

# **Department Council Meeting**

## **January 25, 2019**



**UNIVERSITY OF  
CALGARY**

## **Department Head Report**

**Dr. Brenda Hemmelgarn**

# Update on the Masters of Data Science and Analytics Program in the Centre for Health Informatics (CHI)



UNIVERSITY OF  
CALGARY



UNIVERSITY OF  
**CALGARY**

FACULTY OF SCIENCE

# Master of Data Science and Analytics

## Proposal

Jan. 25, 2019

A better world through knowledge

**CURIOSITY SPARKS DISCOVERY**

## The Data Science Task Force (DSTF)

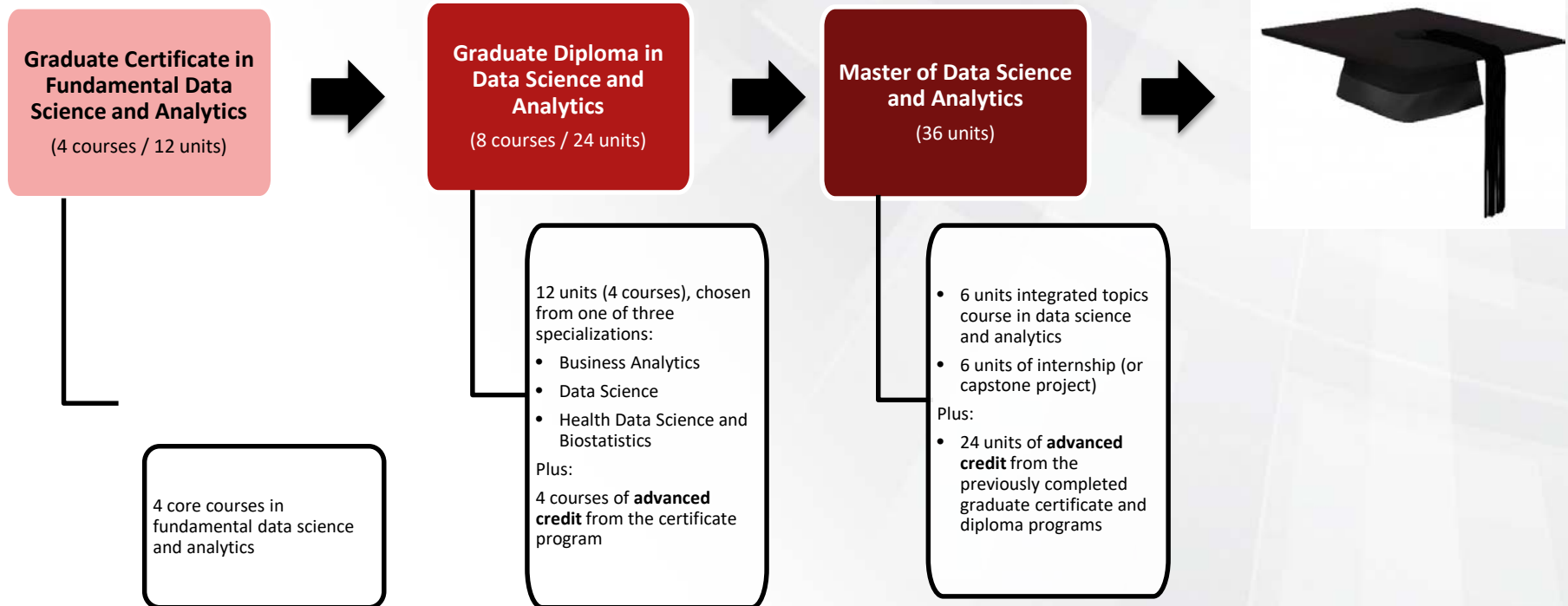
- Usman Alim (CPSC) and Jim Stallard (MTST) – co-directors
- Ryan Hamilton (MTST)
- Marco Bijvank (Haskayne)
- Ray Patterson (Haskayne)
- Sherry Weaver (Haskayne)
- Joon Lee (CHS)
- Tyler Williamson (CHS)
- Kelly Hoglund (Office of the Provost)



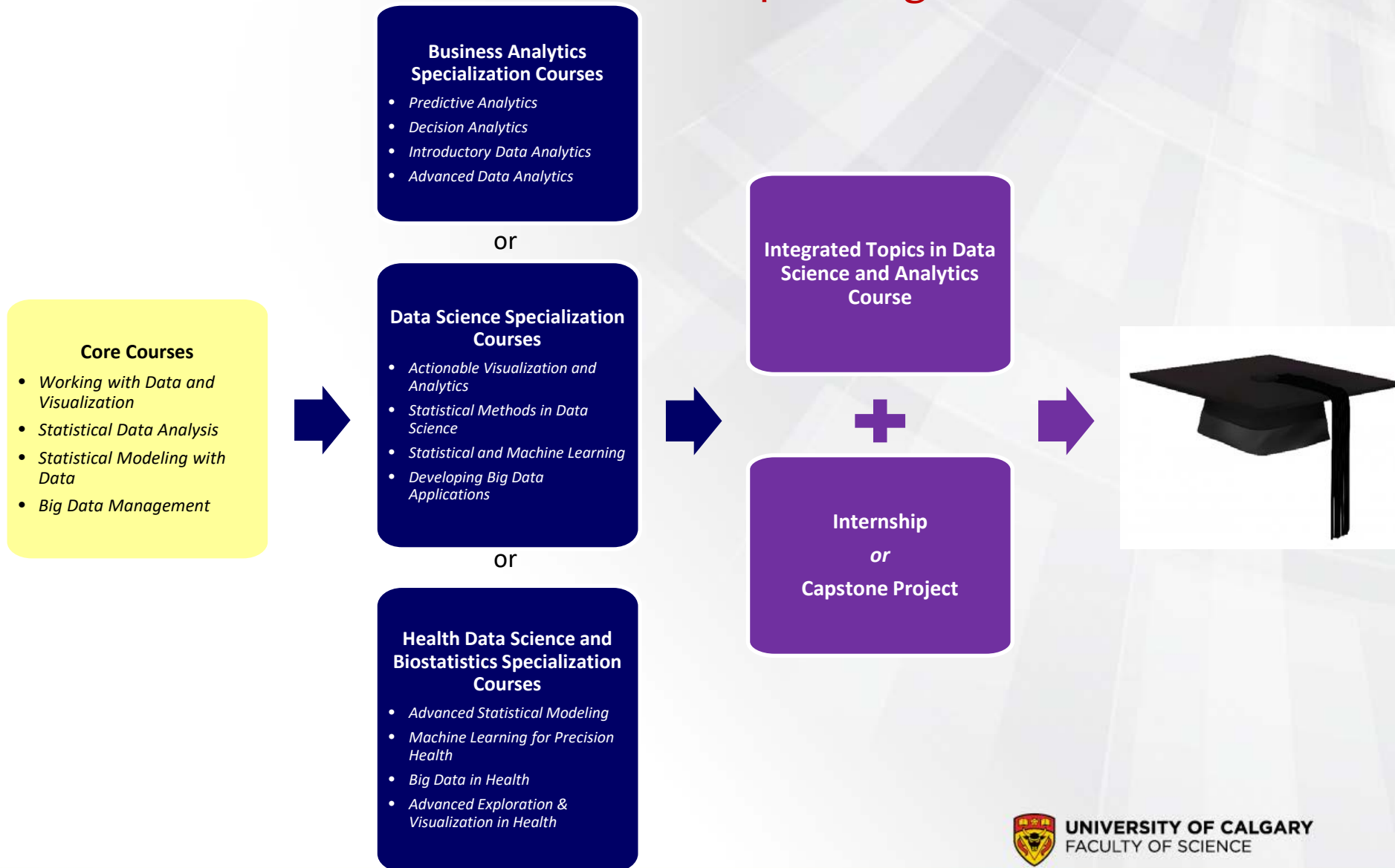
UNIVERSITY OF CALGARY  
FACULTY OF SCIENCE



