

PHSA RESEARCH METRICS

FISCAL YEAR 2023-24

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Table of Contents

PHSA RESEARCH METRICS FISCAL YEAR SUMMARY – PHSA OVERALL	5
PHSA AGGREGATE ANALYSIS	6
Producing and Advancing Knowledge	6
FIGURE 1 Total PHSA Research Funding by Funding Type and Sub-Type by Fiscal Year	6
TABLE 1 COVID-19 Research – FY 2023-24.....	6
FIGURE 2 Total PHSA Research Funding by Fiscal Year and Type.....	7
FIGURE 3 Percentage of PHSA Research Funding by Funding Source Category by Fiscal Year	7
FIGURE 4 Percentage of PHSA Research Funding by RISE Sector and Fiscal Year	8
FIGURE 5 Percentage of PHSA Research Funding by RISE Sector and Program	8
TABLE 2 PHSA Annual Grant Application Success Rate	9
FIGURE 6 Total Number of Publications by Program and Category	9
Building Research Capacity.....	10
FIGURE 7 Total Number of PHSA Researchers by Category and FY.....	10
TABLE 3 Number of Funded Studies, PI’s, UBC Co-PI’s and Award Amount by Program	10
FIGURE 8 Total Number of PHSA Trainees by Fiscal Year	11
FIGURE 9 Total Number of PHSA Trainees by Type by Fiscal Year.....	11
Achieving Economic Benefits and Innovation	12
FIGURE 10 Total # of Invention Disclosures, Provisional Patent and PCT Applications Filed by Fiscal Year	12
FIGURE 11 Total # of National Provisional Patent Applications Filed and Issued by Fiscal Year	12
FIGURE 12 License/Assignment Agreements and Spin-Off Companies by Fiscal Year.....	13
FIGURE 13 Total Cumulative Subject Enrollment and # of Clinical Trials by Fiscal Year	13
FIGURE 14 PHSA Percent of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY..	14
FIGURE 15 Classification of Benefits Summary for All Programs.....	14
BC CANCER RESEARCH INSTITUTE (BCCRI)	15
Producing and Advancing Knowledge	15
FIGURE 16 Total BCCRI Research Funding by Funding Type and Sub-type by Fiscal Year	15
FIGURE 17 Percentage of BCCRI Research Funding by Funding Source Category by Fiscal Year	16
FIGURE 18 BCCRI Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year	17
TABLE 4 BCCRI Annual Grant Application Success Rate	18
FIGURE 19 Total Number of BCCRI Publications by Type and Category.....	18
Building Research Capacity.....	18
FIGURE 20 Total Number of BCCRI Researchers by Category and Fiscal Year	19
FIGURE 21 Total Number of BCCRI Trainees by Type and Fiscal Year.....	19
Achieving Economic Benefits and Innovation	20
FIGURE 22 BCCRI Invention Disclosures, Provisional Patent and PCT Applications by Fiscal Year	20
FIGURE 23 BCCRI National Patent Activity by Fiscal Year	20
FIGURE 24 BCCRI License Agreements and Spin-Off Companies by Fiscal Year.....	21
TABLE 5 TDO IP Related Revenue.....	21
Advancing Health and Policy Benefits	22
TABLE 6 BCCRI Clinical Trials	22
FIGURE 25 BCCRI Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY	22
TABLE 7 BCCRI Top Three Achievements/Accomplishments/Highlights.....	23
BC CHILDREN’S HOSPITAL RESEARCH INSTITUTE (BCCHR)	24
Producing and Advancing Knowledge	24
FIGURE 26 Total BCCHR Research Funding by Funding Type and Sub-type by Fiscal Year.....	24
FIGURE 27 Percentage of BCCHR Research Funding by Funding Source Category by Fiscal Year.....	25

FIGURE 28 BCCHR Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year	26
TABLE 8 BCCHR Annual Grant Application Success Rate.....	27
FIGURE 29 Total Number of BCCHR Publications by Type and Category	27
FIGURE 30 BCCHR Social Media Statistics	28
Building Research Capacity.....	28
FIGURE 31 Total Number of BCCHR Researchers by Category	28
FIGURE 32 Total Number of BCCHR Trainees by Type.....	29
Achieving Economic Benefits of Innovation	29
FIGURE 33 BCCHR Invention Disclosures, Provisional Patent and PCT Applications Filed by Fiscal Year	29
FIGURE 34 BCCHR National Patent Activity by Fiscal Year.....	30
FIGURE 35 BCCHR License/Assignment Agreements and Spin-off Companies by Fiscal Year	30
TABLE 9 BCCHR IP Related Revenue.....	31
Advancing Health and Policy Benefits	31
TABLE 10 BCCHR Clinical Trials.....	31
FIGURE 36 BCCHR Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY.....	32
TABLE 11 BCCHR Top Three Achievements/Accomplishments/Highlights.....	33
BC MENTAL HEALTH & SUBSTANCE USE SERVICES RESEARCH INSTITUTE (BCMHSUS) ...	34
Producing and Advancing Knowledge	34
FIGURE 37 BCMHSUS Research Funding by Funding Type and Sub-type by Fiscal Year.....	34
FIGURE 38 Percentage of BCMHSUS Research Funding by Funding Source Category by Fiscal Year	35
FIGURE 39 Total BCMHSUS Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year.....	36
TABLE 12 BCMHSUS Annual Grant Application Success Rate.....	37
FIGURE 40 Total Number of BCMHSUS Publications by Type and Category	37
Building Research Capacity.....	38
FIGURE 41 Total Number of BCMHSUS Researchers by Category.....	38
FIGURE 42 Total Number of BCMHSUS Trainees by Category	38
Advancing Health and Policy Benefits	39
TABLE 13 BCMHSUS Clinical Trials.....	39
FIGURE 43 BCMHSUS Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY.....	39
TABLE 14 BCMHSUS Top Three Achievements/Accomplishments/Highlights.....	40
BC CENTER FOR DISEASE CONTROL/UBC CDC (BCCDC)	41
Producing and Advancing Knowledge	41
FIGURE 44 Total BCCDC Research Funding by Funding Type and Sub-type by Fiscal Year.....	41
FIGURE 45 Percentage of BCCDC Research Funding by Funding Source Category by Fiscal Year	42
FIGURE 46 Total BCCDC Research Funding by RISE Sector, Funding Source Category and Type by FY	43
TABLE 15 BCCDC Annual Grant Application Success Rate.....	44
FIGURE 47 Total Number of BCCDC Publications by Type and Category	44
Building Research Capacity.....	45
Figure 48 Total Number of BCCDC Trainees by Type.....	45
Advancing Health and Policy Benefits	45
TABLE 16 BCCDC Clinical Trials.....	45
TABLE 17 BCCDC Top Three Achievements/Accomplishments/Highlights.....	46
WOMEN’S HEALTH RESEARCH INSTITUTE (WHRI).....	47
Producing and Advancing Knowledge	47
FIGURE 49 Total WHRI Research Funding by Funding Type and Sub-type by Fiscal Year	47
FIGURE 50 Percentage of WHRI Research Funding by Funding Source Category by FY.....	48
FIGURE 51 Total WHRI Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year	49

TABLE 18 WHRI Annual Grant Application Success Rate..... 50

FIGURE 52 Total Number of WHRI Publications by Type and Category 50

FIGURE 53 WHRI Social Media Statistics 51

Building Research Capacity..... 51

Figure 54 Total WHRI Membership by Category..... 51

Figure 55 Total Number of WHRI Trainees by Type 52

Advancing Health and Policy Benefits 52

TABLE 19 WHRI Clinical Trials 52

FIGURE 56 WHRI Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY 53

TABLE 20 WHRI Top Three Achievements/Accomplishments/Highlights 54

REGISTRIES & DATASETS 55

Advancing Health and Policy Benefits 55

Supporting Research Activities..... 57

TABLE 21 Research Activities Supported by Registries and Datasets 57

TABLE 22 Provision of Data to external Data Sets by Registry 58

Nature of Research Activities 59

FIGURE 57 Ranking of Predominant Nature of Research Questions Using Data from the Registries/Datasets 59

FIGURE 58 Research Access Requests and Approvals from Registry/Dataset by Fiscal Year..... 59

APPENDIX 1 - GLOSSARY..... 60

PHSA RESEARCH METRICS FISCAL YEAR SUMMARY – PHSA OVERALL

Indicator		Key Measure Description	FY 2021-22	FY 2022-23	FY 2023-24
			Value	Value	Value
Producing & Advancing Knowledge	1a	Total Annual Grant Awards by Type (including Major CFI Infrastructure grants)	\$177,100,074	190,089,694	218,873,616
		Salary Awards	13,811,897	16,573,879	19,781,724
		Infrastructure Awards	8,077,745	6,316,173	16,998,023
		Operating Grants	155,130,637	163,514,856	181,890,928
		Other	79,795	3,684,786	202,942
		COVID-19 Research Funding (included in above categories)	13,520,117	7,057,997	11,026,956
	1b	Total Annual Grant Awards by RISE Sector (including Major CFI infrastructure grants)			
		Government	76,402,654	85,150,160	102,028,986
		Non-Profit	76,243,844	83,475,718	92,417,844
		Industry	24,453,576	21,463,815	24,426,786
1c	CIHR Annual Grant Application Success Rate - PHSA Overall/ Nat'l				
	Fall Project Grant	28.1%/26.0%	45.2%/25.0%	27.8%/17.5%	
	Spring Project Grants	29.2%/22.3%	25.0%/22.4%	20.0%/15.3%	
1d	Total # of Publications w/ Program Author				
	BCCHR	1,284	1,403	1,338	
	BCCRI	761	940	855	
	WHRI	1,006	1,244	1,250	
	BCCDC	301	308	214	
	BCMHSUS	151	127	145	
Building Research Capacity	2a	Total # of Research Trainees	2,917	3,120	2,982
	2c	Total # of Researchers (excluding Category 3 – Affiliate Investigator)	940.5	963	1,049.5
	2e	Research Support Fund Grants (Tri-Council only)	\$4,303,669	\$4,134,441	\$4,036,502
Achieving Economic Benefits & Innovation	3a	# of Invention Disclosures	35	31	25
		# of Provisional Patent Applications Filed	17	15	10
		# of PCT Applications Filed	8	5	6
		# of Patents Filed/Issued	115/30	15/42	17/36
	3b	# Active License Agreements	130	133	134
		# of Spin-off Companies	19	20	21
	IP Related Revenue – Realized Revenue				
	BCCRI	\$2,210,216	\$855,384	\$393,634	
	BCCHR	\$1,209,525	\$912,212	\$991,513	
Advancing Health & Policy Benefits	4a	Clinical Trials (including Non-PHSA PIs utilizing PHSa facilities and resources)			
		# active trials at the end of the FY	695	706	712
		Cumulative Subject Enrollment-end of FY	36,287	37,266	31,855
4b	Registries as Research Resources				
	# of Research Requests/Approvals	273/257	223/165	266/255	

PHSA AGGREGATE ANALYSIS

Producing and Advancing Knowledge

In FY 2023-24, researchers affiliated with PHSa were awarded a total of \$218,873,616, an increase of 15.1% from FY 2022-23.

Operating grants continue to make up the largest portion (83%) of total funding received. Operating grants support specific, time-limited research projects. While operating grants are the “bread and butter” of research grants, salary awards are important to provide researchers with the

protected time to successfully compete for operating grants and represent 10% of total awards for the past five fiscal years. A breakdown of funding types and subtypes by fiscal year can be found in Figure 1. For FY 2023-24, the subtype of Operating or Project Operating Grants garnered the largest portion of research funding.

See Table 1 for breakdown of COVID-19 related research funding by program.

FIGURE 1 Total PHSa Research Funding by Funding Type and Sub-Type by Fiscal Year

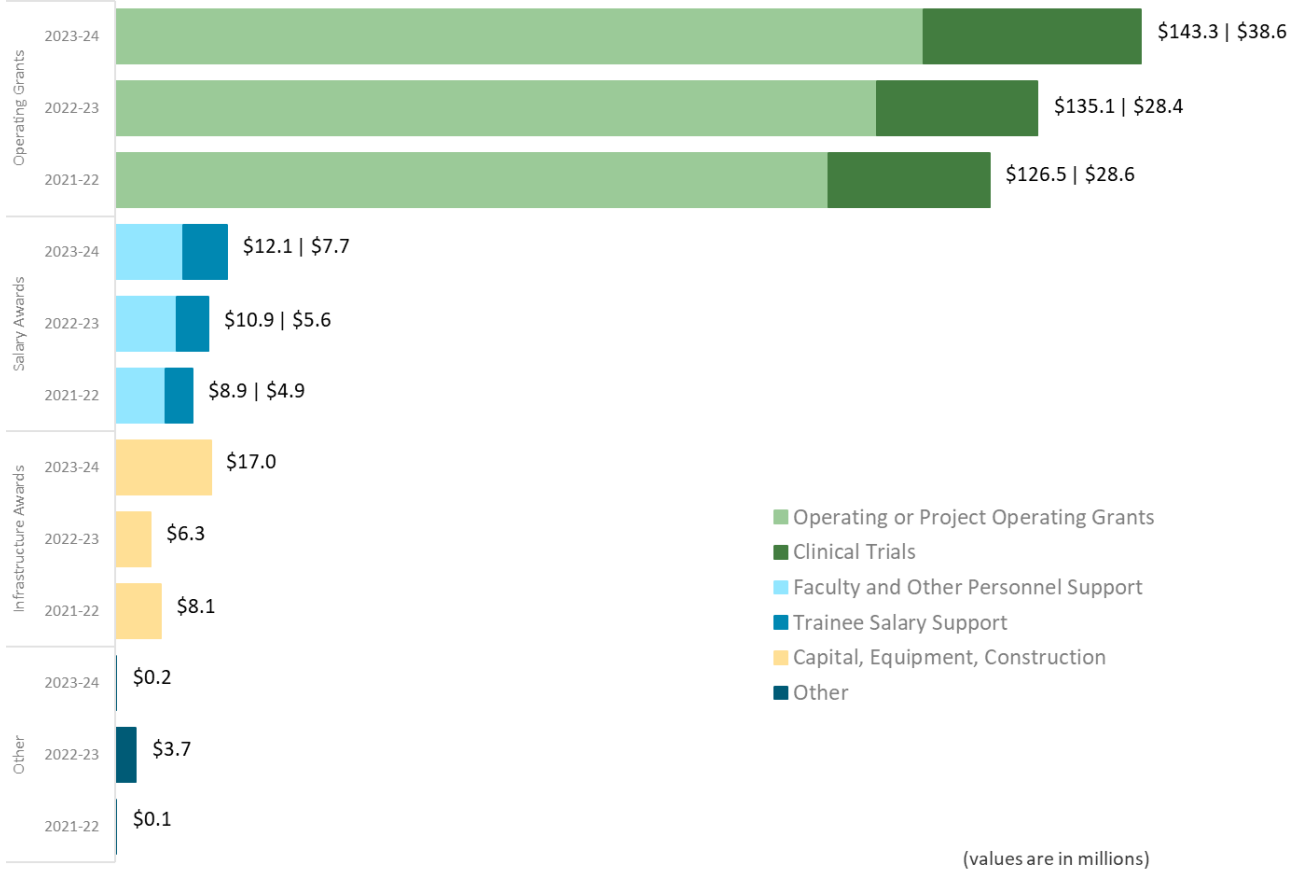


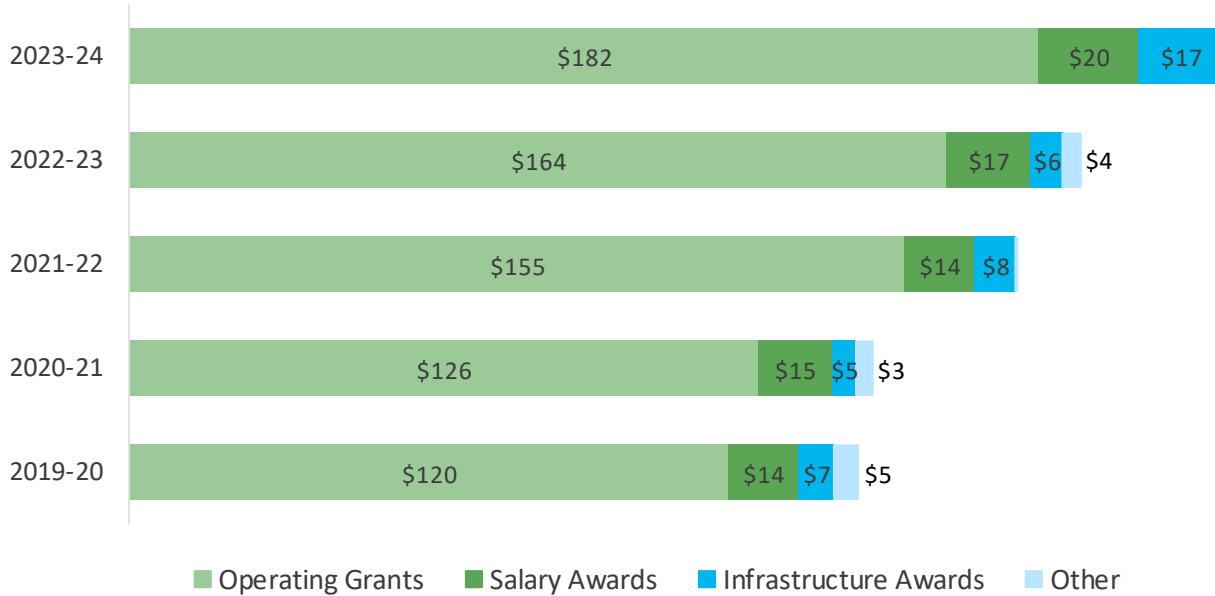
TABLE 1 COVID-19 Research – FY 2023-24

Program	TOTAL
BCCRI	\$41,633
BCCHR	\$5,766,649
WHRI	\$4,226,865
BCCDC	\$967,308
BCMHSUS	\$24,500
TOTAL	\$11,026,956

Research Support Fund grants total \$4,036,502 and represent funding to support the indirect costs of research for tri-council awards but is not included in total research funding or the figures below. Because research support is a shared expense between UBC and PHSA research

programs, PHSA has negotiated to receive 66% of the applicable UBC Research Support grant. Figure 2 shows Total Research Funding by Fiscal Year and Type for the past five fiscal years.

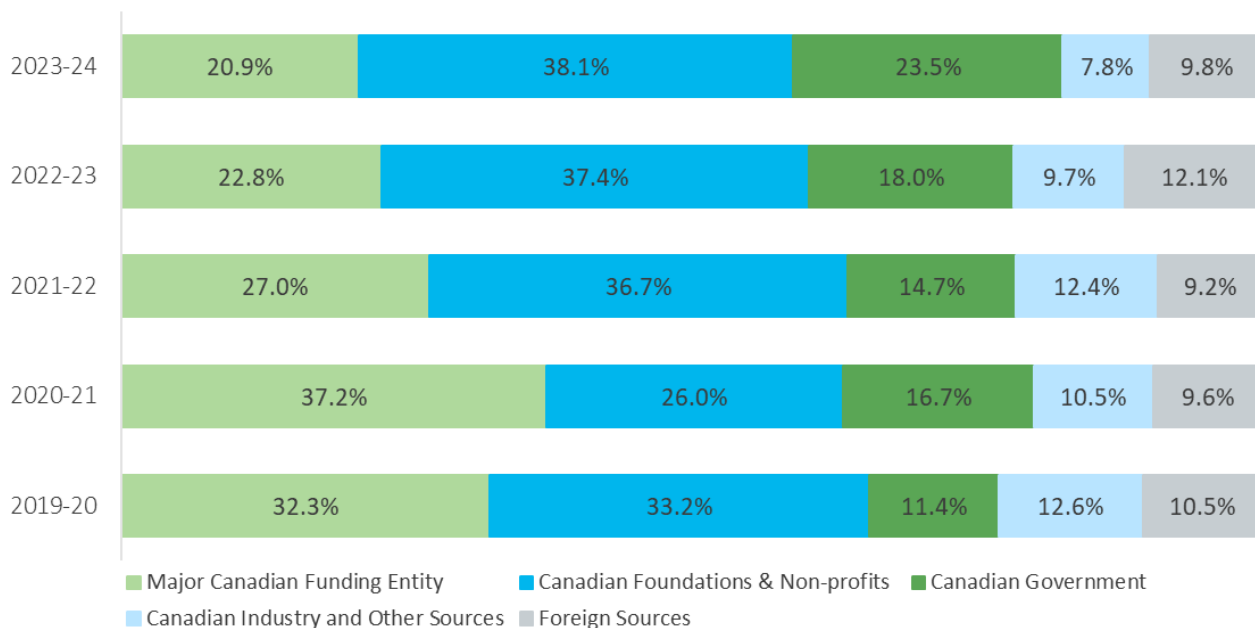
FIGURE 2 Total PHSA Research Funding by Fiscal Year and Type



A comparison of funding source by source category over five (5) fiscal years can be found in Figure 3. This figure, generated by compiling hundreds of potential sources into five categories, highlights the extent to which primary sources of funding vary from year to year. This year, Canadian Foundations & Non-profit and Canadian

Government sources represent 61.6% of the total funding. Canadian Foundations & Non-profits had the largest share of funding in 4 of the last the 5 years. Canadian Industry and Other sources and Foreign sources remain fairly stable while Canadian Government is at its highest level in 5 years.

FIGURE 3 Percentage of PHSA Research Funding by Funding Source Category by Fiscal Year



In addition to the above, Figures 4 and 5 show the same award data by RISE sector (see Glossary – Appendix 1, pg. 63, for sector definition) both by fiscal year and by program for five fiscal years.

FIGURE 4 Percentage of PHSA Research Funding by RISE Sector and Fiscal Year

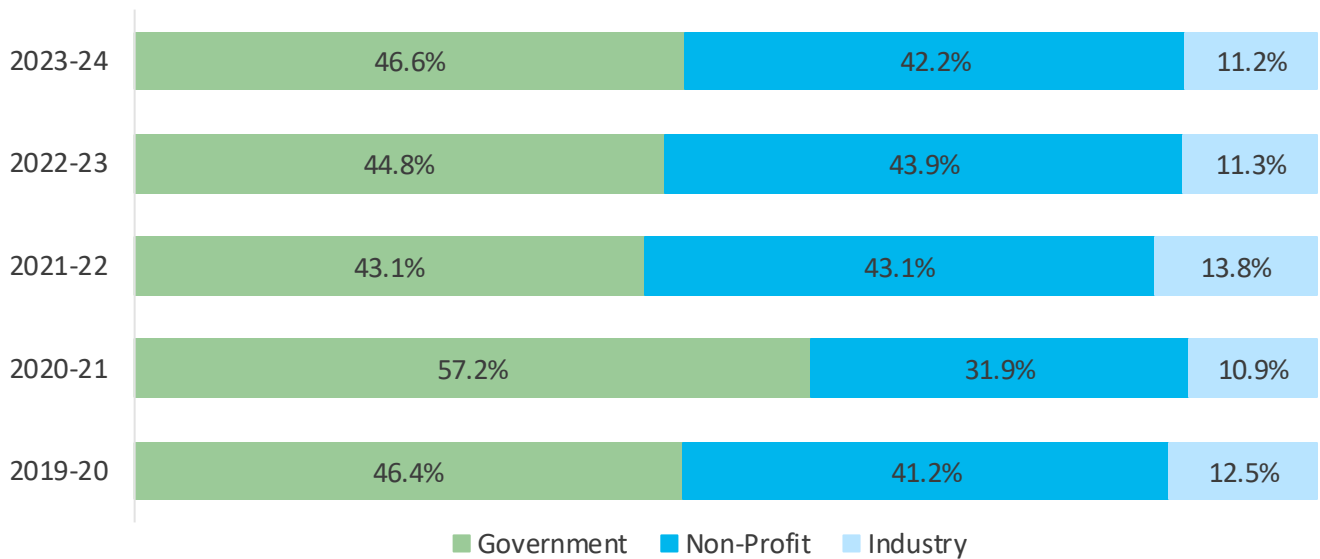
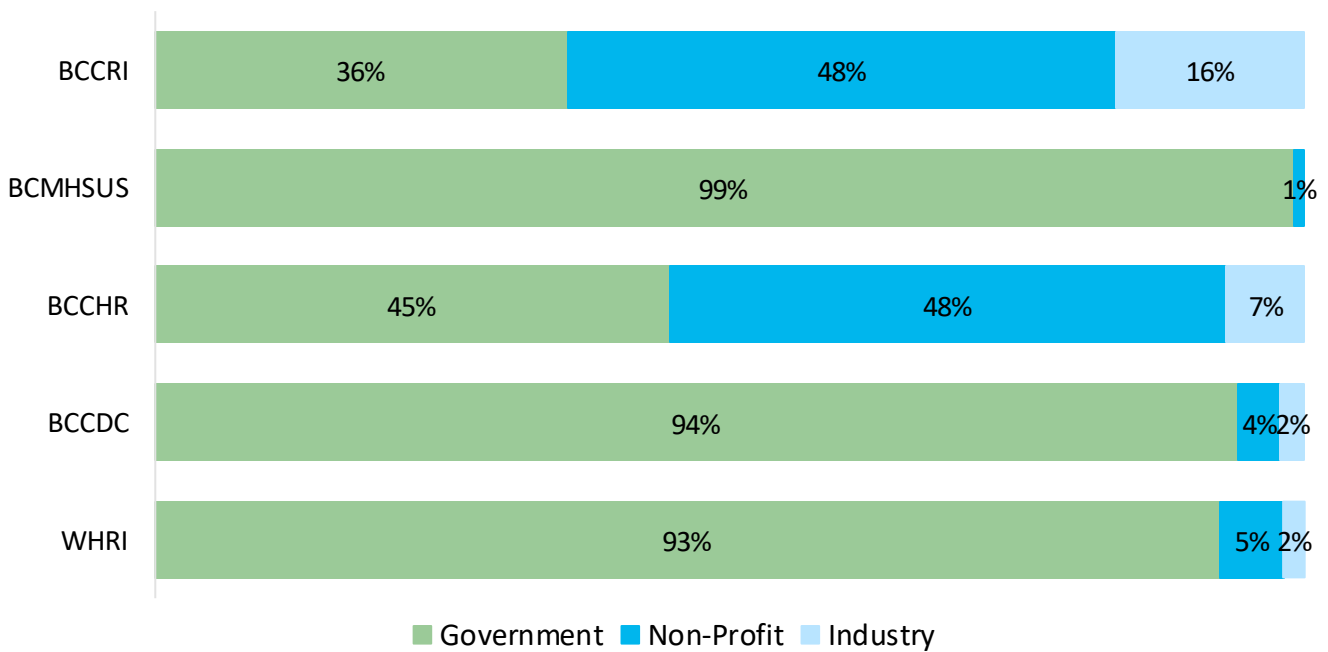


Figure 5 shows the percentage of funding by RISE sector and program for FY 2023-24. This graph reflects the variations in funding sources for all PHSA research entities, as BCMHSUS, BCCDC and WHRI rely heavily on government funding.

FIGURE 5 Percentage of PHSA Research Funding by RISE Sector and Program



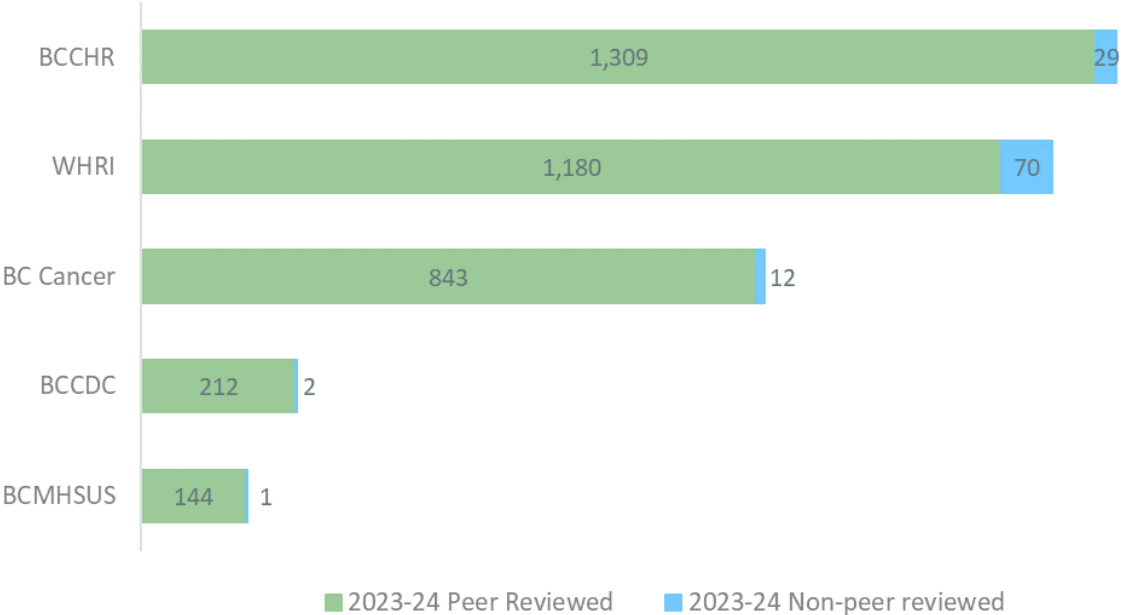
The application success rate is reported for the Fall 2023 and Spring 2024 CIHR project grant competitions. Results (see table 2) are shown for National and PHSA research entities combined. PHSA enjoyed success in both Project Grant programs and was above the national averages resulting in 27 awards.

TABLE 2 PHSA Annual Grant Application Success Rate

Grant Funding Opportunity	National Overall Results % (Approved/Submitted)	PHSA Results % (Approved/Submitted)
2023-09 Project Grant	17.5% (380/2,175)	27.8% (15/54)
2024-03 Project Grant	15.3% (373/2,443)	20.0% (12/60)

Statistics for publications were collected utilizing SciVal with Scopus as the source. Publications were collected in the categories of books, book chapters, peer-reviewed publications inclusive of published journal articles, case reports, essays, literature reviews, and reports produced for government. See Figure 6 for a breakdown of total publications by program and category. Totals are reported by calendar year for all programs. A breakdown by types is shown in the program specific sections due to low sample size.

