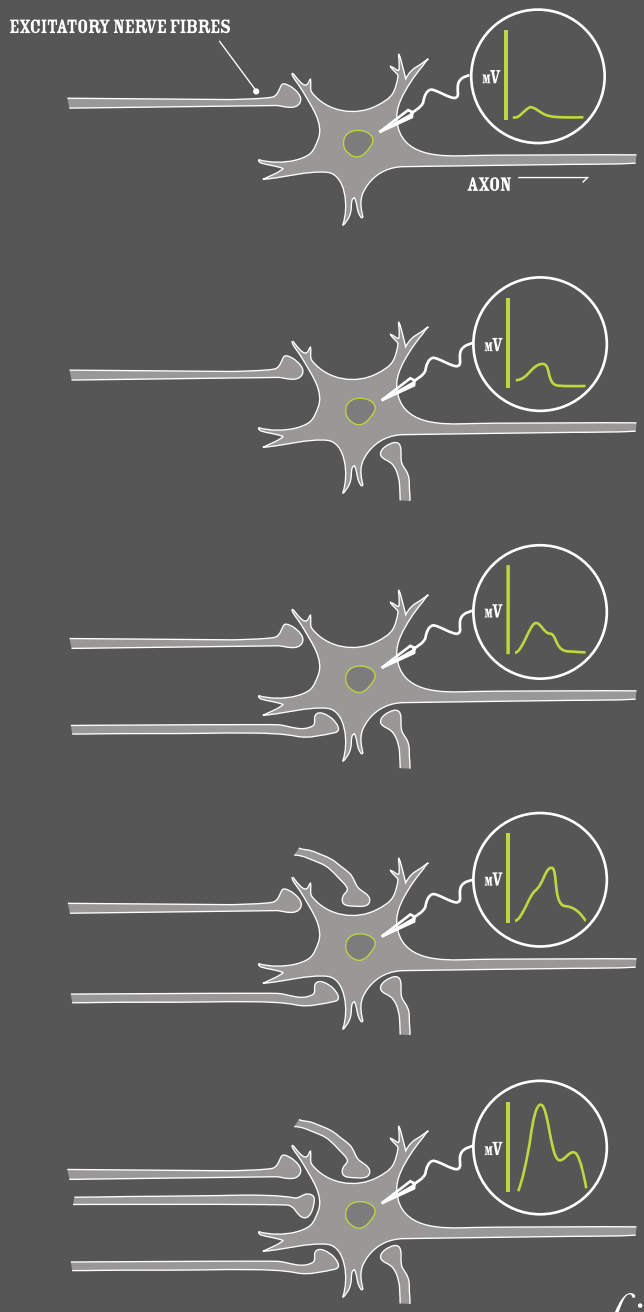
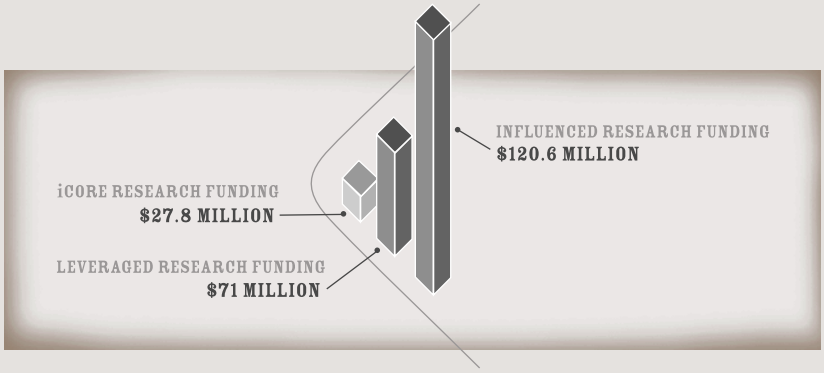


fig. 2

OF

SIGNIFICANT ICT ACTIVITY IN ALBERTA



ECONOMIC IMPACT

Alberta Informatics Circle of Research Excellence maintains that achieving a critical mass of world-class research activity in the province is the most important single factor in the creation of a vibrant ICT sector in Alberta.

This requires stimulation of research activity until it reaches the required threshold.

The current predictions, based on conservative growth estimates, will see the ICT sector in Alberta grow significantly and support the life sciences and oil and gas sectors in an integrated way.

Getting there will require a mix of science and creativity. In 2002-03, iCORE made important strides towards this goal, as this Year in Review documents.

VISION + FOCUS

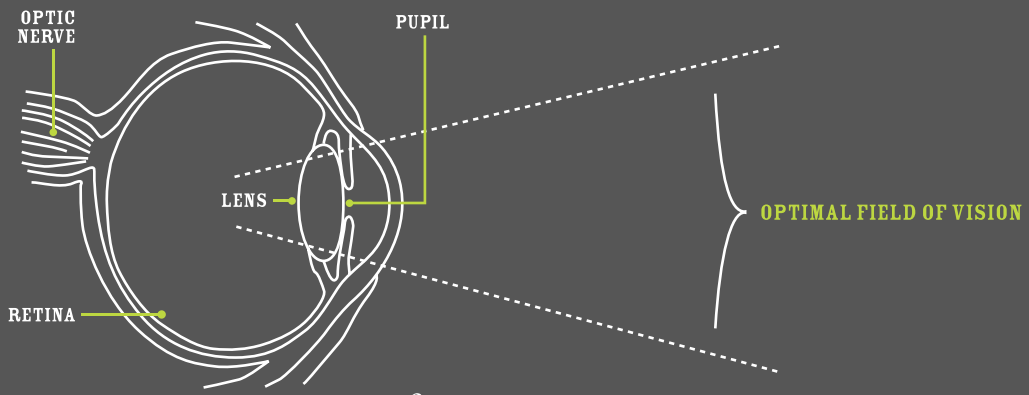


fig. 3

BRIAN UNGER

PRESIDENT AND CEO, iCORE

In just three years – thanks to the focused vision of government, industry and university communities – iCORE has generated the momentum that is realizing Alberta's goals in the ICT sector.

This momentum is helping to establish Alberta as a global player in the areas of wireless communications and nanotechnology. It's also supporting other high-potential areas such as microchip design, machine learning, global navigation satellite systems, and software engineering. We're already seeing significant results from the expanding community of iCORE Chairs evident in the pages that follow.

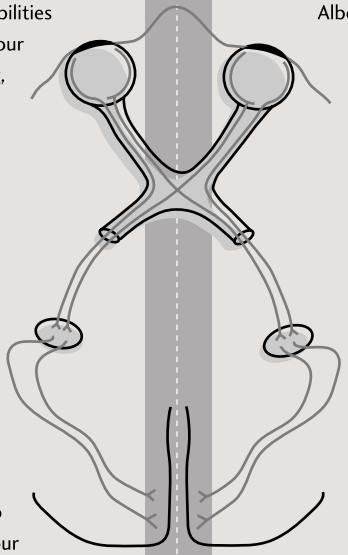
The achievements of these exceptional people mean new possibilities for Albertans. It's a vision for Alberta that is aimed at offering our talented children and grandchildren the possibility of studying, working and excelling in world-class environments, right here in the province, in a place that represents only 1% of the North American community.

