



a place of mind



Annual Report

Year 2014 to 2015

IRES Director's Brief Report 2014-2015 (Kandlikar)

RESEARCH AND TEACHING HIGHLIGHTS

- **Funding:** \$1,740,808 in funding in 2014/15 or an average of \$ 229,053 per faculty FTE
- **Publications:** An average of 4.5 publications per faculty, significant given none of our faculty run large labs; 20% in top-flight journals (impact factor of 5 or greater), including a paper in Nature and one in PNAS; >70% in journals with 5-year impact factors of greater than 3.0. In addition faculty published 9 book chapters.
- **MPP&GA:** Continued work to prepare for the incoming cohort of MPP students; in particular IRES negotiated the delivery of the Sustainability Law & Policy core course that will be delivered in 2015-2016.
- **Graduate teaching (RMES):** We currently have 100 graduate students who remain the focus of program delivery, though our faculty members teach at least one undergraduate course.
- **Undergraduate teaching:** IRES faculty members teach in the ENVR program, in the sustainability pathway and in SCIE 113. All of these contributions are being further enhanced (see below).

ADMINISTRATION HIGHLIGHTS

- Continued to keep the IRES budget in black. Reduced telecommunications cost by > 10%
- Oversaw the successful administration of a new intake (14 students) to the RMES program.
- Led the process aimed at providing partial appointments for Fisheries Center (FC) faculty in IRES. One FC faculty member (Villy Christensen) will most likely join us.
- Worked towards streamlining of the RMES graduate program
 - Initiated and steered the discussion on restructuring the RMES Masters program (changes expected by fall 2016)
 - Led the dialogue on the future of the FC in the RMES graduate program. Agreement was reached in consultation with the FC to (i) close the RMES fisheries stream and (ii) to seamlessly integrate students connected to the newly formed IOF into the RMES program.
- Worked towards greater integration of IRES faculty members into undergraduate teaching.
 - Negotiated the teaching of two courses in the ENVR program - one new (ENVR 3/4XX "Analyzing Sustainability") and one existing (ENVR 410).
 - Initiated and supported the dialogue with EOAS/ENVR to help create a new Sustainability Science area of concentration (AOC) within the ENVR program. IRES is to take a nodal role in the delivery of the Sustainability Science AOC.
 - An IRES faculty member will be the director of SCIE 113 from 2015-2018 (with financial support from IRES). IRES faculty are also teaching both current required courses in the Sustainability pathway.
- Played a key role in the MPP&GA administration including: developing the final program of study; presenting the program to the senate curriculum committee; helping develop the final budget; making admissions and scholarship decisions.

- Fostered the development of 'respectful environment' norms in IRES and formed an Equity and Inclusiveness committee
- Initiated work on an alumni database and RMES program marketing (including comparison with other programs) to remedy the problem of the slow decline in Canadian applications.

PROGRAM GOALS 2015-2016

I was the interim director for a year and will relinquish my director's responsibilities on 15th of July 2015. I will consult with and help the returning director Terre Satterfield with a number of the newly initiated tasks that remain to be completed, especially on academic initiatives.