FIGURE 6 Total Number of Publications by Program and Category



Building Research Capacity

PHSA research entities identified 1,049.5 researchers in categories 1, 2, and 5 in FY 2023-24, up 86.5 from FY 22-23 (see Figure 7). Increases were seen in all researcher categories. Category 3 researchers are defined as Affiliate Investigators and represent those researchers with a primary affiliation with a research or academic institution external to PHSA, but who wish to remain collaborators with PHSA researchers. PHSA does not track category 3 members funding, publications, or trainees. Details on affiliate members can be found in each program section. BCMHSUS, BCCHR and BCCRI can report their researchers

utilizing BCCHR defined categories, which highlight the amount of time protected for research purposes. BCCDC and WHRI define researchers utilizing a methodology that best reflects the type of work and relationships they have with their researchers. Further information on these methods can be found in specific program sections. An attempt to count each researcher only once was made by attributing each researcher to the entity where the bulk of salary and/or support are received. Category 1 researchers are best positioned to compete for external grants.

FIGURE 7 Total Number of PHSA Researchers by Category and FY

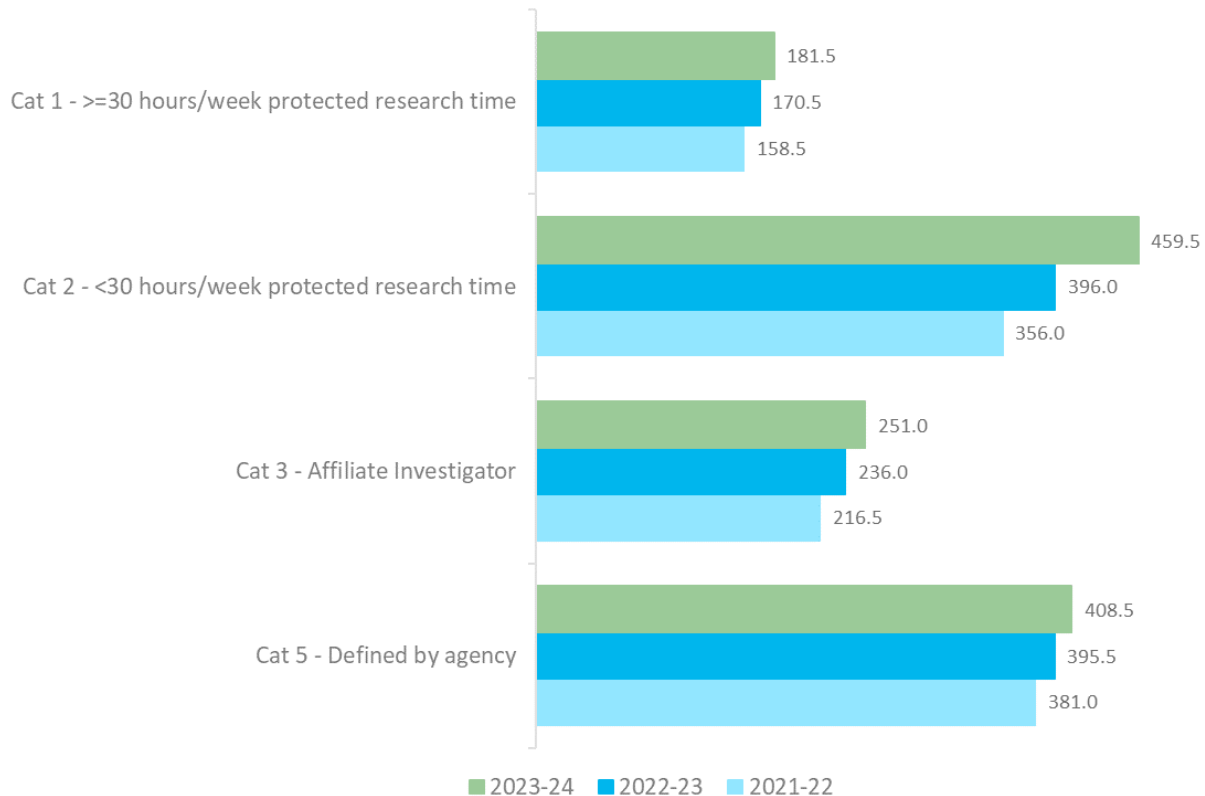


Table 3 provides summary statistics by program at the Principal Investigator (PI) level. PHSA received funding for 466 Principal Investigators collaborating with 1,311 UBC co-investigators for 1,485 unique studies in FY 2023-24. This

excludes Salary and Other award types as these are not designated for specific studies and the number of co-investigators from other academic institutions.

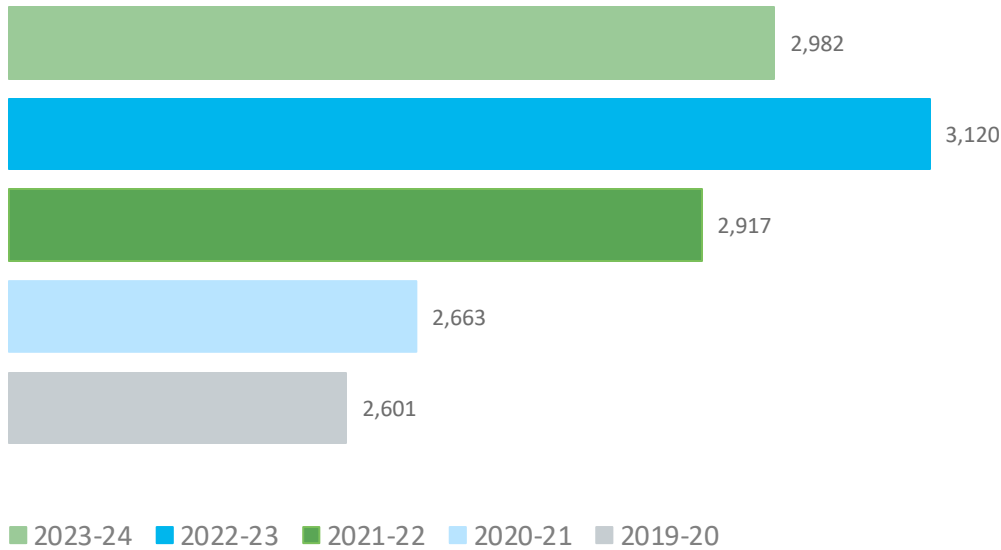
TABLE 3 Number of Funded Studies, PI's, UBC Co-PI's and Award Amount by Program

Program	# of Unique Studies	# of Unique PI's by Program	# of UBC Co-PI's by Program	Total Award Amount
BCCRI	669	194	563	\$108,387,120
BCCHR	665	203	556	\$64,077,384
WHRI	59	33	138	\$9,573,724
BCCDC	80	28	31	\$16,253,490
BCMHSUS	12	8	23	\$597,233
Grand Total	1,485	466	1,311	\$198,888,951

During FY 2023-24, PHSA researchers provided training and supervision to a total of 2,982 research trainees, a decrease of 138 from FY 2022-23. This is a significant metric because the training of post-doctoral fellows (PDFs), Doctoral, and Masters Trainees in particular is a major indicator of the degree to which PHSA and its research entities are supporting their academic mandate and ensuring the next

generation of highly qualified research personnel. In addition, post-doctoral fellows and doctorals contribute significantly to the conduct of research under the supervision of principal investigators. See Figure 8 and 9 for the number of trainees by type and fiscal year for PHSA overall.

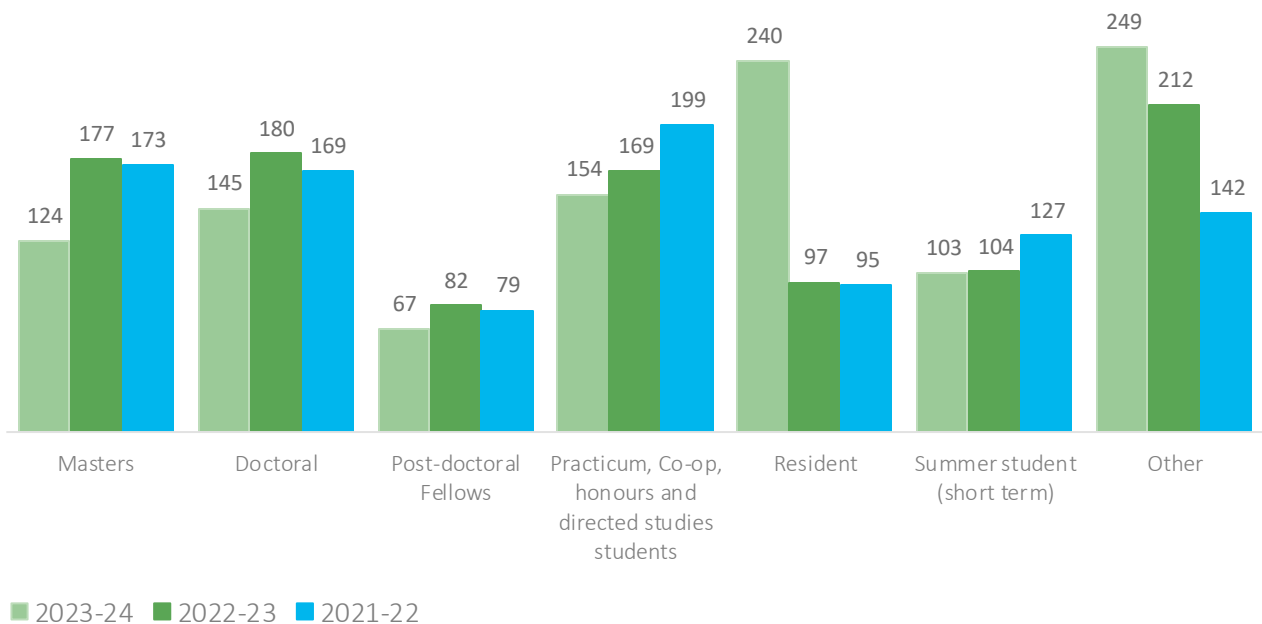
FIGURE 8 Total Number of PHSA Trainees by Fiscal Year



The breakdown of trainees stayed relative the same for the past three years with the largest increase seen in the

Resident category attributed mostly to WHRI and BCMHSUS programs in FY 2023-24.

FIGURE 9 Total Number of PHSA Trainees by Type by Fiscal Year



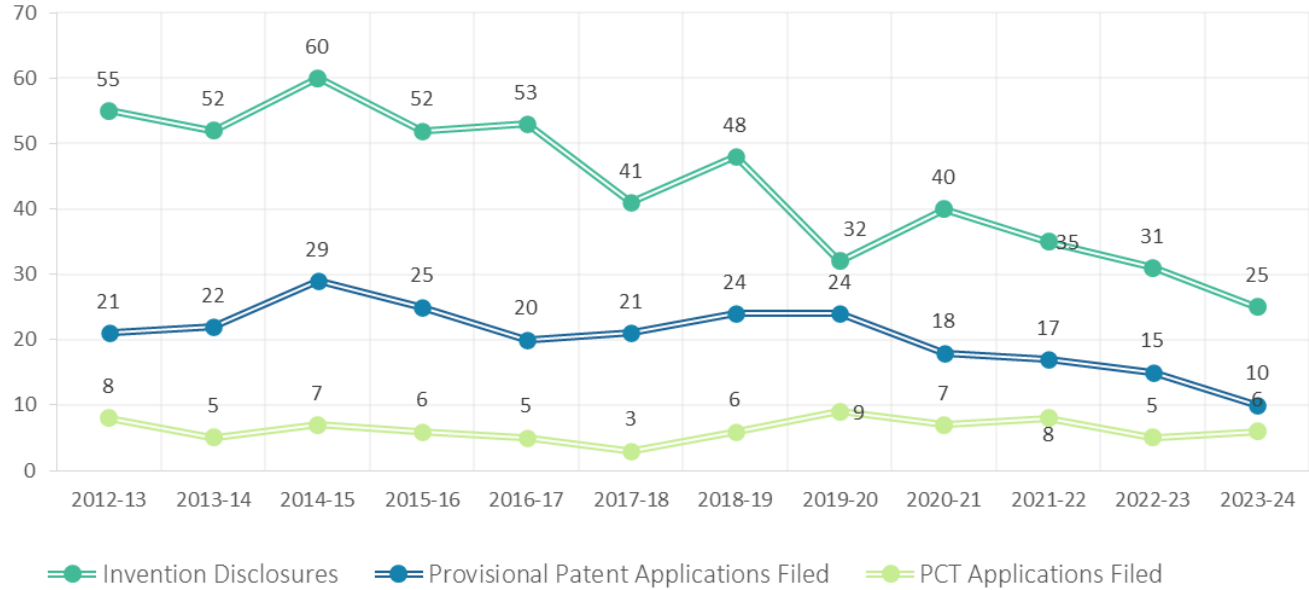
Achieving Economic Benefits and Innovation

The patent process, along with data on licensing and spin-off companies, is provided to measure the commercialization of discoveries, and other economic benefits resulting from these discoveries. Data are included for BCCRI (through the TDO), and BCCHR (through UILO). Program specific IP related revenue data is provided in program sections.

applications filed by fiscal year. Invention disclosures are primarily internal documents, filed with TDO to inform the decision of whether or not to proceed with the patent process. The next stage in the patent process is to file provisional patent applications followed by patent cooperative treaties, or PCTs, which act as a gateway to world-wide patents, each step involving greater specificity.

See Figure 10 for total number of invention disclosure, provisional patent and patent cooperative treaties (PCT)

FIGURE 10 Total # of Invention Disclosures, Provisional Patent and PCT Applications Filed by Fiscal Year



See Figure 11 for the number of national provisional patent applications filed and issued. Applications filed in a given

year represent different applications than those which are approved in that same year.

FIGURE 11 Total # of National Provisional Patent Applications Filed and Issued by Fiscal Year

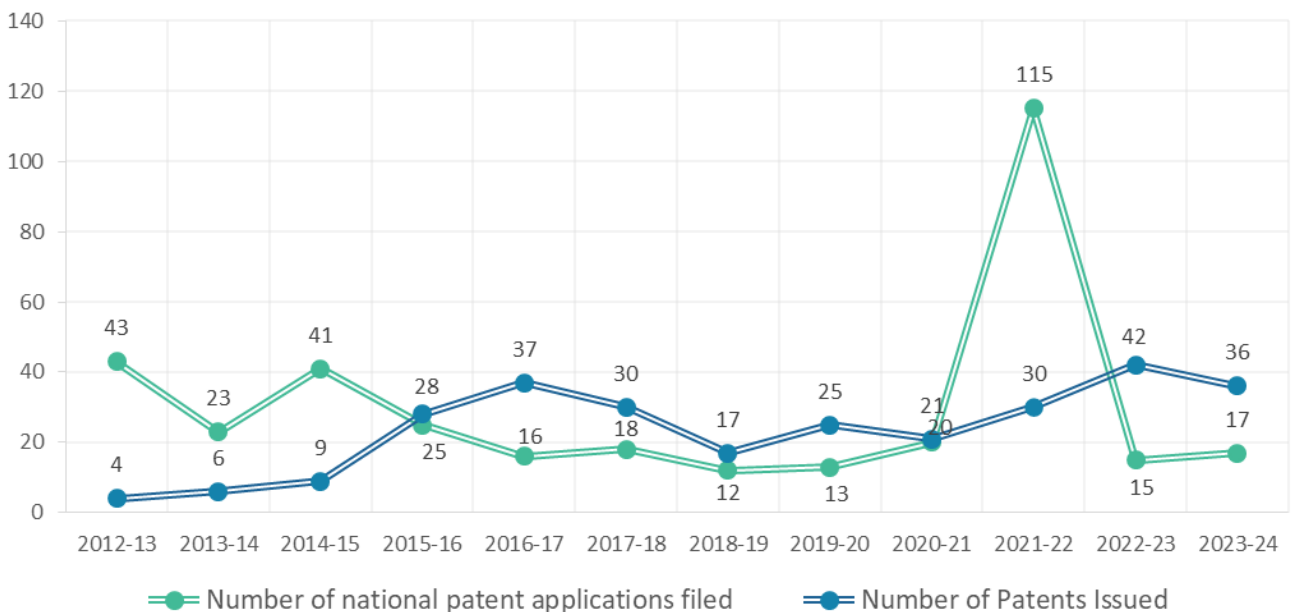
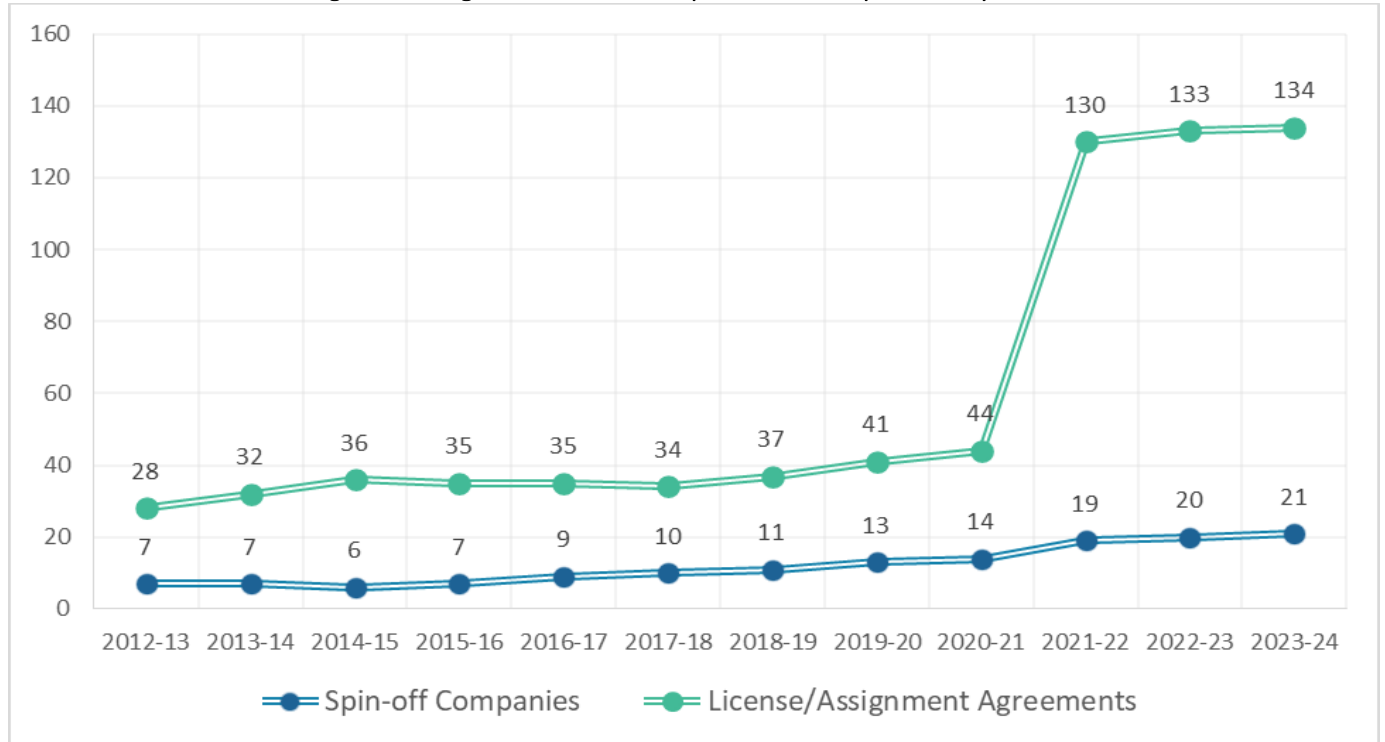


Figure 12 shows all licensing/assignment agreements and spin-off companies for PHSA Overall, combined for the past 12 years. Data is collected from PHSA's Technology Development Office (TDO) and through UBC's University-

Industry Liaison Office (UILO) which includes activities from BCCHR and BCCRI researchers. Program specific numbers can be found in the BCCRI and BCCHR program sections. One new spin-off was created: Arrowsmith (BCCRI).

FIGURE 12 License/Assignment Agreements and Spin-Off Companies by Fiscal Year

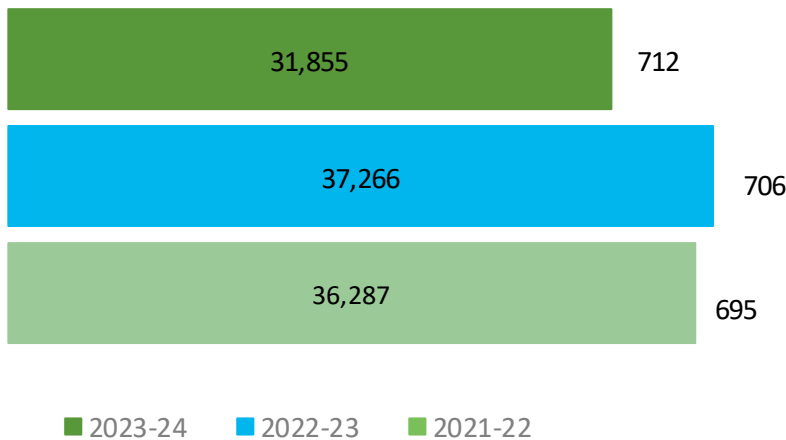


For FY 2023-24, the number of clinical trials increased by 6 over FY 2022-23. See Figure 13 for number of Clinical Trials and Total Cumulative Subject Enrollment by Fiscal Year.

which achieve therapeutic benefits beyond those offered by standard of care treatment. Clinical trials also represent the final step in the translational research continuum, which begins with basic or discovery research, includes development of products, and culminates with the testing of those products in rigorous trials

The opportunity to participate in clinical trials is an important metric because it offers patients the opportunity to participate in clinical evaluation of new drugs, many of

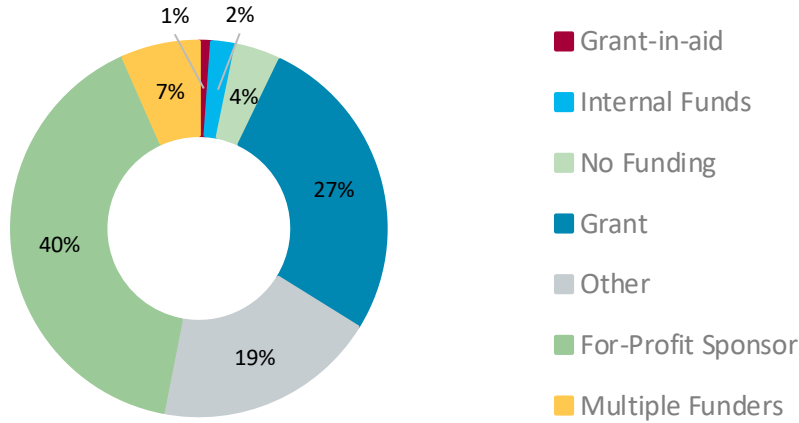
FIGURE 13 Total Cumulative Subject Enrollment and # of Clinical Trials by Fiscal Year



Grant funding type for Clinical Trials (CT) is sourced from the REB (Research Ethics Board) file and reflects the funding type entered as part of the ethics application (see Glossary – Appendix 1, page 65 for a definition of funding types). The percentage of trials that are industry sponsored (For-Profit Sponsor) was 40% in FY 2023-24,

the same as in FY 2022-23. The Other category includes CTs with no funding type or with funding types that cannot be classified into one of the other categories. See Figure 14 for a breakout of trials by funding type percentage by category.

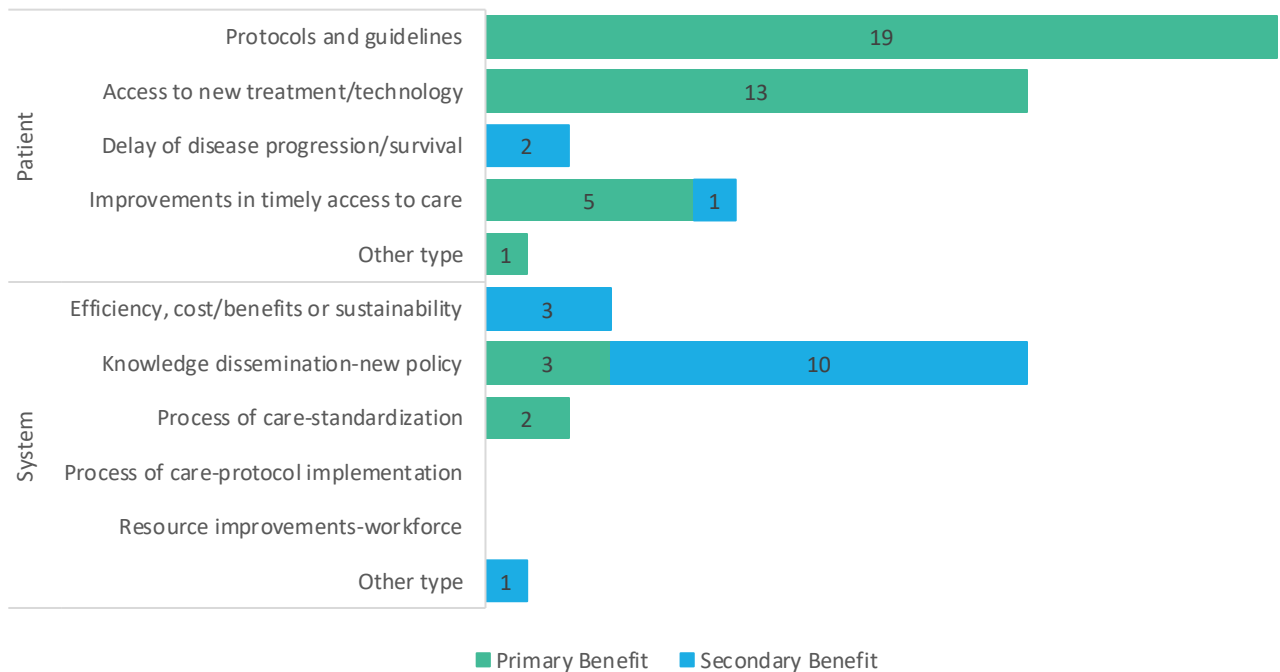
FIGURE 14 PHSA Percent of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY



In FY 2022-23, the programs completed the survey that asked respondents to identify guidelines, drugs, diagnostic agents, or devices adopted or approved in FY 2023-24, and any new and adopted novel and transformational research designs or methodologies resulting from research driven by PHSA researchers or collaborative research in which PHSA researchers were key participants. Program specific outcomes can be found in the *PHSA Research and Student Education Metrics Consolidated Summary Report*. The survey was not intended to be exhaustive, but to capture

the significant, top of mind advancements, and, further, asked respondents to identify the benefits to patients, population health, and/or health system sustainability of those advancements. Figure 15 is a summary of the classification of benefits realized through research. These represent both primary and secondary benefits. The Other Patient and System benefits included Knowledge Translation (1), and Improvements in Quality of Life and Survival of patients (1). There were no outcomes related to COVID-19.

FIGURE 15 Classification of Benefits Summary for All Programs



BC CANCER RESEARCH INSTITUTE (BCCRI)

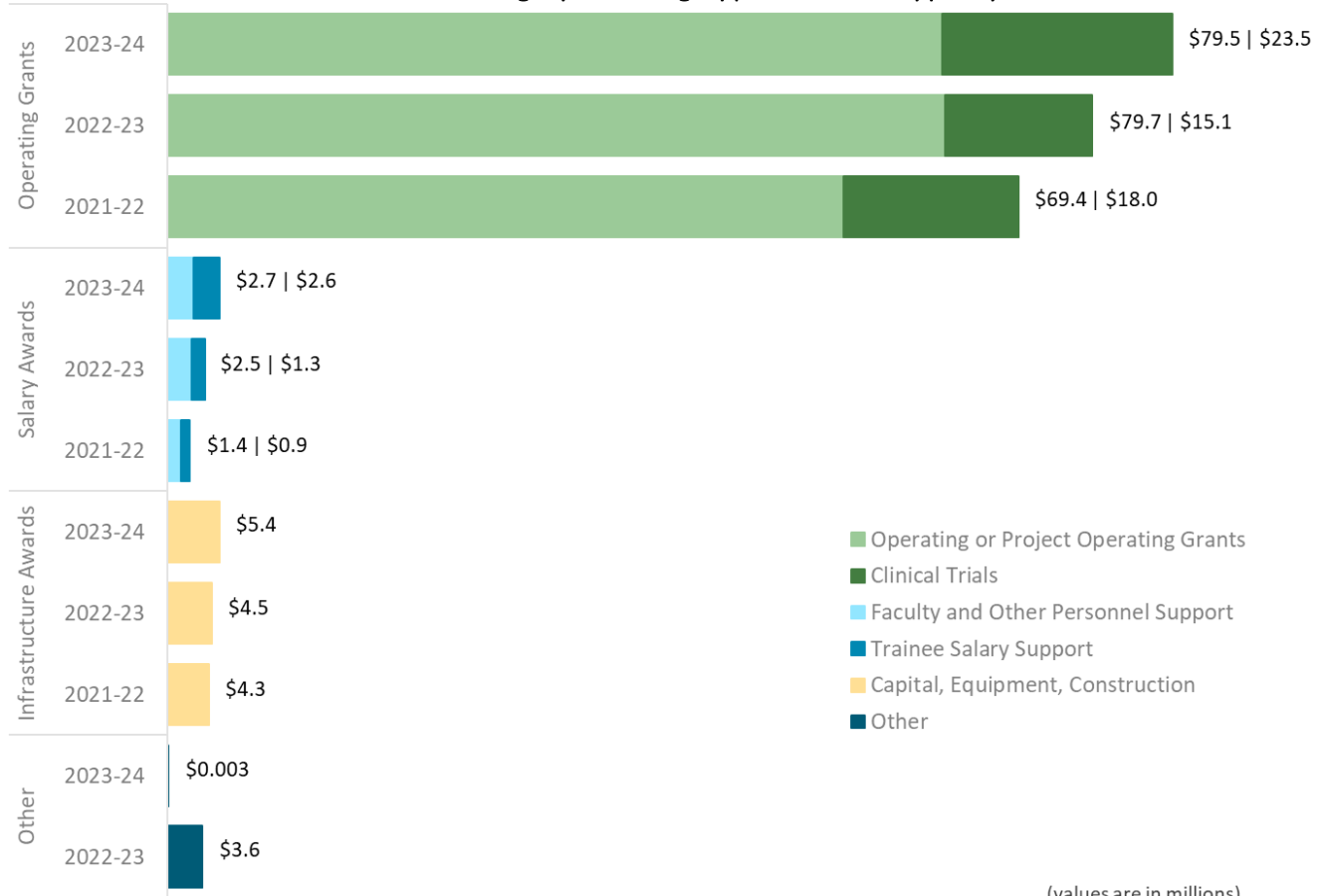


Producing and Advancing Knowledge

In FY 2023-24, researchers affiliated with BCCRI were awarded a total of \$113,743,389 in research funding which represents a 6.5% increase over FY 2022-23. Operating Grants (\$103,035,875) represent 91% of total awards. A breakdown of funding types and subtypes can be found in Figures 16.

BCCRI's portion of the Research Support Fund grant for FY 2023-24 is \$1,282,922 but is not included in total research funding or the figures below. Total Covid-19 research funding was \$41,633 and is included in the figure 16.