# Master of Data Science and Analytics Certificate & Diploma Pathway



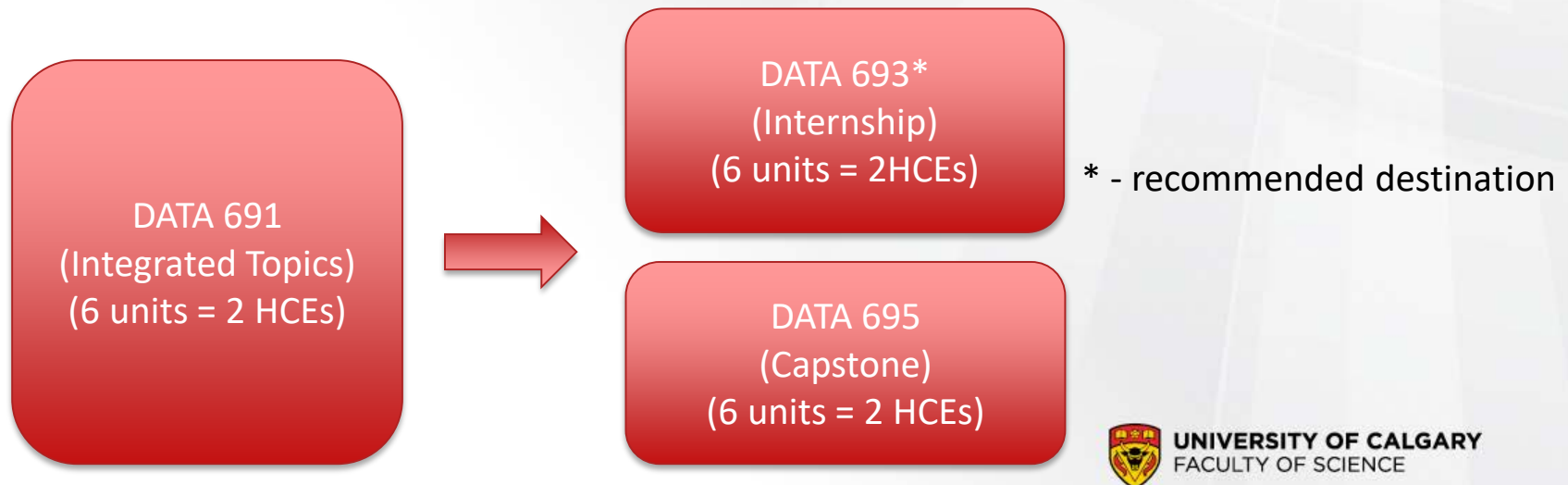
# Sequencing of MDSA Courses



**UNIVERSITY OF CALGARY**  
FACULTY OF SCIENCE

## Some Specs of the Master's Component

- Completed in:
  - 12 months (accelerated) – FT Pathway
  - 2 to 6 years – PT Pathway
- Culminates with two courses:
  1. Integrated Topics in Data Science and Analytics (DATA 691)
  2. Internship (DATA 693) or Capstone (DATA 695)



## Data 691: Integrated Topics in Data Science and Analytics (6 units)

**Description:** Provides a framework for students to initiate, perform and successfully complete a real-world project in Data Science and Analytics. This includes problem identification and formulation; discussion of legal, social, and ethical issues in data-driven projects; holistic thinking how to process data and apply; communication and data storytelling skills as well as leadership skills. In addition, students will be exposed to advanced topics in Data Science and Analytics.

### ■ Possible format:

*Two-week residency* where students take a number of *professional* (70%) and *technical* (30%) modules.

#### Professional Modules

- Communication
- Leadership
- Teamwork
- Ethics/Privacy
- Project Management
- ...

#### Technical Modules

- Bayesian Methods
- Time Series
- Advanced Visualization
- Optimization
- Advanced Machine Learning
- Advanced Bioinformatics
- ...



UNIVERSITY OF CALGARY  
FACULTY OF SCIENCE



## Data 693: Professional Internship in Data Science and Analytics (6 units)

**Description:** Internship (minimum: 200 hours) in data science and analytics where students will integrate and apply professional competencies and advanced analytical tools to a specific domain.

OR

## Data 695: Research Internship in Data Science and Analytics (6 units)

**Description:** Exposure to advanced data analytics methods applied to subdomains of data science, including business analytics and big data problems in healthcare.

