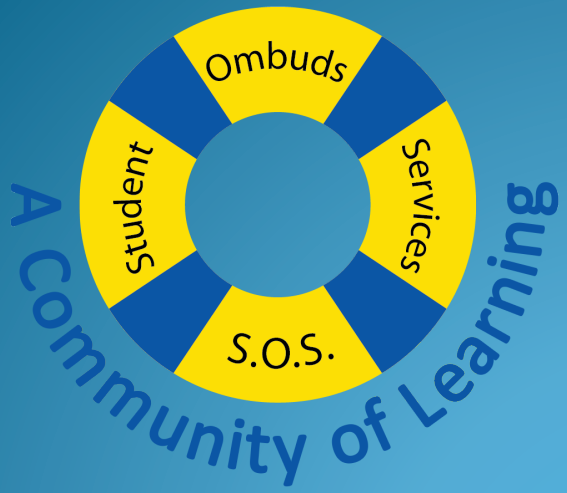
Research & Volunteer Opportunities

By: Maansi Malhotra and Tony Tran

Wednesday, January 7th, 2015



NO NEED TO TAKE NOTES!!

- Slides will be posted on the SOS website within a week
- Please listen and feel free to ask questions in between ☺

bethune.yorku.ca

WHO ARE WE???

- **Maansi Malhotra**
  - 4rd year Biology & Psychology student
  - Peer Advisor
  - Research Assistant/Exchange/Thesis

- **Tony Tran**
  - 3th Year Chemistry
  - Peer Advisor and PASS leader

Student Ombuds Services

- Peer Advising
- Peer Mentoring
- Peer Tutoring
- Peer-Assisted Study Sessions
- Class Representatives

Agenda

- Job Opportunities
- Research Opportunities
- Get involved in what interests you!!

JOB OPPORTUNITIES

CAREER CENTRE

ONLINE JOB POSTING SYSTEM

- Search for jobs (full or part time), internship, summer and volunteer opportunities
- Register for career centre workshops, events, and get email notifications regarding upcoming events
- http://www.yorku.ca/careers/onlinesystem/

Career Fair
Fall 2013
Career · Centre
Thursday, Sept. 26, 2013 10am – 3pm
Technology Enhanced Learning (TEL) Building
The Career Fair is a great way for students to meet a variety of employers in an exhibition-like setting to learn more about their companies and employment opportunities. Employers exhibiting at this year's fair will be recruiting York students and new grads for the following types of positions:
full-time jobs
part-time jobs
internships
summer jobs
YORK UNIVERSITÉ UNIVERSITY
yorku.ca/careers/fair

WORK/STUDY PROGRAM

- Broad range of jobs available
- September - April for full time students
- Demonstrate financial need
  - Student Financial Profile (SFP) at: http://sfs.yorku.ca/services/sfp/

CLAY (College Life at York) PROGRAM

- Better student experience within your college
  - Bethune, Stong etc.
- Possible Clay Positions:
  - Clubs and Program Support Assistant
  - Academic Resource Adviser
  - Productions Technical Manager/Technical Director
  - Conference and Symposia Assistant
  - Alumni Affairs Developer
- September – April; some in the summer

http://sfs.yorku.ca/employment/clay/

YES (York Engaged Students) PROGRAM

- Similar to CLAY program, but not college specific
  - Peer Mentoring
  - Ambassadorship
  - Advising

- Establish new programs or provide services to York students

http://sfs.yorku.ca/employment/yes/

Can I have all of these at once?

- A Work/Study position cannot be held concurrently with other Work/Study, RAY, CLAY or YES positions

"You can have it all. Just not all at once."

- Oprah Winfrey

RESEARCH OPPORTUNITIES

RESEARCH AT YORK (RAY) PROGRAM

- Get introduced to the research environment
  - Paired with a professor and work on a project
  - http://sfs.yorku.ca/employment/ray/
- Demonstrate financial need
  - http://sfs.yorku.ca/services/sfp/
- Minimum of $15.00 per hour, but max ~ 15h work week.

