science co-op

2014/15 UBC Science Co-op Programs Year End Report

ANNUAL PLACEMENTS

UBC Science Co-op reached an exciting milestone of surpassing 1700 placements annually in 2014/2015. The total four-month placements achieved this fiscal year was 1755, which is a 24% increase compared to last year's total of 1415 placements (see Fig 1). The significant growth is attributed to a targeted marketing effort to improve the job posting to placement conversion ratio, maintaining high employer satisfaction and retention rates, and increasing Co-op admission student intake by 6%. With the addition of a third Computational Sciences Co-op Coordinator to a dedicated Co-op team, UBC Science Co-op projects to exceed 1800 placements in the upcoming year.

To date, there are 2300 employers in the Co-op database with over 5500 contacts. In the past year, over 1200 employers have posted 4766 Co-op positions with us from diverse industry types and locations. This annual report will provide detailed information on our program data for 2014/2015 including statistics on growth trends, placement location, student demographics, top employers, satisfaction summaries, graduation data, and a short biography of the Science Co-op Student of the Year Award recipient.

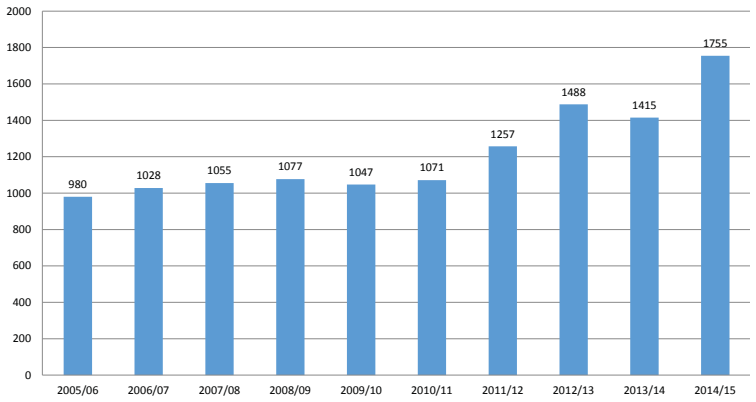


Figure 1: UBC Science Co-op Placements for the period 2005-2015

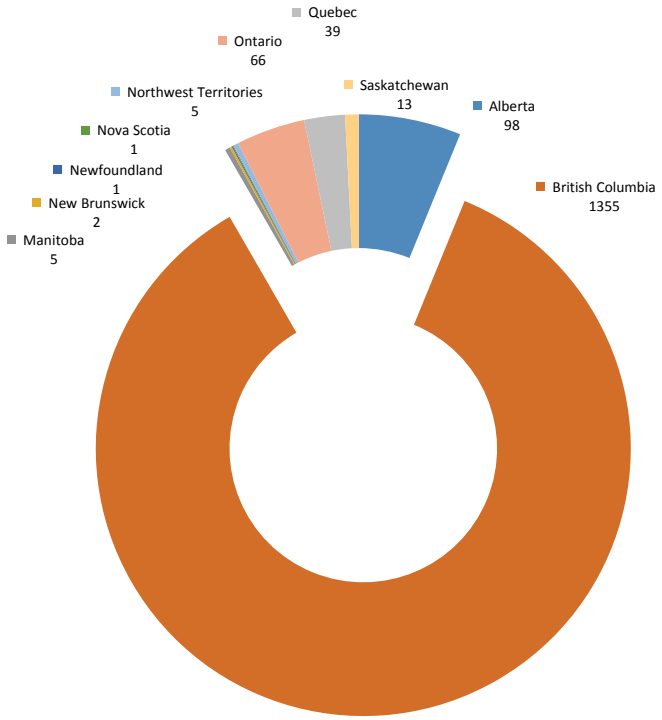
DISCIPLINE TRENDS

There are 25 program disciplines administered by the UBC Science Co-op Program including programs in Bachelor of Science, Bachelor of Computer Science (BCS), Engineering Physics (in Applied Science), Land & Food Systems, and a Graduate level Statistics Program. (see Fig. 2) The majority of the programs have experienced growth in the past year, most notably the Computer Science and BCS programs, which collectively have increased by 40%. The Life Sciences program remains strong and steady and has collectively increased placements by 18%. There is no job shortage in the computer science sector and our business development team will continue to focus on generating job opportunities in the life sciences/biotechnology field.

