

# Department of Statistics & Actuarial Science

Orientation for  
New PhD Students

Wednesday, Sept 5, 2018

# A Great Choice

- It is a very exciting time to be studying any of the 'data sciences'
- These include: Statistics, Actuarial Science, Biostatistics and Quantitative Finance
- It has become widely understood that good decision making should be based on empirical evidence. This requires the 'data sciences'

# The Department

- We have recently had a conference to celebrate our 50<sup>th</sup> Birthday
- We are the oldest Department in Canada
- In 1982 the department's name was changed to Statistics and Actuarial Science
- Now home to more than 45 research active full-time faculty
- The Department is also home to over 900 undergraduate students and about 150 graduate students in programs including Actuarial Science, Biostatistics, Quantitative Finance, and Statistics

# About the Department

- Waterloo Research Institute in Insurance, Securities and Quantitative Finance (WatRISQ),
- Business and Industrial Research Group (BISRG),
- Propel Centre for Population Health Impact (PROPEL),
- Centre for Computational Mathematics in Industry and Commerce (CCMIC)
- Statistical Consulting and Collaborative Research Unit
- Survey Research Centre (SRC)

# Introductions

# The **MOST** important people

- Lisa Baxter - MMath (M3 3138)
- Mary Lou Dufton - PhD (M3 3137)
- Helen Chen - MQF and MActSci (M3 3139)

They know ALL the answers to your questions!

# Some (other) Department People

- *Chair:* Stefan Steiner
- *Assoc. Chair Act. Science:* David Landriault
- *Assoc. Chair Research:* Richard Cook
- *Assoc. Chair UnderGrad:* Pengfei Li
- *Assoc. Chair Grad:* Paul Marriott



# Graduate Student Reps

- Graduate Student Association

<https://uwaterloo.ca/graduate-student-association/>

- Two graduate student reps will be announced shortly

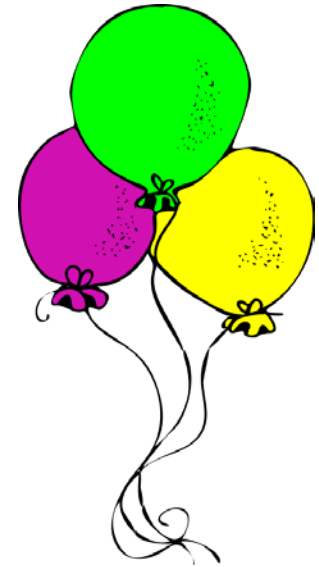


# Department Social

When? Wednesday 12<sup>th</sup> September 4:30pm

Where? M3, Bruce White Atrium

What?      Food  
              Drinks  
              Fellow students  
              Professors



# PhD – Stats or BioStats

- With Masters:
  - Five courses, average at least 70%, must include STAT 901,908
- Without Masters:
  - Eight courses, average at least 70%, must include STAT 901,908
- Graduate skills milestone
- Comprehensive: exams and proposal
- Submission and defense of thesis

# PhD – ActSci

- With Masters:
  - Five courses, average at least 70%, must include three 900 ACTSC and STAT 850 and 901
- Without Masters:
  - Eight courses, average at least 70% must include three 900 ACTSC and STAT 850 and 901
- Graduate skills milestone
- Comprehensive: exams and proposal
- Submission and defense of thesis

# PhD- Comprehensive

- Comprehensive exams, stage 1 (two papers)
  - January and/or May of 1<sup>st</sup> year
  - chair (2018-19): Professor Chengguo Weng
  - Exam meeting Friday September 14 at 10:30 a.m. in M3 4206.
  - Thus years exams: Monday January 7, 2019 and Friday January 11 9:00 a.m. to 1:00 p.m.
  - past exams will be made available
  - search for research topic immediately after passing
- comprehensive exams, stage 2 (thesis proposal)
  - 6<sup>th</sup> term

# PhD

- terms 1 – 12 (first 4 years): fully supported
- terms 13+ (year 5+): mostly RA from supervisor
- international doctoral award:
  - full award for year 1 – 3; 2/3 for year 4; none for year 5+
- term progress report (TPG):
  - starting from term 2, must complete a TPG **each term** ...
  - by end of the **first month** (i.e., Jan, May, Sept) ...
  - for your progress in the previous term (i.e., Fall, Winter, Spring)
  - also used as a base for many other internal awards

# Grad Student Skills Workshop

- part of degree requirement (milestones)
  - TA skills workshop (one evening, ~ 3 hrs)
  - writing skills workshop (three sessions)
- mandatory for all new grad students

# Grad Student Skills Workshop

- Date: Thursday, Sept 6, 2018
- Time: 16:30–19:30
- Location: M3 3127 (seminar room)
- Food: Light dinner provided