I am particularly proud of our success this year in recruiting graduate students. Alberta university faculty, along with iCORE's scholarship program, attracted 24% of the very best informatics graduate students in Canada, up from 12% when iCORE first started. Strong graduate students increase faculty productivity, make it easier to recruit top researchers, and they play key roles in Alberta companies.

Along with attracting top researchers and students, iCORE has made significant progress in building links with industry to foster early and productive working relationships between our chairs and industry. Ultimately success relates directly to our ability to build clusters with critical mass – and this includes both university researchers and companies that can commercialize the results.

The task now is to increase our base funding so that we can maintain the momentum developed in our first three years: to continue to recruit top people, to make it possible to renew awards for our most successful chairs, and to build early bridges with industry.

Alberta's fastest growing companies are in the ICT sector, and over 70% of corporate investment in research by the fastest growing companies is in this sector. This continues to be true even during the recent economic downturn. Informatics is the central nervous system of Alberta's economic future.



ROGER SMITH

CHAIR OF THE BOARD

It's one initiative to be innovative or move science forward. It's a second, different initiative to create successful business ventures. Doing both takes the magic that comes from both sides of the brain – the creativity and the common sense that, in a delicate balance, result in success.

iCORE's focused approach to attract, retain, educate and support exceptional researchers demonstrates this success. Over the past year, we've continued to attract high-calibre researchers to Alberta, people like Dr Robert Wolkow, iCORE Chair in the Department of Physics at the University of Alberta and a driving force behind the National Institute for Nanotechnology. These people are lifting the level of research in Alberta, and are building a solid base for future growth.

2002 also saw us initiate our Industrial Chair Establishment program with the appointments of Dr Jim Haslett and Dr Carey Williamson. This program, which partners the Natural Sciences and Engineering Research Council (NSERC) and iCORE with industry such as TRLabs and Telus Mobility, represents a significant milestone in creating collaborative programs that link research and industry.

We continue to be guided by the Information and Communications Technology (ICT) Research Advisory Committee (IRAC). Established just over one year ago, committee members like IBM's Dr William Pulleyblank play a crucial role in validating what iCORE is doing and affirming or redirecting our priority areas.

While we're focused on attracting the very best informatics leaders and researchers to Alberta, we are building more partnerships, both formal and informal. We have limited funds. We have specific objectives. We must tie in more effectively with provincial and national government initiatives and work to keep informatics research and potential applications front and centre. We must find new and creative ICT applications that flow back to other research areas such as life sciences and energy, as well as back to ICT itself. We must continue to nurture the solid relationships we already have in place with our mainstay partners – the universities.

Exceptional science is happening, and iCORE's success is gaining momentum. We are committed to maintaining our focus and watching those successes multiply.

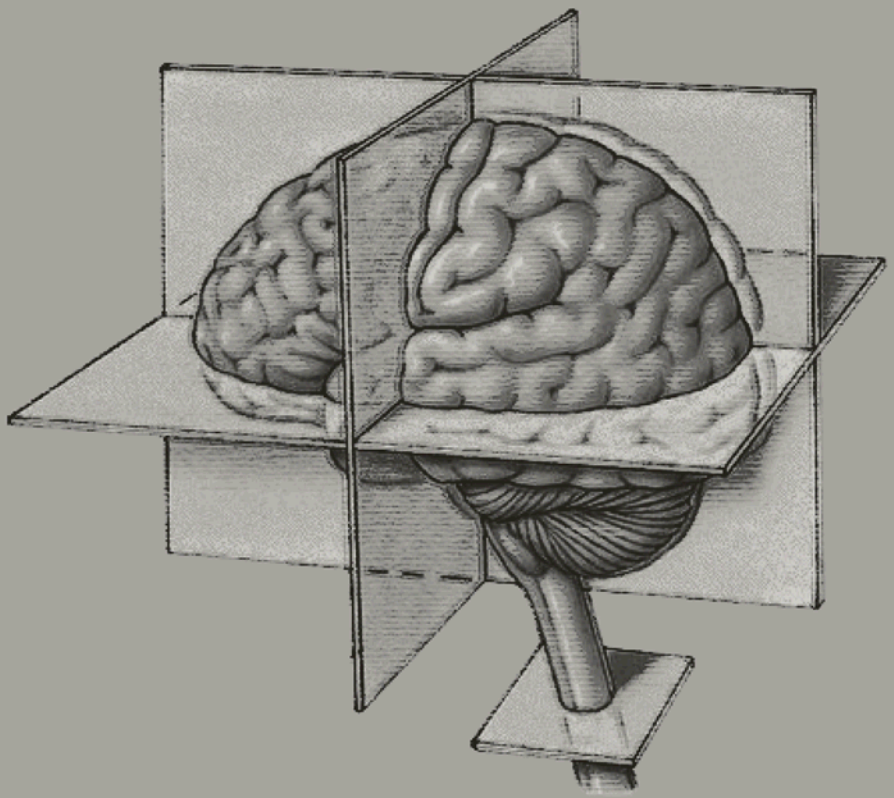
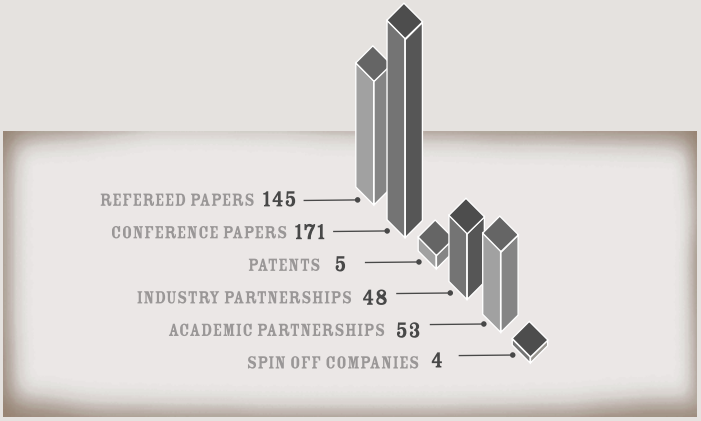


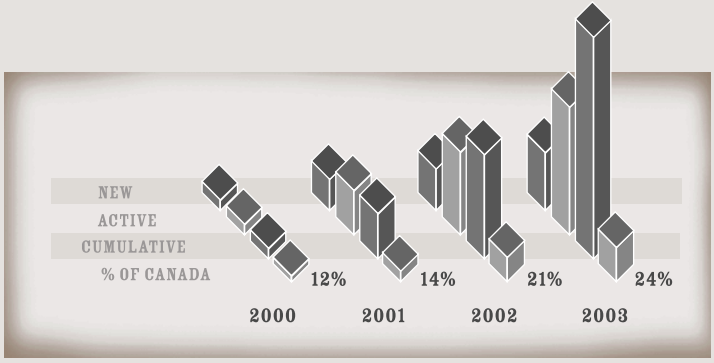
fig. 4
PERFORMANCE MEASURES

iCORE's primary role is to attract, retain and support exceptional researchers. These people have direct impact on the amount of research funding attracted to the province, and the number and quality of graduate students that are drawn to Alberta. They have academic impact on the quality of research, teaching, and publications. They have industry impact by establishing local access to expertise and ideas, and making students available to industry. They have economic benefit when these high quality people create and grow new and existing businesses.