Discipline	*2012/13 Total*	*2013/14 Total*	*2014/15 Total*
ATSC	4	6	3
BCS	64	74	116
BIOC	162	130	157
BIOL	136	139	156
BIOP	22	12	29
BIOT	40	39	38
BPSY	5	3	11
CHEM	64	94	88
CMS	20	32	48
COGS	32	21	35
CPSC	350	307	411
ENPH	176	169	194
ENSC	32	23	29
EOSC	6	14	11
GEOB	6	4	14
GSCI	15	6	6
ISCI	34	44	43
LFS	69	65	97
MATH	23	23	29
MICB	100	84	111
PCTH	46	25	23
PHYL	7	15	17
PHYS	45	53	55
STAT	17	29	28
STAT (GRAD)	13	4	6
Total	*1488*	*1415*	*1755*

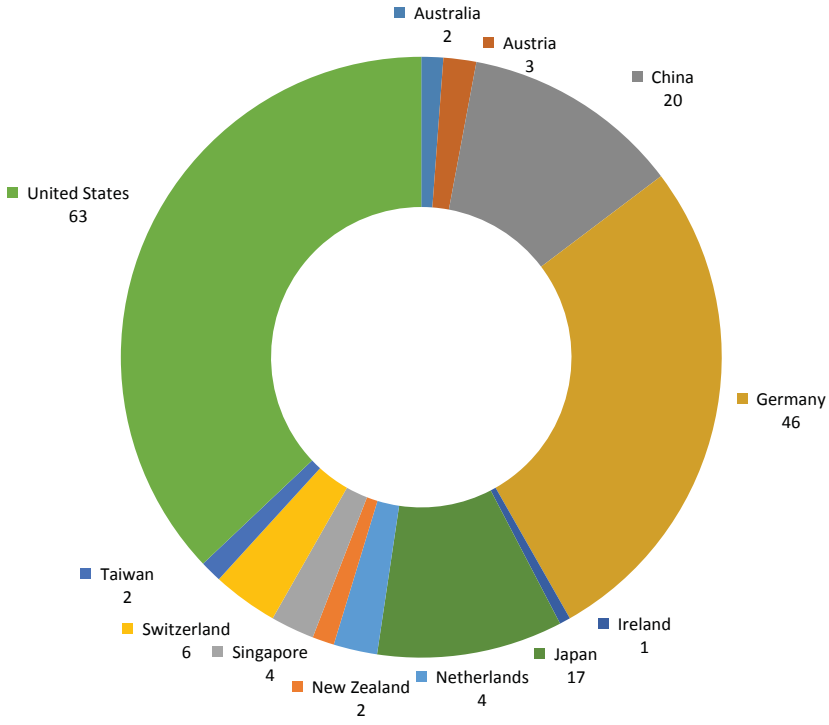
Figure 2: Placement by Discipline

CANADIAN PLACEMENTS BY PROVINCE



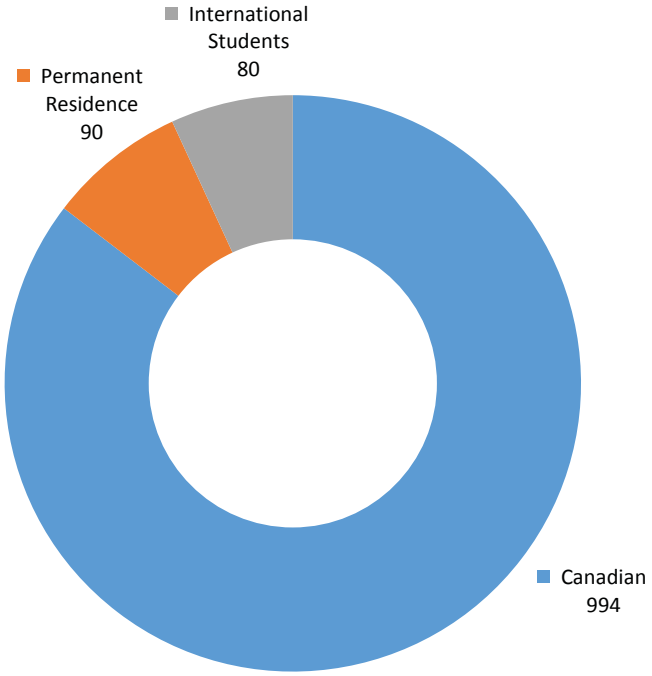
Similar to previous years, 90% of our placements were located in Canada. Of these 1585 placements, local BC shares 1355 (85%) of the placements while the remaining 15% of the students relocated to mainly Alberta (6%), Ontario (4%) and Quebec (2%) for their Co-op work terms. New out-of-province employers that hired our Co-op students consistently are Lady Davis Institute for Medical Research and Lallemand Inc. in Quebec, and University Health Networks in Ontario, to name a few.