# Writing Skills Workshop

- 1<sup>st</sup> session is Tuesday September 11 from 4:30 – 6:30
- 2<sup>nd</sup> session is Tuesday September 25 from 4:30 – 6:30
- 3<sup>rd</sup> session is Tuesday October 23<sup>rd</sup> from 4:30-6:30
- All these session are in M3 3127



# Academic Integrity

- mandatory online course
- access through learn.uwaterloo.ca
- watch out for email in your mailbox

# Harassment and Discrimination

- Harassment and Discrimination are issues taken seriously by the University of Waterloo
- mandatory online course
- access through [learn.uwaterloo.ca](http://learn.uwaterloo.ca)

# Departmental Seminars

- Thursdays, 16:00 – 17:00
- great way to get educated **for real**
- try to attend as many as you can
- Don't be afraid to ask question!
- minimum requirements:
  - MMath students: 2 (Fall); 2 (Winter)
  - PhD students: 4 (Fall); 4 (Winter)
  - attendance forms available from Lisa or Mary Lou

# Graduate Seminar Series

- There is a lunch time series of seminars where our own graduate students can present their work
- This counts for your presentation PhD milestone
- A good chance to practice your presentation skills and get feedback on your research ideas

# Teaching Assistantship

- each TA unit ~ 80 hrs of work during the term
  - **marking** assignments (& keeping student records)
  - holding **office hours**
  - teaching **tutorial** sessions
  - **proctoring** tests/exams
  - etc
- learning the course material
  - not counted in the “80 hrs” workload
  - considered part of your qualification

# Teaching Assistantship

- Have chance to express preferences (though they are not always met)
- Funding level depends on number of TA units you request/hold (0, 1, or 2)
- MMath expectation: 2 TAs/term x 3 terms if satisfactory work both academically and in past TA work

# Teaching Assistantship

- Workload varies
- Discuss early with the Professor to find out what the requirements are and when they take place
- Not necessarily uniform across the term

# Teaching Assistantship

- MUST communicate with instructor if
  - cannot meet a deadline or perform a TA duty (e.g., proctoring)
  - suggestion: find qualified substitute; either swap duties or buy dinner/gift; but MUST have permission from instructor
- NEVER book any trips (vacation) UNLESS you know it will fit into your TA schedule. This is particularly important in the exam period.



# Teaching Assistantship

- all TAs also in the “faculty reserve pool”
- can be randomly selected to proctor exams for large courses in the Math Faculty
- part of your TA duty

# Teaching Opportunities

- After your proposal, if you are interested in an academic career you may get a chance to teach an undergraduate course
- When you are applying for jobs this experience can be very valuable on your CV
- Talk to your supervisor first to find the right time
- Plan ahead as teaching schedules are fixed a year in advance

# Graduate Student Teaching Seminar

Looking to teach a STAT or ACTSC course?

Looking for ways to improve your teaching?

Looking for tips to not let good teaching overwhelm your research?

- Winter 2019 seminar
- 12 weeks which includes three micro teaching sessions and actual in-class practicum experience.
- Taught by math and CS faculty.
- Discussions around presentation skills, creating assessments (assignments, examinations), teaching philosophies and more.
- If interested or if you would like more information please email: [cbruni@uwaterloo.ca](mailto:cbruni@uwaterloo.ca)

# Additional Funding

- scholarships
  - entrance, graduate, senate, ...
- chair's awards
- international doctoral & master awards
- NSERC & OGS
  - domestic students only

# Additional Funding

- research assistantships or studentships
- travel assistance - see Lisa (MMath), Mary Lou (PhD)
  - for presenting your work at a research conference
- bursaries (see Student Awards Office)
  - if you have financial difficulties

# Computing

- MFCF will be running a number of information sessions. You **must** go to one of these
- Fri. Sept 7 11:00-12:00 **M3- 3103**
- Thurs. Sept 13 3:50-4:50 **M3- 3103**
- Fri. Sept 14 1:00-2:00 **M3- 3127**

# Your UW Email



- your UW email, e.g., `jdoe@uwaterloo.ca`
  - your responsibility to manage it
  - free to forward to gmail, yahoo from your Watlam account from [jdoe@connect.uwaterloo.ca](mailto:jdoe@connect.uwaterloo.ca)
  - Ensure you set you gmail to send as if from `jdoe@uwaterloo.ca`
  - but excuses such as “I don’t check my uwaterloo email” are NOT acceptable

# QUEST

- In QUEST, verify personal & academic info.
  - courses
  - financial support
  - other



# Problems, Questions

- People to ask ..
  - Supervisor
  - Grad Student Reps
  - Grad Coordinators Lisa (MMath), Mary Lou (PhD)
  - Associate Chair of Grad Studies (Paul)