- Natural Sciences and Engineering Research Council of Canada
- NSERC is a federal academic granting agency
- Offers summer research assistant scholarships for undergraduate students
  - NSERC - USRA

NSERC REQUIREMENTS

- Canadian citizen/permanent resident
- Enrolled in a bachelor's degree program at an eligible university
- Completed all the course requirements of at least the first year of university study
- Minimum B average (6.0 / 9.0 on York's GPA Scale)
- http://www.nserc-crsng.gc.ca/students-etudiants/ug-pc/usra-brpc_eng.asp

NSERC INFORMATION

- Apply for Undergraduate Student Research Award (USRA)
- Application deadlines are internal to universities
  - usually near the end of January
- Pays $4500 over 16 weeks of research + 25% supplement from university
- You can do an NSERC at any University, don't feel limited to York
- http://www.nserc-crsng.gc.ca/students-etudiants/ug-pc/usra-brpc_eng.asp

HOW TO APPROACH PROFESSORS

- Start looking into Professors' research as soon as possible
- Take an interest in projects that truly interest/ fascinate you
- Approach the Professors through e-mail, office hours or during class
- Be courteous and prepared to market yourself
- Show the professor that you really have looked into the type of research he/she does (ie. read their recent papers!)

SAMPLE EMAIL

- Dear/Hello/Good morning Professor ___
- My name is ___ and I am a ___ student interested in…
- I was wondering if there are opportunities in your lab for…
- I have attached my updated transcript and resume…
- Sincerely___

LINKS TO FACULTY PROFILES

- Physics & Astronomy

http://www.physics.yorku.ca/index.php?option=com_content&view=article&id=69&Itemid=73

- Biology

http://science.yorku.ca/View-users-list/Biology.html?search=o

- Kinesiology

http://www.yorku.ca/gradkahs/faculty.html

- Chemistry

http://www.yorku.ca/gradchem/faculty/index.html

Research Practicum/Project

- Usually zero credits courses
- Taken part time while taking courses
- Must make arrangements with a professor before enrolling
- Evaluation on a pass/fail basis
- Submit personal essay/report on what you did

RESEARCH PRACTICUM

- Zero credit course
- BIOL 1601 (Fall) or BIOL 1602 (Winter)
- Student must make arrangements with a faculty member before enrolling in this course
- Submit personal essay/report on what you did
- Good chance to get “your foot in the door”

RESEARCH PRACTICUM

- Research Practicum in Chemistry
- SC/CHEM 2200 0.00 Research Experience
- Similar to other research practicum courses