## Tuition Rates

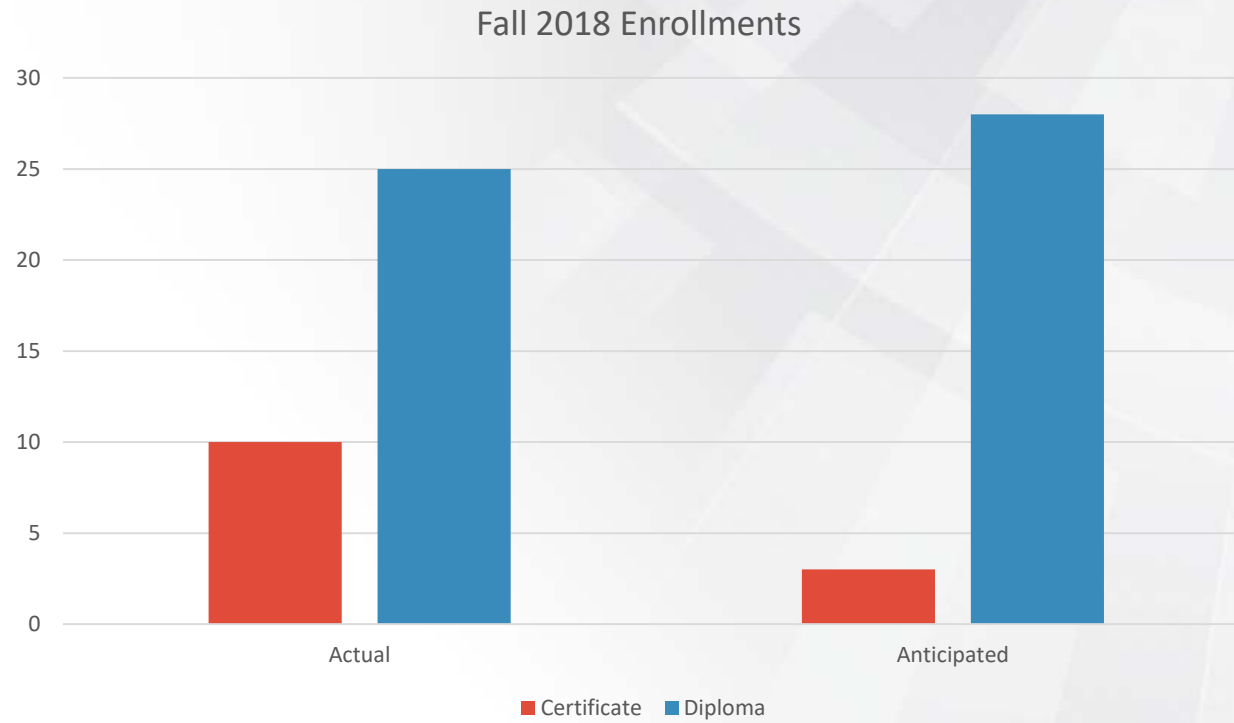
Institution	University of Calgary	University of Calgary	University of British Columbia
Program	<i>Master of Data Science and Analytics</i>	Graduate Diploma in Data Science and Analytics	Master of Data Science
Number of Courses (units/credits)	<i>9 courses + internship/capstone (36 units)</i>	8 courses (24 units)	24 courses + capstone (30 units)
Tuition per 3-units (International)	\$3,000.00; \$1,500.00*  (\$4,000.00; \$2,000.00)*	\$3,000.00 (\$4,000.00)	\$3,060.00 per 3 units (\$4,243.60)
Total tuition Domestic (International)	\$33,000.00 (\$44,000.00)	\$24,000.00 (\$32,000.00)	\$30,600.00 (\$42,436.00)

\* - internship and capstone course



**UNIVERSITY OF CALGARY**  
FACULTY OF SCIENCE

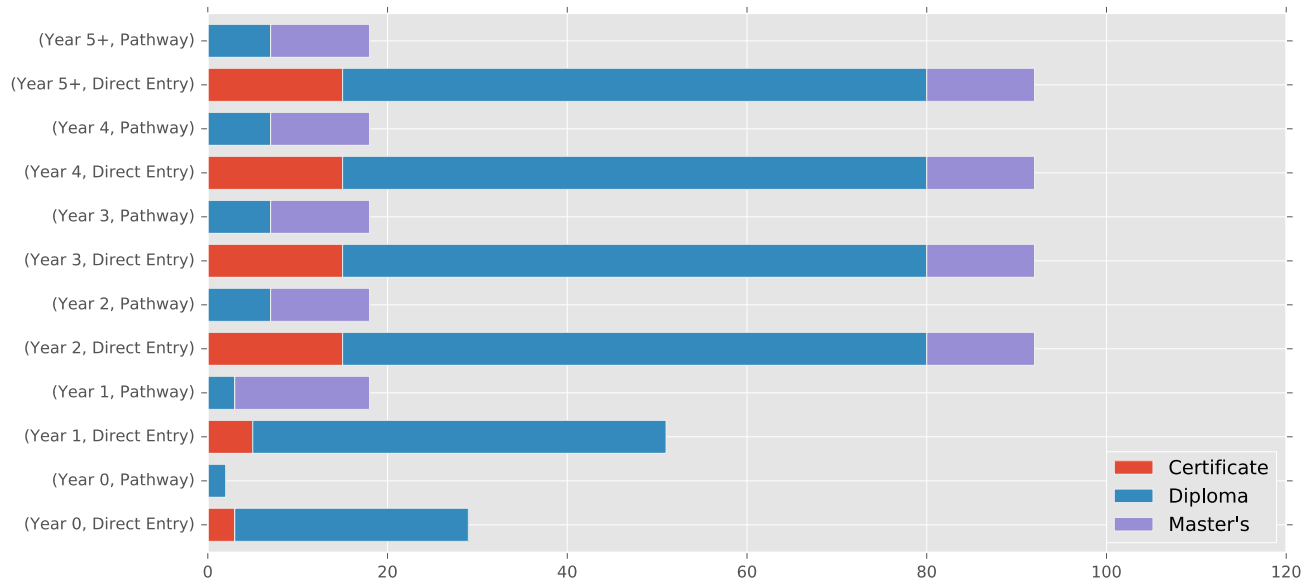
## Current Numbers



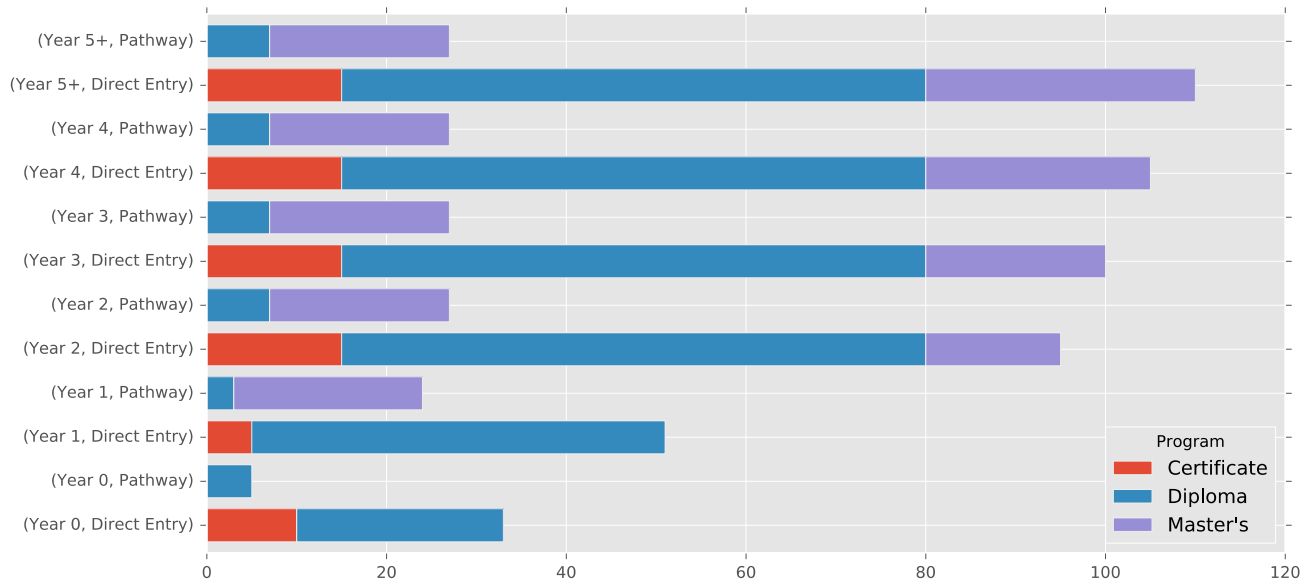
**UNIVERSITY OF CALGARY**  
FACULTY OF SCIENCE