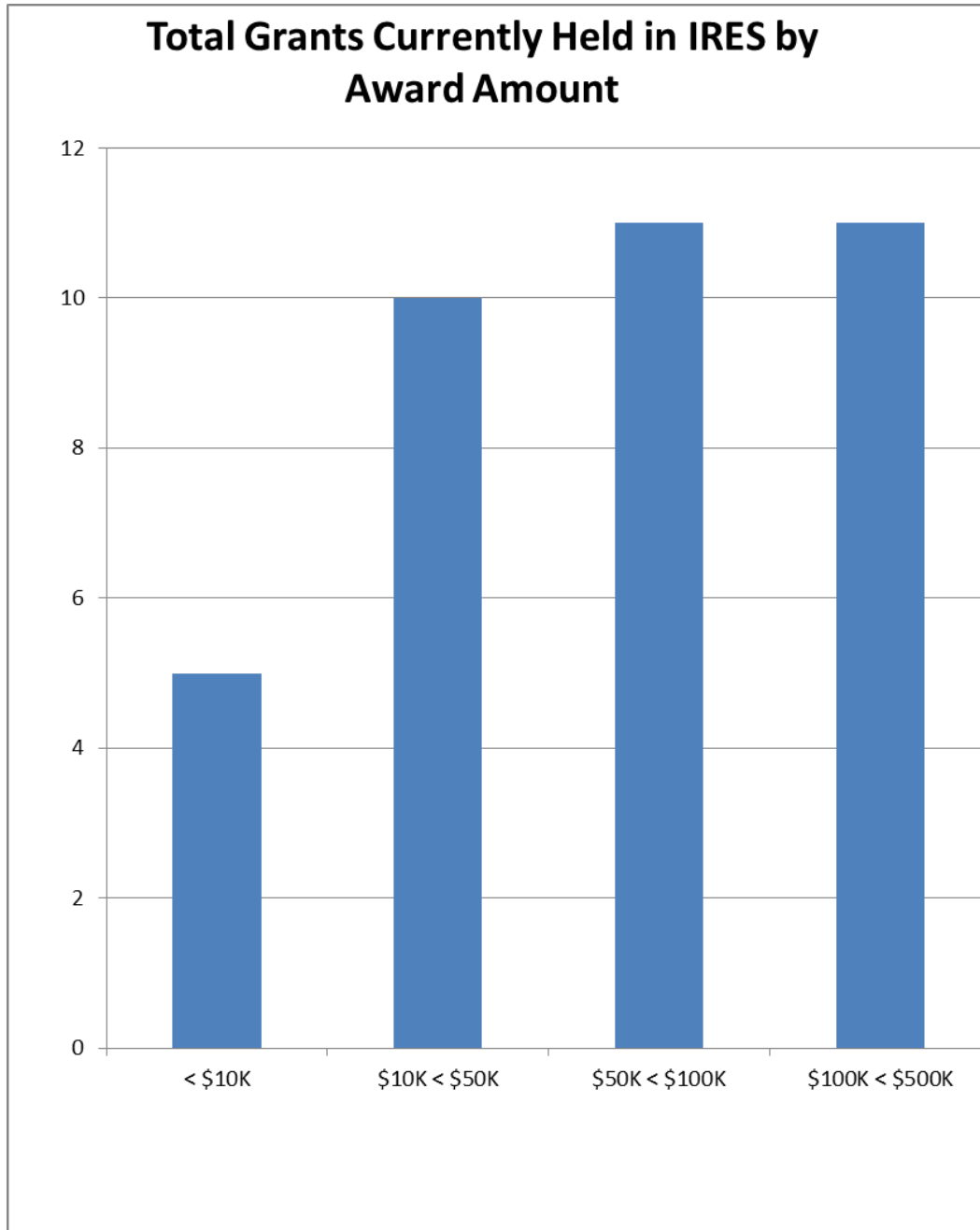
I expect to support and stay involved (above and beyond my usual IRES service responsibilities) in the MPP&GA program. My responsibilities will include:

- Serving as the IRES representative to the academic management committee of MPP&GA
- Serving as a member of the search committee to the two new hires (a Tier II NSERC CRC, and the Symonds Chair) that will teach in the program

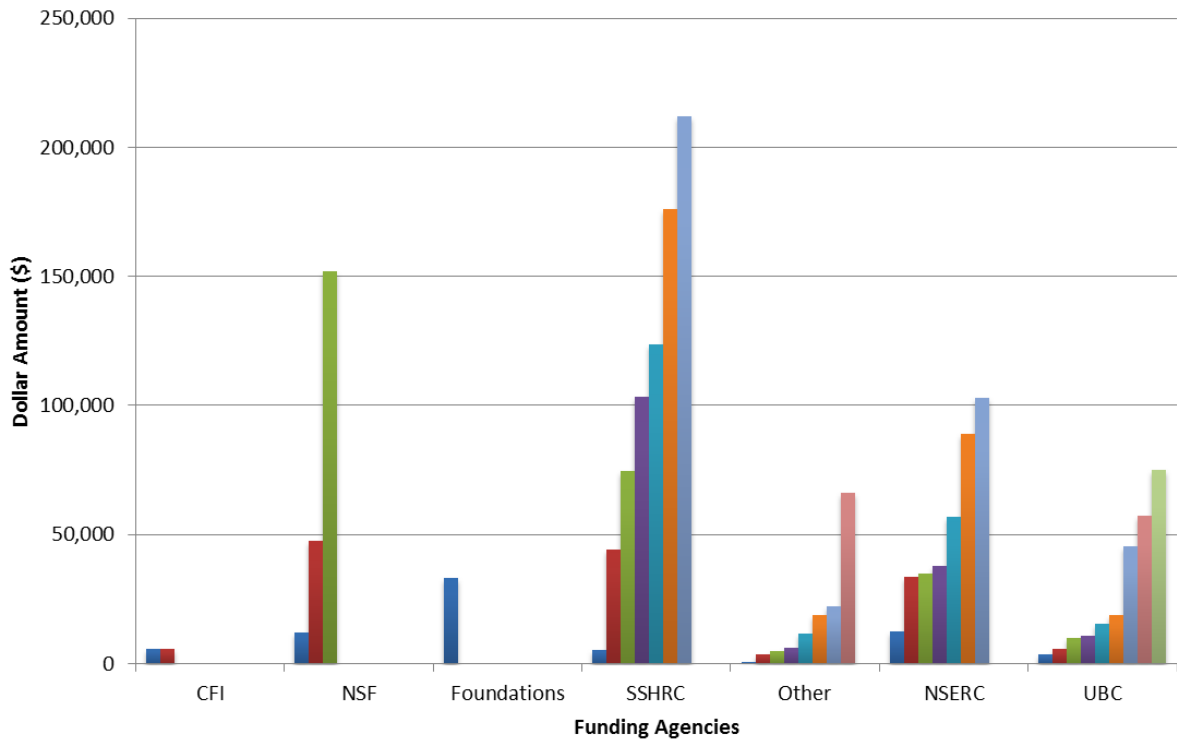
I also expect to remain involved in developing the Sustainability Science AOC.