INTERNATIONAL PLACEMENTS



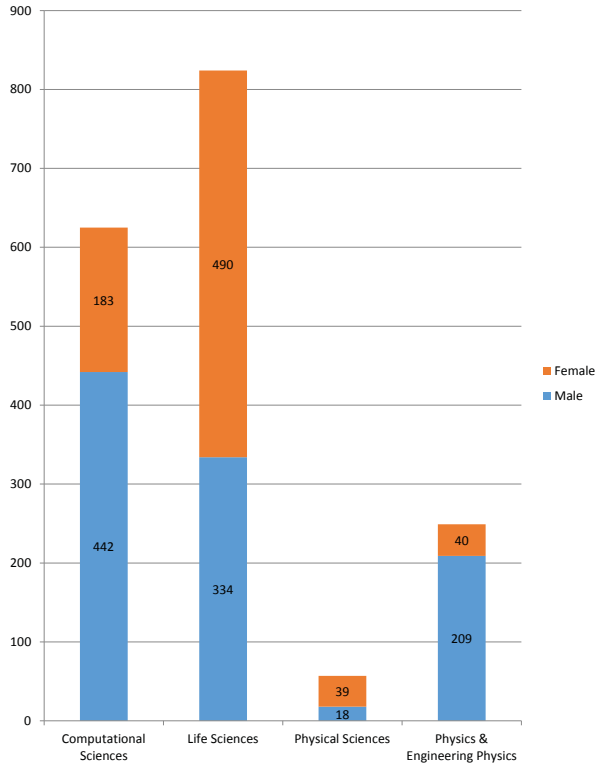
UBC Science Co-op is proud to sustain a consistently high percentage of international placements compared to other Co-op programs on campus. There were 170 (9%) placements outside of Canada that were held in 12 different countries. The top three destinations are the United States (63), Germany (46) and China (20). Key international hiring employers include Amazon, Pinterest and Tesla in the United States, Bayer in Germany and Harbin Medical University in China. The exchange partnership with Max Planck Institutes in Germany continued to be a success in providing challenging research opportunities to our students. All international students receive a pre-departure meeting with our Co-op staff and are required to complete the Safety Aboard Registry with UBC Go Global. Students going to the same country destination are connected before their departure to provide additional social support after their arrival in a foreign country. Science Co-op also held an annual "My International Experience Night" event to promote overseas opportunities to our students.

STUDENT DEMOGRAPHICS



With UBC's incentive to increase international student admissions, our international student population has also grown by 30% from 60 to 80 students compared to the previous year. The 1755 total annual placements were held by 1164 distinct students in our program, of which 6% are foreign students. International students receive assistance from UBC International House and our Co-op staff to acquire their Co-op work permit to legally take on employment in Canada. Some international students were also successful in securing work terms outside of Canada.

GENDER DISTRIBUTION



Approximately 60% of the students in the Science Co-op Program are males and 40% females. The majority of the programs have an even distribution between the two genders except for Engineering Physics, Computer Science and Physics which continue to be more male dominant programs. There are slightly more female students in the groups of Life Sciences program such as Biology and Environmental Sciences.

EMPLOYER EVALUATION SUMMARY

Co-op employers are required to complete an on-line evaluation for each student hired. A summary of employers' evaluations of Co-op students, as well as the Co-op placement process, is provided in the following tables.

