Beyond the Stethoscope: Careers in Health Care

Tuesday, March 7, 2006

Student Centre Boardroom, 12:00-2:00 p.m.

Presented by:
Career Centre, University of Toronto at Mississauga
Room SE 3094. Tel: 905.828.5451
www.utm.utoronto.ca/careers

Co-sponsorship by: Pre-Med Club and Erindale Biology Society

Panel moderated and package prepared by: Chandini Bakshi, Career Assistant

Panelists:

Dr. Darren Jagessar
Chiropractor

Roxanne Mistry
Speech-Language Pathologist

Carissa Vergara
Occupational Therapist

Tamar Daws
Cytology Technologist

Stephanie Vaccari
Intellectual Property Lawyer
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Skills Developed From a Life Science Degree

Before considering a particular career option, it is essential to identify the type of skills that you have developed. Such skills can be developed through whatever experience you might have, whether this be past jobs, volunteer positions, or education. It is important to understand that employers are looking for people that can transfer their skills to a particular job (i.e. transferable skills). They believe that specific requirements of a job can be taught, but it is most valuable to them if their employee takes the general skills that they have acquired, for instance such as time management skills in university, and use them on the job.

Your education at university will have helped you develop many valuable skills. The life science program generally helps students develop:

- **Research skills** (i.e. designing experiments, recording observations, organizing data and critically analyzing data and problem solving)

- **Investigation skills** (i.e. identifying problems, defining expected/potential results-hypothesis testing)

- **Quantitative skills** (i.e. applying scientific concepts to problems, using laboratory equipment, utilizing statistical tests to predict outcomes, interpreting results).

- **Analytical Skills** (i.e. investigating components of problems/ideas, reasoning logically.

SOURCE: www.ukans.edu/~uces/major/bio.shtml
Examples of Careers that are Alternatives to Medicine
(divided according to the educational background required)

<table>
<thead>
<tr>
<th>Clinicians/Service Providers/Practitioners</th>
<th>Research/Investigative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Doctoral Level:</strong></td>
<td><strong>Doctoral Level:</strong></td>
</tr>
<tr>
<td>- Acupuncturist</td>
<td>- Forensic Scientist (Principal Investigator)</td>
</tr>
<tr>
<td>- Chiropractor</td>
<td>- Medical Anthropologist/Sociologist</td>
</tr>
<tr>
<td>- Dentist</td>
<td>- Medical/Health Historian</td>
</tr>
<tr>
<td>- Naturopath</td>
<td>- Research Scientist (Principal Investigator)</td>
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<tr>
<td>- Optometrist</td>
<td></td>
</tr>
<tr>
<td>- Osteopath (U.S. for training)</td>
<td></td>
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<tr>
<td>- Podiatrist (U.S. for training)</td>
<td></td>
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<tr>
<td>- Psychologist</td>
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<tr>
<td>- Psychotherapist</td>
<td></td>
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<tr>
<td>- Veterinarian</td>
<td></td>
</tr>
<tr>
<td><strong>Master’s Level:</strong></td>
<td><strong>Master’s Level:</strong></td>
</tr>
<tr>
<td>- Audiologist</td>
<td>- Biostatistician</td>
</tr>
<tr>
<td>- Clinical Nursing/Specialist</td>
<td>- Clinical Nursing Specialist</td>
</tr>
<tr>
<td>- Eating Disorder Therapist</td>
<td>- Clinical Pharmacist</td>
</tr>
<tr>
<td>- Genetic Counsellor</td>
<td>- Clinical Trials Coordinator</td>
</tr>
<tr>
<td>- Psychological Associate</td>
<td>- Community Health Investigator</td>
</tr>
<tr>
<td>- Psychotherapist</td>
<td>- Epidemiologist</td>
</tr>
<tr>
<td>- Social Worker</td>
<td>- Food Scientist</td>
</tr>
<tr>
<td>- Speech/Language Pathologist</td>
<td>- Psychometrist</td>
</tr>
<tr>
<td><strong>Bachelor’s Level:</strong></td>
<td>- Research Associate</td>
</tr>
<tr>
<td>- Cardiac Rehabilitation Specialist</td>
<td></td>
</tr>
<tr>
<td>- Child Life Specialist</td>
<td></td>
</tr>
<tr>
<td>- Dietician/Nutritionist</td>
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<tr>
<td>- Exercise Physiologist</td>
<td></td>
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<tr>
<td>- Head Injuries Counsellor</td>
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<tr>
<td>- Kinesiologist</td>
<td></td>
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<tr>
<td>- Midwife</td>
<td></td>
</tr>
<tr>
<td>- Nurse/Nurse Practitioner</td>
<td></td>
</tr>
<tr>
<td>- Occupational Therapist</td>
<td></td>
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<tr>
<td>- Pharmacist</td>
<td></td>
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<tr>
<td>- Physiotherapist</td>
<td></td>
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<tr>
<td>- Social Worker</td>
<td></td>
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<tr>
<td>- Therapeutic Recreationist</td>
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</tbody>
</table>

Specific Professions within Alternatives to Medicine

Chiropractor

What do they do?
Chiropractors diagnose and treat patients’ neuromuscular-skeletal disorders of the spine and other body joints by adjusting the spinal column or through other corrective manipulations.