Research Funding

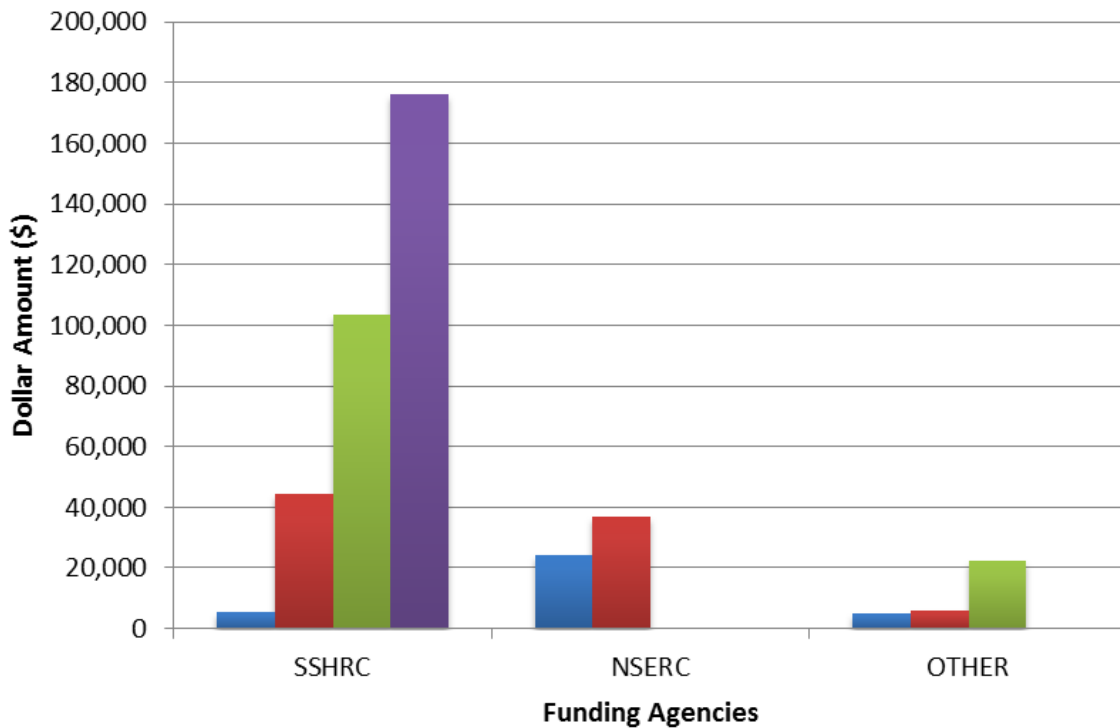
IRES has 12 faculty members with half jointly appointed. They combine to a total of 8.2 FTEs of whom 2 (equivalent to 0.6 FTE) do not run any grants through IRES. The total grant money brought in by IRES faculty (7.6 FTE) in 2014-15 was \$1,740,808 or \$ 229,053 per FTE. Figures below show a breakdown of (i) total amounts held (ii) amounts by funding agencies and (iii) new grants in the year 2014-2015.