Employer Satisfaction with Student's Performance	*Collected Response*	*%*
Very Satisfied	798	70
Satisfied	310	27
Neither Satisfied or Unsatisfied	28	2
Somewhat Satisfied	8	1
Unsatisfied	1	0
Total	1145	100%

Employer Satisfaction on Program's Placement Process	*Collected Response*	*%*
Very Satisfied	986	87%
Satisfied	122	11%
Neither Satisfied or Unsatisfied	20	2%
Somewhat Unsatisfied	6	0%
Very Unsatisfied	3	0%
Total	1137	100%

STUDENT EVALUATION SUMMARY

Co-op students are also required to complete an online evaluation for each work term. A summary of students' evaluations of the Co-op placement and an assessment of the usefulness of the Co-op experience in determining a career path is provided in the tables below.

Student's Overall Satisfaction Level with Placenment	*Collected Response*	*%*
Very Satisfied	625	51%
Somewhat Satisfied	447	37%
Neither Satisfied or Unsatisfied	119	10%
Somewhat Unsatisfied	26	2%
Unsatisfied	5	0%
Total	1222	100%

Usefulness of Experience Towards Future Career	*Collected Response*	*%*
Very Useful	679	56%
Somewhat Useful	380	31%
Neither Useful or Unuseful	130	11%
Not Very Useful	27	2%
Not Useful At All	2	0%
Total	1218	100%

CO-OP GRADUATION

For the BSc and BCS graduating class of May 2015, 20% of the students have participated in Co-op. 214 Science Co-op graduates have completed all required work terms and will be receiving a Co-op designation on their official parchments. The number of Science graduates who have completed at least one Co-op work term is 298, a 13% increase compared to the last year.

	Number of Science Graduates	*Number of Co-op Graduates (with Co-op Designation, completed 4 work terms)*	*Number of Co-op Graduates who completed at least one work term*
May 2015	1122	214	298
November 2014	141	29	25

3-YEAR SUMMARY AT-A-GLANCE

	2011/13	*2013/14*	*2014/15*
Total BSC Graduates (May)	1093	1190	1122
Total BSC Co-op Graduates with Co-op Designation (May)	171	163	214
Total BSC Co-op Graduates with at least one work term (May)	246	264	298
Total Annual Placements	1488	1415	1755
Total Distinct Students Placed	991	971	1164
Total International Placements	162	132	119

STUDENT OF THE YEAR - LUCAS CAHILL

MAJOR IN ENGINEERING PHYSICS

Lucas Cahill is an ideal candidate who exhibits all the qualities of an outstanding Co-op student. During his time as a Co-op student, he has achieved many impressive accomplishments in his workplace, contributing much to advance the research projects that he was a part of. His supervisors described him as "an exceptionally gifted student" and he was consistently rated as the top-tiered student amongst many others they have encountered. Additionally, Lucas has a stellar academic record and is well respected amongst his peers.

Lucas is in his last year of Engineering Physics at UBC, where he takes a heavy course load in Math, Physics and Electrical Engineering. International co-op experience at Laser Zentrum,Germany, microscope development at the Brain Research Centre, UBC, and biomedical imaging at BC Cancer Research Centre has given him the opportunity to directly contribute to his intended career field (research professor in biomedical optics and medical imaging) through multiple research papers and conference presentations. This year he will be attending SPIE Photonics West, one of the largest Biomedical optics and Biophotonics conference in the world, to give an oral presentation on his research at BC Cancer. His co-op experiences have enhanced his understanding and promoted his involvement in his undergraduate courses and confirmed his desire to pursue graduate school in Biomedical Imaging.

We have no doubt that Lucas will continue to succeed in his future studies and career. It is an honor to have a student like Lucas in our UBC Science Co-op Program.

Full Bio of Lucas is available on the Co-op website at
http://www.sciencecoop.ubc.ca/students/awardwinners2014

"Co-op has allowed me to explore different jobs so that I could be sure that I want to pursue graduate school, which is important when committing to another five to six years of schooling. The technical knowledge that I have gained from co-op experiences, the interpersonal communication skills that I have developed through communication of technical details and designs to health care professionals and researchers in my field and in others, and the important contacts that I have established in the field (nationally and internationally) will be major contributors to my success in my future career."

Lucas Cahill, *Recipient of Co-op Student of the Year 2014 Award*