Independent Study/Honours Thesis

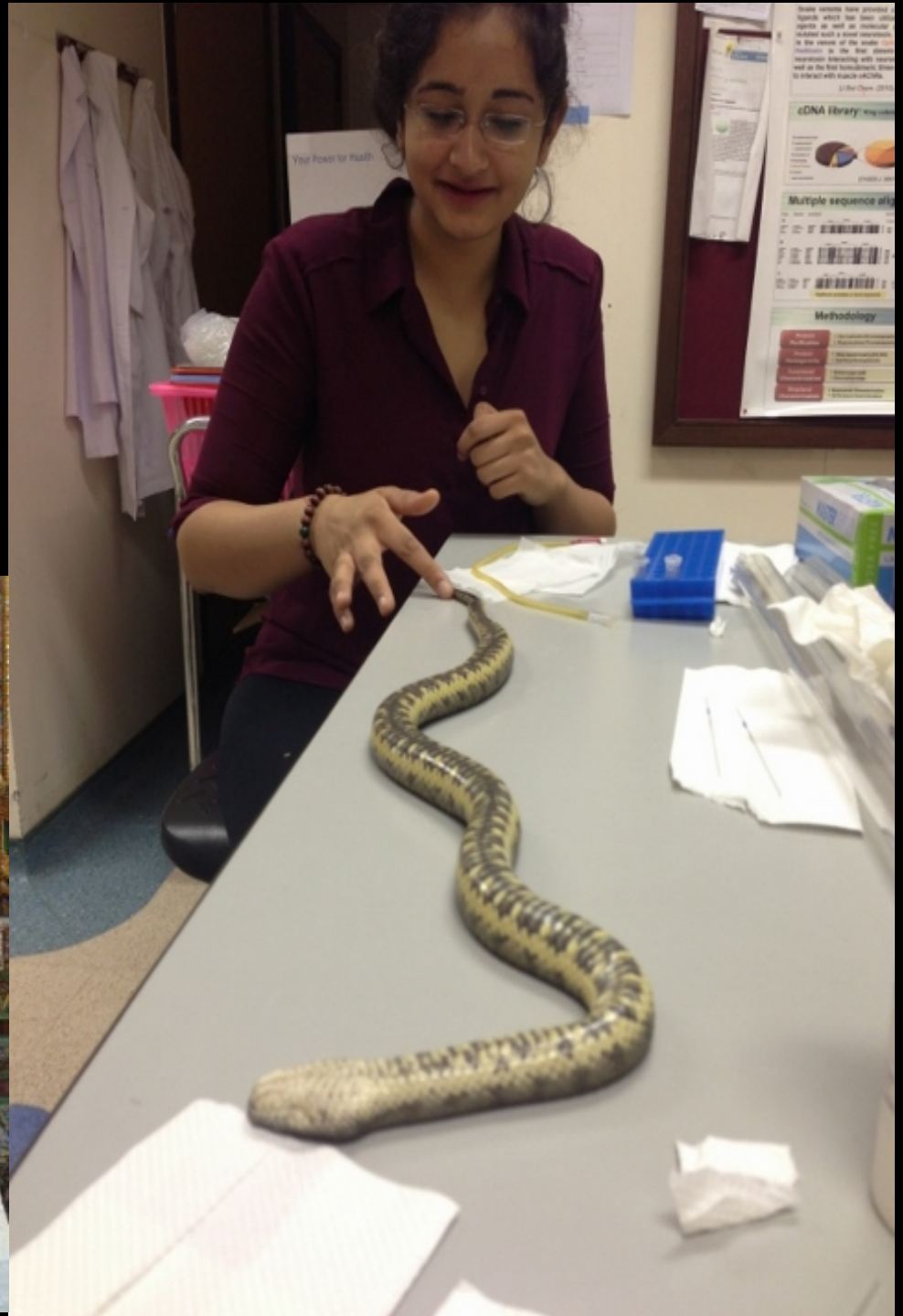
- Biology, Kinesiology and Psychology Departments
- Enrol as a course
- Arrange project details with a Professor
- Grading system is determined beforehand with professor
  - Usually on Literature review, thesis paper, defense.

International Students

York International

- provides facilities to international students at york (5000+), exchange students and visiting scholars
- Information regarding health insurance, immigration and financial aid.
- facilitate international student advising and peer mentoring programs
- and help york students to GO GLOBAL!! (ASK ME- maansi28@gmail.com)
- Further information visit: http://yorkinternational.yorku.ca/

"FROM CULTURE SHOCK TO CULTURE VULTURE"


cDNA library
Methodology

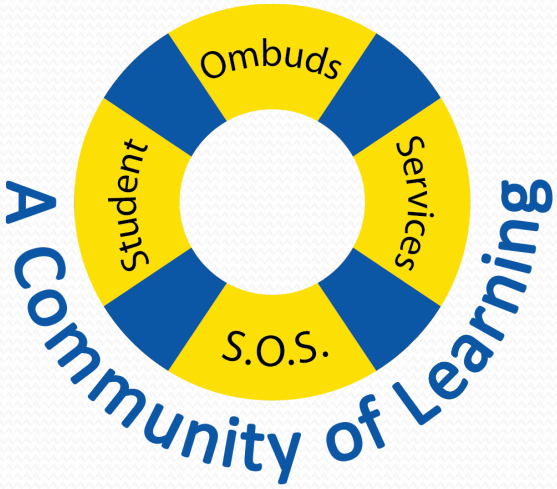
VOLUNTEERING OPPORTUNITIES

VOLUNTEERING WITH BETHUNE

- Many ways to get involved with your college!
  - Peer Tutoring Program
  - Peer Mentoring
  - Class Representatives
  - PASS leaders
  - SOS Academic Advisors
- Student Government (BCC, BAC)