Total IRES Grants: Fiscal Year 2014/15 by Funding Agency



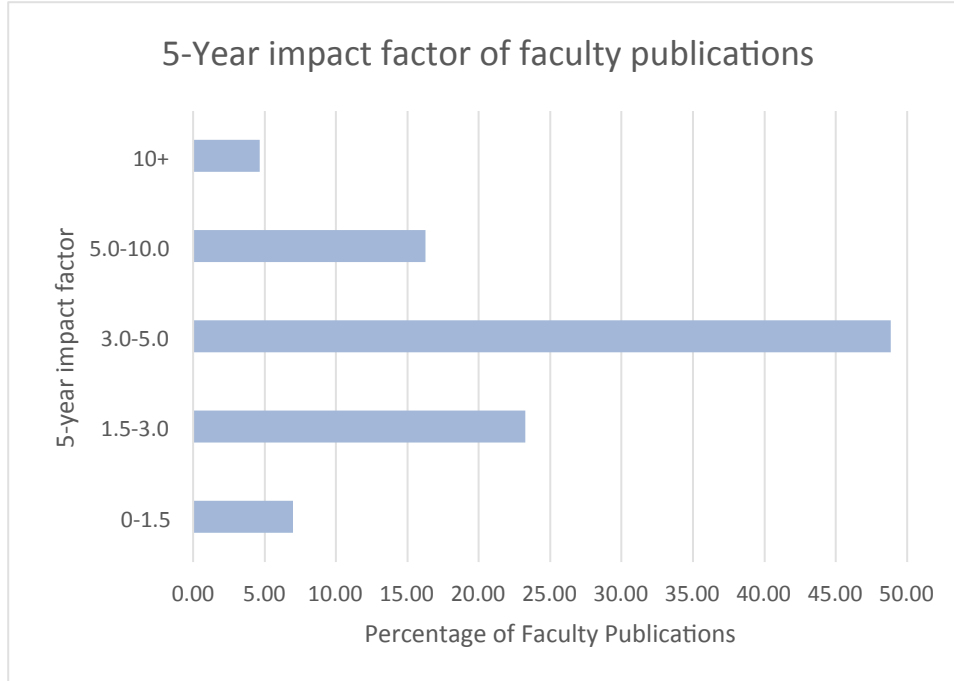
Total IRES Grants Newly Won in Fiscal Year 2014/15 by Funding Agency



Publications

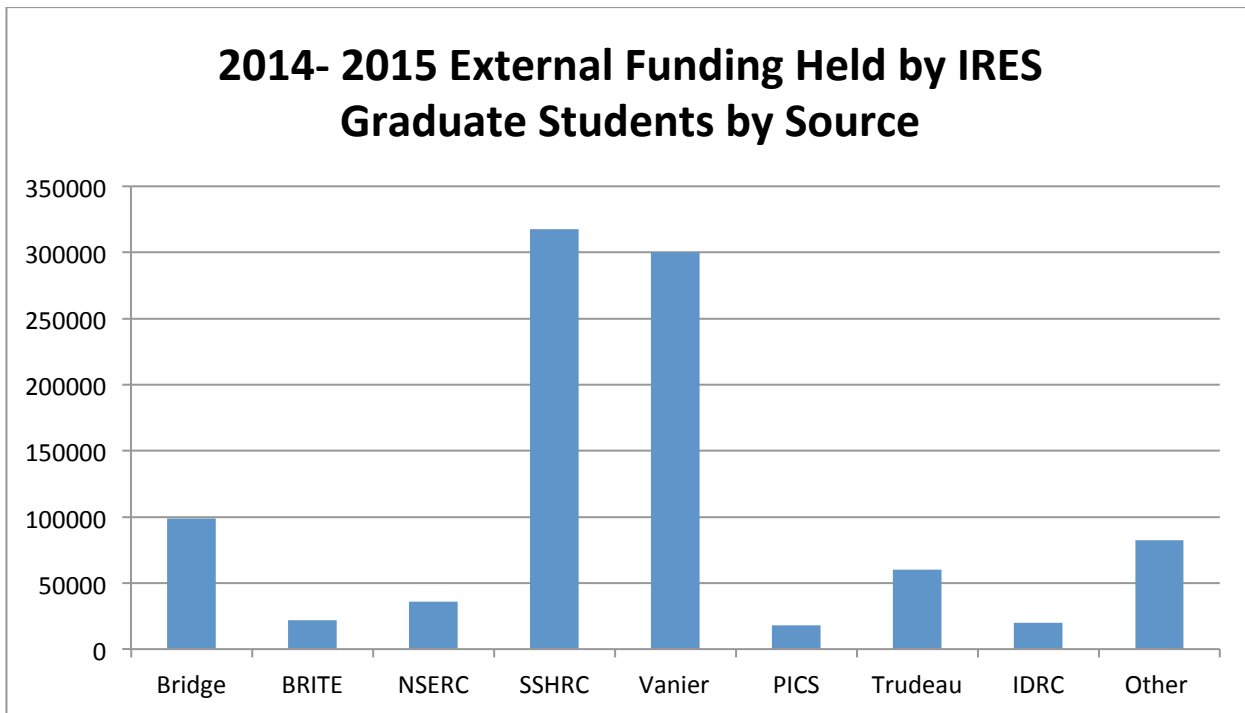
In 2014-2015 IRES Faculty published 46 peer reviewed papers in a variety of journals, including PNAS, Nature, Ecology and Society, PLoS One, Environmental Research Letters, Bioscience, Journal of Environmental Management, Environment and Planning and Ecological Economics. In addition, they published 9 book chapters.