FIGURE 16 Total BCCRI Research Funding by Funding Type and Sub-type by Fiscal Year

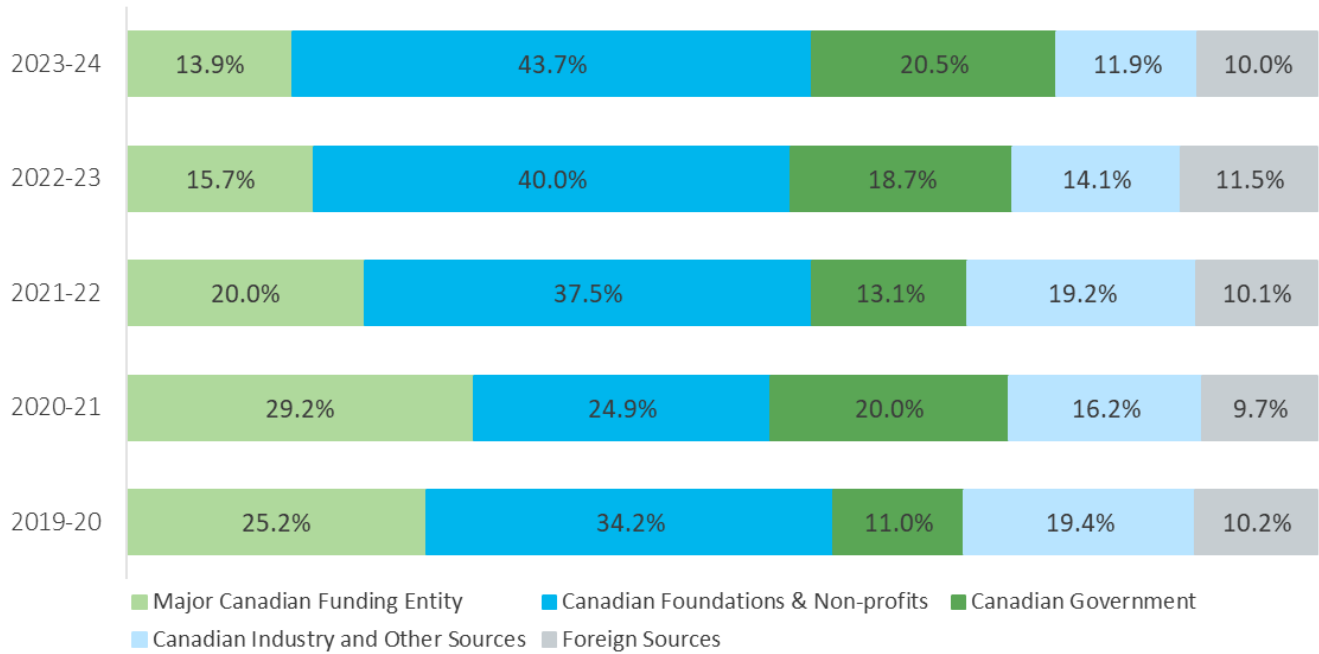


(values are in millions)

Figure 17 shows the percentage of funding by funding source category for the past 5 fiscal years. The Major Canadian Funding Entity category includes CIHR and its Institutes, Genome Canada and the Provincial Genome Agencies, Michael Smith Foundation for Health Research (MSFHR), Natural Sciences & Engineering Research Council

(NSERC), and the Social Sciences & Humanities Research Council (SSHRC). While there has been fluctuation between categories, Canadian sources of funding have remained approximately 90% of total funding, each year. Canadian Foundations & Non-profits saw the largest percentage increase from the previous fiscal year.

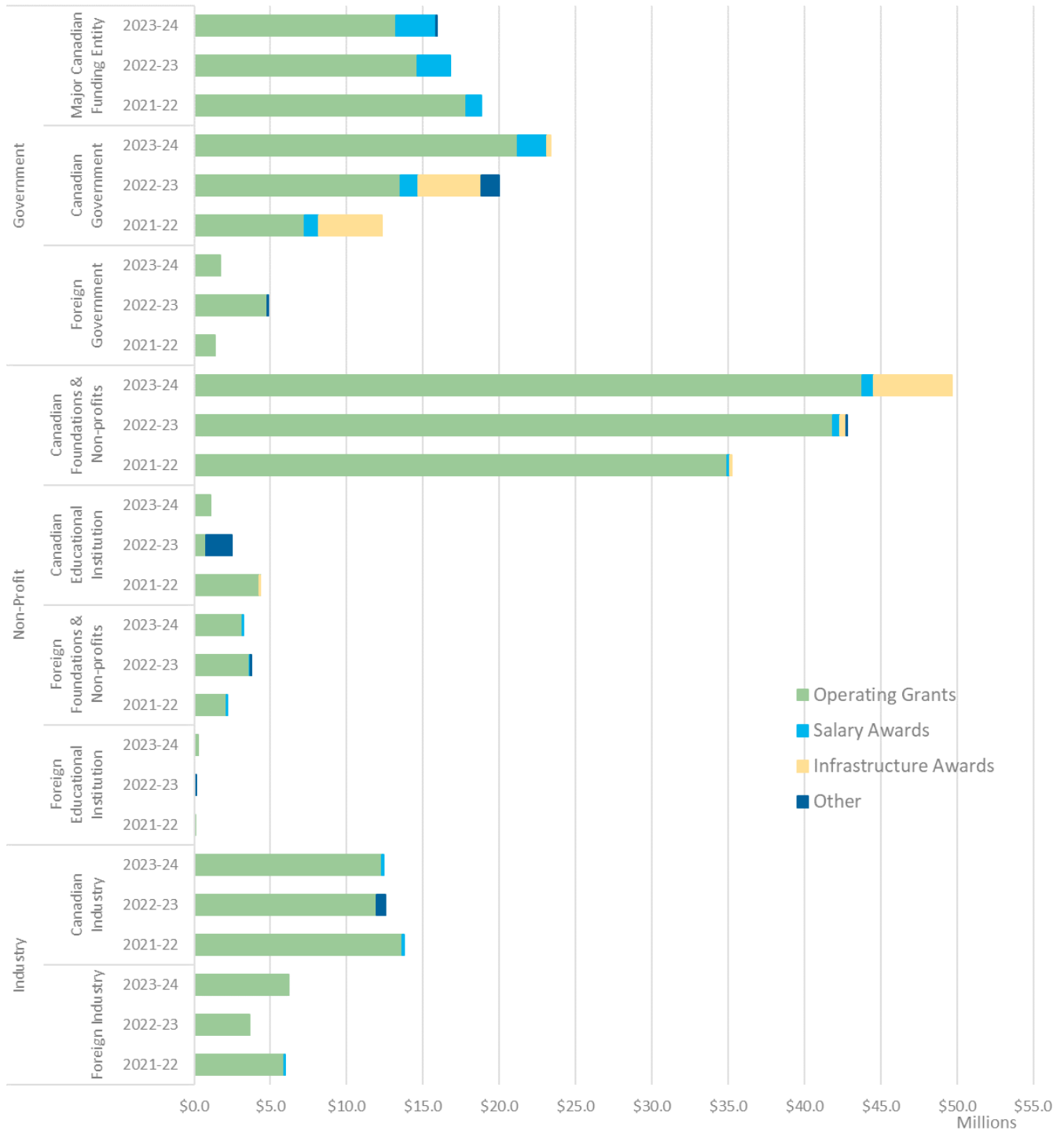
FIGURE 17 Percentage of BCCRI Research Funding by Funding Source Category by Fiscal Year



BCCRI's Total Award Funding is shown by RISE sector, Funding Source Category and Funding Type. In FY 2023-24, the top funding sources are, Canadian Foundations & Non-profits (43.7%), Canadian Government (20.5%), and Major

Canadian Funding Entities (13.9%). Figure 18 details the funding categories by RISE sector, funding source category and funding type.

FIGURE 18 BCCRI Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year



The application success rate is reported for the Fall 2023 and Spring 2024 CIHR grant competitions. Results (see table 4) are shown for National and BCCRI. BCCRI was successful

in both competitions for a total of 9.5 awards from 45.5 applications and beat the national average in the Fall & Spring project grant competitions.

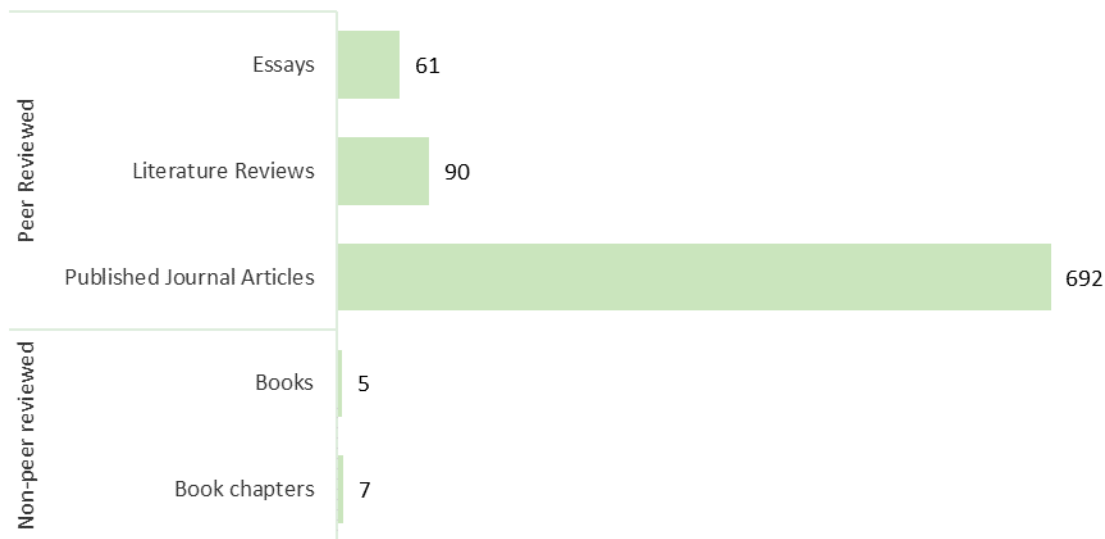
TABLE 4 BCCRI Annual Grant Application Success Rate

Grant Funding Opportunity	National Overall Results % (Approved/Submitted)	BCCRI Results % (Approved/Submitted)
2023-09 Project Grant	17.5% (380/2,175)	22.5% (5.5/24.5)
2024-03 Project Grant	15.3% (373/2,443)	19.1% (4/21)

Total number of publications by type and category of peer vs. non-peer review is seen in Figure 19. BCCRI had a total

of 855 publications, with a majority (843) of published journal articles.

FIGURE 19 Total Number of BCCRI Publications by Type and Category

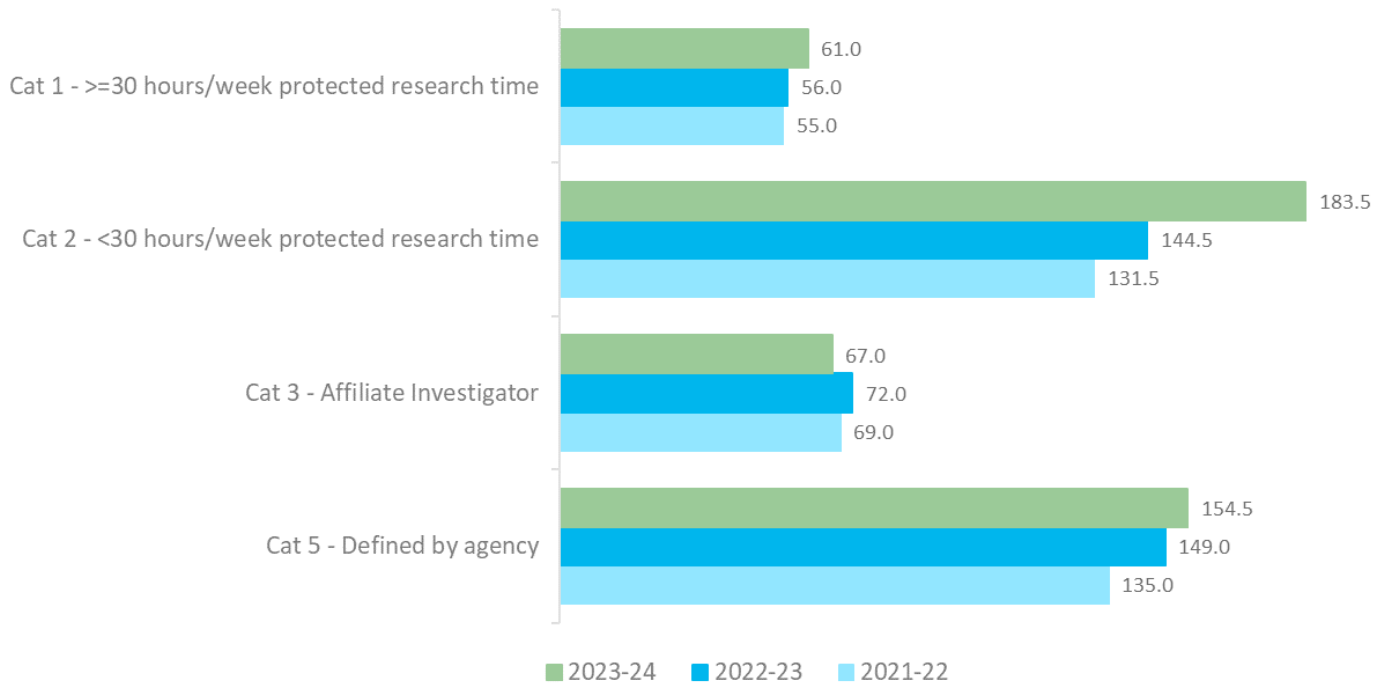


Building Research Capacity

BCCRI has a total of 399 researchers in FY 2023-24 in categories 1, 2, and 5, an increase of 49.5 from FY 2022-23. While adoption of the BCCHR category classifications is in place, a significant amount (154.5) of the total researchers is in Category 5, which is a program specific category used to describe researchers that do not meet BCCHR category classifications. For BCCRI, the majority of Category 5

researchers are Medical or Radiation Oncologists, Program or Practice Leaders, and Nurses. As in past year's reports, researchers whose funding is officially split 50/50 between research entities are classified as 0.5. See Figure 20 for the number of researchers by category.

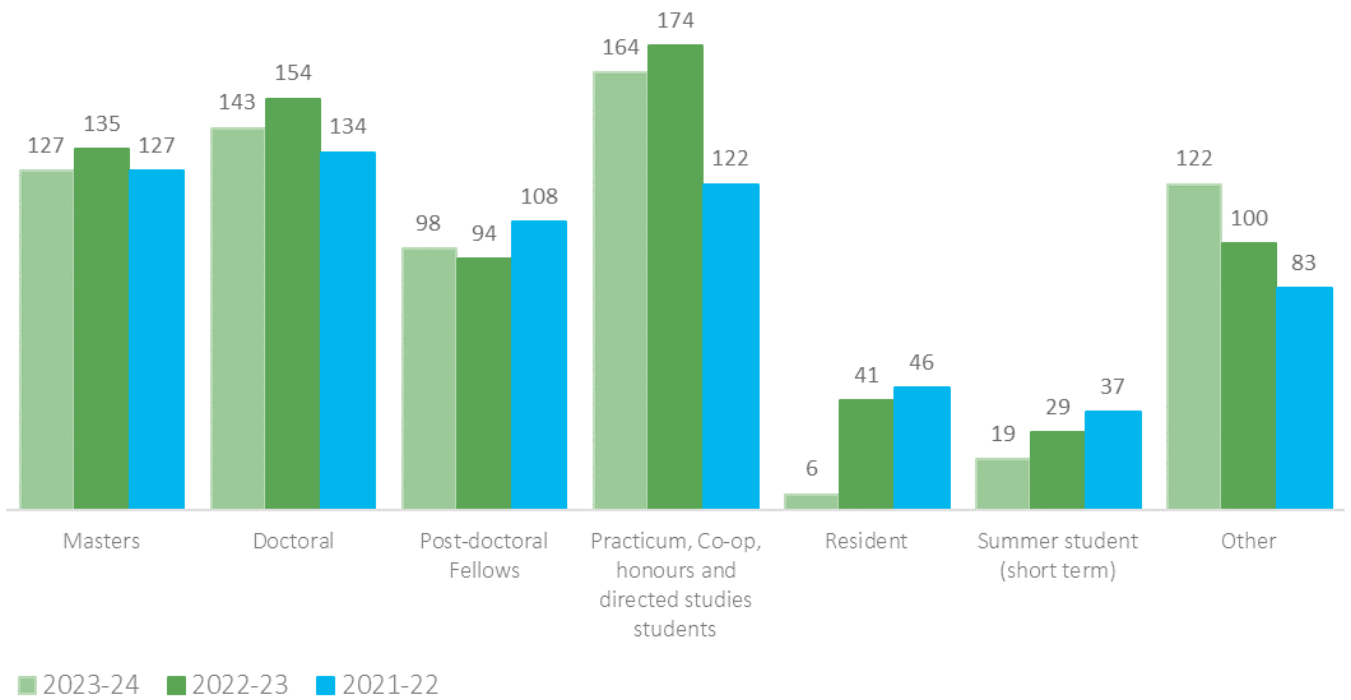
FIGURE 20 Total Number of BCCRI Researchers by Category and Fiscal Year



During FY 2023-24, BCCRI researchers provided training and supervision to a total of 679 trainees, a decrease of 48 from FY 22-23. See Figure 21 for the number of trainees by type. Factors influencing the number of trainees include but are

not limited to, operating grant success rates, whether trainees can obtain fellowships to secure their own funding, how often trainee competitions are held and the envelope of funding.

FIGURE 21 Total Number of BCCRI Trainees by Type and Fiscal Year



Achieving Economic Benefits and Innovation

Patent Activity has remained relatively stable over the last four fiscal years (see Figure 22 & 23). Invention disclosures are primarily internal BCCRI documents, filed with the Technology Development Office (TDO) to inform the decision of whether to proceed with the patent process. The next stage in the patent process is to file provisional

patent applications followed by patent cooperative treaties, or PCTs, which act as a gateway to world-wide patents. National patent applications are then filed with each step involving greater specificity.

FIGURE 22 BCCRI Invention Disclosures, Provisional Patent and PCT Applications by Fiscal Year

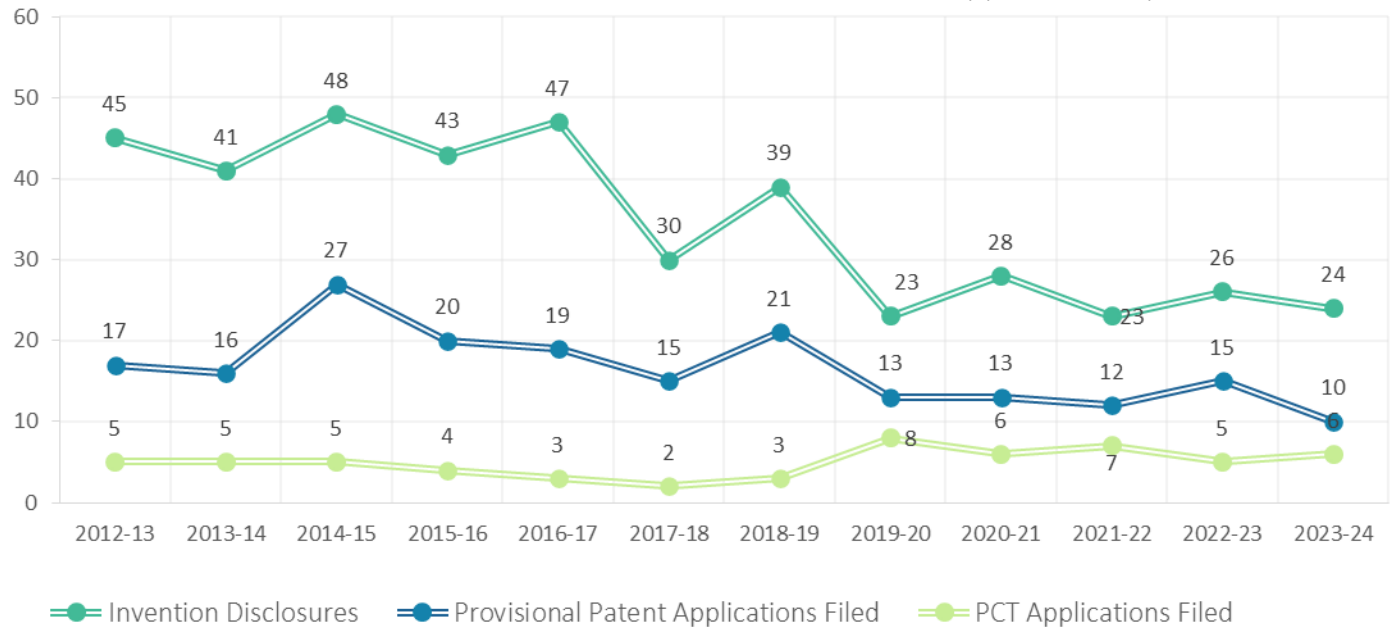
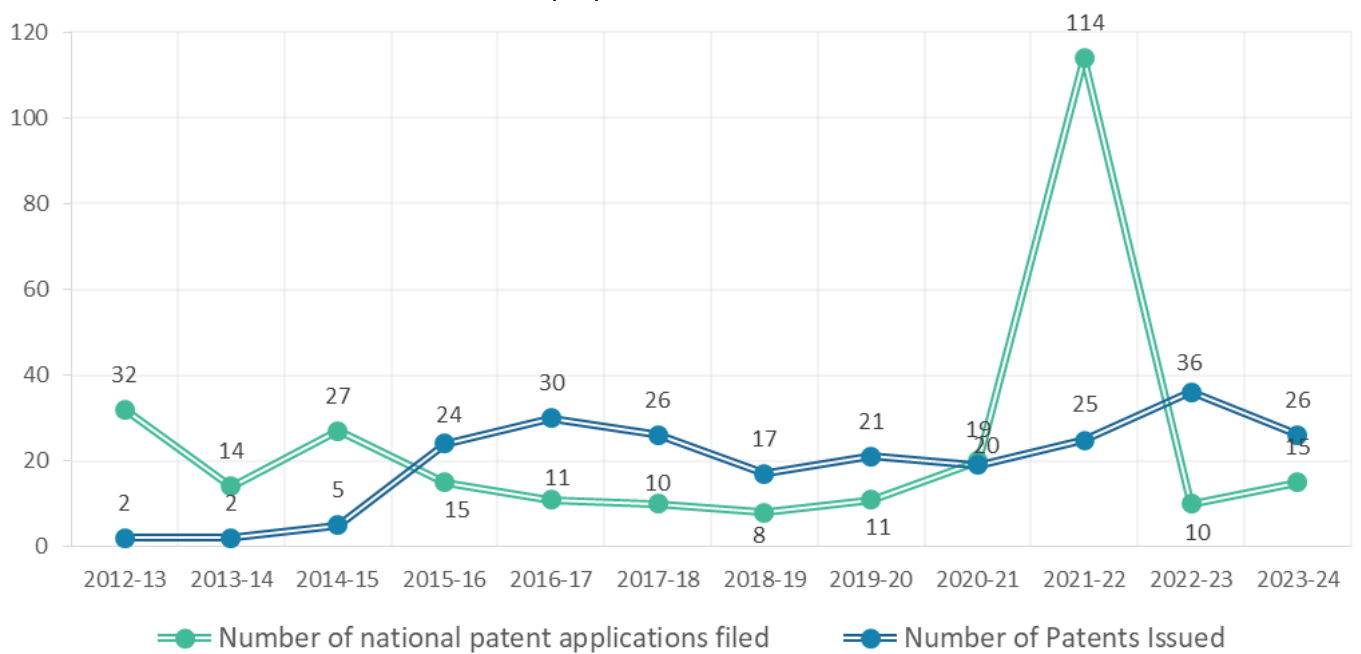


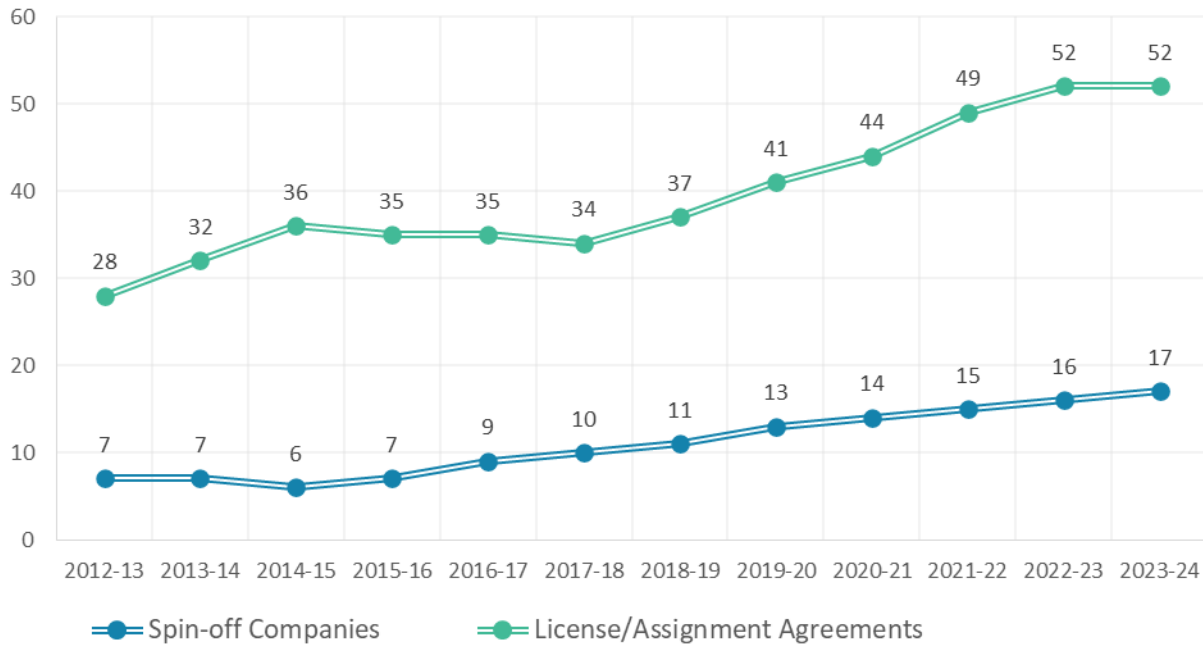
FIGURE 23 BCCRI National Patent Activity by Fiscal Year



In FY 2023-24, there were 52 active license agreements (see Figure 24), including one (1) new licenses/ assignment agreement. There was one (1) new spin-off company created: Arrowsmith. Arrowsmith Genetics (AGx) is a preclinical stage, precision oncology company. Other active

spin-off companies include Alpha9 Theranostics, Innovakine Therapeutics Inc., Aquinox Pharma, Essa Pharmaceuticals, Repeat Diagnostics, Coastal Genomics, Logipath Medical, Qing Bile Therapeutics, Metera Pharma, Curvafix, Fusion Genomics, ARTMS Products, and Vita.

FIGURE 24 BCCRI License Agreements and Spin-Off Companies by Fiscal Year



IP related revenue, in accordance with UBC (University Industry Liaison Office UILO) definitions (see Glossary – Appendix 1, page 61) is reported in Table 5. Expenses related to patenting, license IP and legal costs totaled \$395,395.00 in FY 2023-24. Realized licensing revenue per the distribution agreements totals \$393,633.48 with

\$242,617.70 to PHSA and \$151,015.78 to BC Cancer departments. While distribution agreements vary, typically the inventor receives 50% of the net licensing revenue, with the remainder split between PHSA, BC Cancer departments, and UBC for those researchers with a UBC affiliation.

TABLE 5 TDO IP Related Revenue

IP RELATED REVENUE	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
Royalties	\$729,984.18	\$1,701,269.06	\$1,136,802.24	\$833,316.63	\$1,025,409.71
Equity Liquidated	\$31,375.94	\$123,470.15	\$1,722,742.51	-	\$38,750.00
License Fees	\$302,783.22	\$956,452.72	\$90,371.75	\$1,105,445.56	\$326,229.00
License Management	\$134,207.37	\$217,182.20	\$214,581.56	\$281,283.99	-
Option Fees	0	0	0	0	0
GROSS LICENSING REVENUE (TOTAL)	\$1,198,350.71	\$2,998,374.13	\$2,949,916.50	\$2,220,046.18	\$1,390,388.71

Advancing Health and Policy Benefits

See Table 6 for a detailed breakdown of clinical trial activity by fiscal year.

TABLE 6 BCCRI Clinical Trials

Fiscal Year	17-18	18-19	19-20	20-21	21-22	22-23	23-24
Total Number of Clinical Trials active during the FY	309	337	370	362	388	378	388
Status of the Trial at the end of the FY:							
Total Number of Active Trials	257	277	290	290	319	288	286
Total Number of Trials that closed during the FY	52	60	90	72	69	90	102
Enrolment Numbers:							
Expected Local Subject Enrolment (for the term of the study)	43,064	47,366	48,768	22,566	28,556	27,062	23,784
Total Cumulative Subject enrolment at the end of the FY	34,573	34,341	8,344	6,982	7,369	8,821	8,762

Grant funding type is reported for Clinical Trials in figure 25. This information is sourced from the REB file and reflects the funding type entered as part of the ethics application (see Glossary – Appendix 1, page 65 for a definition of

funding types). This information can be used to trend the percentage of trials that are industry sponsored. Fifty-two percent (52%) of BCCRI Clinical Trials are Industry funded.

FIGURE 25 BCCRI Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY

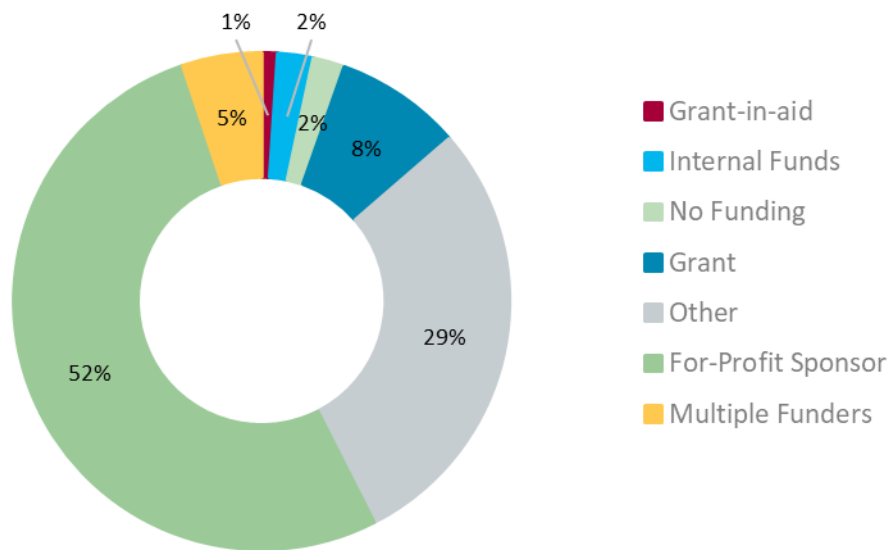


Table 7 reflects BCCRI's Top Three Achievements/Accomplishments/Highlights, and can include awards, citations, clinical programs, either in

progress or historical, and be relevant to FY 2023-24 timeframe (April 1, 2023 - March 31, 2024).