<table>
<thead>
<tr>
<th>Work Description: What would I be doing?</th>
<th>Salaries/Wages:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide patient care including examining, recording and performing diagnostic tests</td>
<td>• In Ontario (source looked at certain regions within Ontario) a Chiropractor can earn from $35 and $50 a visit.</td>
</tr>
<tr>
<td>• Diagnose related disorders</td>
<td>• An individual can potentially earn more depending on their experience and qualifications. Visit the Career Cruising site (can gain access from Career Centre) to get specific salary ranges.</td>
</tr>
<tr>
<td>• Provide natural treatment of health disorders</td>
<td></td>
</tr>
<tr>
<td>• Instruct patients in the use of corrective exercises, lifestyles and nutrition</td>
<td></td>
</tr>
<tr>
<td>• Refer patients to medical care when appropriate.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place of Work: Who needs Chiropractors?</th>
<th>Education:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Private practice</td>
<td>• Minimum 3 years undergraduate studies, concentration in science</td>
</tr>
<tr>
<td>• Clinics in association with other health practitioners</td>
<td>• 4 year program approved by the Council on Chiropractic Education including 1 year of clinical placement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conditions for Work:</th>
<th>Opportunity to Grow:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 3 year undergraduate studies</td>
<td>• Progression to management positions</td>
</tr>
<tr>
<td>• Completion of a 4 year approved program of study</td>
<td>• Self-employed</td>
</tr>
<tr>
<td>• Completion of examinations by regulatory body</td>
<td></td>
</tr>
<tr>
<td>• Licensing by provincial regulatory body</td>
<td></td>
</tr>
</tbody>
</table>
Below are the names and contact information of institutions and organizations that may prove helpful in your further search for information about this career.

<table>
<thead>
<tr>
<th>Professional Associations:</th>
<th>Institutions for Certification:</th>
</tr>
</thead>
</table>
| • Ontario Chiropractic Association  
  www.chiropractic.on.ca | • Canadian Memorial Chiropractic College  
  www.cmcc.ca |

<table>
<thead>
<tr>
<th>Helpful Skills and Qualities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Kind and compassionate</td>
</tr>
<tr>
<td>• Strong interpersonal skills</td>
</tr>
<tr>
<td>• Able to work on your own</td>
</tr>
<tr>
<td>• Computer Skills</td>
</tr>
<tr>
<td>• Teamwork skills</td>
</tr>
<tr>
<td>• Empathetic</td>
</tr>
<tr>
<td>• Willing to work shift work</td>
</tr>
<tr>
<td>• Organized and flexible</td>
</tr>
<tr>
<td>• Good communication skills</td>
</tr>
<tr>
<td>• Problem solving</td>
</tr>
<tr>
<td>• Numeracy</td>
</tr>
</tbody>
</table>

**SOURCE: NOC Binders- Health Related Careers (312)**

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**Speech-Language Pathologist**

**What do they do?**
Speech-Language Pathologists diagnose, evaluate and treat human communication disorders including hearing, speech, language and voice disorders.

**Related Occupations:**
- Speech-Therapist
- Speech-Language Clinician

**Salaries/Wages:**
- In Ontario (source looked at certain regions within Ontario) a Speech-Language Pathologist can earn from $28.50-$31.53 per hour.
- An individual can potentially earn more depending on their experience and qualifications. Visit the *Career Cruising* site (can access from Career Centre) to get specific salary ranges.
### Work Description:
**What would I be doing?**
- Administer tests and examinations
- Evaluate speech, language, voice and cognitive-linguistic disorders
- Plan and implement individual and group programs
- Conduct research on speech and communication disorders
- Develop and supervise programs for communicative disorders assistant

### Prospects of Employment:
- Ontario- good

### Place of Work:
**Who needs Speech-Language Pathologists?**
- Hospitals
- Community/Public Health Centres
- Extended-Care Facilities
- Day Clinics
- Rehabilitation Centres
- Educational institutions
- Private Practice
- Children’s treatment centres

### Education:
- 4 years Honours degree **THEN**
- Master’s degree or Doctorate in Speech Language Pathology.

### Conditions For Work:
- University graduate degree in Speech-Language Pathology
- Licensing with provincial regulatory body- College of Audiologists and Speech-Language Pathologists of Ontario.