http://http://sos.info.yorku.ca/

http://http://bethune.yorku.ca/

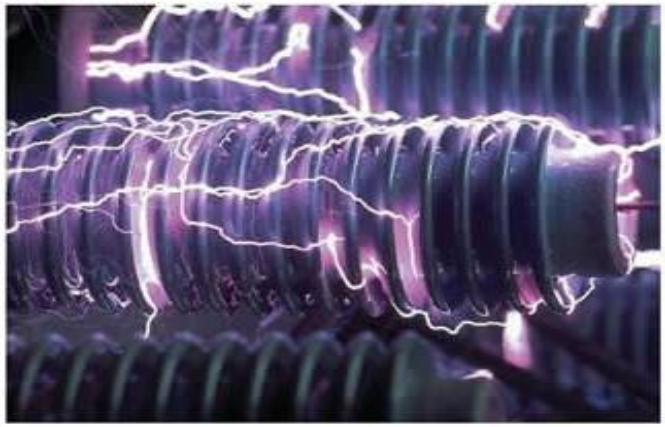


VOLUNTEER OPPORTUNITES

- Clubs on campus: YU Connect
  - http://yuconnect.yorku.ca/
- York University Biology Society (YUBS)
- Chemistry Society at York
  - http://www.yorku.ca/csy

OPPORTUNITIES BY AREAS OF INTEREST

PHYSICS & ASTRONOMY



- NSERC
- TRIUMF
- Physics/Astronomy Project

- The Observatory
- Astronomy Club
- Peer Tutoring

PHYSICS NSERC PROJECTS (SUMMER 2014)

- 1. Cochlear Biophysics (Professor Christopher Bergevin)

- 2. Development and construction of the positron accumulator at the McMaster Nuclear Reactor. (Professor Cody Storry)

3. Analysis of CERN LHC collision data or simulations to search for exotic particles. (Professor Eric Hessels)

4. Construction of auto-locked diode lasers for atom trapping experiments. (Professor Wendy Taylor)

http://www.physics.yorku.ca/index.php/undergraduate/awards/61

TRIUMF

- Canada's National Laboratory for Particle and Nuclear Physics
- Located in Vancouver, BC (UBC)
  - Nuclear Medicine
  - Particle Physics
  - Accelerator Physics
  - Theoretical Physics
  - Molecular & Materials Science
  - Rare-Isotope Beams
  - Detector Development

http://www.triumf.ca/home/about-triumf

TRIUMF CONTINUED…

- TRIUMF Summer Research Awards for Canadian Undergraduate Students
  - Application deadline: January 22, 2015

- More information at:

http://www.triumf.ca/home/employment-opportunities/undergradute-students/awards-scholarships

PHYSICS/ASTRONOMY PROJECT

- Physics & Astronomy Department offers PHYS 4310
- worth 3 credits – Fall or Winter
- Enrol in final year of program
- Arrange project details with a professor

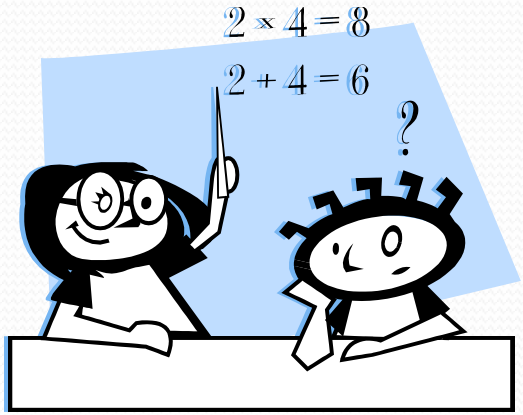
https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/6/wo/qafntbEEyFvO2lETK7QWEM/2.1.10.8.3.44.0.5