The table below shows the distribution of publications across five-year journal impact factors. We assume that a publication in a journal with a five-year impact factor of 3-5 is 'good' (e.g., PLOS One, Ecological Economics, ERL). Journals with an impact factor of 5-10 are considered top-flight disciplinary or topical area journals (e.g. Environmental Science & Technology; Global Environmental Change, Frontiers in Ecology and Environment). Beyond that are career defining journals, all of which have 5-year Impact Factors of 20 or greater, such as Science, Nature, PNAS and Lancet. Of the journal articles, ~20% or n=9 were published in the top-flight area journals or better (including one Nature and another in PNAS). More broadly, ~70% or n=30 were published in journals with 5-year impact factors of greater than 3.0.



Student Funding

During the 2014-2015 academic year, there were 100 graduate students in the RMES program. Of those eligible for funding, virtually all PhD and most Masters students are funded at a minimum stipend of \$18,000 plus tuition. About half of this funding comes from faculty research grants or UBC Graduate and Postdoctoral (G+PS) funding in the form of four-year fellowships (4YF's). In addition, 38 currently eligible RMES students have received external funding for a total of \$950,000. This averages to \$25,000 per student and includes seven of Canada's most prestigious graduate fellowships - including six Vanier Awards of \$50,000 each and one Trudeau Fellowship of \$55,000. Overall, this funding record reflects our ability to attract top, competitive students and the substantial effort we have put into mentoring our student's capacity to develop successful funding proposals.



Students Graduated

From September 2014 – August 2015 saw the graduation of 8 Masters Students and 10 PhD Students.

MA	Supervisor	Thesis Title
Elizabeth Dapaah	Leila Harris	Water access and governance among indigenous and migrant low income communities in the Greater Accra Metropolitan Area (GAMA), Ghana
Ryan Davis	Mark Johnson	Looking past the present waste : path dependencies in municipal solid waste management in the US and European Union
Julia Reckermann	John Robinson	CIRS pre-occupancy evaluation : inhabitant feedback processes and possibilities for a regenerative place
Beatrice (Rosie) Simms	Leila Harris	“All of the water that is in our reserves and that is in our territory is ours” : colonial and Indigenous water governance in unceded Indigenous territories in British Columbia
MSc	Supervisor	Thesis Title
Krista Greer	Daniel Pauly	Considering the ‘effort factor’ in fisheries: a methodology for reconstructing global fishing effort and carbon dioxide emissions, 1950 - 2010
Andrea Haas	Rashid Sumaila	Examining distribution and concentration of access in British Columbia's salmon and herring fisheries
Aylin Ulman	Daniel Pauly	Actual and perceived decline of fishery resources in Turkey and Cyprus : a history with emphasis on shifting baselines
Lauren Weatherdon	William Cheung	Scenarios for coastal First Nations' fisheries under climate change : impacts, resilience and adaptation potential
PhD	Supervisor	Thesis Title
Dyhia Belhabib	Daniel Pauly	West African fisheries : past, present and 'futures?'
Andres Cisneros Montemayor	Rashid Sumaila	The economic benefits of ecosystem-based marine recreation: implications for management and policy
Angela Eykelbosh	Mark Johnson	Closing the carbon loop in sugarcane bioethanol : effects of filtercake biochar amendment on soil

		quality, leaching and carbon utilization
Danika Kleiber	Amanda Vincent & Leila Harris	Gender and small-scale fisheries in the Central Philippines
Rajeev Kumar	Tony Pitcher	Ecosystem based management for Mille Lacs Lake, Minnesota under changing environmental conditions
Frederic Le Manach	Daniel Pauly	Past, present and future of publicly-funded European Union's fishing access agreements in developing countries
Paul Teehan	Milind Kandlikar	Integrative approaches to environmental life cycle assessment of consumer electronics and connected media
Tashi Tsering	Tsering Shakya	Social inequality and resource management : gender, caste and class in the rural Himalayas
Nathan Vadeboncoeur	Ralph Matthews, Terre Satterfield	Knowing climate change : modelling, understanding, and managing risk