# Enrollment Targets

Overall Enrolment Projections (conservative)



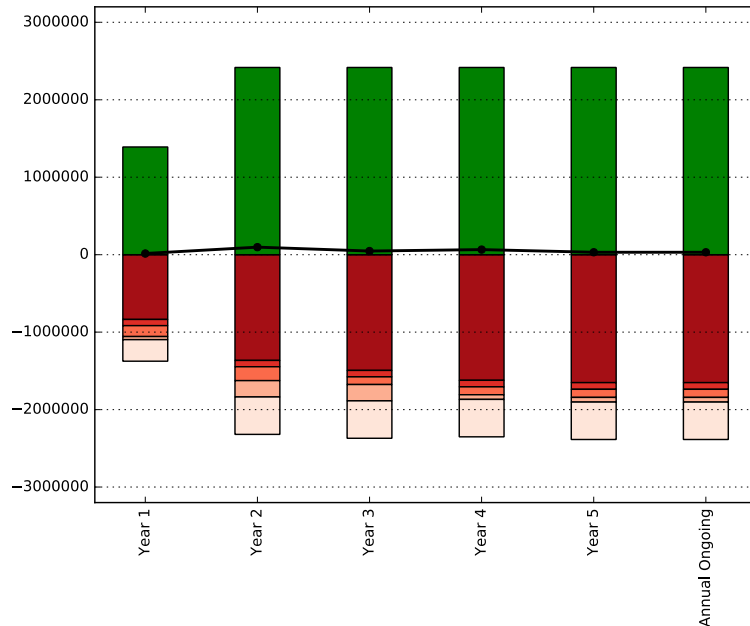
Overall Enrolment Projections (nonconservative)



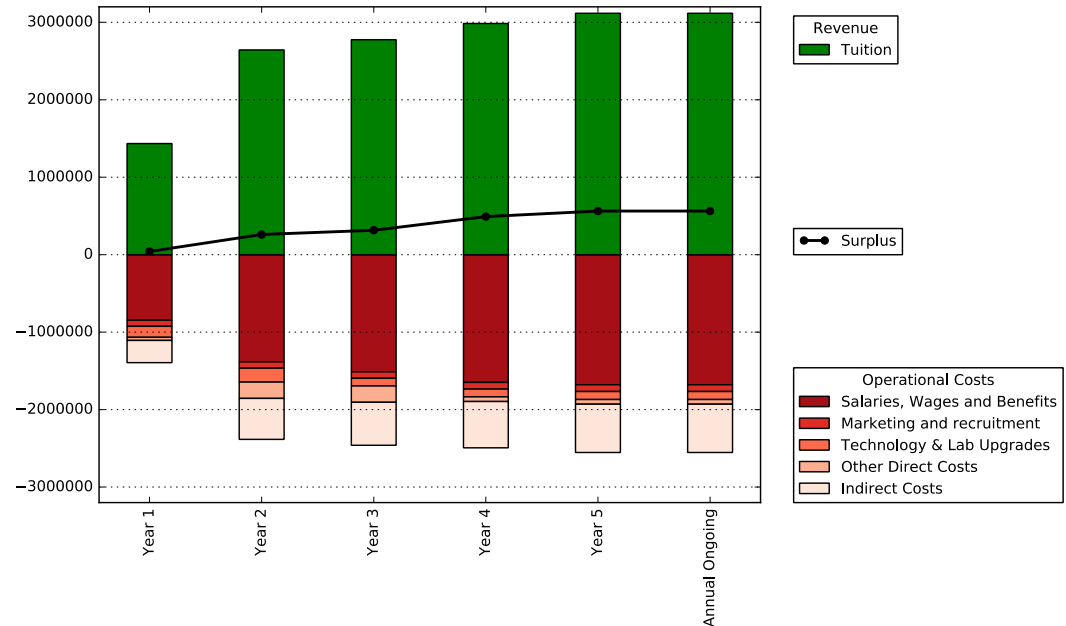
**UNIVERSITY OF CALGARY**  
FACULTY OF SCIENCE

# Budget

Overall Data Science and Analytics Budget (conservative)



Overall Data Science and Analytics Budget (nonconservative)



- *Salaries and wages* include instructional expenses + administrative (GPA, internship coordinator, technician) costs.
- *Other direct costs* include faculty recruitment and professional development.



UNIVERSITY OF CALGARY  
FACULTY OF SCIENCE



Progress	Body	Date	Approval	Recommendation	Discussion	Information
X	Decision Support Team (DST)	14-Jun-2018			X	
X	Department of Mathematics and Statistics	26-Nov-2018			X	
X	Department of Computer Science Graduate Program Committee	28-Nov-2018		X		
X	Haskayne School of Business Graduate Programs Committee	12-Dec-2018			X	
X	Department of Computer Science Council	10-Jan-2019		X		
X	Department of Mathematics and Statistics Council	10-Jan-2019		X		
X	Faculty of Science Executive Committee	15-Jan-2018		X		
X	Department of Community Health Sciences Graduate Education Committee	15-Jan-2019		X		
X	Haskayne School of Business Graduate Programs Committee	21-Jan-2019		X		
	Haskayne School of Business Faculty Council	25-Jan-2019		X		
	Department of Community Health Sciences Department Council	25-Jan-2019		X		
	Faculty of Science Council	31-Jan-2018		X		
	Cumming School of Medicine GSE Graduate Education Committee	19-Feb-2019		X		
	Cumming School of Medicine Strategic Education Committee	TBD		X		
	Cumming School of Medicine Faculty Council	TBD		X		
	Faculty of Graduate Studies Council – Executive Committee	31-Jan-2019		X		
	Faculty of Graduate Studies Council	28-Feb-2019		X		
	Graduate Academic Program Subcommittee (GAPS)	27-Mar-2019		X		
	Academic Planning and Priorities Committee (APPC)	15-Apr-2019	X			