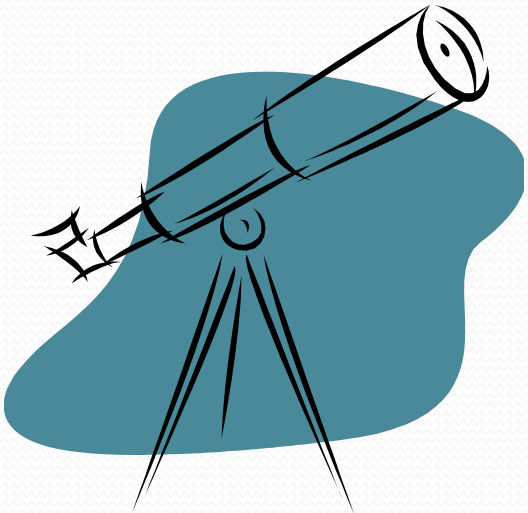
THE OBSERVATORY

- Work/study positions for research in variable stars and stellar evolution
- Volunteer positions to host public viewing nights
- Contact Professor Paul Delaney, the observatory coordinator
  - observe@yorku.ca
  - http://www.physics.yorku.ca/index.php?option=com_content&view=article&id=26&Itemid=78

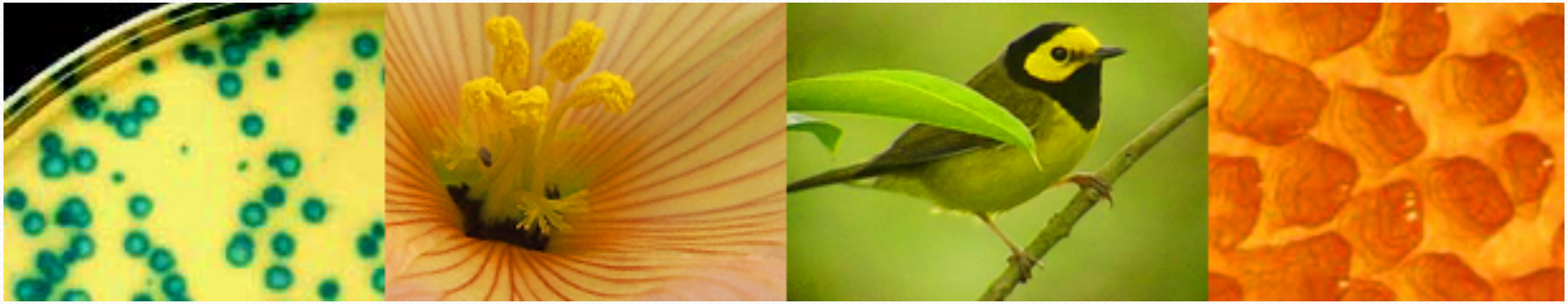
Volunteering Opportunities:

- Peer Tutoring: PHYS 1xxx
  - bctutor@yorku.ca
- Astronomy club:
  - http://www.yorku.ca/yuac/





BIO/PSYCH OPPORTUNITIES



- Center for Vision Research at York
- SickKids Summer Student Research Program
- U of T Department of Medical Biophysics Summer Research program
- RAY and Work/study
- Practicum
- Hospital Volunteering

VISION RESEARCH AT YORK

- York has a vibrant research center in vision and brain research
- www.cvr.yorku.ca
- Some research areas include:
  - Human Visual Performance
  - Visual Human-Computer Interaction, Graphics and Virtual Reality
  - Visual Psychophysics
  - Eye Movements and Hand-Eye Coordination
  - Computational Modeling and Computer Vision
  - Electrophysiology
  - Clinical and Developmental Studies
  - Brain Imaging

CVR VISION SCIENCE SUMMER SCHOOL

- a one-week, all-expenses-paid undergraduate summer school on vision science
- Talks by CVR faculty and hands-on projects in CVR labs
- Deadline: Early-February

SICKKIDS SUMMER RESEARCH PROGRAM

- http://www.sickkids.ca/Research/StudentandFellowResources/RTC/Training-Programs/Summer-Research-Program/index.html

- Accept students in years 1 through 4

- Jobs usually posted in mid December

- APPLY EARLY!!!