### Opportunity To Grow:
- Progression into management positions, i.e. Director of Speech-Language Pathology
- Self-employment

Some of the names and contact information of organizations and institutions that may assist you in your further search for information about this career have been provided below:

### Universities Across Canada that offer a Master of Science Program in Speech and Language Pathology
- University of Alberta- Master of Speech Language Pathology
- University of Alberta- M.Sc. in Speech Language Pathology
- University of Alberta- M.Sc. Speech Pathology & Audiology
- Dalhousie University- M.Sc. in Human Communication Disorders
- University of Toronto- M.H.Sc. in Speech Language Pathology
- University of Toronto- M.Sc. in Speech Language Pathology
- University of Western Ontario- M.Sc. in Audiology and Speech Language Pathology
- University of Western Ontario- M.C.I.Sc. in Audiology and Speech Language Pathology

*SOURCE: Association of Universities and Colleges of Canada.
http://oraweb.aucc.ca/showdcu.html
Can access this site from Career Centre site - under Further Education*
Institutions for Certification
College of Audiologists and Speech-Language Pathologists of Ontario
www.caslpo.com

Professional Associations
- Ontario Association of Speech-Language Pathologists and Audiologists
  www.osla.on.ca

SOURCE: NOC Binders- Health Related Careers (312)

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**Occupational Therapist**

**What do they do?**
Occupational Therapists develop individual and group programs for people affected by illness, injury, developmental disorders, emotional or psychological problems and aging to maintain, restore or increase their ability to care for themselves and engage in work, school or leisure. They also develop and implement health promotion programs with individuals, community groups and employers.

<table>
<thead>
<tr>
<th>Related Occupations:</th>
<th>Salaries/Wages:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clinical Occupational Therapist</td>
<td>• In Ontario (source looked at certain regions within Ontario) an Occupational Therapist can earn up to 28.97 per hour</td>
</tr>
<tr>
<td>• Community Occupational Therapist</td>
<td>• An individual can potentially earn more depending on their experience and qualifications. Visit the Career Cruising site (can access from Career Centre) to get specific salary ranges.</td>
</tr>
<tr>
<td>• Occupational Therapist, Research and Development</td>
<td></td>
</tr>
<tr>
<td>• Occupational Therapist,</td>
<td></td>
</tr>
<tr>
<td>• Rehabilitation Consultant</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Work Description:</th>
<th>Prospects of Employment:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What would I be doing?</strong></td>
<td>• In Ontario (source looked at only this region)- very good</td>
</tr>
<tr>
<td>• Assess function and adaptive behaviour</td>
<td></td>
</tr>
<tr>
<td>• Treat disorders that affect function or adaptive behaviour</td>
<td></td>
</tr>
<tr>
<td>• Develop, maintain, rehabilitate or augment function</td>
<td></td>
</tr>
<tr>
<td>• Work with other health care professionals</td>
<td></td>
</tr>
<tr>
<td>• Develop/implement health promotion programs</td>
<td></td>
</tr>
<tr>
<td>• Supervise support staff and students</td>
<td></td>
</tr>
</tbody>
</table>
### Place of Work:

**Who needs Occupational Therapists?**
- Health care facilities
- Schools
- Rehabilitation centres
- Community health programs
- Extended-care facilities
- Sports organizations
- Private clinics
- Industry

### Education:
- Bachelor of Science and **NOW** need Master of Science in Occupational Therapy

### Conditions for Work:
- University degree in Occupational Therapy
- Licensing with regulatory body - the College of Occupational Therapists of Ontario

### Opportunity to Grow:
- Senior Position
- Management
- Research and development
- Self-employment
- Specialization

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**Universities Across Canada that offer a Master of Science Program in Occupational Therapy**

Some of the names and contact information of organization and institutions that may assist you in your further search for information about this career have been provided below:

- University of Alberta- M.Sc. in Occupational Therapy.
- University of British Columbia- Master of Occupational Therapy (M.O.T.)
- University of British Columbia- Master of Rehabilitation Sciences (M.R.Sc.)
- University of Manitoba- Master of Occupational Therapy
- Dalhousie University- M.Sc. in Occupational Therapy
- McMaster University- M.Sc (OT)- Master of Science in Occupational Therapy
- McMaster University- M.Sc. in Rehabilitation Science
- Queen’s University- M.Sc. In Rehabilitation Science
- Queen’s University- M.Sc. in Occupational Therapy
- University of Toronto- M.Sc. in Rehabilitation Science
- University of Toronto- M.Sc. in Occupational Therapy
- University of Western Ontario- Master of Clinical Science in Occupational Therapy
- McGill University- M.Sc. in Rehabilitation Science

