


Faculty of Science Town Hall

February 1, 2018

Jonathan Schaeffer
Dean.Science@ualberta.ca



Live Streaming?


We are not live streaming today -
cost prohibitive

Encourage anyone who wants to use
their device to broadcast this talk



By the Numbers: 2017-18

- 6,300 ugrads
- 1,174 grads
- 43,000 alumni
- \$110M operating
- 285 faculty
- >1,500 on payroll
- \$78M research



Research Success

Science!
Jeff Gu *et al.*
Evelyn Merrill, *et al.*
Craig Heinke, Greg Sivakoff, *et al.*

Nature!
Michael Caldwell, *et al.*
Graham Pearson, *et al.*

And this is just the first month of the year!




Research Funding

Rose from \$68M to \$78M

Success with CFI, all matched funds

Recruitment for a CERC

Metabolomics Innovation Centre
funding




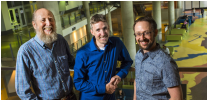
Artificial Intelligence


AI/ML is #2/#3 in the academic world and
has been there for 20 years!

\$25M Federal investment

Google DeepMind donation


Best paper prize(s)



 The image cannot be displayed. Your computer may not have enough memory to open the image, or the image may have been corrupted. Restart your computer, and then open the file again. If the red x still appears, you may have to delete the image and then insert it again.


Teaching

- Excellent teaching evaluations (4.5+)
- SCI-Lift (Science Education and Learning Innovation Facilitation Team)
- Dino 101 and Mountains 101 recognition
- Leadership certificate
- AlbertaSat II is on its way




Space: Update

- \$11.5M cost for >\$30M of renos
- BioSci Zoology tower - 4 floors
- Chemistry West (south) - 3 floors
- ~~Chemistry undergraduate labs (4)~~
- Chemistry undergraduate labs (2)
- ESB, CS, BioSci, NINT networking
- ~~Tory/ESB backfill~~
- Student Innovation Space



Space: Reality Check


- >\$150M to finish Chemistry East/ West and Biological Sciences
- Need to find provincial support, federal support, institutional support, and donors



Fundraising


| Year | Funds Raised | Year | Funds Raised |
|---------|--------------|---------|--------------|
| 2009-10 | \$5.38M | 2012-13 | \$8.31M |
| 2010-11 | \$6.78M | 2013-14 | \$10.87M |
| 2011-12 | \$6.10M | 2014-15 | \$12.94M |
| | | 2015-16 | \$14.95M |
| | | 2016-17 | \$11.69M |
| | | 2017-18 | \$24.30M |

But no money for renovations




Diversity (Faculty Members)

- Last 3 years:
 - 19 of last 38 hires have been women
 - Climbed to 17% women in Science
- Computing Science: from 4 to 8
- EAS NSERC faculty: from 0 to 4
- Chemistry: from 3 to 5




In Any Other Year...

- 2018-19 would have been amazing!
- 5 new AI Chairs
- DeepMind endowed Chair
- CERC possibility
- Renovations



Budget 2017-18

- 2% increase from the province...
- ...but 0% passed on to Faculties (carbon tax; benefits)
- ...and a 0.5% cut
- Consequence was ~\$3 million reduction in spending power
- Slowed down the pace of space renovations




Budget 2018-2021

Budget reduction:


- 2018-19: 4%
- 2019-20: 2.5%
- 2020-21: 2.5%

Devastating to research, teaching, and service for all academic units



Budget 2018-2021

University's budget remains the same
All units are being asked to make these cuts
Self-inflicted wound to address the "structural deficit"
Temporarily addresses a deficit and reduces debt but does not address the structural problems




Consequences

Costs: budget reduction, merit, chairs


- 2018-19: \$3.7M + \$1M + \$0.4M
- 2019-20: \$2.3M + \$1M + \$0.3M
- 2020-21: \$2.2M + \$1M + \$0.3M

Total: \$12.2M from a \$110M budget




Assumptions

- 0% grant increase from Government
- 0% cost of living increase
- 0% inflation
- No impact of the new University budget model
- No impact from Government tuition review



By the Numbers: 2018-21

- 6,300 ugrads
- 1,174 grads
- 43,000 alumni
- \$110M operating
- 285 faculty
- >1,500 on payroll
- \$78M research



Where Does the Money Go?

| | Budget Item | Amount | Total | |
|---------|---------------------------|--------|-------|---|
| Rev | Income (sales, IDF) | 19.2 | | |
| | Central transfer | 91.4 | 110.6 | |
| Expense | Faculty Salaries | 61.8 | | |
| | Staff/Students Salaries | 20.9 | | |
| | Benefits | 14.2 | 96.9 | Faculty salary & benefits: \$74M |
| | Supplies/Service/Sundries | 6.7 | | 67% of budget |
| | Capital Purchases | 1.1 | | |
| | Mortgage | 0.4 | | |
| | Travel | 0.8 | | |
| | Maintenance/Repairs | 0.8 | | |
| | Transfers | 4.2 | | |
| | Other | 0.5 | 14.5 | |
| | | | | 111.4 |

UNIVERSITY OF ALBERTA
FACULTY OF SCIENCE

Important Points

- Revenue generation needs to be profit generation
- Accounting categories do not match business processes
- Renovations become low priority

UNIVERSITY OF ALBERTA
FACULTY OF SCIENCE

(1) Reduce Faculty

For every two senior professors that retire, hire one junior professor
 Estimate \$1.8M reduction for each of three years

UNIVERSITY OF ALBERTA
FACULTY OF SCIENCE

(2) Reduce UG Enrolment

2017-18: 83% admission, 6,300 students
 2018-19: 85% admission, 6,100 students
 2019-20: 86-87% admission, 5,900 students
 2020-21: 87-88% admission: 5,700 students
 Government funding for 6,100 students is from 2011 - we cannot be held to this standard
 Saves money, but deplorable to reduce access to our excellent UG programs

UNIVERSITY OF ALBERTA
FACULTY OF SCIENCE

(3) Budget Enforcement

2017 University introduced UPlan, our first proper budgeting tool
 Units in Science will need to justify their budget and live within those parameters
 Analysis suggests that there are significant savings here
 Will take a year or two to get it right

UNIVERSITY OF ALBERTA
FACULTY OF SCIENCE


Solution So Far

| Item | 2018-19 | 2019-20 | 2020-21 | Total |
|---------------------|-------------|-------------|-------------|-------------|
| Faculty retirements | 1.8M | 1.8M | 1.8M | 5.4M |
| Donation | 0.2M | | | 0.2M |
| Reduce UG enrolment | 0.2M | 0.2M | 0.2M | 0.6M |
| Budget enforcement | 1.0M | 0.5M | | 1.5M |
| Total | 3.2M | 2.5M | 2.0M | 7.7M |

UNIVERSITY OF ALBERTA
FACULTY OF SCIENCE

Provocative Ideas?

- Look critically at course offerings
- Reduce number of labs and/or lab courses (reduces number of TAs; reduces supplies)
- Reduce Science's special internal research funding programs
- Having three semesters
- Fund only "must do", not "would be nice to do"
- Profit generation



Need Your Help

Looking for Ideas...
Please start with \$100K+ ideas
Smaller ideas welcome but have low priority right now



Don't Lose Sight of Reality

- Excelling in research, teaching, and service
- Strength in undergraduate students, graduate students, PDFs, staff, and faculty



Bottom Line

Thank you for making this a great place to work and study
For students, staff, and faculty