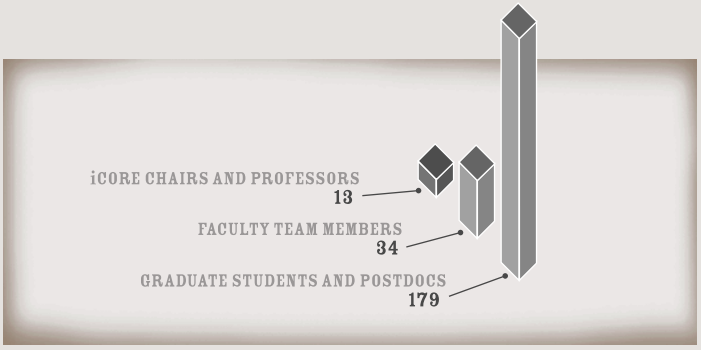
AWARDS AND HONOURS



INTELLECTUAL PROPERTY



iCORE GRADUATE STUDENT SCHOLARSHIPS



ACTIVE RESEARCH TEAMS

DR ROBERT WOLKOW

EXPANDING

DR JIM HASLETT

RESEARCH

DR CAREY WILLIAMSON

TEAMS

EACH YEAR, iCORE EXPANDS THE BASE OF ICT RESEARCH ACTIVITY IN ALBERTA BY SUPPORTING NEW CHAIRS AND PROFESSORS BUILDING RESEARCH TEAMS WITH EXTREMELY HIGH STANDARDS.

THIS YEAR'S AWARD RECIPIENTS CONTINUE TO RAISE THE BAR IN ALBERTA AND CONTRIBUTE TO THE TWO PRIMARY CLUSTERS OF ICT RESEARCH EXCELLENCE TAKING SHAPE IN THE PROVINCE: WIRELESS COMMUNICATIONS AND NANOTECHNOLOGY.

ROBERT WOLKOW

iCORE CHAIR
NANOSCALE INFORMATION AND COMMUNICATION TECHNOLOGIES

Dr Robert Wolkow admits he never thought he'd move to Edmonton. He couldn't imagine better facilities than what he had at the Steacie Institute for Molecular Sciences in Ottawa. But in the last couple of years, Edmonton has swiftly made a name for itself on the international nanotechnology stage. Big things are happening in the city, which is not bad for a technology that is really really small.

A nanometer is one billionth of a meter, or about 10,000 times smaller than the thickness of a human hair. For decades, researchers like Wolkow have dared to dream of finding new ways to harness molecules to make them act as components in new kinds of devices.

The University of Alberta hosts the best Canadian facilities and research groups for this kind of work, including the National Research Council's new National Institute for Nanotechnology. All the activity in Edmonton is drawing top researchers from around the world, including Robert Wolkow. In January 2002, he became the iCORE Chair in Nanoscale Information and Communication Technologies at the University of Alberta. He is also principal research officer and molecular scale devices group leader at the National Institute for Nanotechnology, a $120 million state-of-the-art facility jointly funded by the federal and provincial governments.

"For years we've been dreaming about the potential of nanotechnology," says Wolkow. "But it's hard to communicate with molecules." Wolkow and his team are marrying conventional silicon-based technology with molecules, looking for niche applications for functional molecular units in areas where silicon technology is weak. They believe it is this subtle communication between silicon and molecules that will unveil new technologies like supercomputers the size of a water drop or new "green" processing technologies that minimize energy consumption and the generation of undesirable byproducts.

Wolkow and his team have big dreams and a strong vision of what can be. "We want to translate our ideas and research into jobs, products and services that will fuel Alberta's growth," says Wolkow. "With all that's happening in Edmonton, I think there's nothing we can't do."

iCORE is providing $3.75 million over five years for Wolkow and his team at the University of Alberta. NINT will commit up to $4.5 million over five years to support research and facilities development for this program. The University of Alberta is contributing $1.75 million.

JIM HASLETT

iCORE/NSERC/TRLABS INDUSTRIAL RESEARCH CHAIR
WIRELESS SCIENCE AND TECHNOLOGY INITIATIVE

Ask Dr Jim Haslett to describe the work he is doing as an iCORE Industrial Research Chair, and words like collaborative, innovative, exciting and challenging pepper his speech. Haslett leads a research program called the Wireless Science and Technology Initiative, which concentrates on developing advanced radio frequency integrated circuits for next-generation wireless products. iCORE and the Natural Sciences and Engineering Research Council (NSERC) jointly sponsor the program, and worked with TRLabs to create the Chair.

"The work we're doing demonstrates the value of collaboration, of bringing together people with different ideas and skills and balancing our vision with hands-on applications," says Haslett. The radio frequency integrated circuit design area is extremely competitive. His team knows that short-range wireless communication will permeate all aspects of our lives, affecting everything from how we buy groceries to how we check our health. They dream of building things like a wireless system for heart patients that continuously monitors their condition, tracks where they are and has the capability to access help fast if they experience a medical emergency. These are the kinds of niche areas Haslett and his researchers want to mesh into targeted end products.

iCORE provided $1 million over five years to establish the industrial chair. NSERC is providing an additional $120,000 per year with a matching cash contribution from TRLabs. The University of Calgary will provide additional funding to hire a second academic staff member into the Chair program, and to hire a research assistant.

He says the multi-disciplinary approach is leveraging both knowledge and dollars, and is building an infrastructure and team with expertise in diverse areas like circuit and antenna design, geomatics, and biometrics. Haslett stresses the importance of teamwork, and says that tearing down traditional industry and research silos has resulted in more progress, faster.

Haslett has already attracted 11 graduate and post-graduate students to his team, seven of whom are on NSERC scholarships. While he and his team know a long learning curve lies ahead, they're buoyed by what they've already accomplished. "We've built a terrific infrastructure based on a variety of sources. We have a great team working collaboratively with other teams. We have a lot to do, and we're having a ball doing it."