**SOURCE:** Association of Universities and Colleges of Canada

http://oraweb.uacc.ca/showdcu.html

*Can access this site from Career Centre site - under Further Education.*
Institutions for Certification

- College of Occupational Therapists of Ontario www.coto.org

Professional Associations

- Ontario Society of Occupational Therapists www.osot.ca
- Canadian Association of Occupational Therapists www.caot.on.ca

SOURCE: NOC Binders- Health Related Careers (312)

Cytology Technologist

What do they do?
Cytology Technologists (also called Cytotechnologists) microscopically study human cells collected from organs in the body and processed on glass slides to detect and diagnose precancerous changes, cancers and some infections. A Cytology Technologist looks over the entire microscope slide, marking areas showing significant cellular changes in a cell's size, shape and colour making a diagnosis and sends some slides for review by a pathologist.

<table>
<thead>
<tr>
<th>Work Description: What would I be doing?</th>
<th>Skills Required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cytology Technologists play a key role in the fight against cancer. Working in collaboration with other health professionals, Cytology Technologists provide information used to assess patient health and aid in diagnosis of cancer.</td>
<td>• Cytology Technologists must be accurate, patient and have strong analytical and problem solving skills to rise to the challenge of making critical diagnoses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Places of Work: Who needs a Cytotechnologist?</th>
<th>Prospects and Related Careers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hospitals</td>
<td>• The growing reliance on laboratory tests in medical diagnoses means there is a high demand for Cytology Technologists, both locally and internationally.</td>
</tr>
<tr>
<td>• Private laboratories</td>
<td></td>
</tr>
<tr>
<td>• Commercial companies e.g. pharma and biopharma industry</td>
<td></td>
</tr>
<tr>
<td>• Career advancement areas include education, laboratory management, research, sales and technical consulting</td>
<td></td>
</tr>
</tbody>
</table>

www.utm.utoronto.ca/careers
Universities and Institutions Offering Programs in Cytotechnology

- University of Manitoba - Bachelor of Allied Health Science (diagnostic cytology)
- Dalhousie University - Bachelor of Health Science (diagnostic cytology)
- Michener Institute for Applied Health Science - Advanced Diploma in Diagnostic Cytology program
  - Educational admission requirement is a Canadian certified Medical Laboratory Technologist or a Bachelor of Science degree and one full-time university level credit in both human anatomy and human physiology with a minimum grade of at least 60%
  - Graduates are eligible to write the national certification examination conducted by the Canadian Society for Medical Laboratory Science (CSMLS). Certification qualifies the graduate for registration with the College of Medical Laboratory Technologists of Ontario (CMLTO), which is a requirement to practice in Ontario. This certification provides mobility throughout Canada and it is recognized around the world.

SOURCE: www.michener.ca/intl/diag_intl.php

Intellectual Property Lawyer

What do they do?

This profession provides great opportunities of combining Science with Law. For instance, some Intellectual Property Lawyers specialize in representing a number of pharmaceutical companies in patent infringement disputes. They can also assist Scientists in protecting their inventions. Those specializing in such cases are thought to be a patent attorney practicing patent law.

What educational path do most people take in Canada to become an Intellectual Property Lawyer?

In Science related areas, individuals that are want to become Intellectual Property Lawyers in Canada typically finish an undergraduate B.Sc. degree (although not limited to this, gives students a strong science background) and then continue to do their LLB (Law School-Bachelor of Laws).

What is a typical day of work for a patent attorney or agent?

Some patent attorneys, especially associates in large-firm practice, spend nearly the whole day working on patent litigations. This can consist of digging through boxes-full of documents, supervising paralegals who are stamping numbers on boxes-full of documents, and assisting in the delivery of boxes of documents to deposition sites and to court for trial. After some time, the associate's responsibilities may increase to include taking depositions and defending depositions (questioning witnesses and representing witnesses who are being questioned).

Still other patent attorneys, especially those in corporate medium-sized and smaller patent firms, spend most of the day preparing and prosecuting patent applications. Most patent agents do this also.
Another category of patent work is licensing. Some people spend all day doing licensing (for example, those who work in the patent licensing department of a large university or large corporation). This involves contract drafting, but more importantly requires some negotiating skill and experience.

Still another category is opinion work. A client will want to know whether some proposed product or course of action will infringe the patent rights of others. To write an opinion letter, the lawyer must be familiar with the patent or patents being discussed and with the client's technology. Sometimes the result of such study is a modification of the client's product to avoid infringement.

SOURCES: www.patents.com/opportun.htm and NOC Binders- Health Related Careers (312)

Career Profiles of UofT and UTM Alumni

Refer to the Alumni binder in the Career Centre for more profiles!