# Moving Forward



**UNIVERSITY OF CALGARY**  
FACULTY OF SCIENCE

Discussion

Open forum



**UNIVERSITY OF CALGARY**  
FACULTY OF SCIENCE

**CURIOSITY SPARKS DISCOVERY**

?s

Email comments/questions/concerns to either

[tyler.williamson@ucalgary.ca](mailto:tyler.williamson@ucalgary.ca)

[joonwu.lee@ucalgary.ca](mailto:joonwu.lee@ucalgary.ca)



**UNIVERSITY OF CALGARY**  
FACULTY OF SCIENCE

# Congratulations!

Dr. Jennifer Hatfield

Canadian Society for  
International Health  
(CSIH)  
Canadian Women in  
Global Health List 2018

Vic Neufeld  
Mentorship Award in  
Global Health Research



Dr. Jennifer Brenner

Canadian Society  
for International  
Health (CSIH)  
Canadian Women  
in Global Health  
List 2018





Dr. Rachel Ellaway

Canadian Association  
for Medical  
Education (CAME)  
2019 Ian Hart Award  
for Distinguished  
Contribution to  
Medical Education



# Welcome!



Jerrie Ambrus  
Administrative Assistant CRDS

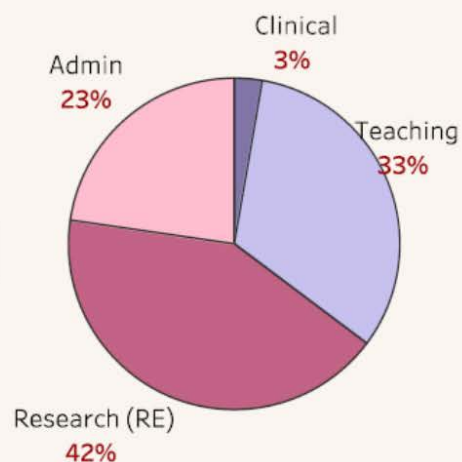
## ANNUAL FTEs<sup>2</sup>

	2014-15	2015-16	2016-17	2017-18 <sup>1</sup>
CSM	512	500	508	518
Basic Sciences	131	126	129	136
Clinical w/out AARP	155	153	157	157
Clinical w. AARP	226	221	222	225
<b>Community Health Sci..</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>40</b>

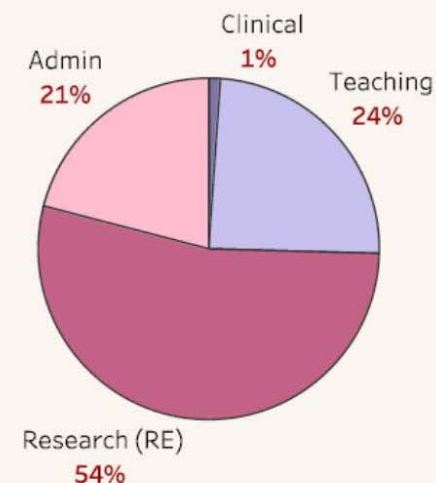
## ANNUAL REs<sup>3</sup>

	2014-15	2015-16	2016-17	2017-18
CSM	200.7	199.6	201.4	209.0
Basic Sciences	69.4	66.8	67.9	72.9
Clinical with AARP	80.7	81.5	81.0	83.8
Clinical wout AARP	50.6	51.2	52.5	52.3
<b>Community Health Sci..</b>	<b>14.8</b>	<b>15.6</b>	<b>15.5</b>	<b>16.8</b>

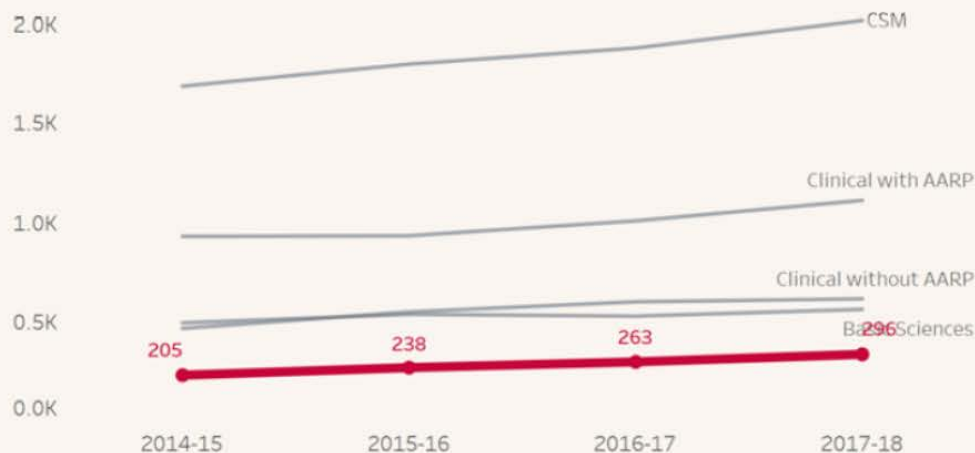
## Community Health Sciences<sup>3.1</sup>



## Basic Sciences<sup>3.1</sup>



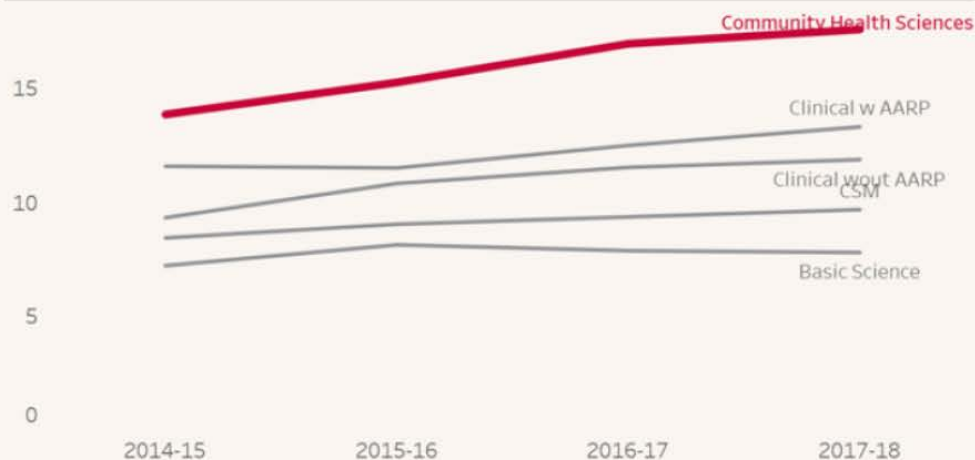
PUBLICATIONS <sup>7</sup>



PUBLICATIONS PER FTE <sup>8</sup>

	2014-15	2015-16	2016-17	2017-18
CSM	3.3	3.6	3.7	3.9
Basic Sciences	3.7	4.2	3.8	4.0
Clinical with AARP	3.9	4.1	3.8	4.7
Clinical without AARP	3.0	3.5	3.5	3.8
Community Health Sciences	6.0	6.8	7.3	7.4