CAREY WILLIAMSON

TELUS INDUSTRIAL RESEARCH CHAIR
WIRELESS TRAFFIC MODELING

"Research is exciting. It builds upon itself. The more you do, the more you want to do," says Dr Carey Williamson. That's a good thing because as one of iCORE's new Industrial Research Chairs, Williamson has his hands full. For the past 1.5 years, Williamson has been an iCORE Professor in Broadband Wireless Networks. Now he expands his role to include Industrial Research Chair in Wireless Traffic Modeling at the University of Calgary.

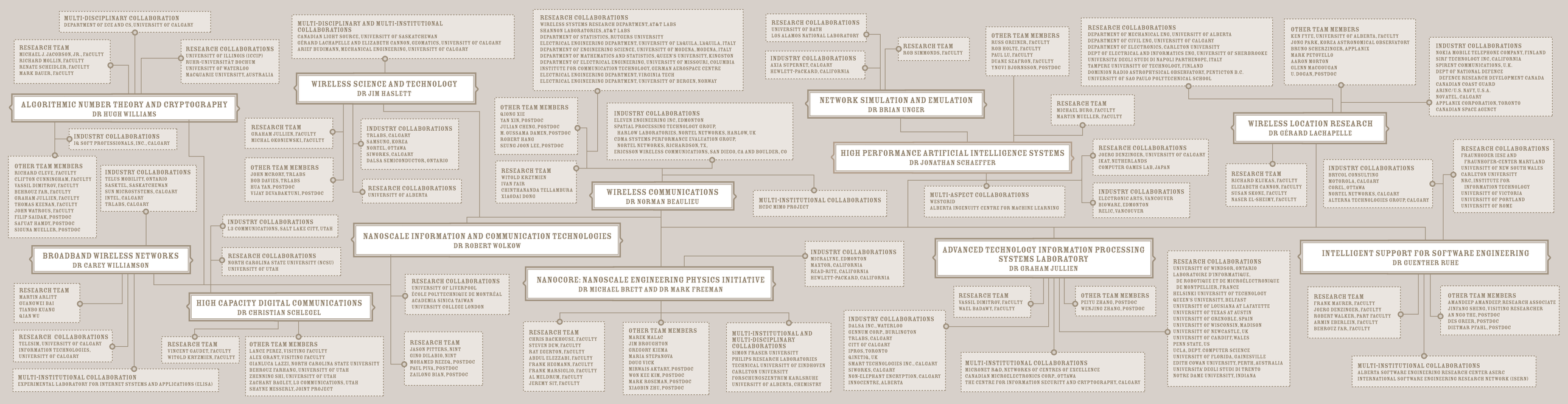
The Chair results from a partnership between iCORE and Telus Mobility, and is an exciting opportunity to use innovative university-based research to solve real-world industry problems. Williamson and his team will receive $100,000 a year for two years from both Telus and iCORE to undertake research into the modeling and analysis of wireless Internet traffic. The Natural Sciences and Engineering Research Council (NSERC) may soon provide matching funding, further leveraging the research dollars. All this, Williamson says, is allowing his group to develop a world-class research lab, state-of-the-art technologies, and establish a vigorously active ICT research program at the University of Calgary.

"Our partnership with Telus is win-win," adds Williamson. "The external money allows us to bring in more graduate students and hire more research staff. It also allows us to demonstrate to industry the value we can bring to the table." Williamson's team is doing wireless network capacity planning for Telus, helping the company determine the impact of increasing wireless Internet traffic on its traditional cellular voice network.

Their goal is to enhance wireless Web performance in Alberta, Canada and around the world. And Williamson is confident he and his team will succeed. "We've developed significant momentum in the past couple of years," he says. "It is exciting to see innovative thinking and research evolve into practical industry solutions."

Logical thinking takes those thoughts and shapes them into solutions for everyday life. For Williamson and his team, it's the ability to successfully balance the two that is helping them make waves on the radar screen of the wireless research world.