TABLE 7 BCCRI Top Three Achievements/Accomplishments/Highlights

<p>BC GOVERNMENT GRANT TO THE BC CANCER FOUNDATION IN SUPPORT OF INCREASED CLINICAL RESEARCH AND TRIAL CAPACITY FOR BRITISH COLUMBIANS</p>
<p>In March of 2023 the BC Government provided a \$150 Million 3-year grant to the BC Cancer Foundation to enhance clinical research and clinical trial capabilities across the province. Over the last year, this funding has provided significant improvements to BC Cancer's clinical research programs. This includes the recruitment of approximately 30 staff to support clinical research and trial activities at the provincial and regional level. 20 Clinician-Researcher startup projects have been awarded in the amount of \$4.7M, while 23 projects specific to increasing Radiation Oncology clinical trials were funded (\$2.9M). \$400,000 was provided to the Northern Biobank Initiative to continue the work to improve access for BC's northern population to participate in clinical research. Moreover, the BC Government grant has allowed for the growth of BCCRI training programs, supporting the creation of internal graduate and postdoctoral fellowship awards. These awards, called the Rising Stars Awards have provided an additional 28 graduate students awards and 5 postdoctoral awards with a total funding allocation of \$1.98M. Further enhancements to support clinical research and trials include the procurement specialized equipment, upgrades to existing infrastructure and much need support to underfunded core facilities and services.</p>
<p>IMPLEMENTATION OF A NANOSTRING LYMPHOMA ASSAY (LEXA) IN CLINICAL PATHOLOGY</p>
<p>The BC Cancer Centre for Lymphoid Cancer (CLC) team has developed a digital gene expression-based platform called Lymph2Cx (a 20-gene assay), which can be applied to routinely produced formalin-fixed paraffin-embedded (FFPE) biopsies to assign cell-of origin (COO) in diffuse large B-cell lymphoma (DLBCL) as part of large team grant funded by Genome Canada. This assay was later modified to include an additional 58 genes to accurately distinguish primary mediastinal large B-cell lymphoma (PMBCL) from DLBCL subtypes based on gene expression and was renamed Lymph3Cx.</p> <p>To further dissect the subtypes of DLBCL, the CLC team has modified this assay to identify a clinically and biologically distinct patient group with double hit, or dark zone signatures, who have inferior outcomes and distinct biology. The assay was named DLBCL90 (a 90-gene assay), which was reported previously. In order to incorporate all these subclassification features into one assay with clinical utility, the CLC team has successfully completed cross validation of the assay in BC and Ontario last year and named the clinical assay LExA120. In October 2023, BC Cancer obtained the BC College of Physicians and Surgeons Diagnostic Accreditation Program (DAP) laboratory accreditation allowing the LExA120 assay to become part of routine pathology diagnostic work up of aggressive B-cell Lymphomas across the province.</p>
<p>A PHASE I/II STUDY OF 177LU-HTK03170 IN METASTATIC, CASTRATION RESISTANT PROSTATE CANCER SUBJECTS WITH PROSTATE SPECIFIC MEMBRANE ANTIGEN POSITIVE DISEASE</p>
<p>177Lu-HTK03170 is a novel, BC Cancer Research Institute in-house developed, PSMA directed radioligand therapy that delivers beta particle radiation to PSMA expressing cells and the surrounding microenvironment. This is the first BC Cancer Investigator led radiopharmaceutical therapeutic clinical trial to take place at BC Cancer. In Phase 1, using 3+3 dose escalation, up to 18 participants will be treated with the first-in-man 177Lu-HTK03170 radioligand therapy. The safety profile will be created through acute and late effects over the 5 cycles of treatment, and the maximum tolerated injected activity will be established through radiation dosimetry measurements using individual participant's radiation dosimetry. Phase 2 will continue with an additional 32 participants, to further characterize the safety profile of 177Lu-HTK03170 and its quality-of-life effects and assess additional efficacy measures.</p>

BC CHILDREN'S HOSPITAL RESEARCH INSTITUTE (BCCHR)



Producing and Advancing Knowledge

In FY 2023-24, researchers affiliated with BCCHR were awarded a total of \$76,518,965 in research funding, an increase of 11.3% from last FY. The amounts awarded as Operating Grants (\$58,138,456) make up approximately 76% of total funding received. A breakdown of funding types and subtypes can be found in Figure 26. BCCHR's

portion of the Research Support Fund Program grant totaled \$1,928,530 for FY 2023-24 but is not included in total research funding or the figures below. Total Covid-19 related research funding was \$5,766,649 and is included in the figure 26.

FIGURE 26 Total BCCHR Research Funding by Funding Type and Sub-type by Fiscal Year

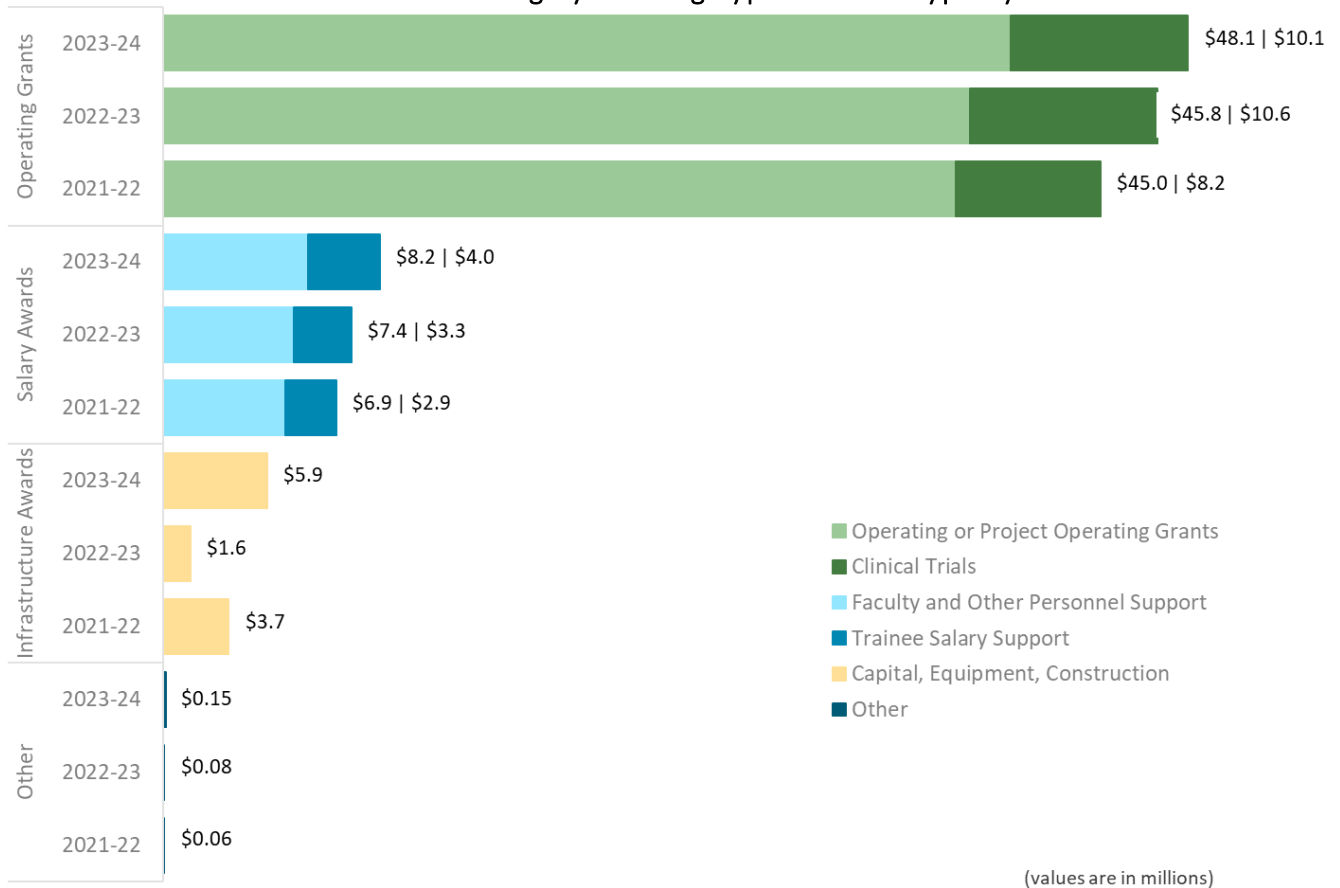
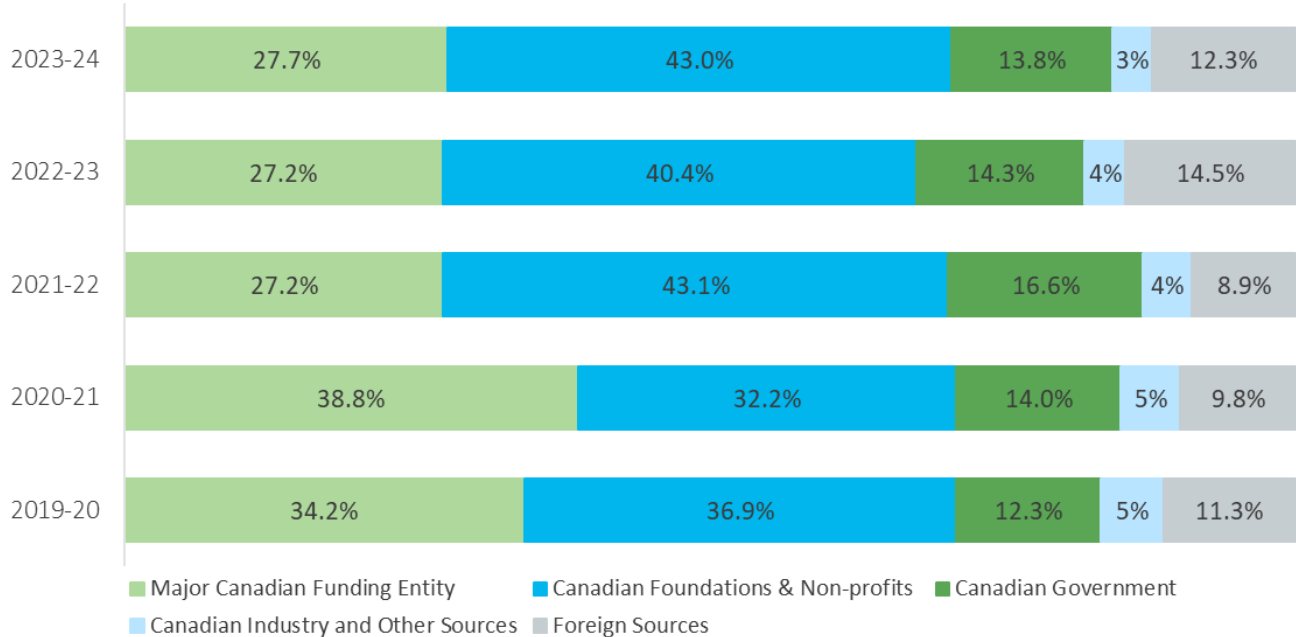


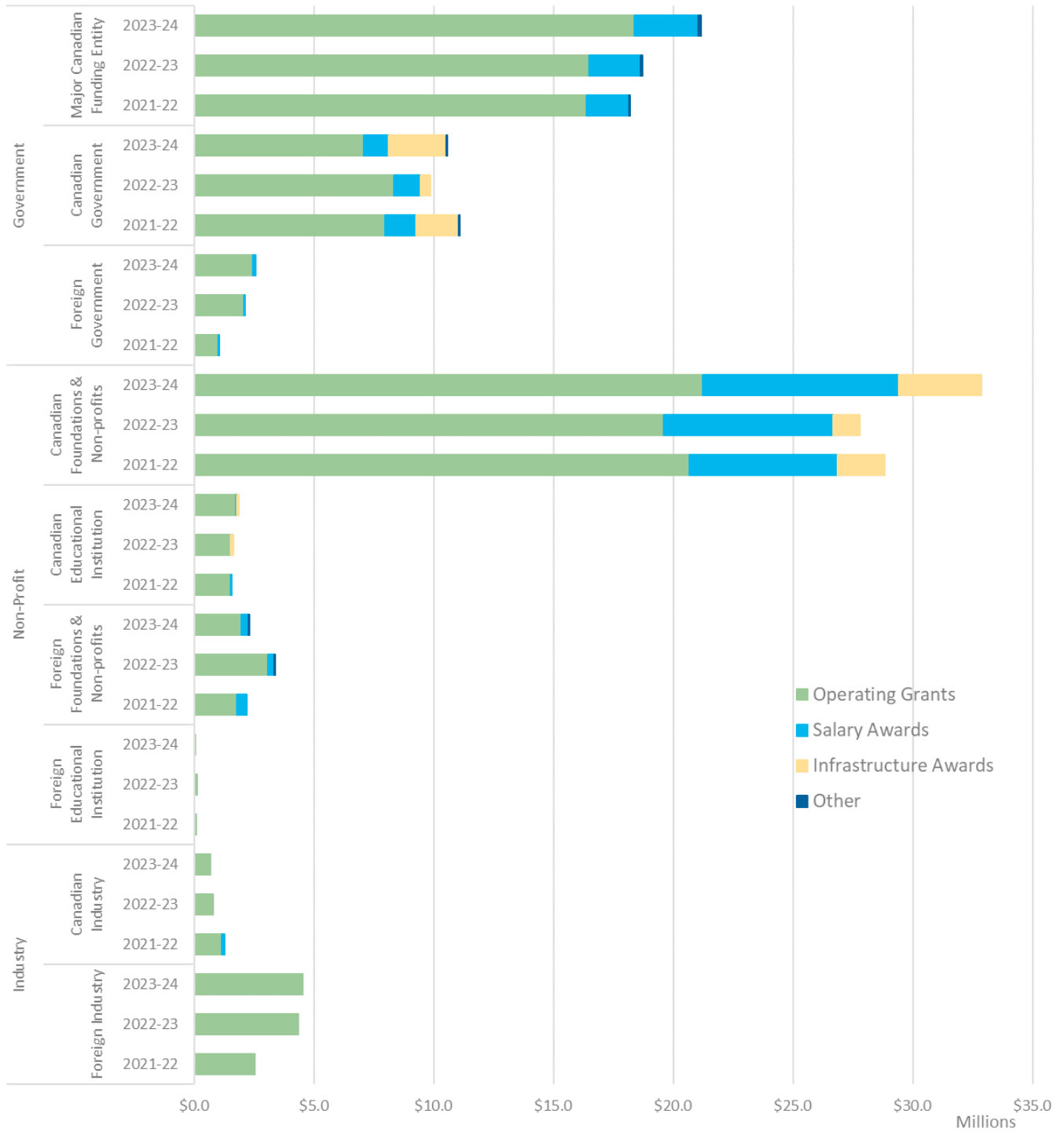
Figure 27 shows funding by funding source category. For FY 2023-24, all categories remained relatively unchanged from the previous fiscal year.

FIGURE 27 Percentage of BCCHR Research Funding by Funding Source Category by Fiscal Year



The top three funding categories are Canadian Foundations & Non-Profits (43%), Major Canadian Funding Entity (27.7%), and Canadian Government (13.8%). Figure 28 details the funding categories by RISE sector, funding source category and funding type.

FIGURE 28 BCCHR Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year



The application success rate is reported for the Fall 2023 and Spring 2024 CIHR grant competitions. Results (see table 8) are shown for National and BCCHR. BCCHR was

successful in both Project Grant competitions for a total of 10.5 awards out of 45.5 applications, beating the national average in both Project competitions.

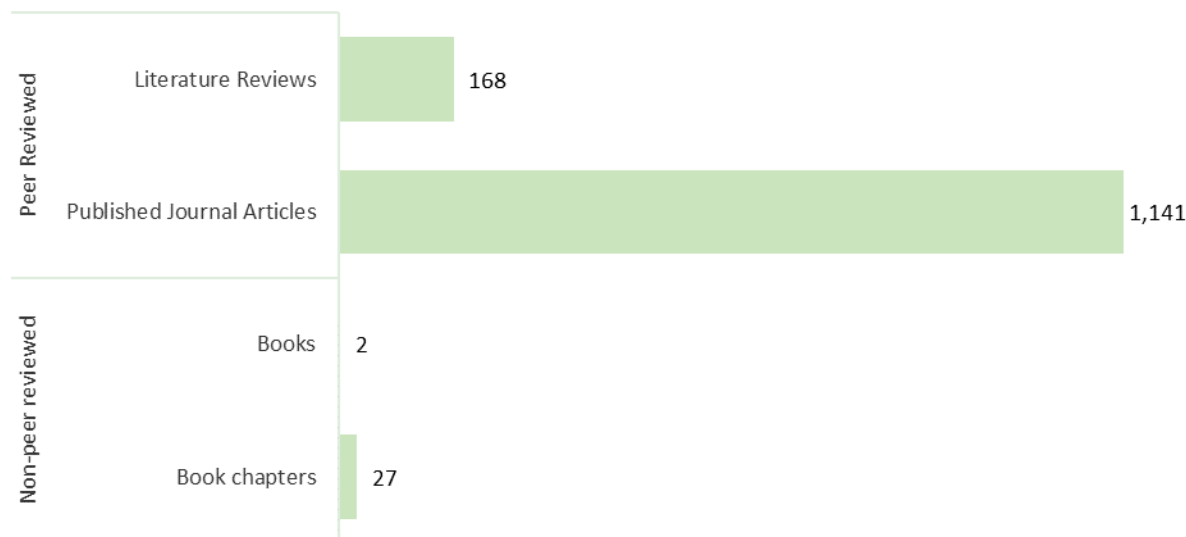
TABLE 8 BCCHR Annual Grant Application Success Rate

Grant Funding Opportunity	National Overall Results % (Approved/Submitted)	BCCHR Results % (Approved/Submitted)
2023-09 Project Grant	17.5% (380/2,175)	33.3% (5.5/16.5)
2024-03 Project Grant	15.3% (373/2,443)	17.2% (5/29)

BCCHR had 1,338 publications in calendar year 2023, with 98% of them being peer reviewed. Total number of publications by type and category of peer vs. non-peer reviewed, is seen in Figure 29. Peer review represents the gold standard for scientific credibility. The program total

represents the number of publications where at least one program researcher was an author of the publication. When researchers from more than one research entity/program collaborate on the same publication, it is counted once for each program.

FIGURE 29 Total Number of BCCHR Publications by Type and Category



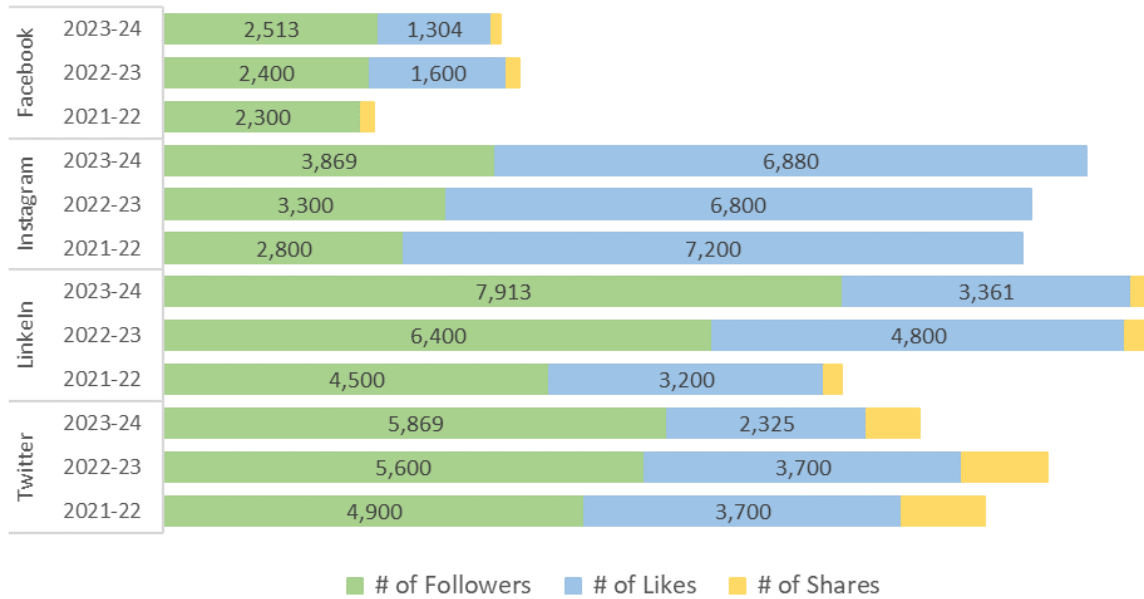
Three full fiscal years' worth of data is provided for BCCHR's four research specific social media channels in Figure 30; Facebook (member since July 2011); X, formerly known as Twitter (member since March 2009); Instagram (member since January 2018); and LinkedIn (member since 2015). Tracking and reporting of this data is a measure of knowledge translation in addition to meeting the following goals with regard to BCCHR research activities:

- To increase online visibility of and traffic to the BCCHR website
- To have our audience complete a specific ask, such as sign up for our newsletter, request information about a study, donate to research

- To further disseminate the knowledge that's produced here to the public, to our own PIs and trainees, and to our colleagues at BCCHF, BCCH and PHSA
- To engage and connect internal audiences including researchers and students

These metrics are a measure of reach and engagement and provide an indication of the volume of activity. In addition to the below activity, many BCCHR researchers maintain their own professional accounts to engage peers, funders, and patients, but this information is not tracked.

FIGURE 30 BCCHR Social Media Statistics

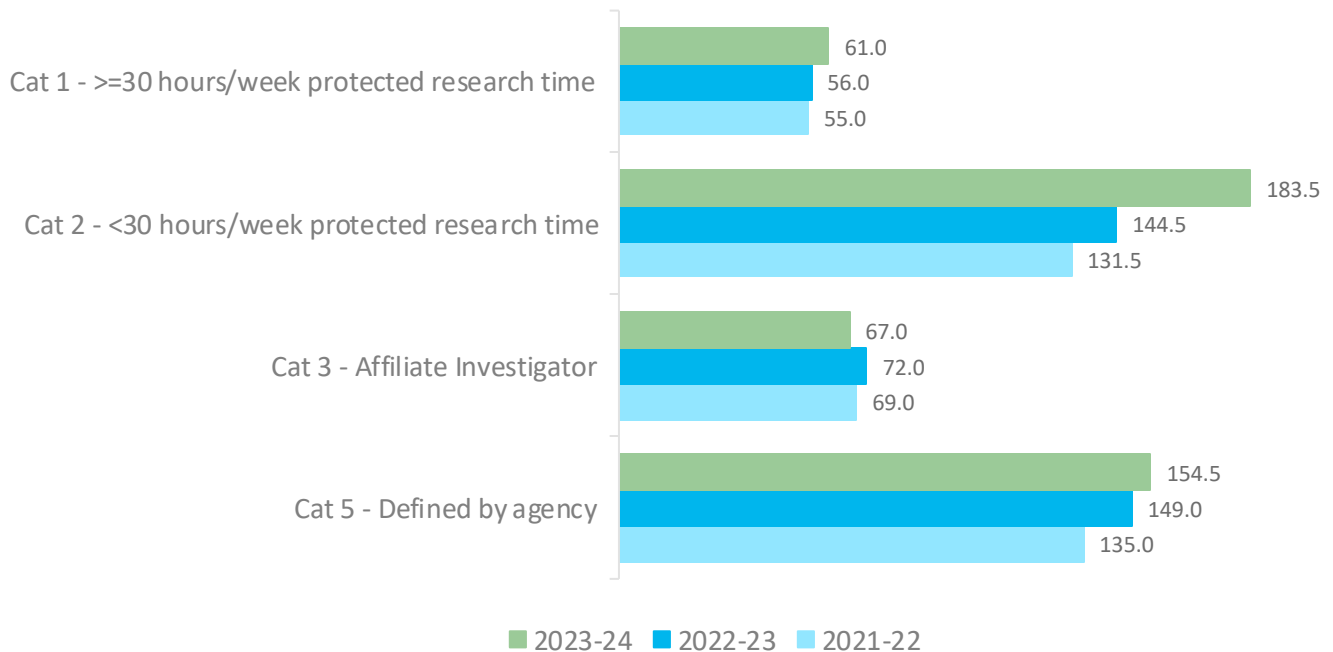


Building Research Capacity

BCCHR has a total of 344.5 researchers in category 1 and 2, an increase of 13 from FY 2022-23. The distribution of these researchers is represented in Figure 31. Researchers in categories 1 and 2 are primarily based on the Children’s & Women’s Oak Street campus with the largest proportion of the members being split between Category 1 – those that have greater than 30 hours per week of their time protected for research and Category 2 – those that have fewer than 30 hours per week of protected research time. Category 3 members are affiliate investigators that are not

based on site but who collaborate with BCCHR members and are affiliated with a Research Theme. Their primary affiliation will be with another academic and/or research institution. The purpose of this category is to provide official recognition for these individuals who collaborate with BCCHR members on a regular basis. BCCHR does not track Category 3 members funding, publications, or trainees. These numbers exclude emeritus/emerita investigators who have prior status as investigators with BCCHR.

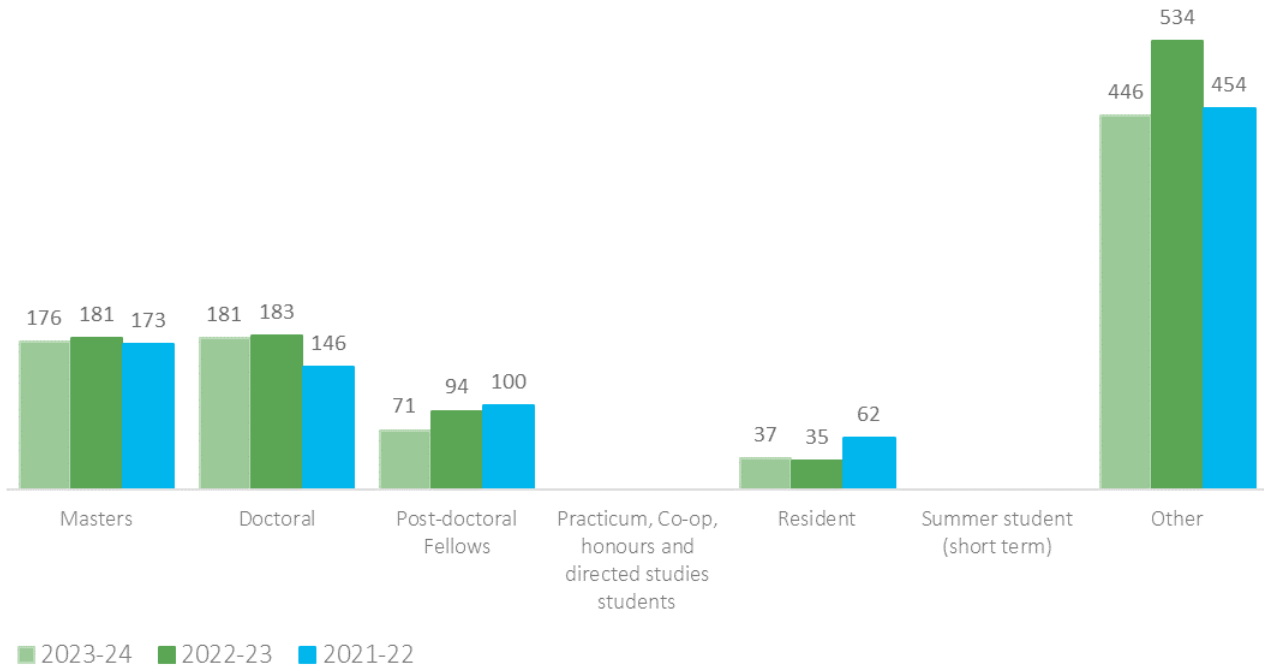
FIGURE 31 Total Number of BCCHR Researchers by Category



During FY 2023-24, BCCHR researchers provided training and supervision to a total of 911 (down 116 from FY 2022-23) trainees. BCCHR categorizes practicum, co-op, honours and directed studies and summer students in one combined category, without the ability to differentiate

type. See Figure 32 for number of trainees by type. BCCHR currently tracks full-time research trainees (masters, doctoral and post-doctoral fellows) and undergraduate students undertaking their training at BCCHR.