Name: Carolyn Ann Fitzpatrick
Degree: B.Sc.: Specialist in Psychology; Major in Exceptionality in Human Learning
Year of Graduation: 1990
Post Grad Degrees/Diplomas: Master of Science, Psychology, currently doing PhD, Interdisciplinary Studies.

Current Position: Carolyn has had several part-time positions.
Summary of Key Positions:
1. BC Children’s Hospital, Youth and Family Counsellor, Eating Disorders Program, ongoing.
2. UBC, Dept of Psychiatry, Research Assistant, Eating Disorders.
3. Kamloops Mental Health Centre, Eating Disorders Counsellor for 6 months.
4. Vancouver Career College, College Instructor, 2 years on and off.
5. Chilliwack School Distract, Teaching Assistant, Special Needs, 3 months so far.

Key Experiences: As a student, Carolyn has always worked on the Erindale Campus. She worked in the registrar’s office for 2 summers and the school year in-between; She worked in the Psychology Office (PUMP room) as an Assistant to students; She T.A.’ed a first year psychology course after graduating; She was also a member of the psychology club.

Word of Advice: Carolyn says that when one graduates with a Psychology degree, they should not always count on starting in a career, per se. They might end up working crazy hours in several different jobs. Carolyn strongly recommends doing a professional degree, or, at least, take a program that enables practical experiences in a chosen field.

Name: Shirley Chan
Education: B.Sc., Molecular Biology
Current Position: Genetics Educator/ Content Developer, DNA Learning Centre
Background of Current Position: Shirley Chan is currently working as the Genetics Educator/Content Developer at the DNA Learning Centre (DNALC), an educational arm of Cold Spring Harbour Research Lab in New York State. The Centre’s focus is to educate high school and primary school children about DNA through classes and labs. Students can, for instance, participate in labs like DNA restriction analysis, DNA extractions, or fingerprinting. The DNALC also provides teacher-training courses to bring teachers up to date on new scientific techniques.

Chan was hired to write content for a new project. Dr. Watson wants an interactive genetics textbook on the internet to provide authoritative and interesting information. Chan’s job is to write the text, help with the design and storyboard any information that needs to be animated or put into a game format—whatever is necessary to make the site a fun and educational experience for children.

Chan is a Toronto native who completed all her post-secondary degrees at the University of Toronto. She confesses to having spent a “great chunk” of her life in school. In terms of her publications, she is the first author of a 1997 Cell paper and one of the co-authors on another 1997 Cell article. Her major work experience during university was in her research lab which was located off the main campus.

Word of Advice: Chan exhorts graduate students to know what they want. Being unclear and unfocussed after graduation will only lead to frustration. Chan found that once she made the decision to leave academia, “life actually got easier.” She is not advocating the non-academic life; she is just saying that students make the decision EARLY. Then once a decision is made, individuals must stick to it. Further, they should then do research, target potential employers, volunteer, network and join professional organizations in order to find that first full-time employment opportunity.

Name: Ameet Dhillon
Degree: B.Sc.: Specialist in Psychology; Major in Human Exceptionality in Learning
Year of Graduation: 1999
Post Grad Degree: Bachelor of Science Occupational Therapy

Current Employment: NRIO- Brain injury clinic that provides cognitive rehabilitation to client’s who sustained a brain injury or spinal cord injury usually after a motor vehicle accident. The goal is to provide opportunities to become independent in self-care activities, become productive and continue living with their brain injury.

Oakville Trafalgar Hospital- Work as a casual occupational therapist in the hand unit, orthopaedic unit and stroke to provide patients with safe discharge planning.

Concentra Integrated Services- Complete home assessments, job site assessments, attendant care assessments, ergonomic assessments and intervention.

Characteristics: According to Dhillon, in his profession, one is likely to be an empathic person that finds it rewarding to work with individuals with disabilities. The goal is always to advocate for the person and provide them with the means to enable them to reach their maximum level of independence.
**Key Experiences:** Dhillon volunteered at Milton District Hospital in their OT department (and now works for the amalgamated Oakville Hospital). In addition, Dhillon volunteered at a brain injury community support group and helped out in a classroom that had children with autism.

**How to Job Search:** When Dhillon graduated from the OT program, he consulted with a head hunter that lined up many interviews. He also searched workopolis page. He found that his work experience and an informative resume that outlined his skills set worked the best. Dhillon tailored each resume for a specific job. He also acquired positions based on referrals from other OT colleagues with whom he worked or attended school. Dhillon claims that this helped the most.