ICT CLUSTERS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RICHARD MOLLIN, FACULTY
RENATE SCHEIDLER, FACULTY
MARK BAUER, FACULTY
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RUHR-UNIVERSITÄT BOCHUM
UNIVERSITY OF WATERLOO
MACQUARIE UNIVERSITY, AUSTRALIA
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VASSIL DIMITROV, FACULTY
BEHROUZ FAR, FACULTY
GRAHAM JULLIEN, FACULTY
THOMAS KEENAN, FACULTY
JOHN WATROUS, FACULTY
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SAFUAT HAMDY, POSTDOC
SIGUNA MUELLER, POSTDOC
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SASKTEL, SASKATCHEWAN
SUN MICROSYSTEMS, CALGARY
INTEL, CALGARY
TRLABS, CALGARY
BROADBAND WIRELESS NETWORKS
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GUANGWEI BAI
TIANBO KUANG
GIAN WU
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ALEX GRANT, VISITING FACULTY
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ZHENNING SHI, UNIVERSITY OF UTAH
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GINO DILABIO, NINT
MOHAMED REZEQ, POSTDOC
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ÉCOLE POLYTECHNIQUE DE MONTRÉAL
ACADEMIA SINICA TAIWAN
UNIVERSITY COLLEGE LONDON
NANOSCALE INFORMATION AND COMMUNICATION TECHNOLOGIES
DR ROBERT WOLKOW
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GÉRARD LACHAPELLE AND ELIZABETH CANNON, GEOMATICS, UNIVERSITY OF CALGARY
ARIEF BUDIMAN, MECHANICAL ENGINEERING, UNIVERSITY OF CALGARY
WIRELESS SCIENCE AND TECHNOLOGY
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MICHAL OKONIEWSKI, FACULTY
OTHER TEAM MEMBERS
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BOB DAVIES, TRLABS
HUA YAN, POSTDOC
VIJAY DEVABAKTUNI, POSTDOC
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SHANNON LABORATORIES, AT&T LABS
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DEPARTMENT OF ENGINEERING SCIENCE, UNIVERSITY OF MODENA, MODENA, ITALY
DEPARTMENT OF MATHEMATICS AND STATISTICS, QUEEN'S UNIVERSITY, KINGSTON
DEPARTMENT OF ELECTRICAL ENGINEERING, UNIVERSITY OF MISSOURI, COLUMBIA
INSTITUTE FOR COMMUNICATION TECHNOLOGY, GERMAN AEROSPACE CENTRE
ELECTRICAL ENGINEERING DEPARTMENT, VIRGINIA TECH
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YAN XIN, POSTDOC
JULIAN CHENG, POSTDOC
M. OUSSAMA DAMEN, POSTDOC
ROBERT HANG
SEUNG JOON LEE, POSTDOC
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IVAN FAIR
CHINTHANANDA TELLAMBURA
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FRANK HEGMANN, FACULTY
FRANK MARSIOLIO, FACULTY
AL MELDRUM, FACULTY
JEREMY SIT, FACULTY
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GREGORY KIEMA
MARIA STEPANOVA
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WON KEE KIM, POSTDOC
MARK ROSEMAN, POSTDOC
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PHILIPS RESEARCH LABORATORIES
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LOS ALAMOS NATIONAL LABORATORY
INDUSTRY COLLABORATIONS
AXIA SUPERNET, CALGARY
HEWLETT-PACKARD, CALIFORNIA
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DR BRIAN UNGER
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PAUL LU, FACULTY
DUANE SZAFRON, FACULTY
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MARTIN MUELLER, FACULTY
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DR JONATHAN SCHAEFFER
MULTI-ASPECT COLLABORATIONS
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IKAT, NETHERLANDS
COMPUTER GAMES LAB, JAPAN
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BIOWARE, EDMONTON
RELIC, VANCOUVER
ADVANCED TECHNOLOGY INFORMATION PROCESSING SYSTEMS LABORATORY
DR GRAHAM JULLIEN
RESEARCH TEAM
VASSIL DIMITROV, FACULTY
WAEL BADAWY, FACULTY
OTHER TEAM MEMBERS
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WENJING ZHANG, POSTDOC
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OCNUM CORP., BURLINGTON
TRLABS, CALGARY
CITY OF CALGARY
IPROS, TORONTO
QINETIQ, UK
SMART TECHNOLOGIES INC., CALGARY
SIWORKS, CALGARY
NON-ELEPHANT ENCRYPTION, CALGARY
INNOCENTIVE, ALBERTA
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THE CENTRE FOR INFORMATION SECURITY AND CRYPTOGRAPHY, CALGARY
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DEPARTMENT OF CIVIL ENG, UNIVERSITY OF CALGARY
DEPARTMENT OF ELECTRONICS, CARLETON UNIVERSITY
DEPT OF ELECTRICAL AND INFORMATICS ENG, UNIVERSITY OF SHERBROOKE
UNIVERSITA DEGLI STUDI DI NAPOLI PARTHENOPE, ITALY
TAMPERE UNIVERSITY OF TECHNOLOGY, FINLAND
DOMINION RADIO ASTROPHYSICAL OBSERVATORY, PENTICTON B.C.
UNIVERSITY OF SAO PAULO POLYTECHNICAL SCHOOL
OTHER TEAM MEMBERS
KEN FYFE, UNIVERSITY OF ALBERTA, FACULTY
JONG PARK, KOREA ASTRONOMICAL OBSERVATORY
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MARK PETOVELLO
AARON MORTON
GLENN MACGOUGAN
U. DOGAN, POSTDOC
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SIRF TECHNOLOGY INC, CALIFORNIA
SPIRENT COMMUNICATIONS, U.K.
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DEFENCE RESEARCH DEVELOPMENT CANADA
CANADIAN COAST GUARD
ARINC/U.S. NAVY, U.S.A.
NOVATEL, CALGARY
APPLANIX CORPORATION, TORONTO
CANADIAN SPACE AGENCY
WIRELESS LOCATION RESEARCH
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ELIZABETH CANNON, FACULTY
SUSAN SKONE, FACULTY
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MOTOROLA, CALGARY
CORELL, OTTAWA
NORTEL NETWORKS, CALGARY
ALTERNA TECHNOLOGIES GROUP, CALGARY
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CARLETON UNIVERSITY
NRC, INSTITUTE FOR INFORMATION TECHNOLOGY
UNIVERSITY OF VICTORIA
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QUEEN'S UNIVERSITY, BELFAST
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MULTI-INSTITUTIONAL COLLABORATIONS
ALBERTA SOFTWARE ENGINEERING RESEARCH CENTER ASERC
INTERNATIONAL SOFTWARE ENGINEERING RESEARCH NETWORK (ISERN)

NETWORKS AND INFORMATICS THEORY

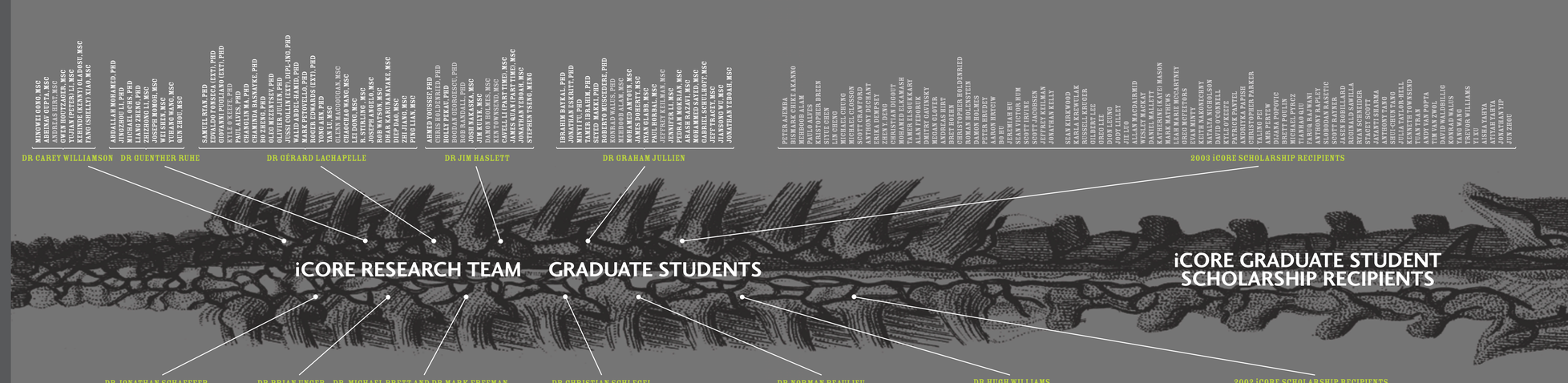
ADVANCED TECHNOLOGY INFORMATION PROCESSING SYSTEMS GRAHAM JULLIEN
HIGH CAPACITY DIGITAL COMMUNICATIONS CHRISTIAN SCHLEGEL
NETWORK SIMULATION AND EMULATION BRIAN UNGER
ALGORITHMIC NUMBER THEORY AND CRYPTOGRAPHY HUGH WILLIAMS
BROADBAND WIRELESS NETWORKS CAREY WILLIAMSON
WIRELESS COMMUNICATIONS NORMAN BEAULIEU
WIRELESS TRAFFIC MODELING CAREY WILLIAMSON
WIRELESS LOCATION RESEARCH GÉRARD LACHAPELLE
WIRELESS SCIENCE AND TECHNOLOGY JIM HASLETT

NANOTECHNOLOGY

NANOSCALE ENGINEERING PHYSICS MICHAEL BRETT
NANOSCALE ENGINEERING PHYSICS MARK FREEMAN
NANOSCALE INFORMATION AND COMMUNICATION TECHNOLOGIES ROBERT WOLKOW

SOFTWARE SYSTEMS

HIGH PERFORMANCE ARTIFICIAL INTELLIGENCE JONATHAN SCHAEFFER
SOFTWARE ENGINEERING DECISION SUPPORT GUENTHER RUHE



GRADUATE STUDENTS

Graduate students play an important role on research teams, asking and answering the latest and most pressing research questions. Many of them stay after graduation as the skilled workers, entrepreneurs and leaders of the expanding Alberta ICT sector.