SickKids® FOUNDATION

SICKKIDS CONTINUED…

- Sample jobs from summer 2009 posted below:

Investigator	Title of Project	Research Program
Dr. Yigal Dror	The role of SBDS in hematopoiesis	Cell Biology
Dr. Cecil Hahn	Clinical research on the utility of continuous EEG monitoring for seizure identification among critically ill children in the intensive care unit.	Neuroscience & Mental Health, Neurology
Dr. Clifford Lingwood	Regulation of glycosphingolipid biosynthesis by use of exogenous alternative substrates.	Molecular Structure & Function
Dr. Brian H. Robinson	Isolation of genes responsible for mitochondrial defects using single chromosome transfer.	Genetics & Genome Biology

U of T: Department of Medical Biophysics Summer Research Program

- Open to all university students in their second and third years of undergraduate studies.
- Program runs from second week of May to the end of August
- Present their work as a poster at the Summer Student Poster Day in late Aug.
- Application deadline: Early Feb
- **Minimum** requirements:
  - Medical physics stream: B+
  - Biology: A-
- http://medbio.utoronto.ca/summer/

Department of MedicalBiophysics

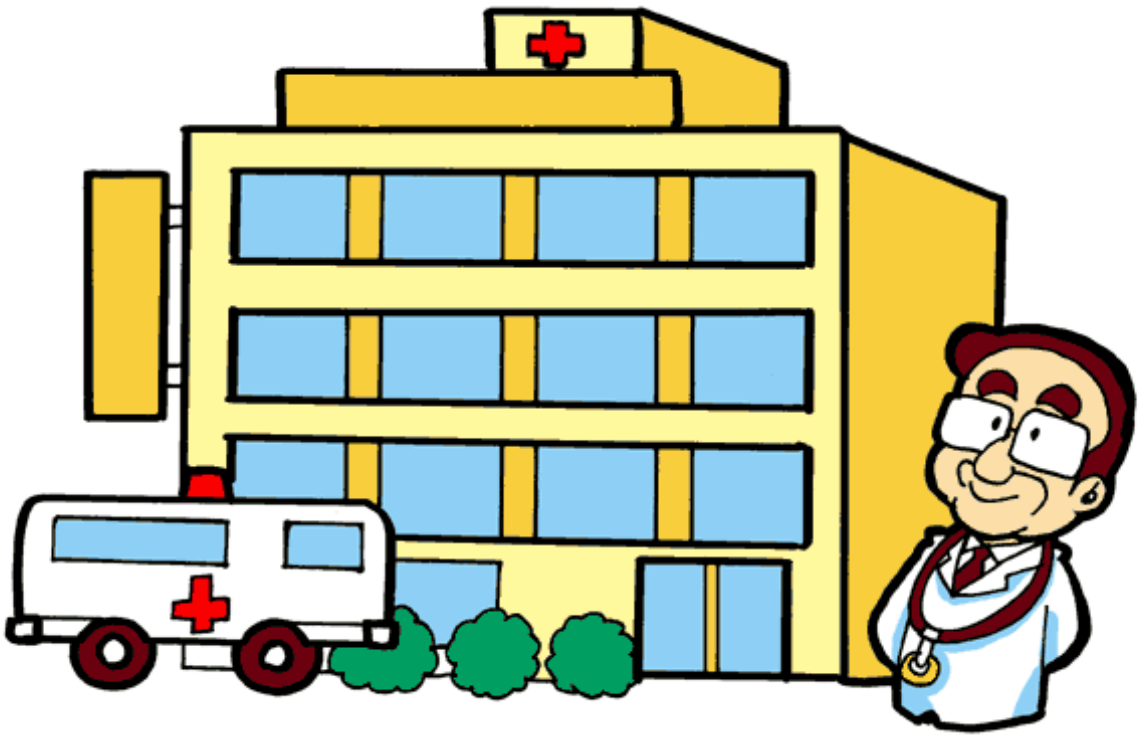
OTHER RESEARCH OPPORTUNITIES OUTSIDE OF YORK

- IMS Summer Student Program:
  - http://www.ims.utoronto.ca/programs/summer.htm

- RTC Summer Research Program for Undergraduates @ The Lunenfeld-Tanenbaum (Mount Sinai Hospital)
  - http://research.lunenfeld.ca/rtc/?page=Summer%20Students

VOLUNTEERING

- Hospitals
- Rehab clinics
- Retirement Homes
- Charity Organizations
- York Organizations
- Check for opportunities on the Career Centre's online posting system: http://www.yorku.ca/careers/onlinesystem/



hospital

BEFORE YOU START VOLUNTEERING…

- Make sure you're up to date with all your immunizations, see your family doctor

- GET YOUR TB SHOT ASAP!!!