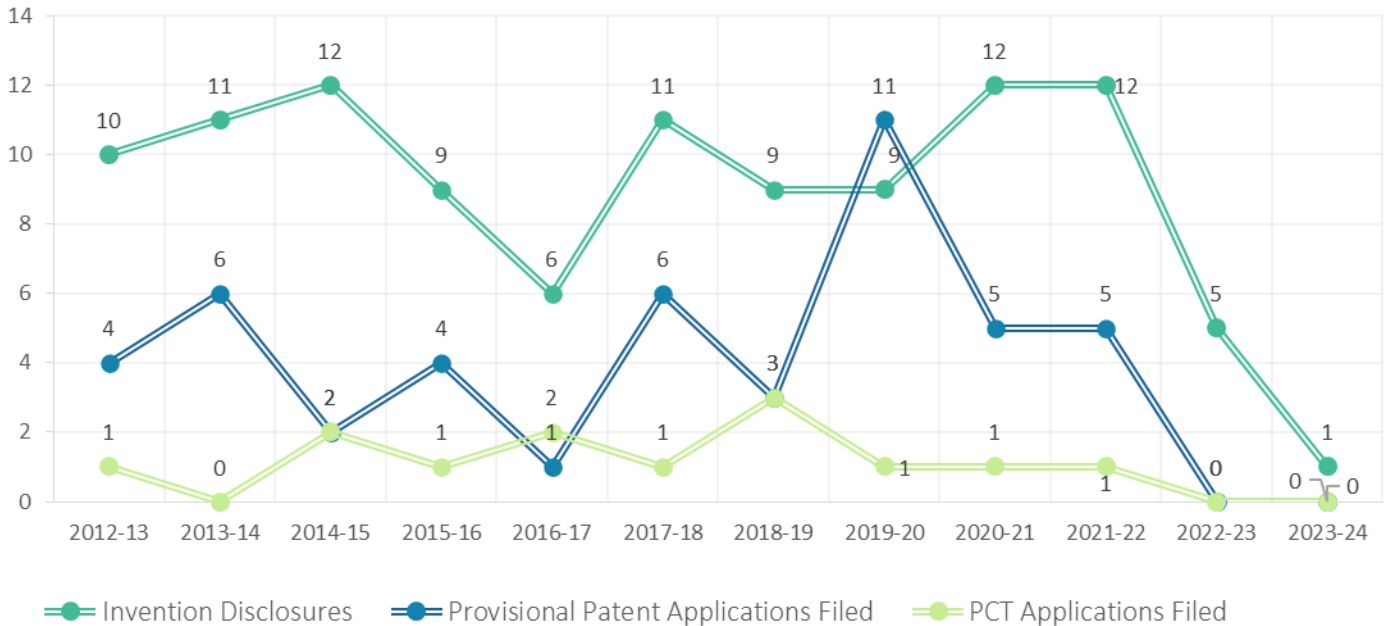
FIGURE 32 Total Number of BCCHR Trainees by Type



Achieving Economic Benefits of Innovation

The number of invention disclosures, provisional patent and PCT applications filed by fiscal year are shown in Figure 33

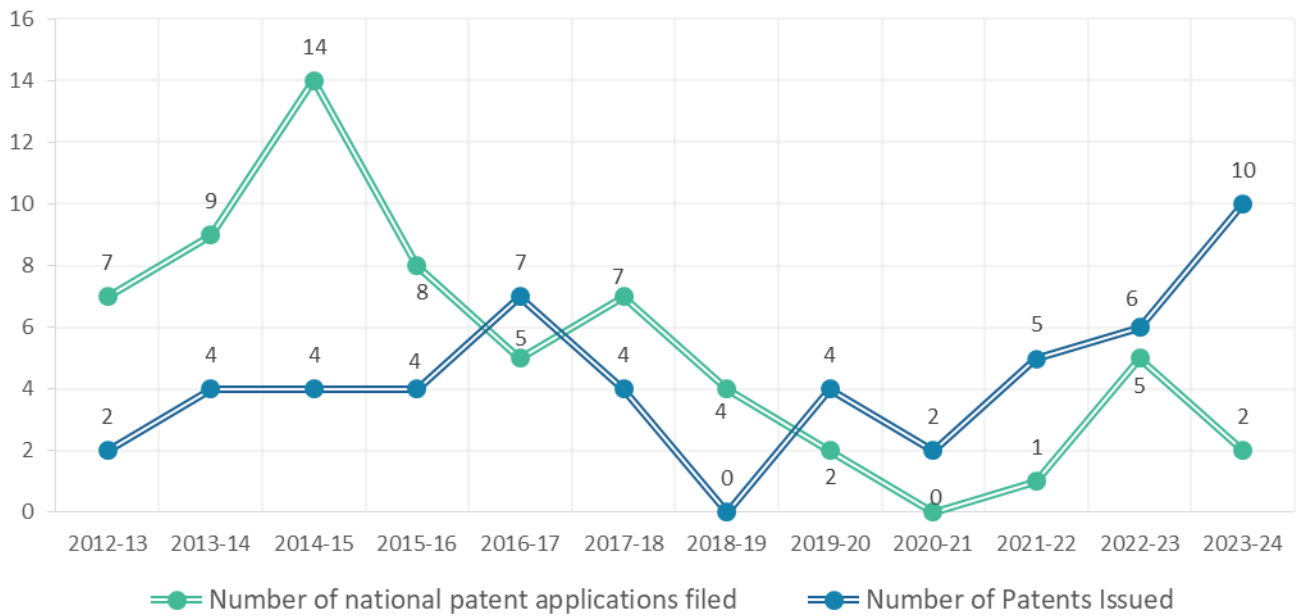
FIGURE 33 BCCHR Invention Disclosures, Provisional Patent and PCT Applications Filed by Fiscal Year



Patents are reported in Figure 34 below. Applications filed in a given year represent different applications than those which are approved in that same year and are typically the result of applications in previous years.

Data is collected and reported by the University of British Columbia University-Industry Liaison Office (UILO).

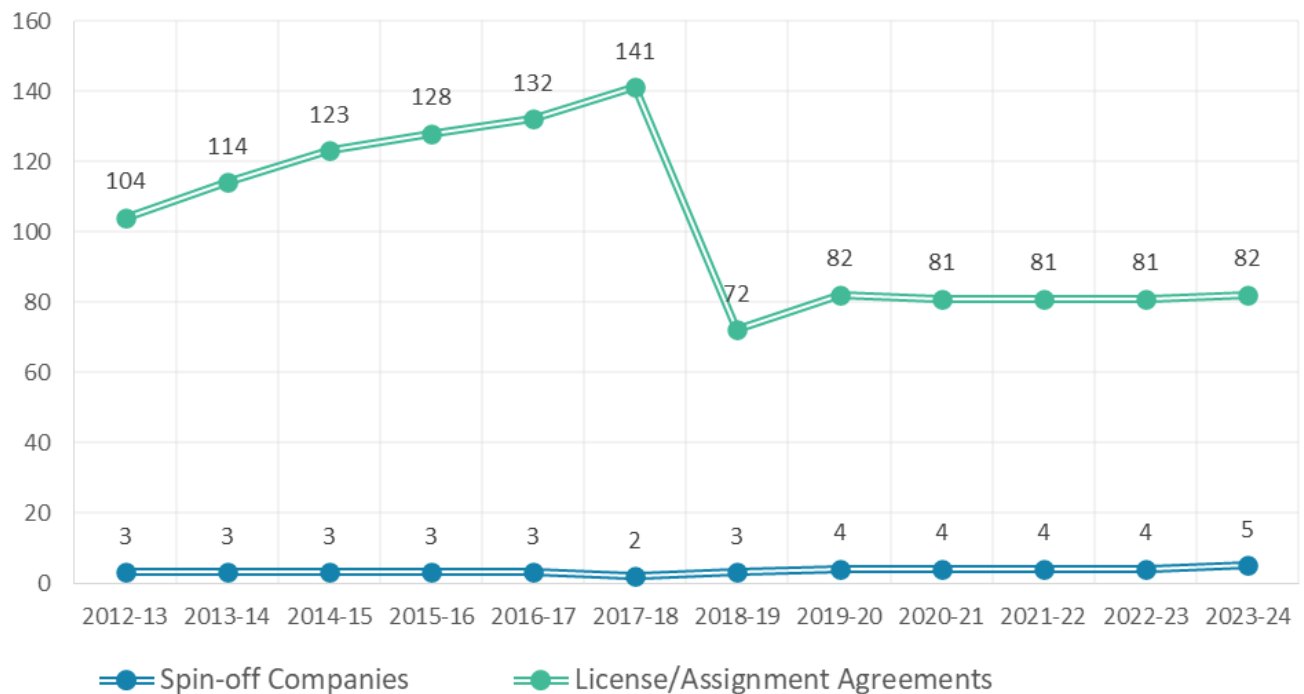
FIGURE 34 BCCHR National Patent Activity by Fiscal Year



Again, in FY 2023-24, there were 82 active license/assignment agreements in place (See Figure 35). One (1) new spin-off company was created in FY 2023-24: Overture Therapeutics Inc. BCCHR holds shares in: Incisive Genetics, Lions Gate Technologies, ME Therapeutics, and

Xenon Pharmaceuticals (private) which is held in trust by UBC.

FIGURE 35 BCCHR License/Assignment Agreements and Spin-off Companies by Fiscal Year



IP related line-item revenue data for FY 2023-24 is shown below. Expenses related to patenting, license IP and legal costs totaled \$13,420 in FY 2023-24.

TABLE 9 BCCHR IP Related Revenue

IP RELATED REVENUE	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
Royalties	\$635,065.03	\$727,424.30	\$837,237.00	\$283,716.00	\$223,457.00
Equity Liquidated			\$331,104.00	-	-
License Fees			\$101,705.00	\$630,466	\$781,476.00
License Management					
Option Fees					
GROSS LICENSING REVENUE (TOTAL)	\$635,065.03	\$727,424.30	\$1,270,046.00	\$914,181	\$1,004,933.00

Advancing Health and Policy Benefits

See Table 10 for a detailed breakdown of clinical trial activity by fiscal year.

TABLE 10 BCCHR Clinical Trials

Fiscal Year	17-18	18-19	19-20	20-21	21-22	22-23	23-24
Total Number of Clinical Trials active during the FY	195	212	200	228	240	248	243
Status of the Trial at the end of the FY:							
Total Number of Active Trials	153	175	153	188	189	186	184
Total Number of Trials that closed during the FY	42	37	47	40	51	62	59
Enrolment Numbers:							
Expected Local Subject Enrolment (for the term of the study)	102,916	108,147	104,957	110,337	21,373	21,814	31,548
Total Cumulative Subject enrolment at the end of the FY	108,720	6,564	5,632	8,855	22,016	17,667	13,980

Grant funding type is reported for clinical trials in Figure 65. This information is sourced from the REB (Research Ethics Board) file and reflects the funding type entered as part of

the ethics application (see Glossary – Appendix 1, page 65 for a definition of funding types). Twenty-nine percent (29%) of BCCHR’s clinical trials are industry funded.

FIGURE 36 BCCHR Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY

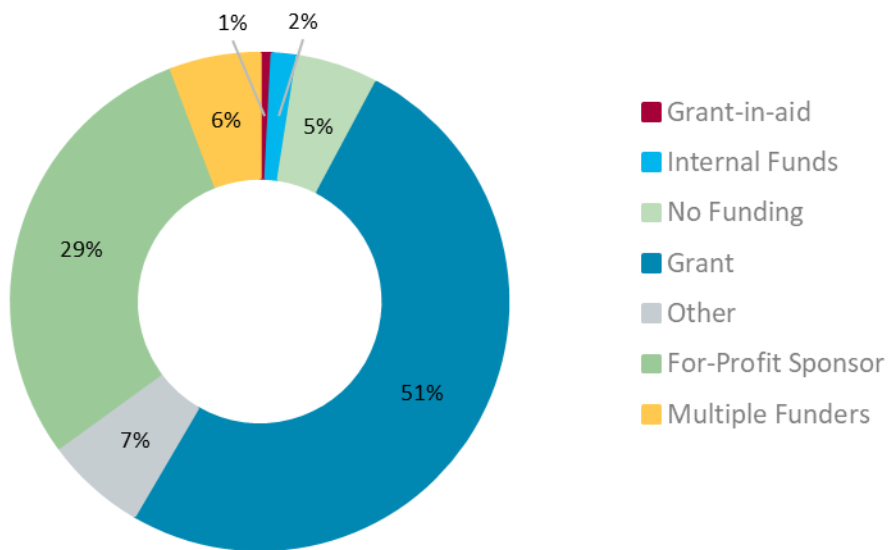


Table 11 reflects BCCHR’s Top Three Achievements/Accomplishments/Highlights, and can include awards, citations, clinical programs, either in

progress or historical and be relevant to FY 2023-24 timeframe (April 1, 2023 - March 31, 2024).

TABLE 11 BCCHR Top Three Achievements/Accomplishments/Highlights

IMPROVING TREATMENT FOR SEPSIS
In a key publication in The Lancet, BCCHR researchers found that for children younger than five with suspected sepsis, substantial mortality can occur after being discharged from the hospital, especially in low-income countries. The team developed improved guidelines for recognizing sepsis and for predicting whether children may be at high risk of post-discharge mortality in Uganda. These guidelines have now been adopted and implemented at several hospitals in Uganda.
ADDRESSING THE RISING INCIDENCE OF EATING DISORDERS IN CANADIAN YOUTH
During the COVID-19 pandemic, with heightened health measures, there was a substantial increase in eating disorders amongst youth in Canada. Researchers from BCCHR have been at the forefront of determining the extent of the increase, as well as how best to address it and direct more resources towards preventing and treating this growing issue, which is estimated to have cost around \$40 million between the years 2000-2022. To help meet these new needs, BCCHR researchers are providing training in family-based therapy for eating disorders to clinicians across BC and the Yukon to support access to quality, evidence-based treatments for eating disorders, no matter where a family lives.
A SAFER PATH TO OVERCOMING FOOD ALLERGIES
BCCHR researchers conducted study that identified a safe path to overcoming food allergies for older children or building resistance for those who can’t risk consuming allergens. Called sublingual immunotherapy (SLIT), the technique involves placing small amounts of food allergens under the tongue.

BC MENTAL HEALTH & SUBSTANCE USE SERVICES RESEARCH INSTITUTE (BCMHSUS)



BC MENTAL HEALTH & SUBSTANCE USE SERVICES
Provincial Health Services Authority

Producing and Advancing Knowledge

In FY 2023-24, researchers associated with BCMHSUS, were awarded a total of \$907,037. Operating grants and Salary Awards make up the majority (95%) of awards. A breakdown of funding types and subtypes can be found in Figure 37. BCMHSUS's portion of the Research Support

Fund Program grant totaled \$64,274 for FY 2023-24 but is not included in total research funding or the figures below. Total Covid-19 related research funding was \$24,500 of Operating Grants and is included in the Figure 37.

FIGURE 37 BCMHSUS Research Funding by Funding Type and Sub-type by Fiscal Year

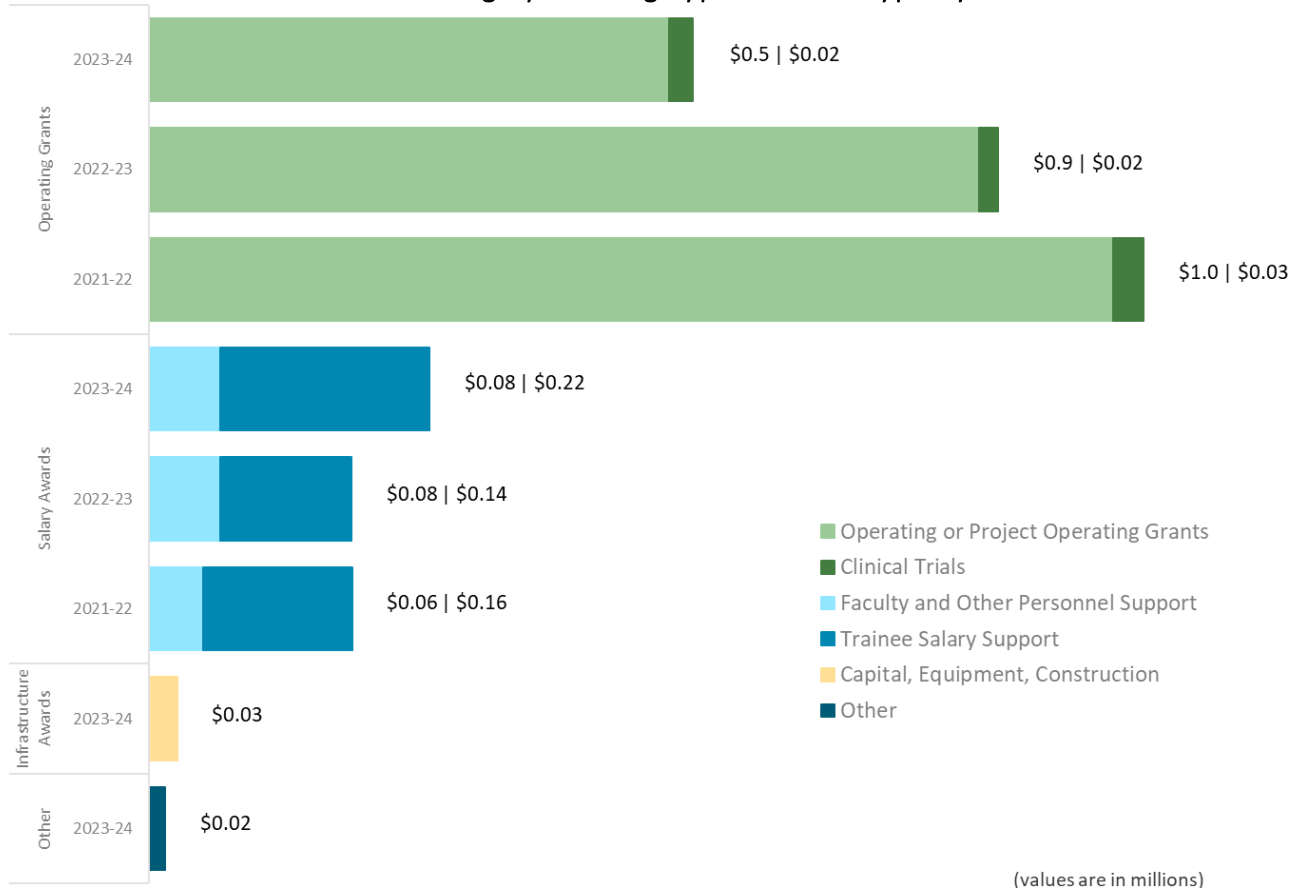
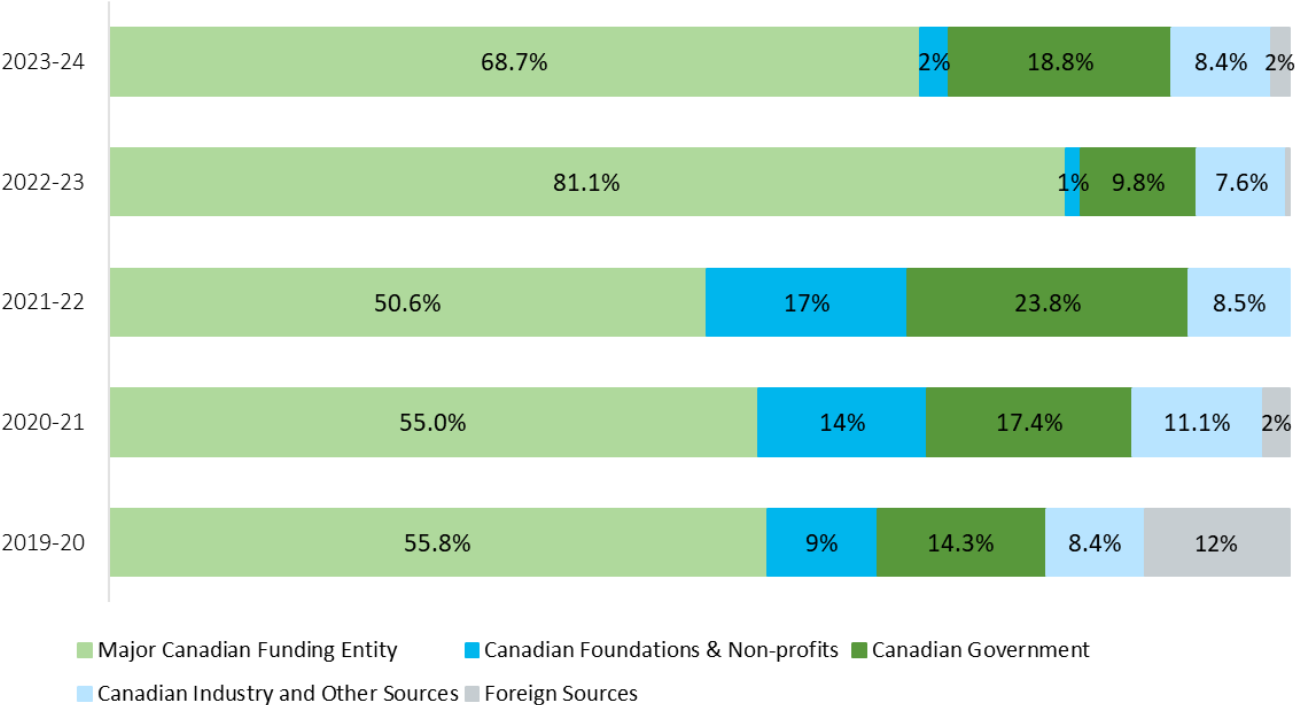


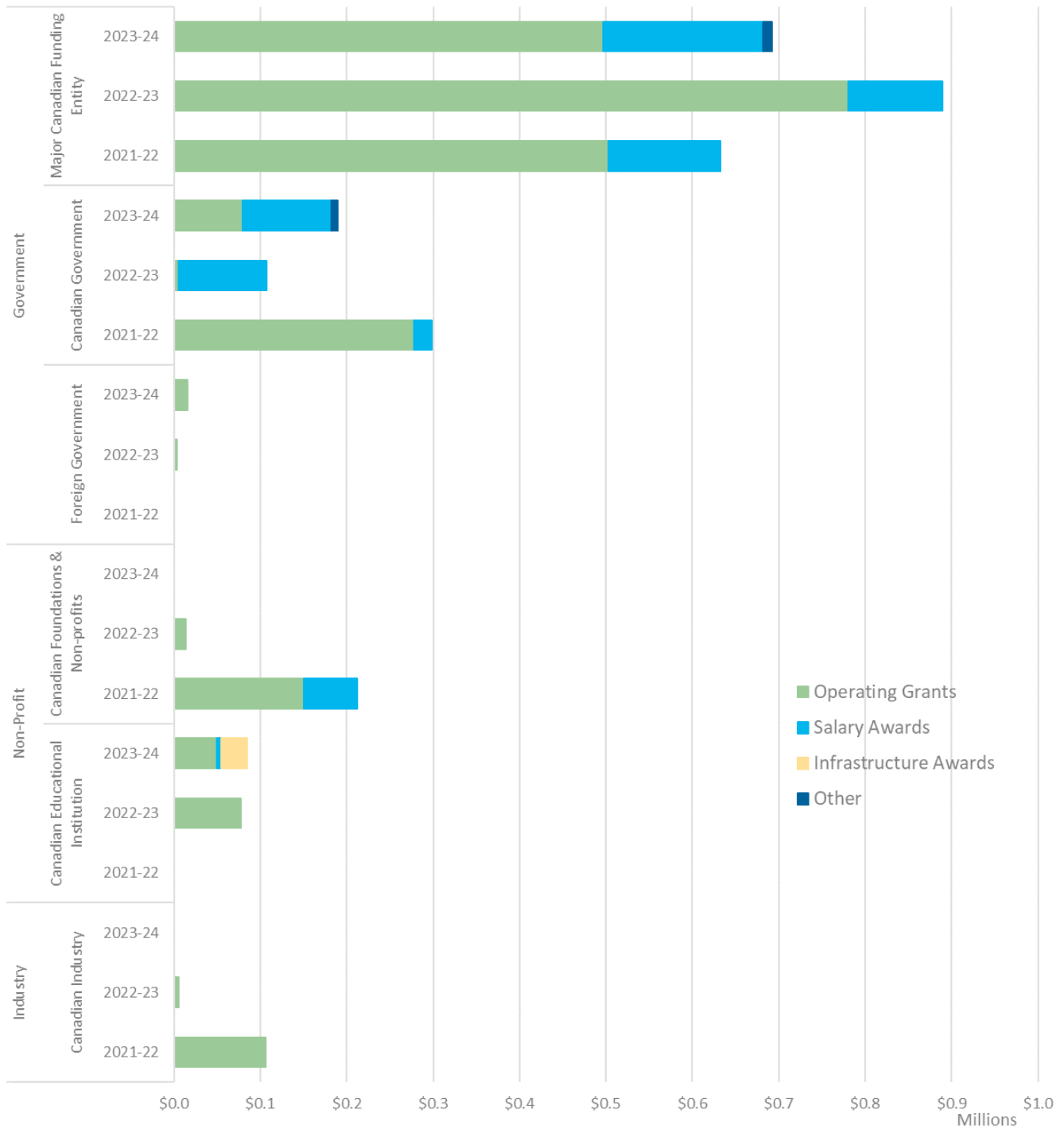
Figure 38 shows funding by funding source category. The Major Canadian Funding Entity continued to make up the majority of funding with the Canadian Government category being the second largest. Due to the small number of awards, the category percentages fluctuate year over year.

FIGURE 38 Percentage of BCMHSUS Research Funding by Funding Source Category by Fiscal Year



The top 2 funding categories are Major Canadian Funding Entities (68.7%), and Canadian Government (18.8%).
 Figure 39 details the funding categories by RISE sector, funding source category and funding type.

FIGURE 39 Total BCMHSUS Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year



The application success rate is reported for the Fall 2023 and Spring 2024 CIHR grant competitions. BCMHSUS was

not successful in the Fall Project Grant competitions for a total of 0 awards out of 1 application.

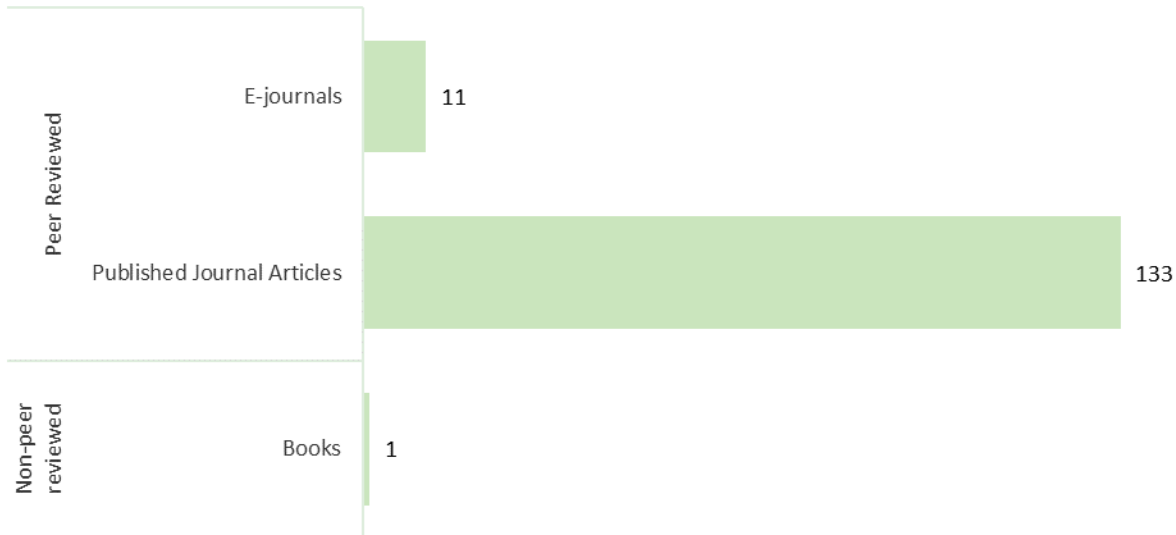
TABLE 12 BCMHSUS Annual Grant Application Success Rate

Grant Funding Opportunity	National Overall Results % (Approved/Submitted)	BCMHSUS Results % (Approved/Submitted)
2023-09 Project Grant	17.5% (380/2,175)	0.0% (0/1)
2024-03 Project Grant	15.3% (373/2,443)	0.0% (0/0)

BCMHSUS had a total of 145 publications of which 99% were peer reviewed. Total number of publications by type and category (peer vs. non-peer reviewed) is seen in Figure 40. The program total represents the number of

publications where at least one program researcher was an author of the publication. When researchers from more than one research entity/program collaborate on the same publication, it is counted once for each program.

FIGURE 40 Total Number of BCMHSUS Publications by Type and Category

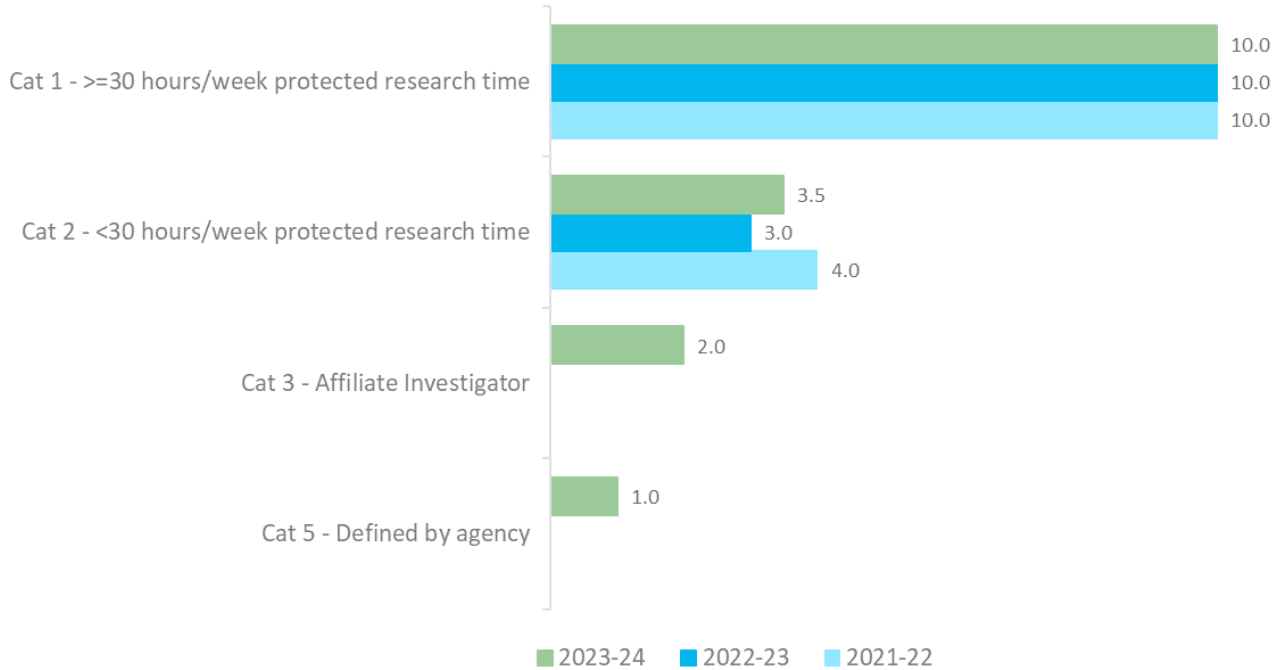


Building Research Capacity

BCMHSUS had a total of 14.5 researchers in FY 2023-24, with 10 having greater than 30 hours of protected research time per week (Figure 41). BCMHSUS clinicians engaged in research are now counted in the BCCHR totals following the

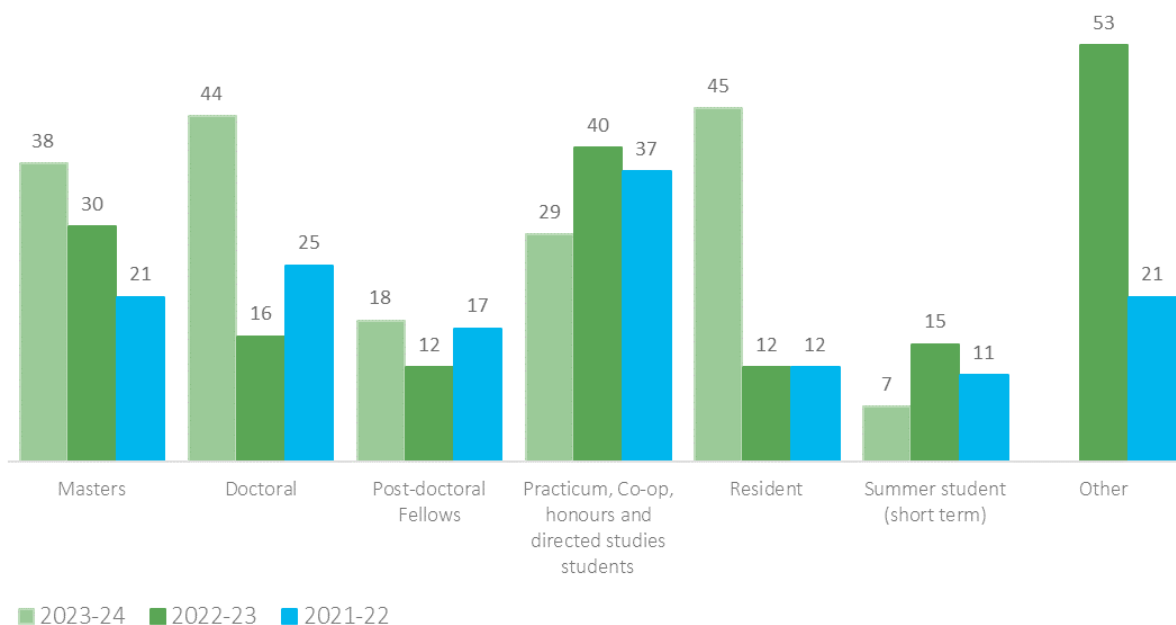
operational transfer of Child & Youth Mental Health back to BC Children's Hospital.