Canada's top students in computing science and electrical and computer engineering are coming to Alberta's universities in unprecedented numbers. They are attracted by the caliber of the iCORE Chairs, the energy of the expanding departments, the excellence in the overall quality of research, the high expectations for the future, and the financial support of iCORE's Graduate Student Scholarships.

SYNERGY AND COLLABORATION

iCORE PLAYS A LEADERSHIP ROLE IN FOSTERING COLLABORATIONS ACROSS THE PROVINCE, AMONG UNIVERSITY, PUBLIC AND PRIVATE SECTOR PARTNERS.

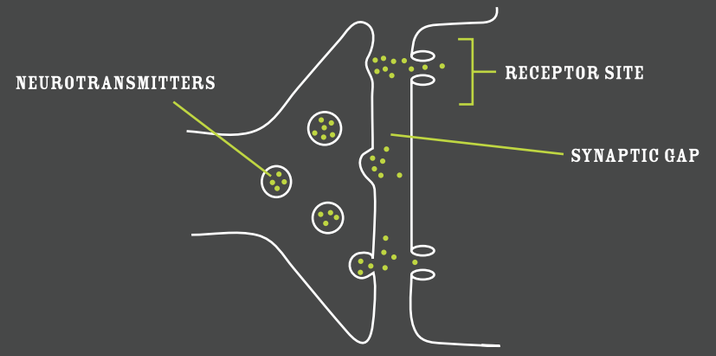
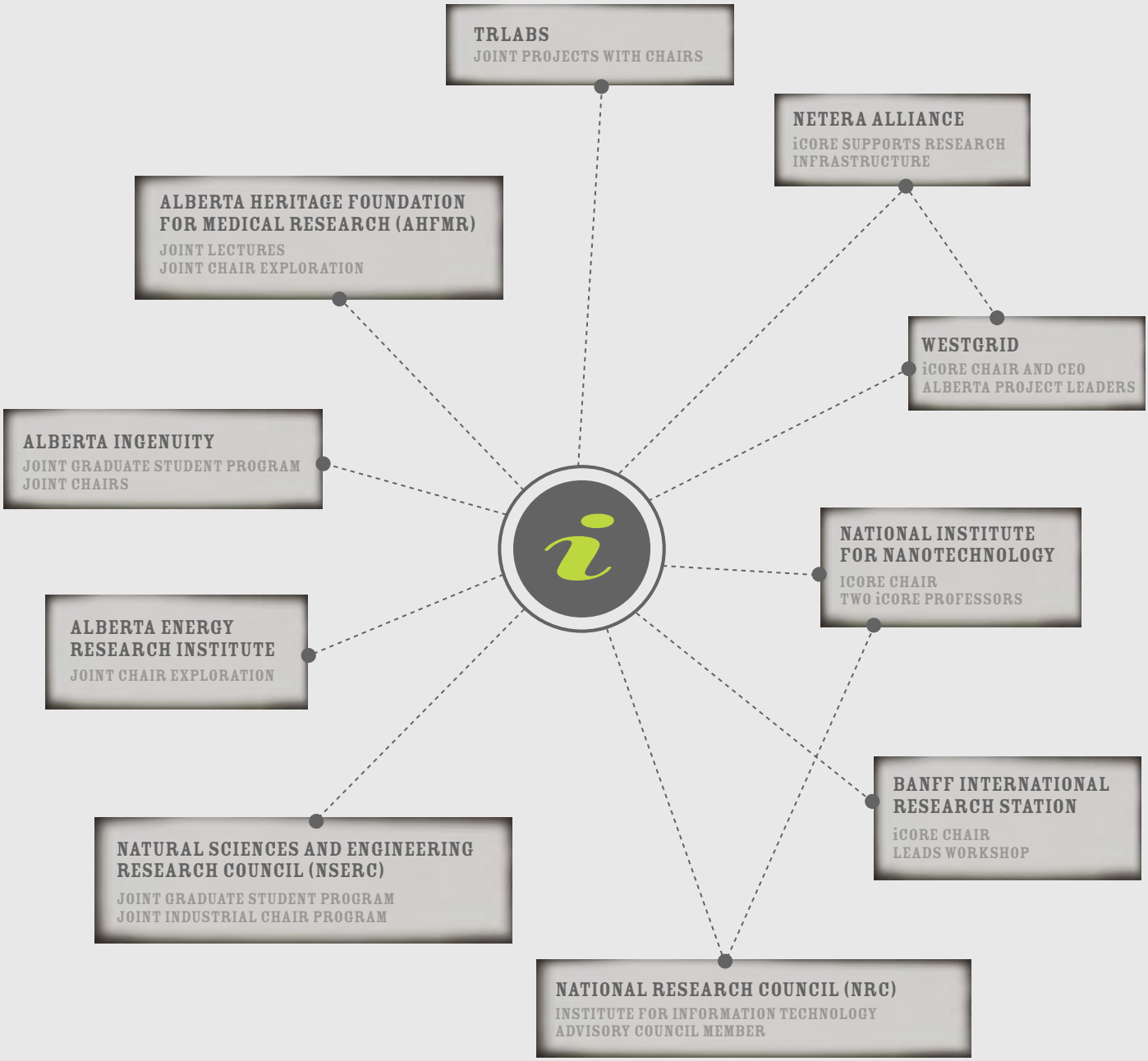


fig. 5

TRANSMISSION ACROSS A SYNAPSE


TRLABS
JOINT PROJECTS WITH CHAIRS
NETERA ALLIANCE
iCORE SUPPORTS RESEARCH INFRASTRUCTURE
ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH (AHFMR)
JOINT LECTURES
JOINT CHAIR EXPLORATION
WESTGRID
iCORE CHAIR AND CEO
ALBERTA PROJECT LEADERS
ALBERTA INGENUITY
JOINT GRADUATE STUDENT PROGRAM
JOINT CHAIRS
NATIONAL INSTITUTE FOR NANOTECHNOLOGY
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TWO iCORE PROFESSORS
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JOINT CHAIR EXPLORATION
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JOINT INDUSTRIAL CHAIR PROGRAM
NATIONAL RESEARCH COUNCIL (NRC)
INSTITUTE FOR INFORMATION TECHNOLOGY
ADVISORY COUNCIL MEMBER

MANDATE

THE ALBERTA INFORMATICS CIRCLE OF RESEARCH EXCELLENCE (iCORE) IS PART OF AN INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) STRATEGY AND ACTION PLAN NOW SEEING SUCCESS IN THE PROVINCE OF ALBERTA.