Hospitals available

- Mackenzie Health Hospital
- Mount Sinai Hospital
- Princess Margaret Cancer Centre
- Humber River Hospital
- Trillium Health Centre
- Credit Valley Hospital
- and More!

Contact the hospital

- Contact and seek information from the Volunteer Services Department (website, email, phone).
- Ask about the application process. Hospitals have different requirements for their application.
- Apply, interview, attend the information sessions.
- Enjoy and learn!

KINESIOLOGY AND HEALTH SCIENCE OPPORTUNITIES

- Muscle Health Research Centre
- Physiotherapy/Chiropractic clinics
- Nursing Homes

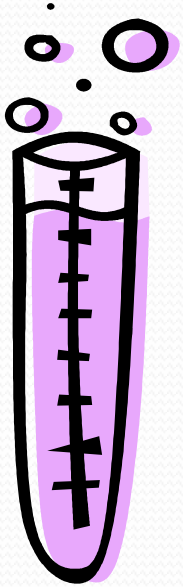
Muscle Health Research Centre

- Research focused on the importance of skeletal muscle on overall health and well being
  - Effects of exercise on:
    - Diabetes
    - Cancer
    - Aging
    - Cardiovascular Diseases (CVD)
- http://www.yorku.ca/mhrc/

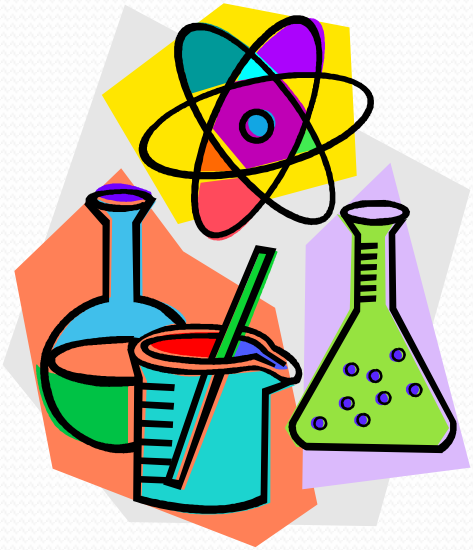
PHYSIOTHERAPY/CHIROPRACTIC CLINICS

- Contact nearby clinics for opportunities
- Visit in person and drop off your resume
- York Lanes Chiropractic Clinic-(416) -736 -5414
- Athletic Therapy certificate program
  - http://www.yorku.ca/atherapy/
- Hospitals

CHEMISTRY



- Research Practicum
- Pharmacy Opportunities
- Sanofi Pasteur & Pfizer



PHARMACY OPPORTUNITIES

- Shoppers Drug Mart
- Zellers
- Wal-Mart
- Rexall Pharmacies

- Pharmaceutical companies
- Sanofi Pasteur - Mission statement: Protecting and improving human health worldwide by offering the broadest range of vaccines
- Pfizer - Mission statement: Helping Canadians live healthy and balanced lives by discovering and developing innovative medicines

http://www.sanofipasteur.ca/

www.pfizer.ca

IN SUMMARY

- There are plenty of opportunities available
- Use the time now to get your resume, cover letters and reference letters ready
- Start searching for projects that interest you
- Approach professors early to see if they have positions available
- Get good grades!

THANKS FOR LISTENING!

Contact Information:

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Tony Tran
tt8042@yorku.ca

The Six Actions That Make Us Happy At Work

Learn

Be positive

Be open

Participate

Love

Find Meaning