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*SOURCE: Career Centre Alumni Binder*

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**How to Gain Experience**

Start early by seeking relevant summer, part-time and volunteer opportunities. This will help you gain experience and develop the skills that employers want. There are several opportunities both on and off campus that can help you gain the pertinent work/volunteer experiences. Register with the Career Centre online at [www.utm.utoronto.ca/careers](http://www.utm.utoronto.ca/careers) to access all summer, part time, volunteer and full time job postings.

**On-Campus Opportunities**

**Credit Research Courses**

The *Research Opportunity Program (ROP)* provides a great way to gain experience at UTM. ROP allows students in their second year (i.e. those who have completed at least 5 credits but not more than 9) to earn one full course credit by participating in a faculty member’s research project. ROP courses are designated as BIO 299Y5Y, CHM 299Y5Y etc. More information is available at [www.utm.utoronto.ca/research/rop/](http://www.utm.utoronto.ca/research/rop/)

Senior year students should consider *4th year research courses* such as BIO 481Y5Y. These courses allow the student, under the supervision of a faculty member, to do more independent research than the ROP. There are also several internship opportunities for Life Science students (For instance, Biology Department offers some great internship opportunities- refer to their site for more information). Through a part-time, unpaid work commitment, you will apply the expertise you have gained through your previous course work. Placements will be made at local conservation authorities, planning departments, consulting companies, corporations, federal agencies, and other relevant organizations. Please consult the website for further details.

You should keep in mind that for all the above positions, it is essential to start getting to know your professors well so that if you decide to do a research course it should not be as difficult to find a supervising professor.
OSAP Work-Study Jobs
The OSAP Work Study Program provides students with an opportunity to work on-campus during the academic year and gain academic/career related experience. For further information on complete eligibility requirements and information about consideration for special circumstances please visit: www.utm.utoronto.ca/careers/work_study.html

Remember to start looking for these jobs early on during the academic year, as they are posted on the Career Centre site in early September. UTM students are eligible for positions at all 3 campuses at U of T. In past years, there have been a number of research/lab assistant job postings in the varying science disciplines.

Part-Time and Summer Jobs
If you are not eligible for OSAP, you can still find part-time work on campus. This can be achieved by either checking job postings on your Career Centre account (for on-campus opportunities, select the advance search, and choose the campus that you want) or by selecting the ‘Gain Experience’ link, “On-Campus”.

On-Campus Volunteer Positions
Search for volunteer opportunities online with your Career Centre account. Volunteer information is also available in the “On-Campus Volunteer Opportunities” Binder at the UTM Career Centre. Volunteer opportunities such as Community on Campus and the AccessAbility Centre are ideal if you are interested in pursuing a career in occupational therapy, physiotherapy, rehab medicine, or if you are interested in helping individuals with special needs.

Keep in mind that all volunteer positions might not be posted. If you are interested in volunteering in a lab, it is a good idea to personally approach a professor and ask them if there are any openings to volunteer in their lab. This type of experience will not only give you the opportunity to develop your skills, but will also give you the chance to build contacts within the department and lab.

UTM Clubs
Another ideal way to gain experience is to join clubs around campus. While joining any kind of club will help you build on your leadership and general transferable skills, some clubs that are relevant if you are interested in Medicine or its Alternatives are as follows:

- Pre-Med Club
- Erindale Biology Society (EBS)
- Erindale Chemistry and Physics Society (ECPS)
- Psychology Association of Undergraduate Students @ Erindale
- Forensic Society (IVNVI) at UTM
- Pre-Dental Society (PDS)
Off-Campus Opportunities

Off-Campus Summer and Part-Time Positions
Samples of recent part time and summer job listings from the Career Centre website include:

- Sunnybrook & Women’s College Heath Sciences Centre- Student Research Assistant
- Grandview Children’s Centre- Personal Support Worker
- Conagra Foods- Summer Student Lab Technician
- Mount Sinai Hospital- Administrative Intern.
- Pepsi Bottling Group- Laboratory Technician (Microbiology)

Off-Campus Volunteer Positions
Volunteering can help you develop relevant skills and better understand a specific career path. In addition to the Career Centre website, you can also refer to the “Off-Campus” Volunteer Opportunities binder to gain more information about specific volunteer positions of interest.