THIS STRATEGY WAS ORIGINALLY PREPARED IN 1998 BY A TASK FORCE OF THE ALBERTA SCIENCE AND RESEARCH AUTHORITY. THE GOALS FOR ALBERTA DEFINED IN THAT PLAN WERE 140,000 JOBS, $1.5 BILLION IN R&D, AND $30 BILLION IN GDP BY 2010 – ALL IN THE ICT SECTOR. iCORE WAS LAUNCHED IN 1999 TO HELP MAKE THIS HAPPEN.

IT IS WORKING.

fig. 6

BY FOLLOWING THROUGH ON A FOCUSED STRATEGY, iCORE HAS BEEN ABLE TO HELP ACHIEVE ITS GOALS BY:

1) Identifying market-directed high-growth segments of ICT in which Alberta can be a global leader.
2) Recruiting and funding the best researchers and graduate students in these areas.
3) Supporting the development of competitive ICT businesses in these areas through close relationships with industry.

MAJOR IMPACT IS NOW EVIDENT IN:

1) The expansion of the ICT sector in Alberta, which now makes up over half of the fastest growing companies in the province, despite an economic downturn.
2) Widening application of ICT as an enabler for all of Alberta's sectors including energy, agriculture, forestry, health, education and the environment.
3) Greater opportunities perceived for skilled workers and students, such that 24 percent of the top students in Canada in computing science and electrical and computer engineering are choosing to do their graduate studies at an Alberta university.

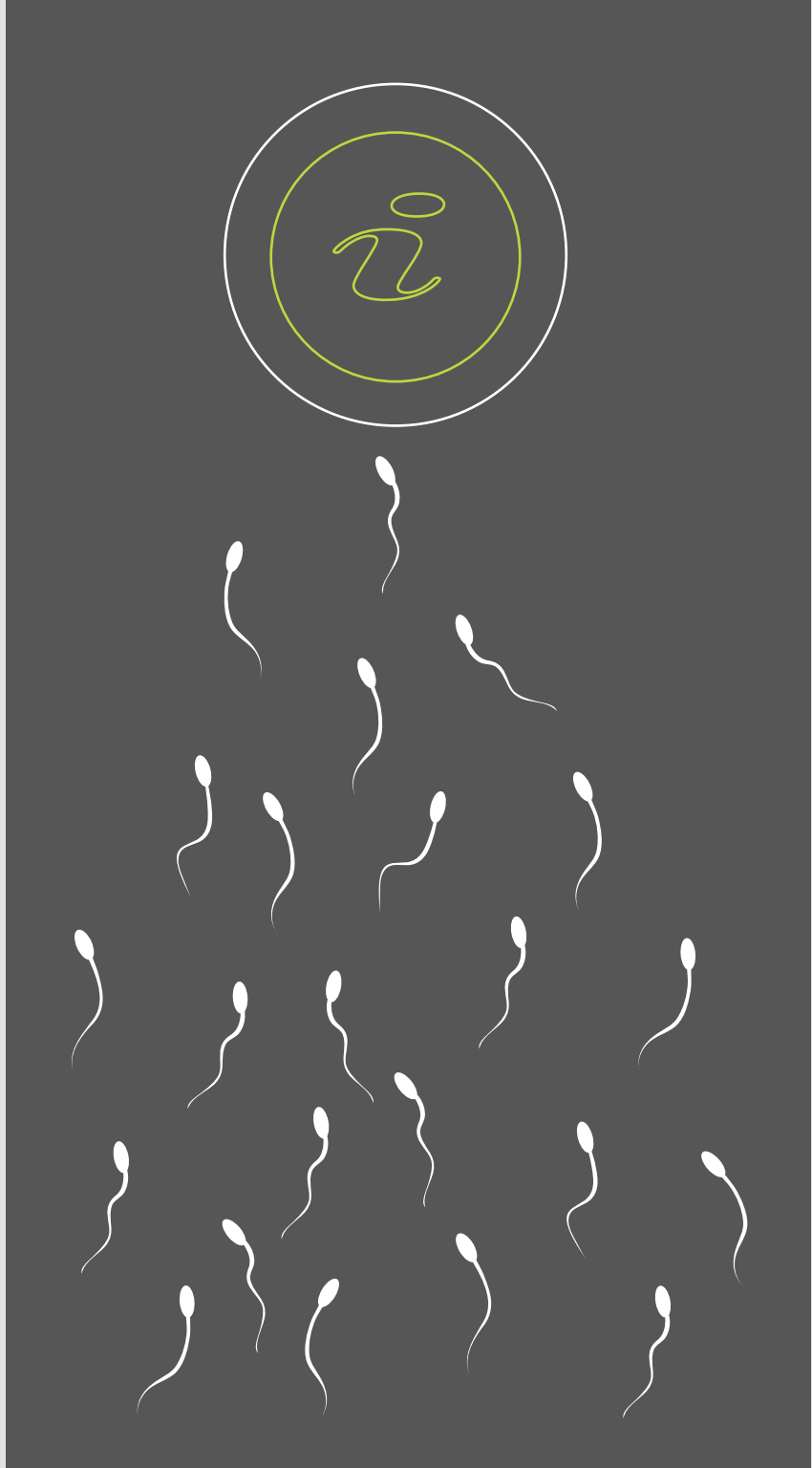
iCORE has met all of the goals defined in its business plan to date.

THE CASE FOR SUSTAINED AND FOCUSED INVESTMENT IN ICT IS STRONG. iCORE HAS HELPED TO CREATE SIGNIFICANT MOMENTUM WITHIN ICT, DESPITE A MAJOR DOWNTURN OF THE SECTOR.

GRANT PROGRAMS

THE ALBERTA INFORMATICS CIRCLE OF RESEARCH EXCELLENCE OPERATES GRANT PROGRAMS THAT CULTIVATE THE DEVELOPMENT OF WORLD-CLASS RESEARCH TEAMS IN ALBERTA.

INFORMATICS – THAT IS, AREAS OF COMPUTER SCIENCE, ELECTRICAL AND COMPUTER ENGINEERING, PHYSICS, MATHEMATICS AND OTHER DISCIPLINES RELATED TO INFORMATION AND COMMUNICATIONS TECHNOLOGY – IS THE FOCUS OF iCORE'S PROGRAMS.



MAJOR AWARD PROGRAMS

Chair and Professor Establishment (CPE) Grants are used to create positions for iCORE Chairs and Professors, and associated research teams, with excellent research records in information and communications technology.