FIGURE 41 Total Number of BCMHSUS Researchers by Category



During FY 2023-24, BCMHSUS researchers provided training and supervision to a total of 181 trainees, an increase of 3 over last FY (see Figure 42).

FIGURE 42 Total Number of BCMHSUS Trainees by Category



Advancing Health and Policy Benefits

See Table 13 for a detailed breakdown of clinical trial activity by fiscal year. Of note is that all of BCMHSUS trials contained enrollment figures in all REB (Research Ethics Board) records.

TABLE 13 BCMHSUS Clinical Trials

Fiscal Year	17-18	18-19	19-20	20-21	21-22	22-23	23-24
Total Number of Clinical Trials active during the FY	5	7	7	5	8	8	8
Status of the Trial at the end of the FY:							
Total Number of Active Trials	5	7	7	4	7	7	6
Total Number of Trials that closed during the FY	0	0	0	1	1	1	2
Enrolment Numbers:							
Expected Local Subject Enrolment (for the term of the study)	902	1,217	1,320	1,115	1,400	882	894
Total Cumulative Subject enrolment at the end of the FY	423	465	565	551	596	523	457

Grant funding type is reported for Clinical Trials in Figure 43. This information is sourced from the REB (Research Ethics Board) file and reflects the funding type entered as part of the ethics application (see Glossary – Appendix 1, page 65 for a definition of funding types). The majority, sixty-three percent (63%) of BCMHSUS' Clinical Trials are grant funded.

Figure 42

FIGURE 43 BCMHSUS Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY

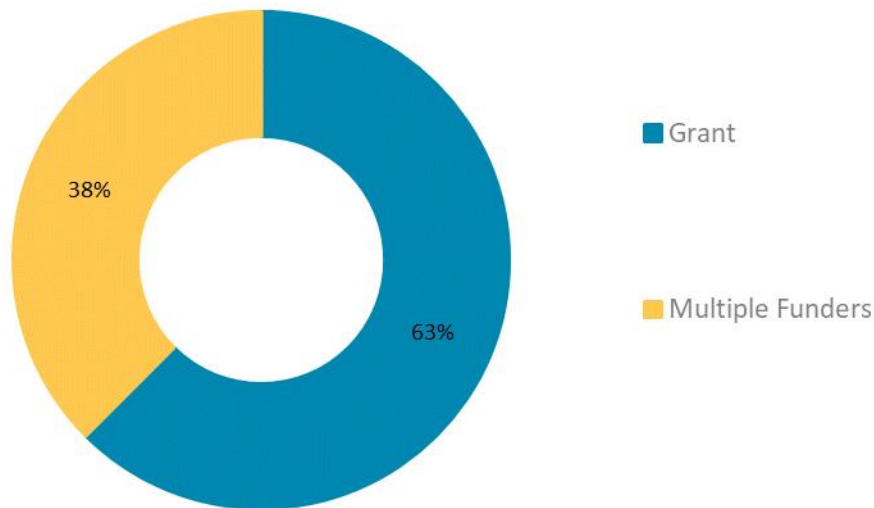


Table 14 reflects BCMHSUS' Top Three Achievements/Accomplishments/Highlights, and can include awards, citations, clinical programs, either in

progress or historical and be relevant to FY 2023-24 timeframe (April 1, 2023 - March 31, 2024).

TABLE 14 BCMHSUS Top Three Achievements/Accomplishments/Highlights

<p>BCMHSUS RESEARCH LEAD OF FORENSIC PSYCHIATRY AND UBC PROFESSOR, ELECTED PRESIDENT OF INTERNATIONAL ASSOCIATION OF FORENSIC MENTAL HEALTH SERVICES</p>
<p>BCMHSUS Research Lead of Forensic Psychiatry and UBC Professor, Dr. Tonia Nicholls, was elected President of the International Association of Forensic Mental Health Services. Dr. Nicholls, a trained forensic psychologist, works at the critical intersection of mental health and the criminal justice system. Her extensive research, along with her knowledge translation and exchange activities, are designed to enhance well-being and improve services for marginalized populations, particularly individuals with mental health and substance use issues, as well as those in contact with the criminal justice system. Additionally, Dr. Nicholls has joined a national team funded by the Social Sciences and Humanities Research Council (SSHRC) to develop culturally safe services within forensic settings. This collaboration underscores her commitment to advancing forensic mental health services through inclusive and culturally informed approaches.</p>
<p>CLINICIAN RESEARCHER DR. JEHANNINE AUSTIN PUBLISHES LANDMARK STUDY ON PHARMACOGENOMIC TESTING IN CMAJ</p>
<p>Dr. Jehannine Austin, a BCMHSUS clinician researcher, has published research in the Canadian Medical Association Journal (CMAJ) that demonstrates significant benefits of pharmacogenomic testing in guiding antidepressant use. The study, titled "Cost-effectiveness of pharmacogenomic-guided treatment for major depression," reveals that pharmacogenomic testing can lead to population health gains while substantially reducing health system costs. These findings suggest that pharmacogenomic testing presents a valuable investment opportunity for health systems, promoting both better health outcomes and cost efficiency. The full article can be found in the November 14, 2023 issue of CMAJ (195: E1499-E1508), and is accessible via the DOI: 10.1503/cmaj.221785. PMID: 37963621</p>
<p>CLINICIAN RESEARCHER DR. JEHANNINE AUSTIN PUBLISHES LANDMARK STUDY ON PHARMACOGENOMIC TESTING IN CMAJ</p>
<p>Dr. Evelyn Stewart, a BCMHSUS clinician scientist, has been named the holder of the new Congdon Family Hospital Chair in Child and Youth Mental Health Research at BC Children's Hospital. Dr. Stewart is an internationally recognized expert in Obsessive-Compulsive and Related Disorders (OCRDs) and is the founding director of the Pediatric OCD Program at Healthy Minds since 2011. Her primary research focus has been to advance the understanding and improve outcomes for OCRDs across the lifespan, with her findings being integrated into patient assessment and treatment. In recognition of her outstanding contributions, Dr. Stewart was awarded the Faculty of Medicine Distinguished Achievement Award for Excellence in Service to the University and Community by the University of British Columbia in 2023. Additionally, her work titled "Review: Mental Health Impacts of the COVID-19 pandemic on children and youth – a systematic review" was honored as the Wiley Top Cited Article in Child and Adolescent Mental Health for 2022-2023.</p>

BC CENTER FOR DISEASE CONTROL/UBC CDC (BCCDC)



Producing and Advancing Knowledge

In FY 2023-24, researchers affiliated with BCCDC were awarded a total of \$17,215,626 in research funding, which represents a 179% increase over last fiscal year. The amount awarded as Operating Grants (\$10,578,106) makes up 61% of total awards. A breakdown of funding types and subtypes can be found in Figure 44 and by funding source category in Figure 45.

BCCDC’s portion of the Research Support Fund Program grant totaled \$279,918 for FY 2023-24 but is not included in total research funding or the figures below. Because of its public and population health mandate, research at BCCDC is very much embedded within its clinical mandate and, as such, is also supported by operating funding to a significant degree. Total Covid-19 related research funding was \$967,308 and is included in Figure 44.

FIGURE 44 Total BCCDC Research Funding by Funding Type and Sub-type by Fiscal Year

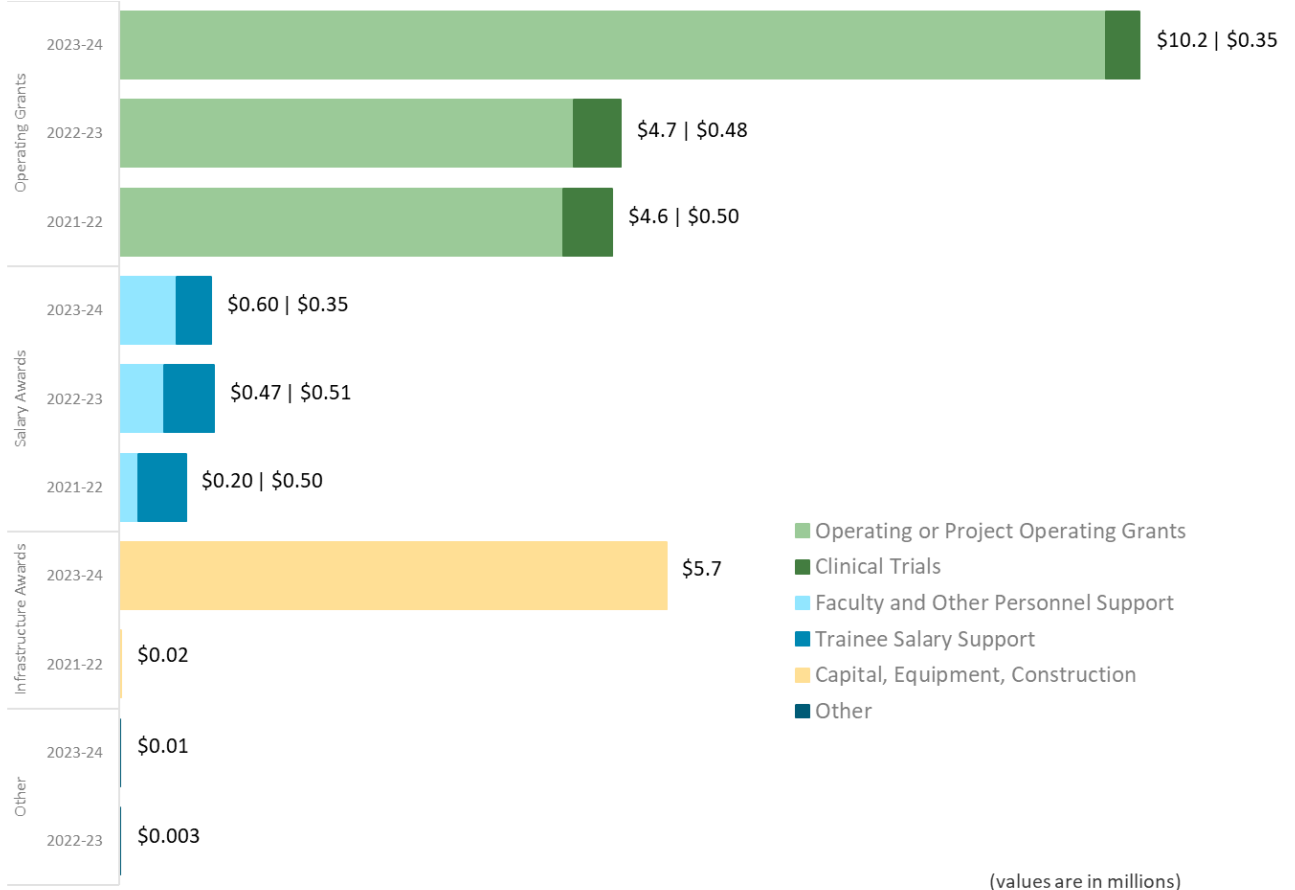
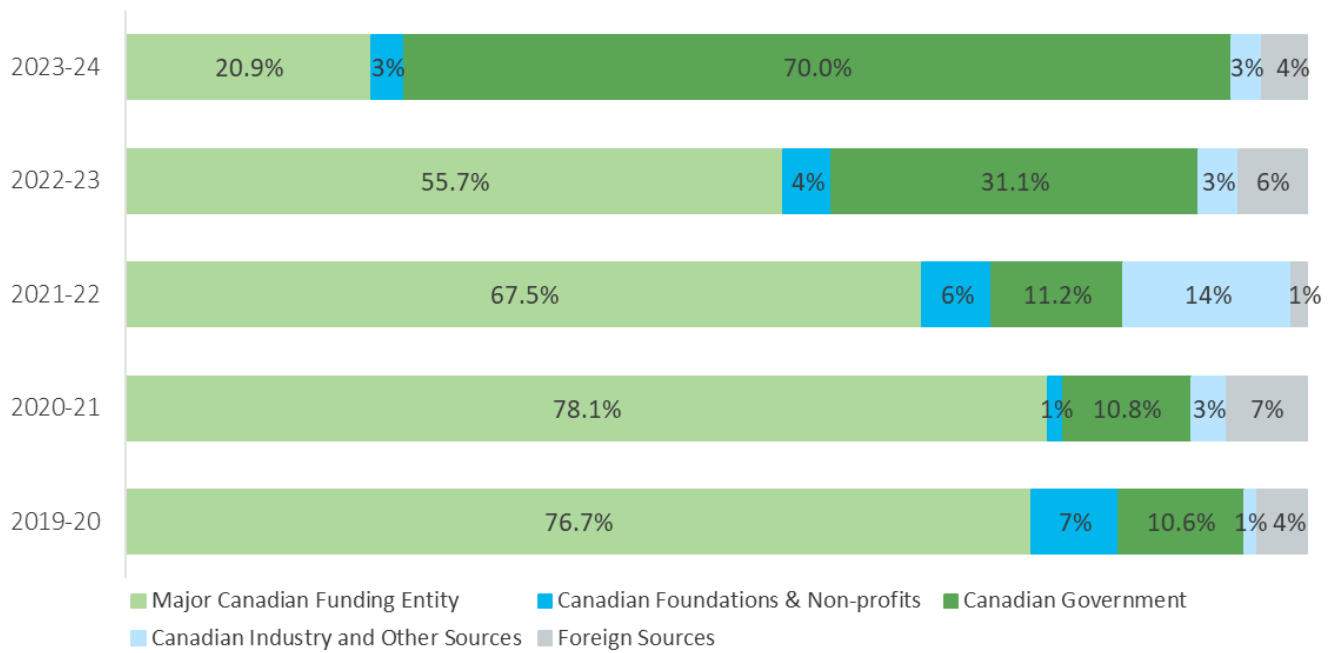


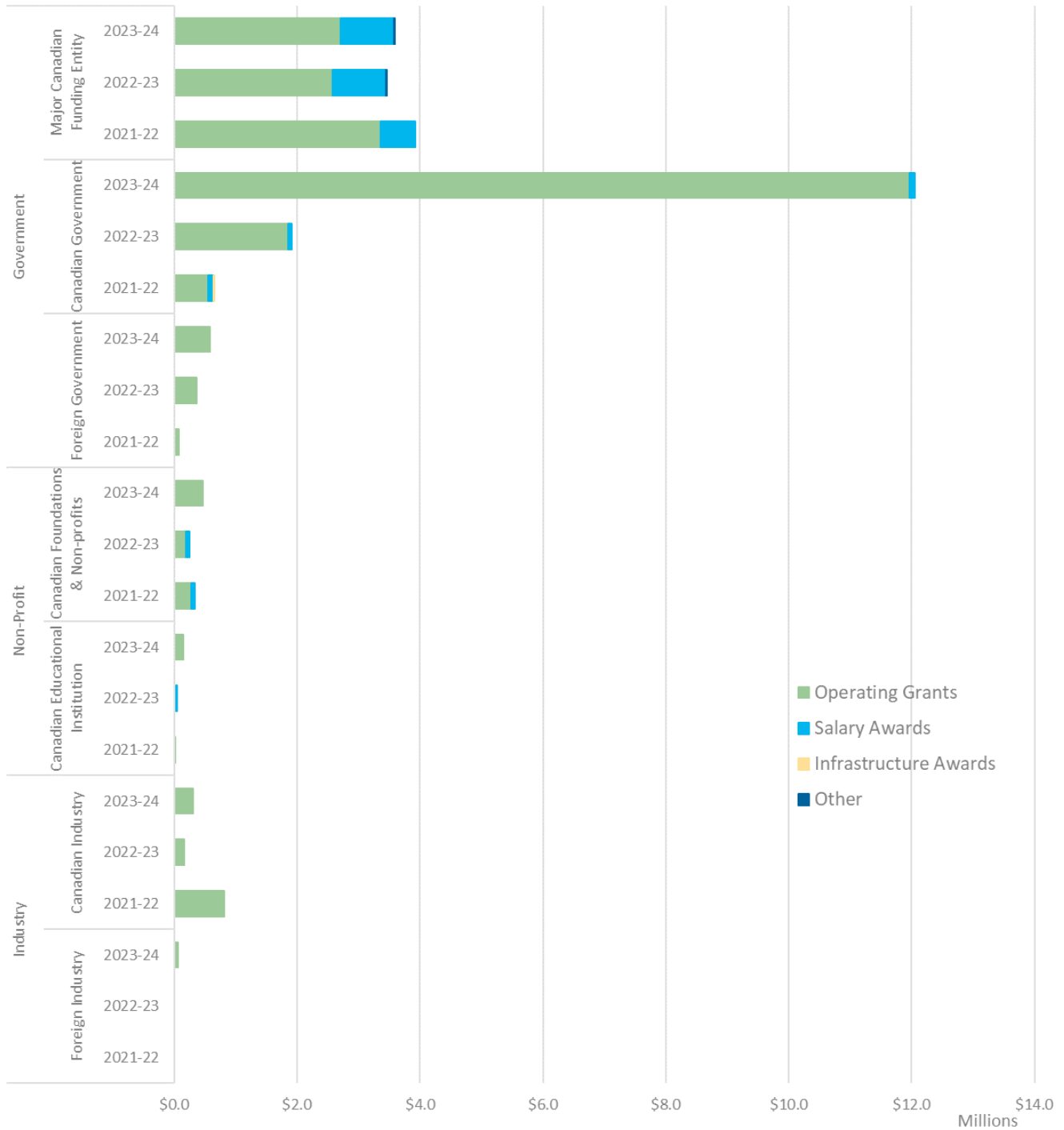
Figure 45 shows funding by funding source category.

FIGURE 45 Percentage of BCCDC Research Funding by Funding Source Category by Fiscal Year



The top two funding categories in FY 2022-23 are Major Canadian Funding Entity (20.9%) and Canadian Government (70%). Figure 46 details the funding categories by RISE sector, funding source category and funding type.

FIGURE 46 Total BCCDC Research Funding by RISE Sector, Funding Source Category and Type by FY



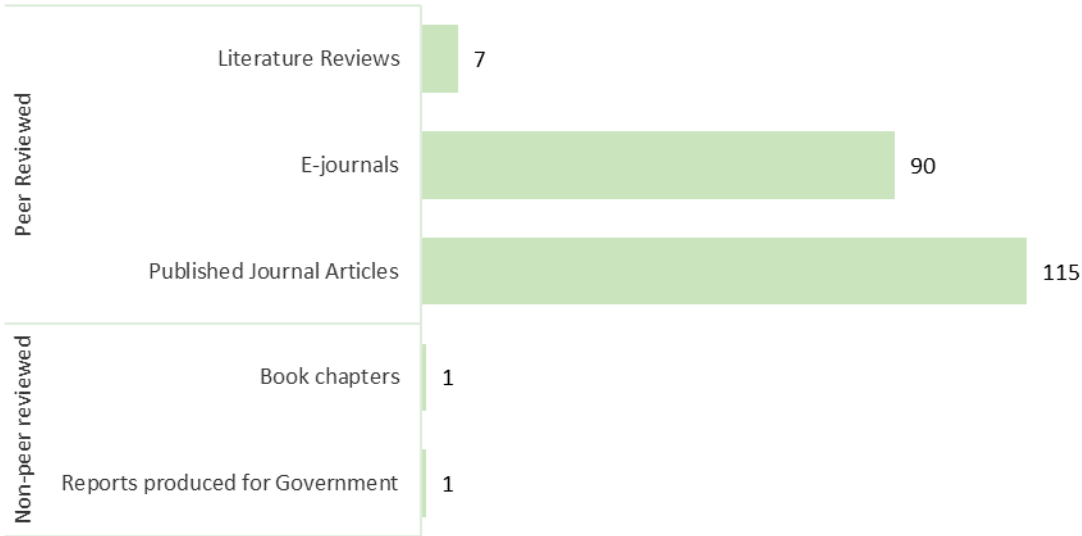
The application success rate is reported for the Fall 2023 and Spring 2024 CIHR grant competitions in Table 15. BCCDC was unsuccessful in either of the Project Grant competitions, with 0 awards and 5 applications.

TABLE 15 BCCDC Annual Grant Application Success Rate

Grant Funding Opportunity	National Overall Results % (Approved/Submitted)	BCCDC Results % (Approved/Submitted)
2023-09 Project Grant	17.5% (380/2,175)	0% (0/3)
2024-03 Project Grant	15.3% (373/2,443)	0% (0/2)

BCCDC had a total of 214 publications of which 99% were peer reviewed. Total number of publications by type and category (peer vs. non-peer reviewed) is seen in Figure 47. The program total represents the number of publications where at least one program researcher was an author of the publication. When researchers from more than one research entity/program collaborate on the same publication, it is counted once for each program.

FIGURE 47 Total Number of BCCDC Publications by Type and Category

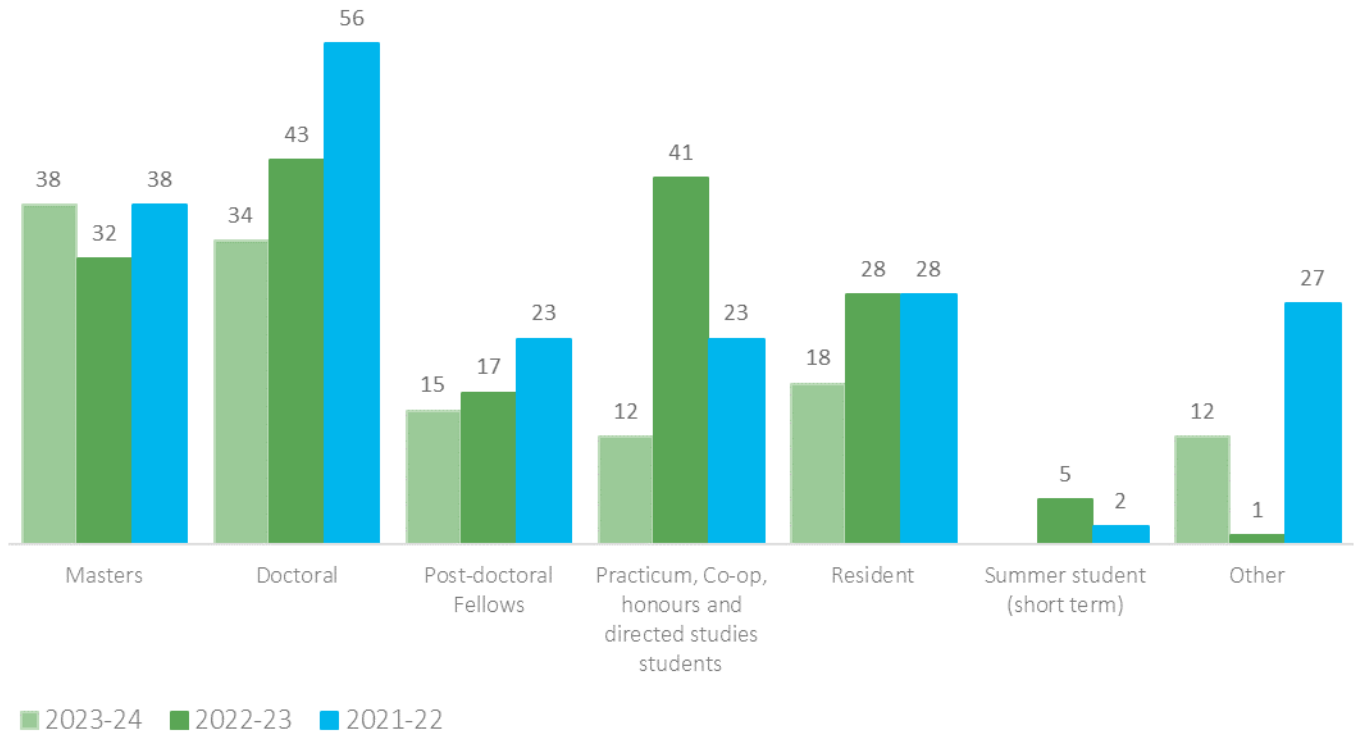


Building Research Capacity

BCCDC defines a researcher as any principal investigator or co-investigator involved in BCCDC research projects. BCCDC had a total of 53.5 researchers meeting this definition in FY 2023-24, an increase of 4 from FY 2022-23.

During FY 2023-24, BCCDC researchers provided training and supervision to a total of 129 trainees (see Figure 48) a decrease of 38.

Figure 48 Total Number of BCCDC Trainees by Type



Advancing Health and Policy Benefits

See Table 16 for a detailed breakdown of clinical trial activity by fiscal year.

TABLE 16 BCCDC Clinical Trials

Fiscal Year	17-18	18-19	19-20	20-21	21-22	22-23	23-24
Total Number of Clinical Trials active during the FY	5	9	11	12	14	15	12
Status of the Trial at the end of the FY:							
Total Number of Active Trials	4	8	10	11	14	14	11
Total Number of Trials that closed during the FY	1	1	1	1	0	1	1
Enrolment Numbers:							
Expected Local Subject Enrolment (for the term of the study)	2,750	6,699	10,579	12,625	12,814	13,729	7,721
Total Cumulative Subject enrolment at the end of the FY	1,639	2,707	2,961	1,663	3,613	5,233	2,111

Grant funding type is sourced from the REB (Research Ethics Board) file and reflects the funding type entered as part of the ethics application (see Glossary – Appendix 1, page 65 for a definition of funding types). Fifty percent

(50%) of BCCDC’s clinical trials are grant funded, 25% have multiple funders, 17% with no funding, and 8% with other funding.

Table 17 reflects BCCDC’s Top Three Achievements/Accomplishments/Highlights, and can include awards, citations, clinical programs, either in progress or historical, and be relevant to FY 2023-24 timeframe (April 1, 2023 - March 31, 2024).

TABLE 17 BCCDC Top Three Achievements/Accomplishments/Highlights

<p>KLOSHE TILLICUM, AN INDIGENOUS-LED CIHR FUNDED RESEARCH PROJECT EXPLORES HOW BUILDING RELATIONSHIPS WITH INDIGENOUS COMMUNITIES CAN INCREASE TRUST IN PUBLIC HEALTH</p>
<p>Kloshe Tillicum (“Good Relations” in Chinook Jargon) is a CIHR funded project utilizing Indigenous methodologies to explore how health information and services could have been improved during the COVID-19 pandemic and how to make health systems more trustworthy for Indigenous people(s) and communities in BC. Four in-person focus groups and four virtual focus groups with rural, remote and underserved Indigenous communities. Being Indigenous co-led, there was a commitment for a community (driven) data gathering process where Indigenous men assisted with the development of the question guide. Focus groups were flexible in length and included a shared meal and the research team held true to the tradition of storytelling while honoring the process of witnessing and collective reflections. For more information:</p> <ul style="list-style-type: none"> • BC Medical Journal Article: Kloshe Tillicum (good relations) move at the speed of trust: https://bcmj.org/bc-centre-disease-control/kloshe-tillicum-good-relations-move-speed-trust • BCCDC Grand Rounds Presentation “How can building relationships with Indigenous communities increase trust in public health?” https://nexuswebcast.mediasite.com/Mediasite/Channel/af0eaf5cff4e444cb4ee15256696b4dd5f/watch/9f8ee757226f4b89a75dc89b7f2833251d
<p>APPLIED RESEARCH TO RESPOND TO SUPPORT KEY PROVINCIAL POLICIES IN THE DRUG TOXICITY EMERGENCY</p>
<p>BCCDC researchers published a BMJ paper showing that Risk Mitigation Guidance (RMG) opioid dispensations were associated with reduced mortality in people with opioid use disorder in the week after dispensation. The RMG provided clinical guidance to physicians and nurse practitioners in prescribing alternatives to the illegal drug supply. BCCDC co-developed, validated, and publicly shared data on people receiving prescribed alternatives to illegal drugs via the Unregulated Drug Poisoning Emergency Dashboard which helps monitor the reach of this intervention. BCCDC also contributed to provincial and national evaluations of the decriminalization of people who use drugs.</p>
<p>USING INNOVATIVE PLATFORMS, TECHNOLOGIES, AND METHODS TO MONITOR RESPIRATORY AND OTHER EMERGING AND RE-EMERGING PATHOGENS OF PANDEMIC POTENTIAL</p>
<p>Work includes novel methods for detection and sequencing of pathogens to knowledge translation tools. The REALTIME Project integrated laboratory, genomic and healthcare data on COVID-19 and other respiratory viruses for health system intelligence to improve health outcomes. Researchers also developed sequencing and modeling approaches for respiratory viruses in wastewater. These techniques were expanded for application to monitor antimicrobial resistance, enteric bacteria and avian influenza (H5). BCCDC developed automated data pipelines and interactive dashboards to display and share respiratory illness data with policy makers and the public. In alignment, improvements were made to the public accessibility of surveillance data for various pathogens such as avian influenza. E.g. A tool was developed to help the public understand our respiratory virus surveillance dashboards.</p>

WOMEN'S HEALTH RESEARCH INSTITUTE (WHRI)



Producing and Advancing Knowledge

In FY 2023-24, researchers affiliated with WHRI were awarded a total of \$10,488,599 in research funding, which represents a 45% increase over last year. The amount awarded as Operating Grants (\$9,570,854) makes up 91.3% of total awards. A breakdown of funding types and subtypes can be found in Figure 49 and by funding source category in Figure 50.