The UTM Career Centre also hosts a Volunteer Fair usually in late September. Just to name a few of the volunteer groups that attended this past September that might be of your interest is as follows:

- Alzheimer Society Peel
- Canadian Cancer Society
- Canadian Red Cross
- The Lung Association
- UofT, AccessAbility Resource Centre
- UTM, Let's Talk Science Partnership Program
- UofT, Community on Campus
- Trillium Health Centre

Internship Directory
Another great way to gain experience is through internships! You can search for internships through the Career Centre Internship Directory available in hard copy and online by logging on to your Career Centre account. Examples of internships that might be of interest to students wishing to pursue careers in Alternative to Medicine are:

- Oxfam Quebec- assisting in humanitarian aid
- Summer Fellowships in Genomics with the Genomic Institute

Some Other Great Internship Opportunities

- National Research Council- NRC sponsors a number of programs to provide students the opportunity to develop their skills and expertise, while at the same time, gaining valuable experience working with research groups or leaders in Canadian government laboratories and research institutions (http://careers-carrieres.nrc-cnrc.gc.ca/careers/career_main.nsf/pagee/emplprograms.html)
- Natural Resources Canada- Science & Technology Internships- Recent Graduates in Science or Engineering is provided an opportunity by The Science and Technology Internship Program to gain meaningful work experience. Potential interns will work under the direction of experienced scientists on cutting edge research and
development projects with NRCan partners. More information can be obtained from their website: http://www.nrcan.gc.ca/css/hrsb/st/intern-e.htm

**Employer Directories**

Search through the Career Centre Employer Directories to find work experiences in specific fields. You can search the directories by education, location, field of interest and through many other options. Keep in mind that each directory will have its own unique way of organizing information. An example of how one particular directory is organized and one alternative to search through it is as follows:

<table>
<thead>
<tr>
<th>Bachelor of Science- Health Sciences</th>
<th>Bachelor of Science- Physical Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Canadian Blood Services</td>
<td>- Community Care Access, Peel</td>
</tr>
<tr>
<td>- Canadian Pharmacist’s Assn.</td>
<td>- Hospital for Sick Children</td>
</tr>
<tr>
<td>- Canadian Institute for Health Info</td>
<td>- North York Community Care</td>
</tr>
<tr>
<td>- Community Care Access, Peel</td>
<td>- Scarborough Hospital</td>
</tr>
<tr>
<td>- Centre for Addictions and Mental Health</td>
<td>- St Joseph’s Health Centre, Toronto</td>
</tr>
<tr>
<td>- Children’s &amp; Women’s Health Centre</td>
<td>- Toronto Community Care Access.</td>
</tr>
<tr>
<td>- Gamma-Dynacare</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor of Science- Speech Pathology</th>
<th>Bachelor of Science- Occupational Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Canadian Hearing Society</td>
<td>- Community Care Access, Peel</td>
</tr>
<tr>
<td>- Hospital of Sick Children</td>
<td>- Hamilton Health Sciences</td>
</tr>
<tr>
<td>- Mount Sinai Hospital</td>
<td>- Ontario March of Dimes</td>
</tr>
<tr>
<td>- Toronto Grace Hospital</td>
<td>- Toronto Community Care Access.</td>
</tr>
<tr>
<td>- University Health Network</td>
<td>- Toronto Rehabilitation Institute</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor of Science-Psychology</th>
<th>Bachelor of Science- Nutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Centre for Addiction and Mental Health</td>
<td>- Maple Lodge Farms</td>
</tr>
<tr>
<td>- Children’s Hospital of Eastern Ontario</td>
<td>- Mount Sinai Hospital</td>
</tr>
<tr>
<td>- Kids Help Phone</td>
<td>- Nestle Canada</td>
</tr>
<tr>
<td>- Toronto Association for Community Living</td>
<td>- St Michael’s Hospital</td>
</tr>
<tr>
<td>- Trillium Health Centre</td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** The Career Directory (2005 Edition). Refer to this source for further details on the following employers. Note: Only a handful of employers are mentioned here, a complete list of employers can be obtained from source directory or other available directories.

**Job Prospects and Trends in the Health Care Field**

In North America, the increasing demand for health care products and services and the restructuring of the health care system and fiscal restraint has resulted in changes to the health care system that calls for different human resource needs. In response, governments in the 21st century are planning for reinvestment in human resources development in the health field.

Part of the increased cost leading to strained budgets is the expense of rapidly advancing technology, particularly in pharmaceuticals. Another part can be assigned to the aging population. During restructuring and reform of health care, a great many health care workers lost their jobs. One consequence was a significant shortage of certain
types of health care workers. As new roles for those who provide health care services evolve, there will be an increase in the range of skills required by health care professionals, particularly IT skills. The growing demand in the industry, the existing shortage of workers, and the need for new and increased worker skill sets strongly impact the supply of workers in this field.

(Canadian Nurses Association, Nursing Strategy Consultation Paper, June 2000, p.6-14).

Government Employment Opportunities

When healthcare is mentioned, most people think of jobs within hospitals, clinics and labs. Many people do not realize that healthcare jobs can be found within each level of the government. The two primary federal employers of healthcare workers are Health Canada and Correctional Services of Canada. Positions within Health Canada include epidemiologists, health information coordinators, health risk assessment, toxicology specialists, and nurses. Correctional Services of Canada positions include pharmacists, nurses, and occupational therapists. The Royal Canadian Mounted Police also employ healthcare professionals (usually occupational health doctors or nurses).