Industrial Chair Establishment (ICE) Grants are used to create positions for iCORE Industrial Chairs, and associated research teams, with excellent industry-relevant research records in information and communications technology. This program also expects industry partners and NSERC funding.

The success of these programs is supported by auxiliary outreach programs.

SUPPORT PROGRAMS

Visiting Professor Grants bring world-class researchers in information science and engineering to Alberta universities for periods from six months to two years. Internationally recognized researchers working in one of the target areas of research supported by iCORE come to Alberta to work with the Alberta research community, and forge ongoing collaborations.

Graduate Student Scholarships are available to support Alberta graduate students in computer science and electrical and computer engineering who hold NSERC Post Graduate Scholarships or awards of equivalent merit.

iCORE Distinguished Lecturer Series is designed to increase awareness of the scope, world-class quality and potential impact of informatics-related research in Alberta. The high-profile lectures present the context, challenges and highlights of undertaking internationally significant informatics research in Alberta, and encourage cross-pollination of ideas among research teams and industry. Lectures are held across the province and also made available via the web.

Recruiting Grants support researchers at Alberta universities in the process of identifying and attracting global leaders in information science and engineering and in the subsequent process of building strong research teams.

Annual Research Report, published each fall, outlines the activities and achievements of the iCORE research teams. It provides an overview of the research program, details of specific research projects, the nature of collaborations with other researchers and industry, teams members, graduate students, and the results of research.

Public profile of research excellence in Alberta is conveyed via the iCORE web site, quarterly iCORE newsletters, an annual advertising plan, public launches, news releases and special projects. All contribute to building awareness of the importance of Alberta's investment in ICT, and the positive return on this investment. iCORE is also active in a collaborative communications group to build reputation for excellence in research in Alberta, which includes Alberta Innovation and Science; the Universities of Alberta, Calgary and Lethbridge; Alberta Ingenuity; Alberta Heritage Fund for Medical Research; and the Alberta Research Council.

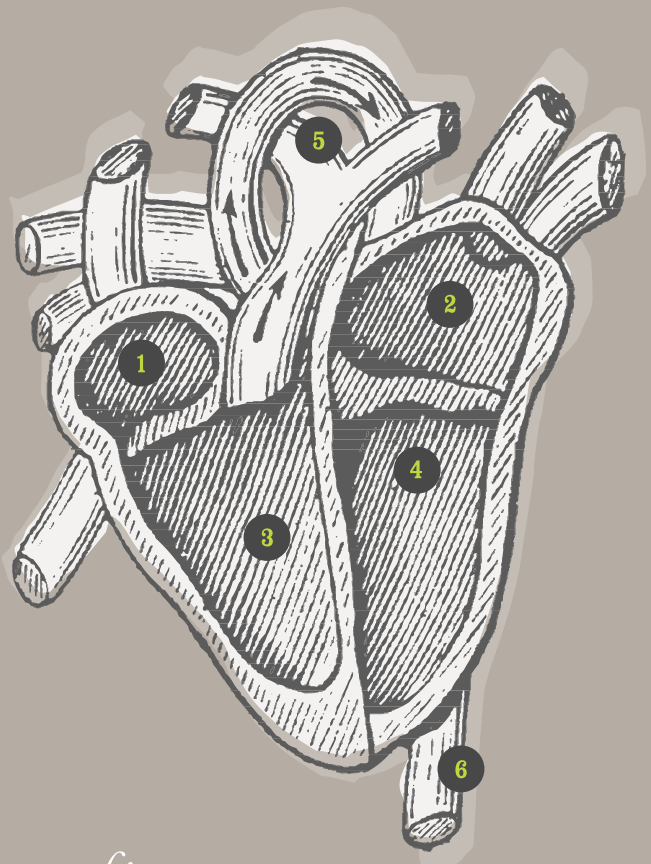


fig. 8

THE iCORE TEAM 2002-03

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FOUNDING PRESIDENT
NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL

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ELECTRICAL AND COMPUTER ENGINEERING
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UNIVERSITY OF CALGARY

TONY MARSLAND
PROFESSOR, COMPUTING SCIENCE
UNIVERSITY OF ALBERTA

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FOUNDER, CHAIR AND CTO, CELCORP

BRIAN UNGER (CHAIR)
PRESIDENT AND CEO, iCORE

PETER GARRETT
PRESIDENT AND CEO
GLOBAL THERMOELECTRIC INC.

R.G. (RANDY) GOEBEL
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DAN BADER
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POOLE CHAIR IN MANAGEMENT FOR ENGINEERS
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NATIONAL RESEARCH COUNCIL

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FRED STEWART
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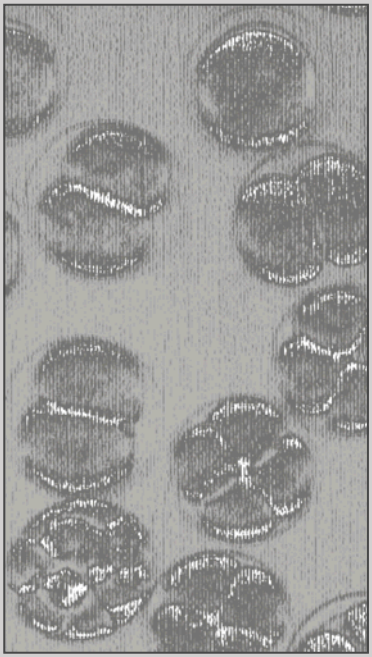

fig. 9

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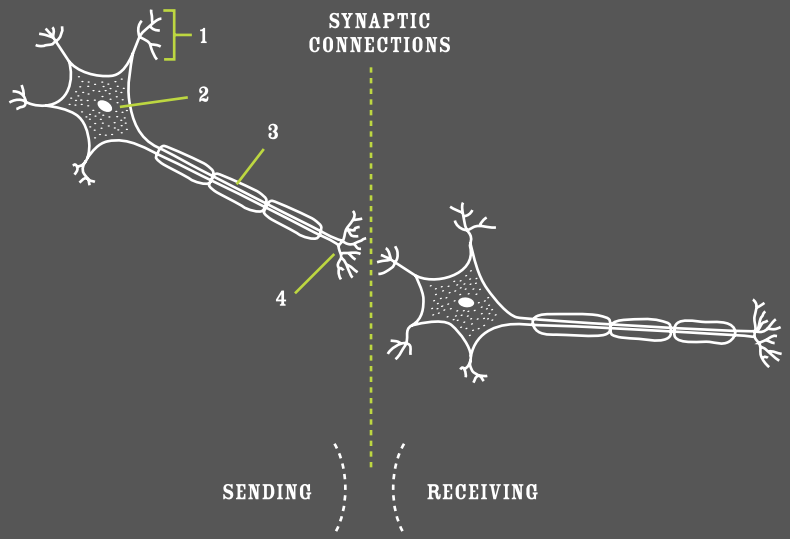

fig. 10

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