WHRI's portion of the Research Support Fund Program grant totaled \$480,858 for FY 2023-24 but is not included in total research funding or the figures below. WHRI shares investigators with a number of other health research institutes and universities and benefits from additional external grant revenues linked to these investigators.

Total Covid-19 related research funding was \$4,226,865 and is included in the figure 49.

FIGURE 49 Total WHRI Research Funding by Funding Type and Sub-type by Fiscal Year

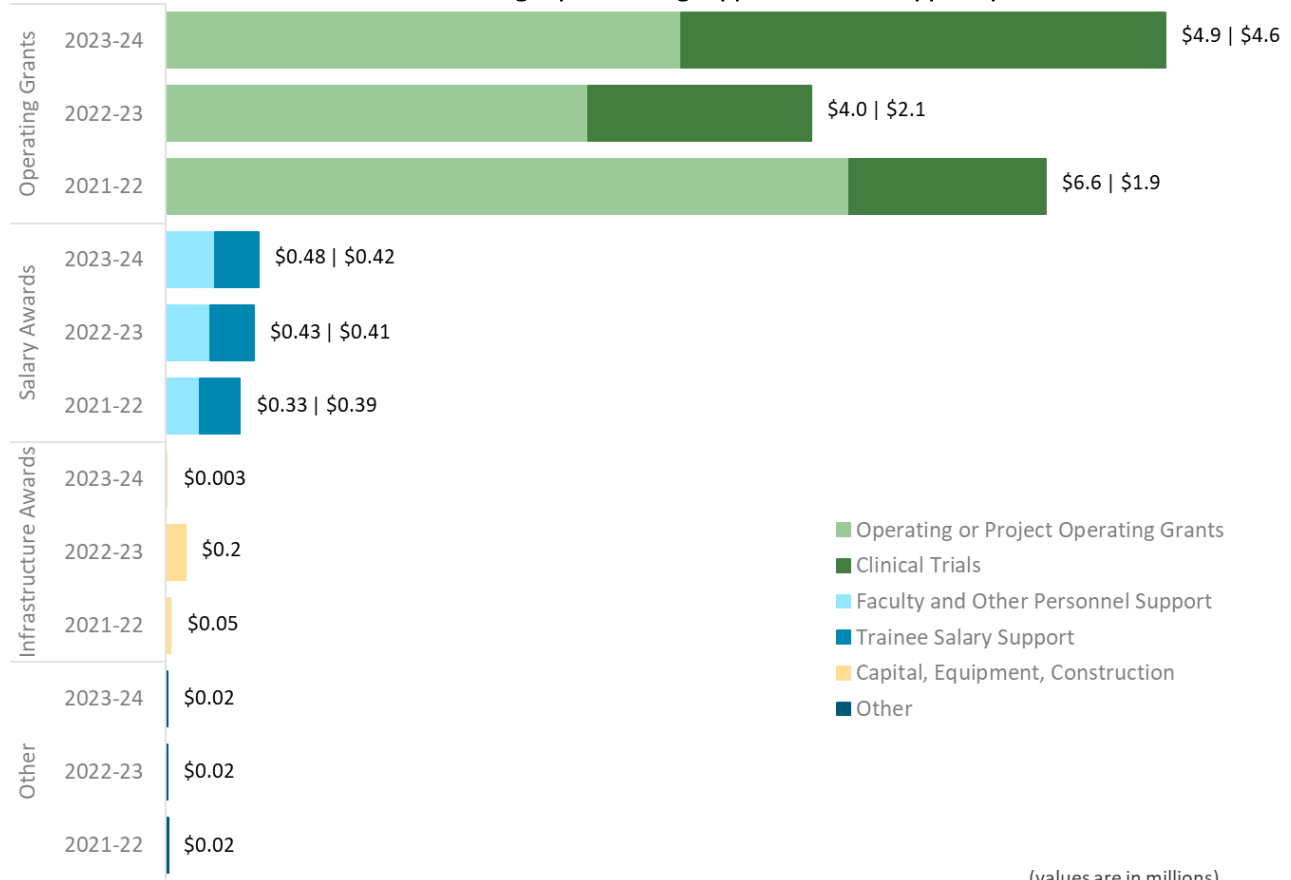
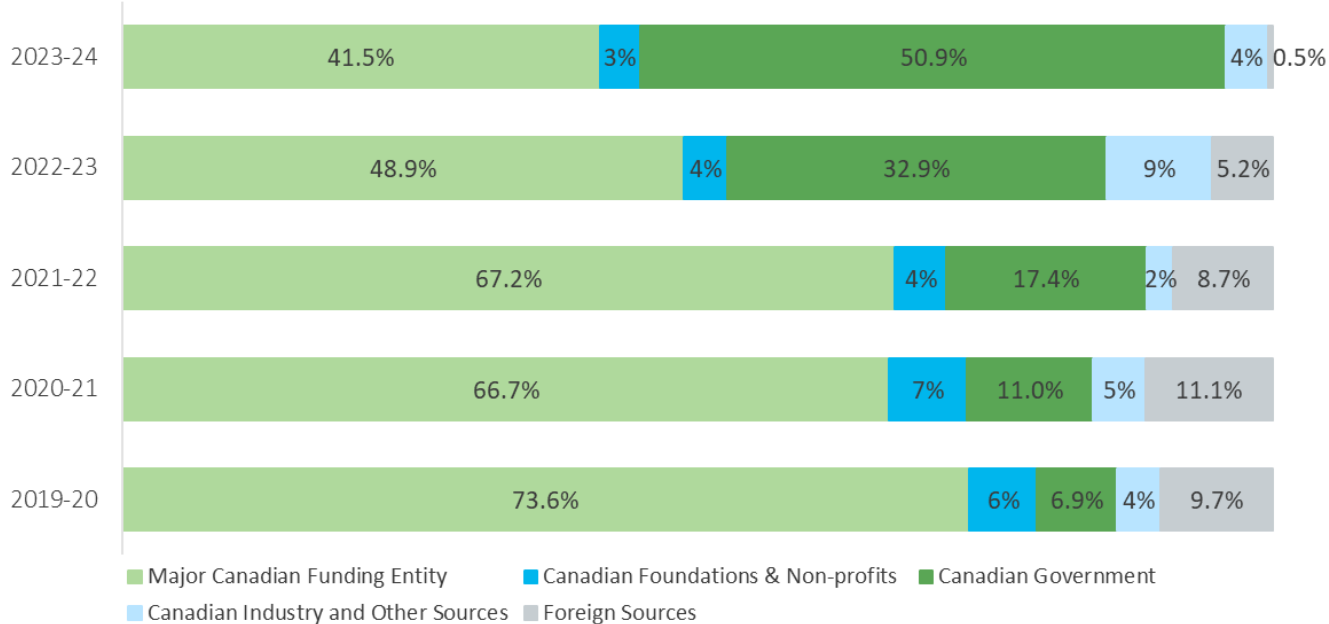


Figure 50 shows funding by funding source category.

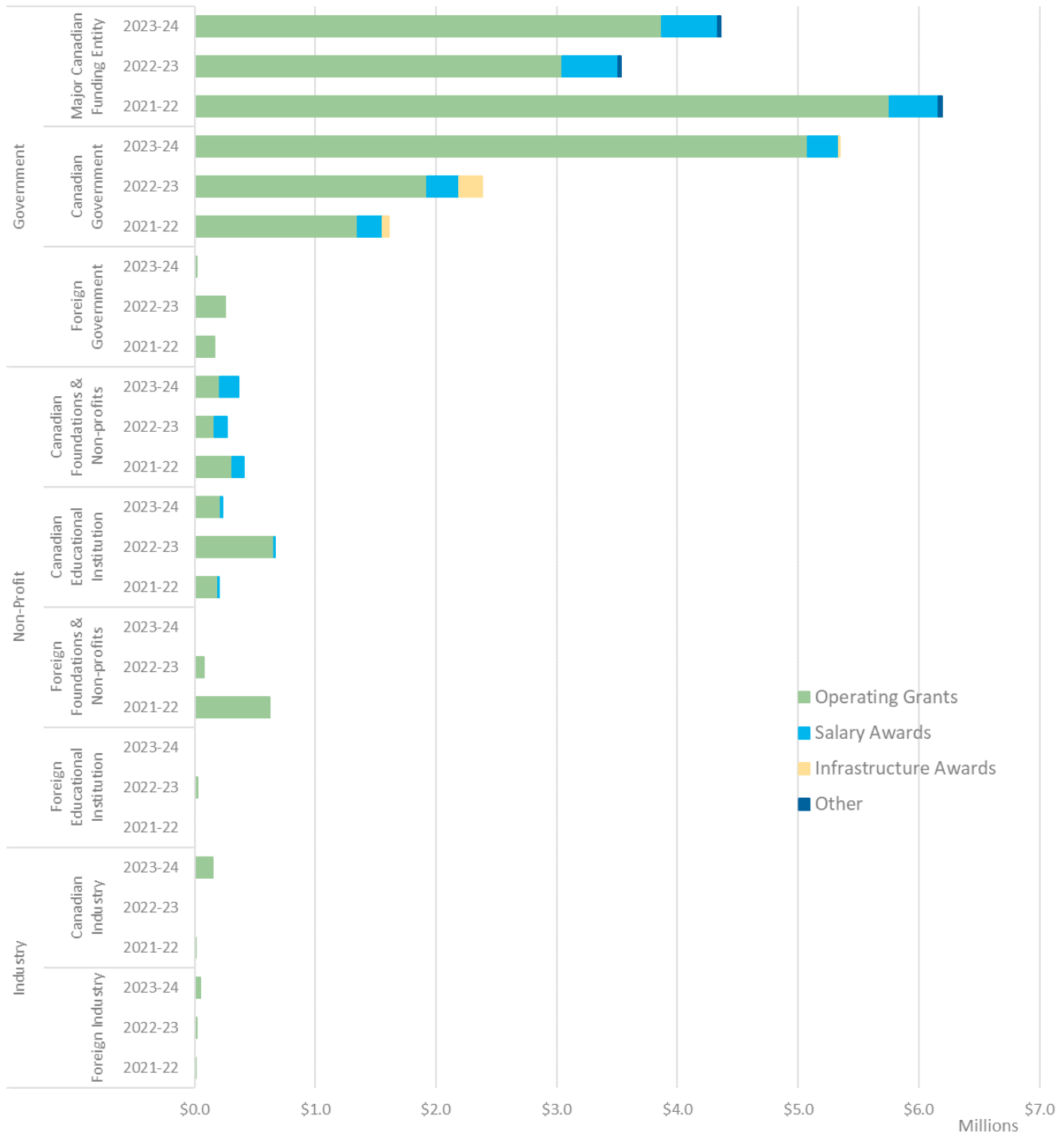
FIGURE 50 Percentage of WHRI Research Funding by Funding Source Category by FY



In FY 2023-24, the top two funding categories are Major Canadian Funding Entities (41.5%) and Canadian Government (50.9%). Figure 51 details the major funding

categories by RISE sector, funding source category and funding type.

FIGURE 51 Total WHRI Research Funding by RISE Sector, Funding Source Category and Type by Fiscal Year



The application success rate is reported for the Fall 2023 and Spring 2024 CIHR grant competitions. WHRI was successful in both Project Grant competitions with a total of 7 awards from 17 submissions. In both Project Grant

competitions, WHRI was above the national average success rate. WHRI investigators apply for grant competitions that are offered by a variety of granting agencies.

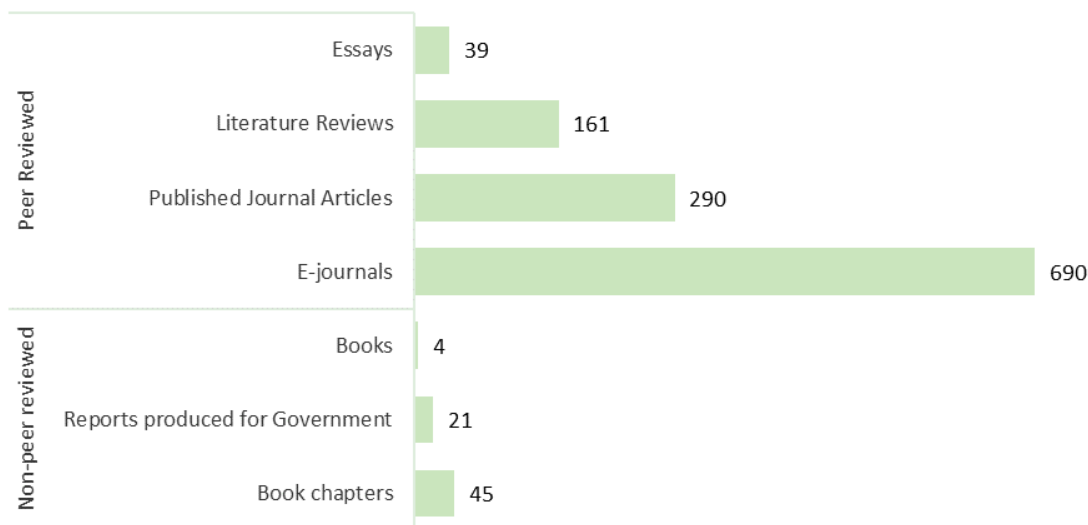
TABLE 18 WHRI Annual Grant Application Success Rate

Grant Funding Opportunity	National Overall Results % (Approved/Submitted)	WHRI Results % (Approved/Submitted)
2023-09 Project Grant	17.5% (380/2,175)	44.4% (4/9)
2024-03 Project Grant	15.3% (373/2,443)	37.5% (3/8)

WHRI had a total of 1,250 publications in calendar year 2023 of which 94% were peer reviewed. Total number of publications by type and category (peer vs. non-peer reviewed) is shown in Figure 52. Peer review represents the gold standard for scientific credibility. The program

total represents the number of publications where at least one program researcher was an author of the publication. When researchers from more than one research entity/program collaborate on the same publication, it is counted once for each program.

FIGURE 52 Total Number of WHRI Publications by Type and Category



Three full fiscal years' worth of data is provided for WHRI's four research specific social media channels; Facebook (member since Aug 2010); X, formerly known as Twitter (member since August 2010); Instagram (member since May 2018); and LinkedIn (member since June 2017). Strategic use of social media, combined with tracking and reporting of this data directly supports our strategic aim to Increase and Promote Research Translation, Implementation, and Communication. Social media use also aligns with several domains within the [WHRI Strategic Framework for Knowledge Translation](#) (KT) including:

- Building KT Capacity: Promoting and hosting events to accelerate the dissemination of evidence to knowledge users.
- Advocating for a Culture of KT: Promoting KT activities and KT products.
- Manage KT Projects: Facilitating KT events and activities, including dissemination of research evidence to targeted

knowledge users (e.g. patients, providers, prescribers, decision makers); and track the impact of dissemination campaigns that increase the use of KT products.

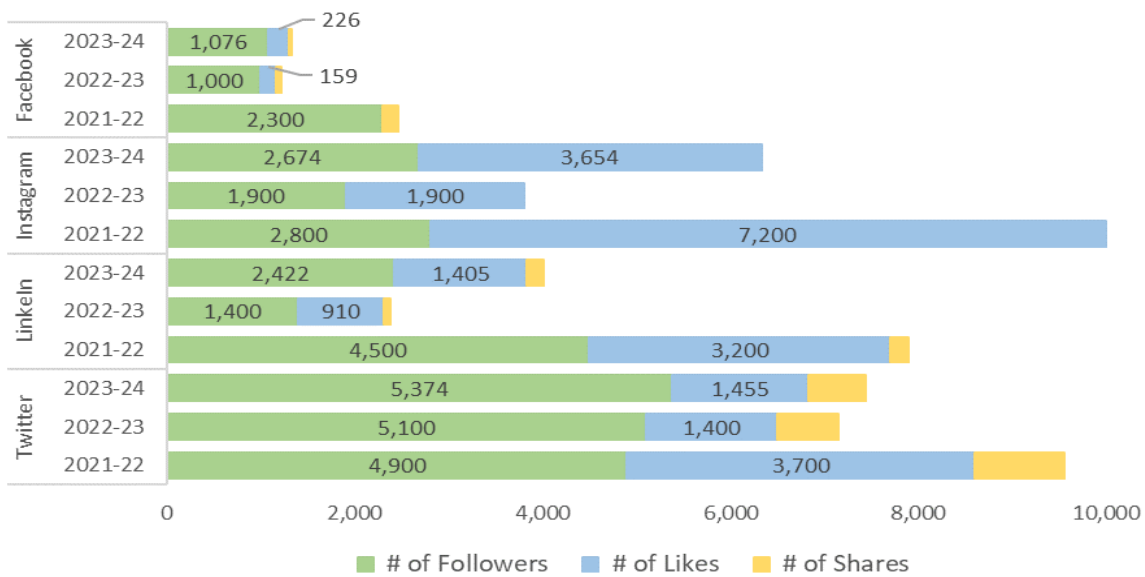
In addition to our strategic alignment, social media is practically used to:

- Drive traffic to the WHRI website, which allows users to engage with our services and supports.
- Enhance the profile of the WHRI as one of only 3 women's research institutes in Canada.
- Amplifying the successes and opportunities of the women's health research community, including investigators, trainees, and those across PHSA programs.
- Strengthen and track the impact of WHRI events and KT opportunities (e.g., WHRI Symposia, @WomensResearch Wellness Exchange (public event), @WomensResearch Podcast, BC Women's Research Rounds)

Figure 53 shows annual results of three fiscal years. These metrics are a measure of reach and engagement and provide an indication of the volume of activity.

In addition to the below activity, many WHRI researchers maintain their own professional accounts to engage peers, funders and patients, but this information is not tracked.

FIGURE 53 WHRI Social Media Statistics



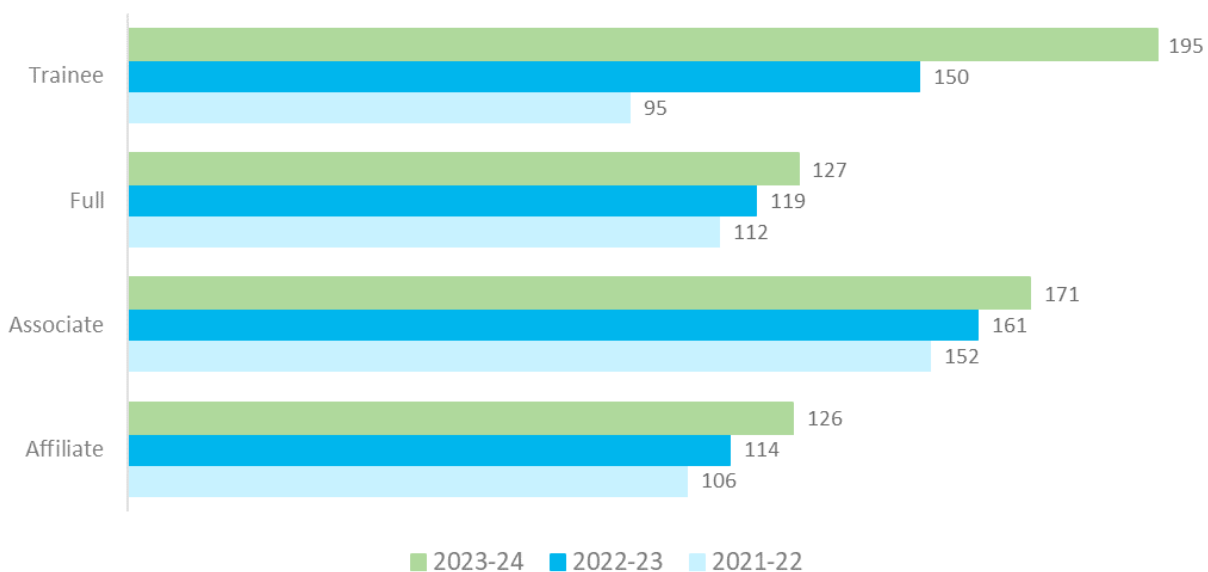
Building Research Capacity

In an effort to show WHRI’s activities, their membership statistics are shown (see Figure 54). In FY 2023-24, membership increased by 75 for a total of 619 members.

The increase is due in part to a new membership category introduced in FY 2020-21, Trainee Member. The membership categories are as follows:

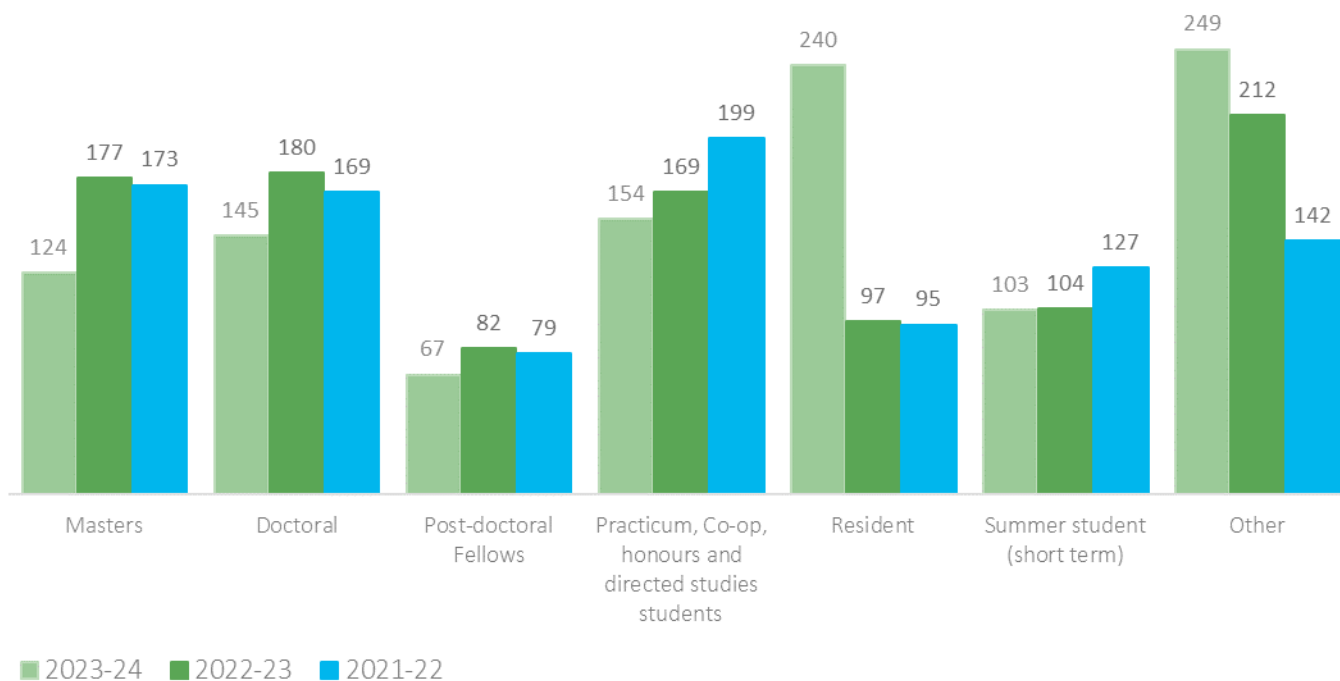
<i>Full Member</i>	Individuals involved in women’s health research for which the WHRI would be the only research institute affiliation.
<i>Associate Member</i>	Individuals who are involved in women’s health research, at least in part, but have a strong relationship with another research institute (e.g., BCCHR) that they wish to maintain; the result is a dual membership with the WHRI and their current affiliation.
<i>Affiliate Member</i>	Individuals who are extensively involved with another institute but may have projects that would overlap with WHRI.
<i>Trainee Member (new 2020-21)</i>	Individuals who are undergrads, grad students, medical students, research and clinical fellows, international students, and any person in a degree-granting program who is engaged in research.

Figure 54 Total WHRI Membership by Category



WHRI researchers provided training and supervision to a total of 1,082 trainees (see Figure 55) an increase of 61 over last fiscal year.

Figure 55 Total Number of WHRI Trainees by Type



Advancing Health and Policy Benefits

Clinical trial data from the REB (Research Ethics Board) is provided utilizing the same methodology as last year. See Table 19 for a detailed breakdown of clinical trial activity by fiscal year.

TABLE 19 WHRI Clinical Trials

Fiscal Year	17-18	18-19	19-20	20-21	21-22	22-23	23-24
Total Number of Clinical Trials active during the FY	31	38	20	23	22	45	39
Status of the Trial at the end of the FY:							
Total Number of Active Trials	23	30	16	17	16	35	29
Total Number of Trials that closed during the FY	8	8	4	6	6	10	10
Enrolment Numbers:							
Expected Local Subject Enrolment (for the term of the study)	6,653	10,928	8,838	8,864	8,868	11,120	8,273
Total Cumulative Subject enrolment at the end of the FY	3,092	3,160	1,507	1,938	1,941	4,309	5,135

Grant funding type is reported for Clinical Trials in Figure 56. This information is sourced from the REB (Research Ethics Board) file and reflects the funding type entered as part of the ethics application (see Glossary – Appendix 1, page 65 for a definition of funding types). Thirty-one percent (21%) of WHRI’s clinical trials are Industry funded, and 46% are Grant funded.

FIGURE 56 WHRI Percentage of Clinical Trial Grant Funding Type – Active and Terminated Trials within the FY

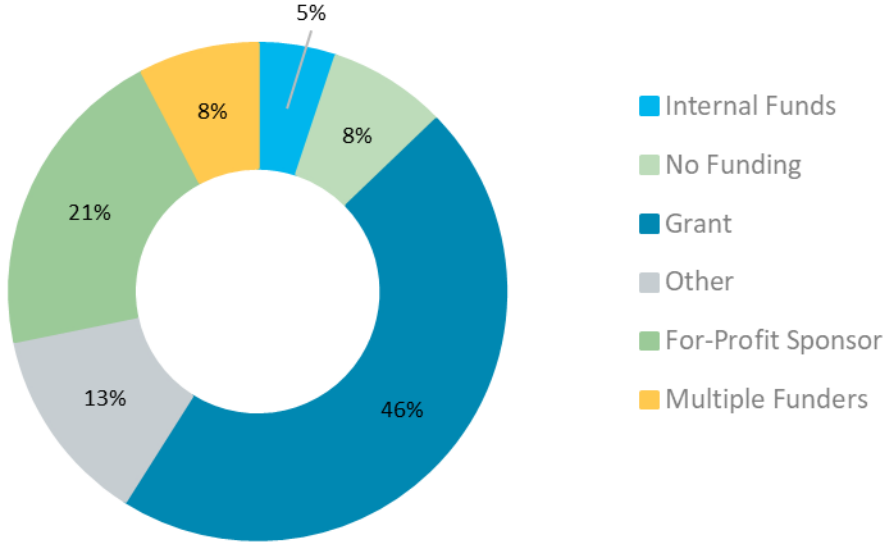


Table 20 reflects WHRI’s Top Three Achievements/Accomplishments/Highlights, and can include awards, citations, clinical programs, either in progress or historical, and be relevant to FY 2023-24 timeframe (April 1, 2023 - March 31, 2024).

TABLE 20 WHRI Top Three Achievements/Accomplishments/Highlights

<p>B.C. LAUNCHES AT-HOME CERVICAL CANCER SCREENING PROGRAM ENABLED BY RESEARCH BY WHRI INVESTIGATOR</p>
<p>Based on a program of research led by WHRI investigator, Dr. Gina Ogilvie, in January 2024, the province of British Columbia launched a new cervix self-screening program (http://www.bccancer.bc.ca/screening/cervix) which now offers at-home cervical cancer screening – the first of its kind in Canada. This new self-screening program will help detect cervical cancer sooner compared to traditional pap screening. With this new program, women and individuals with a cervix aged 25 to 69 can choose to order a kit to self-screen for the human papillomavirus (HPV), the leading cause of cervical cancer, or have their screening sample collected by a health-care provider. This more accurate testing, combined with a new patient-informed self-screening testing option enables more people across the province to get screened, including those from equity deserving groups and those in more rural and remote communities. With the launch of the cervix self-screening program, BC has also instituted HPV testing as its primary cervical cancer screening method.</p>
<p>UNIVERSAL FREE CONTRACEPTION TO ALL PEOPLE IN CANADA: RESEARCH BY WHRI INVESTIGATOR LEADS TO FEDERAL PHARMACARE PROGRAM CHANGE</p>
<p>Research evidence and advocacy led by WHRI researcher, Dr. Wendy Norman and her Contraception and Abortion Research Team (CART) (https://cart-grac.ubc.ca/), in partnership with BC Women’s Hospital + Health Centre (BCW), underpinned a federal policy change to introduce universal contraception for all Canadians. On February 29, 2024, Canada's Pharmacare program announced their plan to provide universal free contraception to all people in Canada. Dr. Norman was a key leader in the BC Universal Contraception policy implementation and her research findings significantly contributed to this recent federal policy announcement that will benefit millions of people across Canada into the future. In partnership with BCW’s, Dr. Norman and her CART team were influential in bringing about this policy change through research, advocacy and implementation planning with the provincial and federal governments and other partners.</p>
<p>THE WHRI LAUNCHED THE BEYOND THE BINARY IN BC GUIDE: A GUIDANCE DOCUMENT FOR THE RESEARCH COMMUNITY TO SUPPORT THE CONDUCT OF GENDER EQUITABLE HEALTH RESEARCH FOR WOMEN, TRANS, AND NON-BINARY PEOPLE</p>
<p>The Beyond the Binary in BC project, which takes a patient-oriented and trauma-informed approach to incorporating gender equity into women’s health research, resulted in a guidance document to support inclusive women’s health research. In February 2024, the WHRI launched the Beyond the Binary in BC Guide (https://whri.org/our-initiatives/beyond-the-binary/), a comprehensive, community-informed resource meant to support the research community through various approaches to language use in a health research context. The guide outlines how language can be both exclusionary and inclusive, describes the different approaches to language use, provides example scenarios for language choices, and showcases practical tools to support ongoing learning. This project has now been scaled up pan-Canadian with broad input nationally from research and community task forces. The goal of Beyond the Binary Canada is to develop a nationally relevant, and feasible guidance and resource package to support health researchers and health research institutions in their commitments to conducting gender equitable health research for women, trans, and non-binary people.</p>

REGISTRIES & DATASETS



Advancing Health and Policy Benefits

For the eleventh year, data was collected from PHSA’s registries and data sets to capture information to allow identification of users of the databases, how the data support research and a benefit classification which provides a deeper understanding of the benefits resulting from the use of these data for research.

Data stewards for a total of 14 PHSA registries or datasets, were invited to participate in a survey designed to assess the research activities of the registry/dataset. Completed surveys from 13 out of the 14 registries/datasets were obtained. The Research Metrics working group drew a distinction between two types of databases that might be

counted. The first are those that serve as registries. These are the result of significant infrastructure investment in the collection of longitudinal data that are regional, provincial, or national in scope regarding provision of services to specific population(s), maintained for the purposes of undertaking analysis, surveillance and/or research. They represent a significant resource for and investment in research. The second (not collected) are short-term, project-related databases that are primarily grant funded and are not maintained for use beyond the term of a given research project.