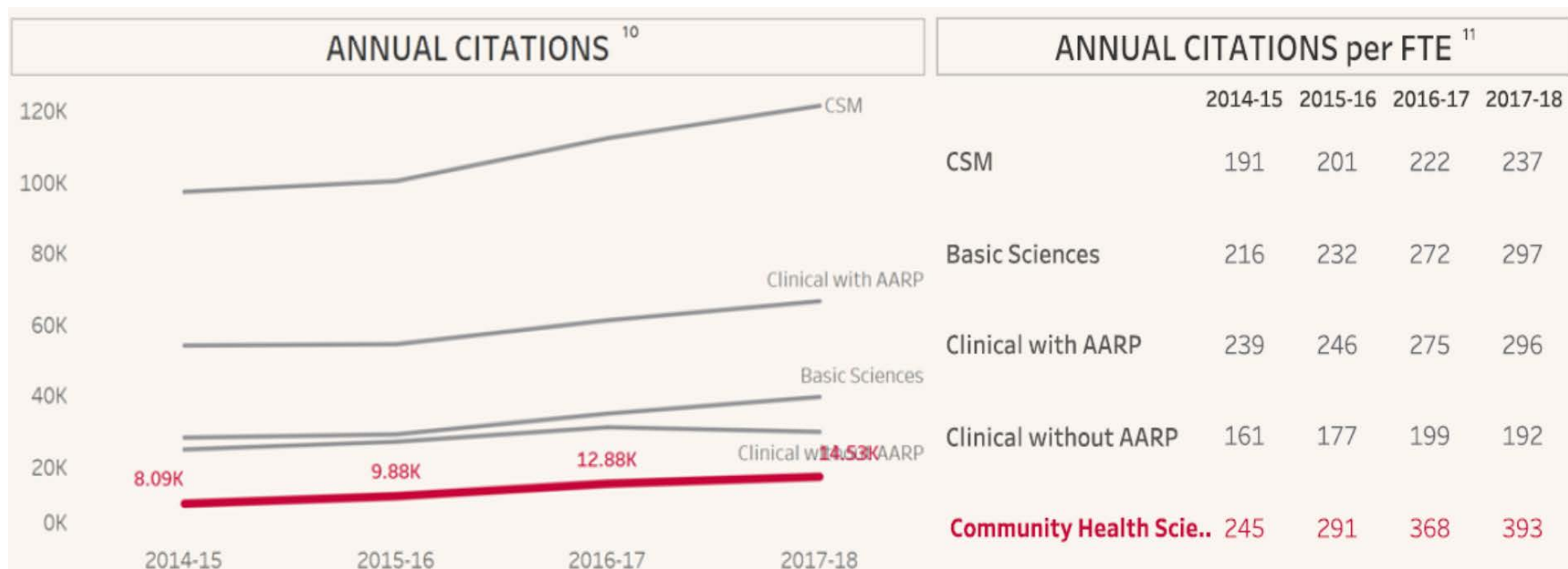
PUBLICATIONS PER RE <sup>9</sup>



PUBLICATIONS PER RE <sup>9</sup>

	2014-15	2015-16	2016-17	2017-18
CSM	8.4	9.0	9.3	9.7
Basic Science	7.2	8.1	7.8	7.8
Clinical w AARP	11.6	11.5	12.5	13.3
Clinical wout AARP	9.3	10.8	11.5	11.9
Community Health Sciences	13.9	15.3	17.0	17.6







## TOTAL RESEARCH REVENUE <sup>4</sup>

	2014-15	2015-16	2016-17	2017-18
CSM	\$172.7M	\$167.2M	\$164.0M	\$198.3M
Basic Sciences	\$45.7M	\$43.7M	\$41.6M	\$52.3M
Clinical w AARP	\$54.4M	\$65.7M	\$62.9M	\$70.1M
Clinical w/out AARP	\$25.9M	\$24.2M	\$27.6M	\$30.1M
<b>Community Health Sci..</b>	<b>\$4.4M</b>	<b>\$5.3M</b>	<b>\$5.5M</b>	<b>\$6.1M</b>

## TOTAL CIHR REVENUE <sup>5</sup>

	2014-15	2015-16	2016-17	2017-18
CSM	\$28.4M	\$30.4M	\$33.0M	\$38.7M
Basic Sciences	\$15.3M	\$14.6M	\$14.6M	\$16.6M
Clinical w AARP	\$10.5M	\$12.5M	\$13.1M	\$14.9M
Clinical w/out AARP	\$2.6M	\$3.3M	\$5.2M	\$7.2M
<b>Community Health Sci..</b>	<b>\$1.47M</b>	<b>\$1.23M</b>	<b>\$1.75M</b>	<b>\$2.58M</b>

## RESEARCH REVENUE PER RE <sup>4.1</sup>

	2014-15	2015-16	2016-17	2017-18
CSM	\$0.63M	\$0.67M	\$0.66M	\$0.73M
Basic Sciences	\$0.66M	\$0.65M	\$0.61M	\$0.72M
Clinical with AARP	\$0.67M	\$0.81M	\$0.78M	\$0.84M
Clinical without AARP	\$0.51M	\$0.47M	\$0.53M	\$0.58M
<b>Community Health Sci..</b>	<b>\$0.30M</b>	<b>\$0.34M</b>	<b>\$0.36M</b>	<b>\$0.36M</b>

## CIHR REVENUE PER RE <sup>5.1</sup>

	2014-15	2015-16	2016-17	2017-18
CSM	\$0.14M	\$0.15M	\$0.16M	\$0.19M
Basic Sciences	\$0.22M	\$0.22M	\$0.22M	\$0.23M
Clinical with AARP	\$0.13M	\$0.15M	\$0.16M	\$0.18M
Clinical without AARP	\$0.05M	\$0.07M	\$0.10M	\$0.14M
<b>Community Health Sci..</b>	<b>\$0.10M</b>	<b>\$0.08M</b>	<b>\$0.11M</b>	<b>\$0.15M</b>