Registry/data set Definition/Purpose

The information on each registry/dataset was compiled from online resources and is described below.

REGISTRY/DATASET	PURPOSE
BC CANCER REGISTRY	The BC Cancer Registry is a population-based registry of all cancers diagnosed in British Columbia residents. It collects data and generates cancer statistics on the BC Population for the purpose of monitoring the burden of cancer in the province. It also serves as a source of information for research.
BC CARDIAC REGISTRY (HEARTIS)	Heart Information System (HEARTis) tracks a patient journey for all current and future cardiac procedures, throughout British Columbia, from registry on the waitlist to procedure completion and follow up. Its purpose is to support clinical care, quality assurance and improvement, and outcome-based research.
BCCDC COVID-19 DATASET	This is an integrated dataset utilized for the management of the COVID-19 pandemic and includes data from the Ministry of Health, Regional Health Authorities, and PHSA.
BC PERINATAL DATABASE REGISTRY (BCPDR)	The (BCPDR) contains data abstracted from obstetrical and neonatal medical records on nearly 100% of births in the province of British Columbia from over 60 hospitals as well as births occurring at home attended by BC registered midwives. The BCPDR also collects data on maternal postpartum readmissions up to 42 days post-delivery and baby transfers and readmissions up to 28 days after birth. Data access is provided for public-interest research purposes, surveillance, program delivery, and evaluation.
BC TRAUMA REGISTRY	Provides data collection, reporting and support of research and quality initiatives related to trauma care.
CENTRAL TRANSFUSION REGISTRY	The Central Transfusion Registry (CTR) is a database operated by the BC Provincial Blood Coordinating Office (PBCO) and contains records of recipients who have received blood and blood products in British Columbia and the Yukon. The CTR was the first population-based transfusion registry in Canada and remains one of the largest such registries in North America since its inception in 1999.
ENDOMETRIOSIS AND PELVIC PAIN INTERDISCIPLINARY COHORT (EPPIC)	A prospective data collection to evaluate patient outcomes after interdisciplinary care for endometriosis and pelvic pain

REGISTRY/DATASET	PURPOSE
BREAST CANCER SCREENING DATABASE (PREVIOUS NAME - SCREENING MAMMOGRAPHY DATABASE)	Clinical system for scheduling, reporting and tracking of screening mammography exams.
BCCH'S BIOBANK	The mission of the BCCH BioBank is to provide a comprehensive service for the collection, processing, storage, rapid access and retrieval of biospecimens and clinical information for research projects using a professional and compassionate approach to patient consenting that adheres to the highest standards of research ethics and patient privacy. A single biospecimen from one patient has the ability to fuel numerous research projects, any one of which might lead to an important medical breakthrough. BC Children's Hospital BioBank collects samples from patients at both BC Children's Hospital and BC Women's Hospital.
PROMIS-BC RENAL/TRANSPLANT	Patient Records and Outcome Management Information System – is the renal care community's clinical information system. With data collected from the 39 renal units in British Columbia, PROMIS supports: Individual patient care management; Renal unit management; Continuous quality improvement and research; Outcomes-based planning. PROMIS database is used as a source of important epidemiological data in support of clinical trials and for assessing new therapies.
CERVICAL CANCER SCREENING DATABASE	A population based clinical system for cervical cancer screening as well as a lab system for all gynaecological cytology performed by the Provincial lab.
LUNG CANCER SCREENING PROGRAM	The BC Lung Screen Trial provides the only access to organized lung cancer screening to eligible B.C. residents.
TUMOUR TISSUE REPOSITORY (TTR)	TTR is a provincial resource to support translational cancer research at BC Cancer, across Canada and internationally. The TTR is a state-of-the-art tumour bank that collects tissues, blood, and clinical information and processes these to create anonymous cases that can be studied by cancer researchers to understand how cancer develops, how it grows, how it spreads, and how it responds to treatment.

Supporting Research Activities

For FY 2023-24, eleven (11) of registries/datasets are used for the purpose of research as defined by UBC (see Glossary – Appendix 1, page 66). In addition, respondents were asked to identify other activities they provide in support of research. Table 21 lists the support activities by

registry/dataset and shows the number of times in the past three fiscal years that a registry has provided a particular support activity. These research support activities are ranked from most provided to least over the three-year period.

TABLE 21 Research Activities Supported by Registries and Datasets

Research Support Activity	Cancer	Cardiac	Cervical	Perinatal	Renal	Breast Cancer	Transplant	Trauma	TTR	Biobank	EPIC	Lung	BCCDC	Grand Total
Support in managing and linking data	3	3	2	3	3	3		3	3	3	3	3	2	34
Assist in identifying knowledge gaps and improvement needs	3	3	3	3	3	3	3	2	1	1	2	3	3	33
Support in ensuring studies meet regulatory standards	3	3	1	3	3	3	3		3	1	3	3		29
Support in designing research studies		3		3	3	3	3	3	3	1	3	3	1	29
Support in conducting biostatistical analysis		3	1	3	3	3	3	3			3	3	3	28
Provide specialized and multidisciplinary methodological expertise	3	3	1	3	3	1	3	3				3	2	25
Facilitate communication to identify pertinent research question		3	2	2	3	3	3	2				3	3	24
Application of new technical capabilities to provide more timely access to wider range of data	3	2		2	1	1		4		1		3		17
Teaching and hands on training for the above				3	2			2	1					8
Support in providing and teaching project management skills					3	1		1				1		6
Grand Total	15	23	10	25	27	21	18	23	11	7	14	25	14	233

Respondents were asked if they submit data to external organizations for the purposes of research. See Table 22 for the breakdown of data set type by registry/dataset for FY 2023-24. This table lists the type of external data set and

shows the number of times in the past three years that the registry has submitted data. The type of dataset is ranked from most submitted to least.

TABLE 22 Provision of Data to external Data Sets by Registry

Type of External Data Set	Cancer	Cardiac	Perinatal	Renal	Breast	Transplant	TTR	Biobank	Lung	BCEHS-Paramedic	Grand Total
Pan Canadian dataset	3			1	1	2	1	2	1		11
Provincial data		3	3	3		3		1		1	14
International dataset	3			1		3			2		9
Cross feeding within PHSA			2	2						1	5
Other			3								3
Grand Total	6	3	8	7	1	8	1	3	3	2	42

Names of the external datasets include:

Provincial:

- Ministry of Health, Health Ideas, HDP
- PANDA
- Data Innovation Program
- Population Data BC
- BC COVID Biobank Network (BCCBN)
- The Centre for Health Evaluation and Outcome Sciences (CHÉOS)
- BC Cardiac Registry, BCCDC
- Public Health Reporting Data Warehouse (PHRDW)

Pan Canadian:

- Canadian Cancer Registry – Statistics Canada
- Canadian Organ Replacement Registry (CORR)
- Canadian Ovarian Experimental Unified Resource (COEUR) – Terry Fox Research Institute
- Canadian Tissue Repository Network (CTRNet)
- The Neuromuscular Disease Network For Canada
- Public Health Agency of Canada (Canadian Breast Cancer Screening Database)
- PRrecision Oncology For Young people (PROFYLE)
- The Canadian Donation and Transplantation Research Program (CDTRP)

International:

- North American Association of Central Cancer Registries (NAACCR)
- International Agency for Research on Cancer (IARC – a division of the World Health Organization)
- International Cancer Benchmarking Partnership at Cancer Researchers UK
- International Society for Heart & Lung Transplant (ISHLT)
- International Society of Nephrology
- Chronic Kidney Disease Prognosis Consortium (CKD-PC)

Nature of Research Activities

CIHR (Canadian Institutes of Health Research) categorizes health research into four broad themes: biomedical research, clinical research, health services research (research respecting health systems and services); and social, cultural, environmental and population health. Research pursued using the registries/datasets above are

categorized in Figure 57. Access requests are summarized in Figure 58. For examples of the types of research questions posed by researchers, please see Table 6 in the PHSA Research and Student Education Metrics Consolidated Summary Report.

FIGURE 57 Ranking of Predominant Nature of Research Questions Using Data from the Registries/Datasets

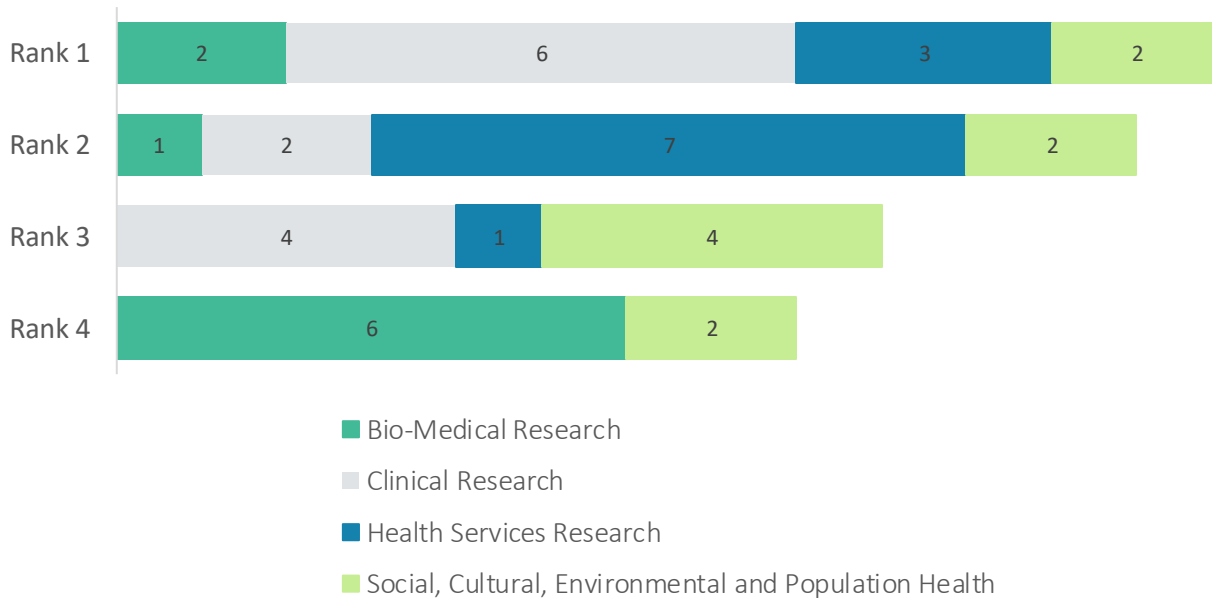
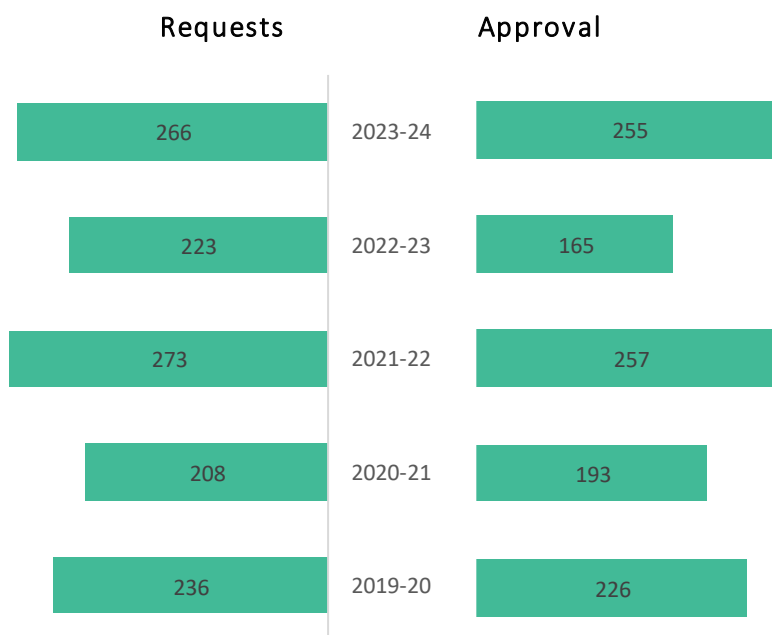


FIGURE 58 Research Access Requests and Approvals from Registry/Dataset by Fiscal Year



APPENDIX 1 - GLOSSARY

GLOSSARY	
TERM	DESCRIPTION [DATA SOURCE]
METRIC DEFINITIONS	
Metrics 1ab, 2b – Total annual grant awards, Total annual external grant awards by major funding categories by program or research entity	Total Annual Award (\$) for Grants, Awards and Contracts by Funding Source <i>[RISe annual file provided by UBC Office of Research Services]</i>
Metric 1c – Annual grant application success rate by program/research entity. Added in FY 09-10	Success rates for two CIHR operating grant competitions (March and September of applicable year) for BCCRI and BCCHR, BCMHSUS and WHRI. <i>[CIHR website for National results; Program results self-reported on the excel data collection form]</i>
Metric 1d – Total # of Publications Added in FY 10-11; Category addition in FY 11-12	Total number (of publications, not authors) published within applicable calendar year meeting the following criteria: Book, book chapter, reports produced for the government, peer-reviewed publication inclusive of published journal articles, case reports, essays, literature reviews, e-journals, and monographs. Excluded = abstracts, editorials, summaries, letters to the Editor, epubs, in press and submitted publications. <i>[Programs self-report utilizing SciVal to search Scopus utilizing researcher name; Program inputs data on excel data collection form]</i>
Metric 2a – Total number of trainees by program/research entity	Total Number (head count, not FTE) of Research Trainees by Student Type. (Exclude clinical trainees who are supported during their brief research rotations.) Research trainees counted will be any individuals who are primarily supervised by a researcher affiliated with the reporting unit, during all or a portion of the reporting year. <i>[Programs manually request trainee statistics from individual investigators and input data on excel data collection form]</i>
Metric 2c – Total number of researchers by program/research entity	List of Researcher Names including Research definition (This metric is to be collected based on BCCHR methodology category types wherever possible, if not available in that format, please designate your category as "5" and add your research definition in the space provided.) Added in FY 11-12 is a column to collect whether a researcher is a shared resource or 100% attributable to a specific program. <i>[Previous year's researchers are provided to each program from the researcher database in excel; Programs provide additions, deletions, changes on excel data collection form]</i>
Metric 2d - Infrastructure Investments - Major CFI Infrastructure Grants (Added FY 10-11)	Total FY \$ for Leading Edge Fund (LEF)/New Initiatives Fund (NIF) awards from Canada Foundation for Innovation. LEF projects sustain and further enhance the most advanced research and technology development efforts already supported by past CFI investments. LEF projects build on existing areas of research priority where institutions have a competitive advantage and a proven track record in enhancing Canada's science and technology capacity. NIF projects build Canada's capacity in new, promising areas of research and technology development. Also included in these amounts are the matching funds (industry, educational, charity, etc.) to these awards. Excluded from these amounts are \$'s associated with the Infrastructure Operating Fund (IOF) or Leaders Opportunity Fund (LOF) from CFI. These get reported under Infrastructure – HR awards and operating grant categories respectively.

TERM	DESCRIPTION [DATA SOURCE]
	<i>[RISe annual file provided by UBC Office of Research Services]</i>
Metric 2e – Research Support Fund Program grants (Added FY 12-13)	<p>A federally funded grant to Canadian post-secondary institutions to help pay the indirect costs of research (e.g., salaries for research administrative staff, administrative costs associated with patent activities, maintenance of lab space). These annual grants are based on a formula related to tri-council award amounts (CIHR, NSERC, and SSHRC) and are paid to the research institutes based on a formal revenue sharing agreement. Due to how UBC is now reporting revenue precipitated by policy changes of the CAUBO (Canadian Association of University Business Officers), PHSA includes revenue related to the Research Support Fund program.</p> <p><i>[RISe annual file provided by UBC Office of Research Services]</i></p>
Metric 3a - # of intellectual property disclosures, patents by program/research entity	<p>Total number of Invention Disclosure (internal documents), provisional patent and PCT applications by fiscal year.</p> <p><i>[BCTDO (for BC Cancer) and UILO (all other programs) complete the excel data collection form]</i></p>
Metric 3b – Licenses, royalty income and # spin-off companies (Revised FY 10/11) (Revised Net Licensing Rev definitions in FY 2013-14)	<p>Total number of active license/assignment agreements and spin-off companies. List the names of all active spin-off companies. These numbers represent cumulative totals from year to year and are no longer reported by region.</p> <p>IP related revenue shall follow the UILO (University-Industry Liaison Office) definitions from FY 2010-11 forward.</p> <p>Definitions:</p> <p>Gross licensing revenue = Royalties + Equity Liquidated + Option Fees + License Fees + License Management + Technology Assignment.</p> <p>Royalties - royalty payments including minimum annual royalty payments</p> <p>License Fees – upfront payments, milestone payments and other payments associated with the license</p> <p>License Management - legal fees incurred by TDO (Technology Development Office) or UILO relating to the licensed IP and reimbursed by licensees</p> <p>Total TDO Expenses for patenting and legal costs</p> <p>Expenses for Licensed IP – patenting, legal and related costs associated with licensed IP</p> <p>Realized revenue per distribution agreements – revenue accrued to PHSA program after distribution to inventors, obligations due to affiliated academic institutions, granting agencies and inventor departments.</p> <p>The revenue distribution varies by entity and will be noted in the narrative.</p> <p><u>Royalty, equity liquidated and licensee fees</u></p> <p>When the UILO licenses technology to a company, the terms of the license typically include a requirement to pay a % royalty on product sales, an upfront license fee and an annual license maintenance fee. The UILO may also negotiate an equity component (company stock) as part of the license agreement. Under the licensing scenario, the University still owns the technology but is granting a license to a third party.</p> <p><u>Option Fees</u></p> <p>This relates to the scenario when a company desires an option on a technology (essentially reserving/holding the technology). These are usually short-term contracts that have a modest option fee.</p>

TERM	DESCRIPTION [DATA SOURCE]
	<p>Technology Assignment</p> <p>This relates to the scenario when a company wishes to take ownership of the technology and in return pays an Assignment fee.</p> <p><i>[BCTDO (for BC Cancer) and UILO (all other programs) complete the excel data collection form]</i></p>
<p>Metric 4a – Clinical Trials Source: Ethics Module for all REBs</p>	<p>Number of active trials and cumulative subject enrollment at the end of the year. Includes CT data for all PHSA and non-PHSA PIs using PHSA facilities and resources</p>
FUNDING TYPE CATEGORIES (COLUMNS)	
Funding Types/Grant Types	The columns on worksheet 1ab, 2b that correspond to the funding types agreed to by the Research Metrics Working Group on July 22, 2009 and revised at the working group's direction in subsequent fiscal years.
SALARY AWARDS	
Faculty and other personnel support	Dollar amount for FY for supported faculty salary awards including chairs.
Trainee salary support	Dollar amount for FY for supported trainee salary awards including trainee research allowances.
INFRASTRUCTURE AWARDS	
Human Resources	Dollar amount for FY for Human Resource Infrastructure including Michael Smith Foundation for Health Research (MSFHR) - team start-up, team, research units, platforms, networks and institutional infrastructure, CFI Infrastructure Operating Fund (IOF) awards.
Capital, Equipment, Construction	Dollar amount for FY for capital, equipment, or construction awards including BC Knowledge Development Fund (BCKDF), matched sources (charities, industry) and other large equipment grants. Excluded are Canada Foundation for Innovation (CFI) awards (see next category).
Capital, Equipment, Construction - Major CFI (Added in FY 10-11)	Dollar amount for FY for capital, equipment, or construction Major Canada Foundation for Innovation (CFI) awards for Leading Edge Fund (LEF)/New Initiatives Fund (NIF) awards. Also included in these amounts are the matching funds (industry, educational, charity, etc.) to these awards. Excluded are \$'s associated with the Infrastructure Operating Fund (IOF) or Leaders Opportunity Fund (LOF) from DFI. These get reported under Infrastructure - HR and Operating Grant categories respectively. (see Metric definition 2d for further detail)
OPERATING GRANTS	
Operating or Project Operating Grants (not exclusive of the next three columns)	Dollar amount for FY for operating or project operating grants including when the salary component is embedded in a grant; includes establishment grants; includes development grants.
Clinical Trials (4a) (Definition clarified in FY 10-11)	Dollar amount for FY for any research project that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes. Health related interventions include any intervention used to modify a biomedical or health-related outcome, for example drugs, surgical procedures, devices, behavioral treatments, dietary interventions, and process-of-care changes. Health outcomes include any biomedical or health related measures obtained in patients or participants, including pharmacokinetic measures and adverse events.
Clinical Trials (4a) (Definition clarified in FY 10-11)	Dollar amount for FY for research involving a new laboratory technique or process, e.g., a new more cost-effective processing for a genetic diagnostic test, or a new

TERM	DESCRIPTION [DATA SOURCE]
	tissue preparation process, etc. Trials that may use clinical material but do not directly involve patients in the research or involve a risk to the patients (may involve their tissue or blood samples however).
Grant in Aid	<p>Dollar amount for FY for Grant-in-aid awards (Broad topic but not directed).</p> <p>A Grant-in-Aid is essentially a donation to one or more researchers, normally to conduct research in an area that is of mutual interest to both the donor and the researcher(s). These grants are normally in the form of a one-page letter addressed to a researcher and signed by the donor and accompanied by the grant funds.</p> <p>Characteristics:</p> <ul style="list-style-type: none"> • Sponsor supports research activities of an individual researcher or group of researchers. Sponsor does not restrict use of funds • Funds are paid in advance • No invoicing or financial statements are required by Sponsor • University/Host Institution retains all rights to inventions and other intellectual property • University/Host Institution is free to publish results • University/Host Institution provides the Sponsor with a final report only • Parties to the Agreement: University/Host Institution and Sponsor (may include University/Host Institution Affiliated Hospitals)
Other Funding Type – Service Contracts Added as sub-type of Other Funding Type category in FY2010-11; Combined into one “Other” category as of FY 14-15	Characteristics: (1) Solely for testing, evaluation or analysis of materials or compounds owned by the Sponsor with no intellectual input or value-added by UBC. (2) Sponsor retains all rights to intellectual property provided by the Sponsor for the services
Other Funding Type – Donations & Endowment Interest Added as sub-type of Other Funding Type category in FY2010-11; Combined into one “Other” category as of FY 14-15	<p>A donation is a gift given by an individual or an organization to a non-profit organization, charity, or private foundation in support of a specific purpose.</p> <p>Endowment – gift of money or income producing property to a public organization (such as a hospital foundation or university) for a specific purpose (such as research or scholarships). Generally, the endowed asset is kept intact and only the income (known as endowment interest) generated by it is consumed.</p>
Other Funding Type Combined into one “Other” category as of FY 14-15	Dollar amount for FY, combined, of any grant, award or contract that does not fit into the above categories. Please specify name of Funding Type in space provided.
FUNDING SOURCE CATEGORIES (ROWS)	
UBC RISE Sector	<p>Sector denotes an area of the economy in which the funder is assigned. This decision is based on how the organization is funded. Three sectors are currently utilized by UBC’s Research Information System (RISe) and include:</p> <p>Non-Profit – funding provided mostly by private donations and endowments.</p> <p>Industry – funding provided by a for-profit business in the private or commercial sectors of business.</p> <p>Government – funding provided by local, provincial, national, federal, or foreign government entity. [definitions to be further developed with input from Working Group and RISe personnel]</p>

TERM	DESCRIPTION [DATA SOURCE]
Funding Sources/Granting Program	The rows on worksheet 1ab, 2b that correspond to the funding sources agreed to by the Research Metrics Working Group on July 22, 2009 and modified in subsequent fiscal years.
CIHR and its institutes (included in Major Canadian Funding Category)	The Canadian Institutes of Health Research and its thirteen subsidiary institutes: <ul style="list-style-type: none"> * Aboriginal Peoples' Health * Aging * Cancer Research * Circulatory and Respiratory Health * Gender and Health * Genetics * Health Services and Policy Research * Human Development, Child and Youth Health * Infection and Immunity * Musculoskeletal Health and Arthritis * Neurosciences, Mental Health and Addiction * Nutrition, Metabolism and Diabetes * Population and Public Health
CCSRI (formerly NCIC/Canadian Cancer Society/CCSR) – (name changed to CCSRI for FY 11-12 and moved to CDN Foundation & Non-profit category)	On February 1, 2009, the Canadian Cancer Society integrated the operations of the National Cancer Institute of Canada (NCIC), creating the Canadian Cancer Society Research Institute. Grants from all three of these organizations should go in this category.
NSERC (included in Major Canadian Funding Category)	Natural Sciences and Engineering Research Council
SSHRC (included in Major Canadian Funding Category)	Social Sciences and Humanities Research Council
Genome Canada and provincial Genome agencies (included in Major Canadian Funding Category)	Genome Canada, and its regional centres: Genome BC, Genome Alberta, Ontario Genomics Institute, Genome Quebec, Genome Prairie, and Genome Atlantic
MSFHR (included in Major Canadian Funding Category)	Michael Smith Foundation for Health Research (BC)
Canadian Industry	Canadian-based for-profit corporations. Decisions on whether a funding source is Canadian or Foreign are driven by award payment or contract address.
Canadian Foundations & Non-Profits (name modified in FY 12-13 to align with UBC categories – all historical data was recoded)	Canadian not for profit organizations including foundations and charities. These include grants that are “internally” sourced (i.e., that are from BCCHR, BCCRI or their affiliated Foundations such as BCWF, BCCHF, and BCCF etc.)
Canadian Educational Institution	This was added in FY 09-10 as a separate Funding Source Category and includes all educational and/or academic institutions in Canada. Foreign Educational Institutions are categorized under Foreign Other Source.
Canadian Government	Provincial, municipal, territorial, or federal governments and crown corporations in Canada
Foreign Industry	For-profit corporations outside Canada. Decisions on whether a funding source is Canadian or Foreign are driven by award payment or contract address.

TERM	DESCRIPTION [DATA SOURCE]
Foreign Foundations & Non-Profits (name modified in FY 12-13 to align with UBC categories – all historical data was recoded)	Not for profit organizations including foundations and charities headquartered outside Canada, e.g., March of Dimes, American Cancer Society
Foreign Government	Provincial, municipal, territorial, or federal governments and government-controlled corporations outside Canada including the armed forces (e.g., US Military)
Foreign Other Source	All Foreign funding sources not captured in the above Foreign categories including Foreign Educational Institutions.
CLINICAL TRIAL GRANT FUNDING TYPES	
Source of funds refers to the funder, sponsor, grantor, or agency (government, industry, and non-profit) that is providing the funds needed to undertake the project. Projects are not considered “For-Profit” if a sponsor is only collaborating and not funding the study (e.g., providing study drug or lab space only).	
Grant	Funding provided for specific projects by sponsors in the government or non-profit sectors.
For-Profit Sponsor (Industry or Pharmaceutical)	Funding provided for specific projects by sponsors in the industry sector.
Grant-in-aid	Funding provided for general research activities by sponsors in any sector (Industry, Government or Non-profit)
Internal Funding	Funded by internal program department, program operational budget or non-profit foundation (e.g., salary award)
No Funding	No funding provided.
Other	Funding not yet known when ethics application was submitted.
Multiple Funding Type	Any combination of the above funding types.
RESEARCH TRAINEES’ CATEGORIES (COLUMNS)	
Research Trainee	Total number of research trainees by student type excluding clinical trainees who are supported during their brief research rotations. Research trainees counted will be any individuals who are primarily supervised by a researcher affiliated with the reporting unit, during all or a portion of the reporting year.
Masters	Graduate students enrolled in a full time master’s program who are supervised by a faculty member affiliated with the reporting organization.
Doctoral (changed from PhD in FY 2010-11)	Graduate students enrolled in a full time PhD program who are supervised by a faculty member affiliated with the reporting organization.
Post-doctoral	Full time post-doctoral fellows whose primary focus is research (NOT clinical fellows)
Summer students (short term)	High school and or university students who are engaged in a short-term program with the reporting program for a limited period (e.g., over the summer, a few weeks)
Residents	MDs engaged in a residency program that may include a research rotation
Practicum, co-op, honors and directed studies students	High school and/or university students whose assignment to the reporting organization is according to a practicum, co-op, honours and/or directed studies program
Other Research Trainee Type	(Reporting organization to specify definition)
RESEARCH TRAINEES (ROWS)	
Do you Support These Types of Research Trainees	To be answered Yes or No for each Research Trainee Category listed above. Is used to indicate that a research entity does have Research Trainees of this type but has no data collection ability. This will distinguish between those with zero (0) Trainee types from those that have them but can’t count them.

TERM	DESCRIPTION [DATA SOURCE]
Total Head Count	Total number of research trainees of that type, not an FTE (Full Time Equivalent number).
LIST OF RESEARCHER NAME (COLUMNS AND ROW)	
<p>Category (modified to add Shared Membership sub-category under BCCHR categories 1-3 in FY 2010-11) Membership categories revised FY 16-17</p>	<p>A number one through five (MUST have one selected). Categories 1-4 are as described in the BCCHR “Guide for Completing an Application for Membership” available online at http://www.cfri.ca/research_support/forms/membership.asp. These categories are based on a calculation of a given individual’s research hours/week.</p> <p>Category 5 will be for those research entities/programs who do not utilize the CFRI categories. If you utilize category 5, please indicate the definition that your research entity/program uses to define Researchers.</p> <p>A shared membership sub-category available in CFRI Categories 1-3 was added in FY 2010-11. This new category allows individuals to formally declare their alignments (including percentage affiliation) with more than one organization. Category 4 was clarified to include only affiliate investigators that are not based on site but who collaborate with program members. Their primary affiliation will be with another academic and/or research institution.</p> <p>New categories for FY 16-17: http://bcchr.ca/research-support/membership</p>
First, Last, Middle name	Self-explanatory, e.g., Jane Mary Smith
Short Name	Name as it would appear in PubMed, for example, Smith, JM
Count Attributed to Program Added in FY 11-12	An indication by number (1 or .5) of whether a researcher is attributable to applicable program 100% (full) or 50% (shared).
UBC’s definition of Research Added in FY 13-14	<p>UBC defines research involving human subjects as “any systematic investigation (including pilot studies, exploratory studies, and course-based assignments) to establish facts, principles or generalizable knowledge which involves living human subjects; or human remains, cadavers, tissues, biological fluids, embryos or fetuses.” It does not include...” quality assurance studies, performance reviews or testing within normal educational requirements, or activities undertaken for administrative or operational reasons...” unless they include an ‘element of research.’</p>
OTHER	
Fiscal Year	Includes data for April 1 - March 31 of applicable fiscal year (i.e., FY 14-15 is April 1, 2-14 – March 31, 2015)