## ***"Strengthening our Identity"***

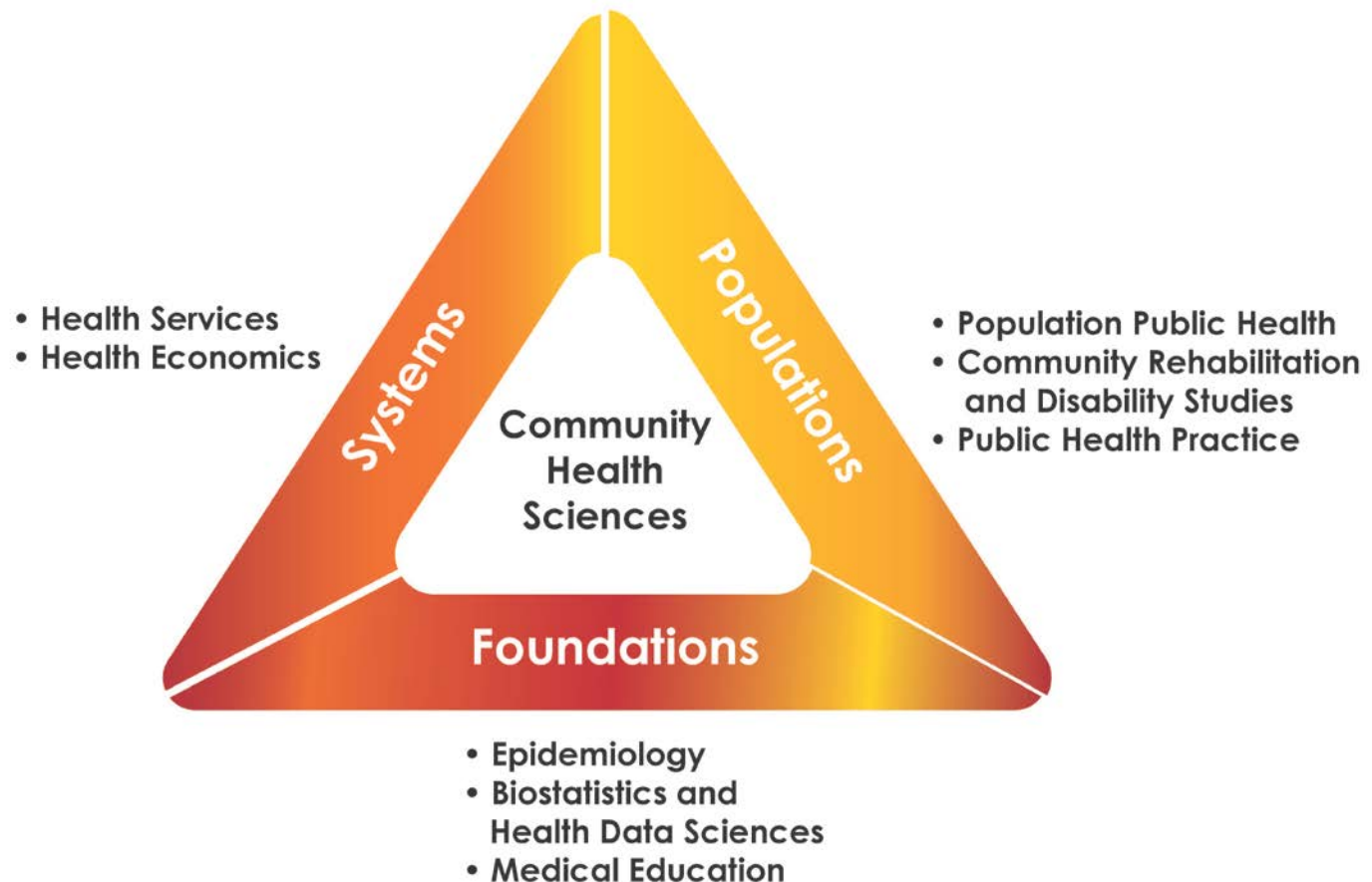
### **Key Points:**

**Two engaging Keynote Addresses by Zain Velji, partner and VP at Strategy Northweather, and Kim Lawrence, Associate VP Marketing, with Vishu Mahajan, Creative Director, University Relations**

**Department members moved into groups within the three new Division/Family categories to contemplate and answer the following questions:**

- 1. What is your connection to the Department of Community Health Sciences?**
- 2. Who are we? What are we known for?**
- 3. What is the focus we want to profile?**

Thanks to all who voted, “Image 3” was the logo winner!



## CRDS Instructor – Applicant Review Stage

**Search Committee:** Brenda Hemmelgarn (Chair), Dorothy Badry (external), Zak Thraya (student rep), Anne Hughson, Ebba Kurz, Bonnie Lashewicz, Joanna Rankin, Tolulope Sajobi



**Healthcare Epidemiology Assistant Professor** – posted,  
closing on January 31, 2019

**Search Committee:** Brenda Hemmelgarn (Chair), Marco Bijvank (external), Elissa Rennert-May (student rep), Reed Beall, Eldon Spackman, Chris Mody, Ranjani Somayaji, Dan Gregson, Bill Ghali, Geoff Taylor, Kathryn Bush

**Health Services Researcher** – posted, closing on February 15, 2019

**Search Committee:** Brenda Hemmelgarn (Chair), Joseph Dort, Winson Cheung, Nicole Culos-Reed, Wayne Matthews, Bill Ghali, May Lynn Quan, Natalie Scime, Hude Quan

Update:

1. We will **continue** to use the ARO for the current merit cycle (2017-2019).
2. The Faculty 180 system will be used by CSM faculty members for activities on or after July 1, 2019.

Training will be available and is strongly encouraged. Please keep an eye on your emails as more information will be disseminated.

# Important 2019-2020 Dates

**January 29, 2019**

**HSIF Info Session**

**12:00-1:00 pm (Tuesday)**

**Rose Room, 3E47**

**February 1, 2019**

**CHS/O'Brien Institute Seminar  
with Alison Pearce**

**Mid-February, 2019**

**Coffee Hour**

**March 22, 2019**

**Next Department Council**

**May 24, 2019**

**Department Council**

# Update from the Engagement Committee

Jesse Hendrikse, Co-Chair

- Faculty Incentive Program – on-going, keep signing in!
- Next Coffee Hour – February TBA, 3-4 pm

Mariko on behalf of Bria Mele and Sophie Hu,  
CHSSE Co-Chairs

- Feb 1 – Data Cleaning Workshop
- Feb 15 – Headshots, TGIF event with Faculty Members
- Feb 22 - Mar 1 – Thesis Defense Workshop
- Mar 22 – Fireside Chat
- Apr 5 - 12 – End of Year Lunch



# Update from O'Brien Institute





# Graduate Education Program

**Guaranteed Funding Policy for all incoming MDCH PhD Students – Effective September 2019.** On November 22<sup>nd</sup> 2018 FGS Council approved the Funding Standard Operating Procedure. Dr. Beattie is now leading the development of the GSE Funding Policy that will take effect on September 2019. A Funding Town Hall was held for all supervisors and students in CSM on December 11<sup>th</sup>, and we have had ongoing discussions at the program and departmental levels for the last 2 years. We thank everyone who has participated and contributed to the development of this policy. All Specialization Chairs have been asked to continue soliciting input from their members to assist me in shaping the final policy to be approved, as well as operationalize the policy.

**MDCH Admissions 2019 Deadline quickly approaching!** Applications for admissions are open and prospective students are actively seeking supervisory support. If you have supervisory privileges in MDCH and have agreed to prepare a letter of supervisory support (due February 8<sup>th</sup>) for an applicant, please ensure that you review and provide feedback on the entire application PRIOR to its final submission. Please be reminded that the Review Committee can only consider information provided within the application package to make recommendations for admission.

# Graduate Education Program

**NEW Student Misconduct and Academic Appeals Policy!** In an effort to make student appeals more efficient, transparent, and consistent, the University of Calgary has approved the new Student Misconduct and Academic Appeals Policy and Procedures effective January 1, 2019. This includes student appeals regarding: academic assessments (i.e., grades); academic progression matters (i.e., dismissals or requirements to withdraw); student academic misconduct; and student non-academic misconduct. The Student Appeals Office is a new resource on campus and has created a website with additional information. You are encouraged to read the new policy and procedures and review the information on the new website. If you have any questions, please contact the Student Appeals Office at [appeals@ucalgary.ca](mailto:appeals@ucalgary.ca).

**New Interim Dean and Vice-Provost (Graduate Studies).** Dr. Robin Yates has been appointed interim dean and vice-provost of graduate studies effective February 1, 2019.

Dr. Lisa Young was first appointed dean and vice-provost of graduate studies at the University of Calgary in 2012 and was reappointed for a second term in 2017. However, after being seconded to The School of Public Policy (SPP) to serve as the new director of graduate programs beginning August 1<sup>st</sup>, 2019, Dr. Young will step down from her role in graduate studies.

# Graduate Education Program

Under Dr. Young's leadership, the FGS has undergone significant transformation; she has been committed to providing a high-quality graduate educational experience and creating a more supportive and dynamic environment within the faculty for students, supervisors, and staff. Among her notable accomplishments, Dr. Young has: worked with the provost to increase funding for graduate student internships and entrepreneurship training; enhanced professional development opportunities for graduate students through the MyGradSkills program; improved access and supports for Indigenous graduate students; and developed more focused interventions for graduate students who may be at risk for not completing their degrees.

We welcome Dr. Yates in his new role with graduate studies and thank Dr. Young for her incredible leadership and advocacy of graduate education over the years.

## **Admissions**

CaRMS interviews are underway (Jan.14 and Jan.25). 12 candidates have been shortlisted for our two positions (one PHPM and one combined PHPM/Family Medicine)

Match day is February 26, 2019.

## **Accreditation**

Preparation has begun for internal PGME accreditation review, scheduled for February 28, 2020.

## **Curriculum**

PHPM is beginning the official RCPSC transition to Competency by Design this year with implementation in 2021. The Specialty Committee, which includes all program directors, has the first of three scheduled workshops in early March.

## **Other**

PHPM chief resident for January to June 2019 is Dr. Richelle Schindler. As with all chief residents, she can be reached at [phpm.cr@ucalgary.ca](mailto:phpm.cr@ucalgary.ca)

## *Student summer research*

Undergraduate summer research funding deadlines are upon us. Thank you to the many faculty that have agreed to supervise summer projects. Faculty who are still interested in supervising an undergraduate summer research project are encouraged to contact Fabiola Aparicio-Ting ([feapaeric@ucalgary.ca](mailto:feapaeric@ucalgary.ca)). We are happy to circulate project descriptions among the BHSc/Health & Society students.

Funding for summer research is available through a number of avenues at the University of Calgary, including:

Program for Undergraduate Research Experience (PURE)

<http://www.ucalgary.ca/provost/TLFC/awards/undergrad>

Deadline: **Thursday, February 8, 2019**

Markin Undergraduate Summer Research Program (USRP)

<https://www.ucalgary.ca/usrp/about/when>

Deadline: **Thursday, February 8, 2019**

O'Brien Centre Summer Studentships (OCSS)

<http://cumming.ucalgary.ca/bhsc/research/summer-studentships>

Deadline: Student portion due **Thursday, February 8, 2019**. Supervisor portion due **Thursday, February 15, 2019**



## *2019/2020 Honours thesis and practicum projects*

Any CHS Faculty who have potential honours thesis projects are asked to please forward a brief description to Fabiola Aparicio-Ting ([feaparic@ucalgary.ca](mailto:feaparic@ucalgary.ca)) or contact her if you are interested in further details. Many of our students will be seeking supervisors for the next academic year starting in March, so this is a great time to connect with a bright and keen student.

Faculty who may have a third year practicum project and are willing to supervise an Health & Society student in this capacity, please contact Fabiola Aparicio-Ting ([feaparic@ucalgary.ca](mailto:feaparic@ucalgary.ca)) for further details.

## *2019-2020 Academic year intake*

We are in the midst of reviewing student admission applications for the Fall 2019 intake. The supplementary application was refined last summer by the BHSc Directors to ensure that we are selecting students who fit the vision of the BHSc program. We are excited to see the results of this intake cycle using this updated application. Many thanks to the CHS faculty who participate in this process as application reviewers.



- Search Committee for CRDS Instructor Position posting closed at the end of Dec. Next steps include review of applicants, ranking to prepare a short list for interviews over the next few months.
- We are pleased to welcome Jerri Ambrus as CRDS Administrative Assistant. Please drop by and say hello.
- No update on discussions with Vice Provost, Teaching and Learning, representatives from Taylor Institute, Arts & Science, Social Work, Education and BCR program to identify models to support and develop more online courses at UofC after Dec. 11, 2018 meeting. We continue to work towards new course options that will lead to lifting the suspension of new enrollments in the Distance BCR program.
- BCR Winter Term underway – delivering 14 courses; completed placement of 120 students in community-based practicum agencies/organizations.
- CRDS is reviewing the grad level course requirements in light of suspended MDCS capstone degree (previously included 12 course offerings). Proposed changes will reflect 4 required CORE courses currently offered to MSc and PhD students.