There are also several internship opportunities available within the government. For more information, please refer to: www.internship.gov.on.ca - Ontario Internship Program.


UTM Career Centre Events, Resources & Services

Workshops
Various small workshops and seminars are designed to assist students in developing and pursing their career options.
- Breaking into Science
- Explore Your Careers Options
- Summer Job Search
- Medical School Information Session

Other workshops include:
- Resume & Cover Letter; Effective Interviews and Networking; Graduate School Information Session; “Now That I'm Graduating What's Next?”; “Work It!” program (for graduating students)

For more details on Career Centre events and workshops including dates/times, please refer to the Career Centre Website.

Career Fairs & Special Events
UTM Career Centre offers a number of fairs and special events throughout the year including:
- UTM Volunteer Fair
- Professional Schools Fair
- Professional School Information Sessions
• Career Expo
• Summer Job Fair
• Internship Events
• Networking Breakfast
• Employer Information Sessions
• Career Panels

For more information on these fairs and events, including the dates/times, please visit the Career Centre website.

Resume Critiques
Get feedback on your resume or cover letter by attending an individual 30-minute Critique with one of our professional staff. Sign up online to make same day appointments.

Individual Career Counselling
If you are unsure about your career direction or how your academic major relates to work after graduation, you may find it helpful to make an individual appointment with a career counsellor. You can make an appointment by either dropping into the Career Centre (SE3094) or calling 905-828-5451.

Job Coach
If you have already decided to pursue a career in a certain field, you will find it helpful to book an individual appointment with our Job Coach, Lynn Sharer, who can assist you in organizing your search and providing you with the marketing tools to help you successfully land the job you want.

Extern Program
This is a great program if you wish to discover more about a career through job shadowing. Learn more about a career area of your choice through a 1-5 day placement with a career professional in the field of your interest. Extern program takes place twice during the year: February during Reading week and mid-May. For exact details on the dates, when applications are due and criteria to apply, please refer to the Career Centre website. In the past students have had a chance to job shadow Physiotherapists, Occupational Therapists and many other healthcare professionals!

UTM Alumni Mentorship Program
This program gives students’ in their 3rd or 4th year an opportunity to gain first hand knowledge from Alumni Mentors’ in their field of interest. Students are matched with an appropriate mentor. Some examples of past UTM mentors: Occupational Therapist, Physiotherapist, Chiropractor, Health Administrator and Dentist. Refer to Career Centre website for further details.

www.utm.utoronto.ca/careers
Electronic Resources

Career Cruising
This website has over 400 different careers and provides a systematic approach to learn more about these varying careers. There are many different career listings that might be of interest to students wishing to pursue careers in Alternatives to Medicine. Examples include Psychologist, Optometrist, Genetic Counsellor, Dietician/Nutritionist, and Audiologist just to name a few. A great thing about this site is that it is Canadian based. Each career option on this site is divided into different subsections such as Career Description, Education, Career Path, Profiles and Interviews of professionals in the field and Related Jobs. It is possible to search by school subject, cluster, index, or use career selector or matchmaker to see what careers option best suits you.

Career Cruising is only accessible from the Career Centre. Please feel free to come and ask our Student Career Assistants to help you get access this site.

Vault
Gain free access from the Career Centre Website to the VAULT -Online Career Library. The Vault is comprised of Career Research Guides which includes information on interview strategies, careers in specific industries and job-search tips. The Vault also includes Employer Research which provides full profiles of more than 3,000 companies and leading industries (example: companies like Bayer and many more). Industry overviews and occupation profiles, which look at the career outlook for 53 top career paths (examples- Pharmaceutical Sales Representative, Microbiologist), are also incorporated in Vault.

Useful Links
• There are several useful links from the Career Centre Site that are pertinent to students wishing to work in health related fields. For instance, on the Career Centre main page, if you click on ‘Explore Careers’ you can gain access to useful information such as ‘Careers by Major’. This link provides a guide for students in specific majors such as Biology, Psychology (coming soon) and Forensic Science (coming soon). You can also download past panel packages and also find further helpful weblinks.

• There are several weblinks for healthcare occupations in the “Explore Careers” section. For instance, the site Career Matters gives information about Medicine and Health Care fields
  http://www.ilc.org/cfmx/CM/Careers/cm_career_themes.cfm?theme_id=10

• You can also find out more about specific graduate schools by clicking the ‘Further Education’ link. For instance, you can search through specific graduate schools in Ontario such as Psychology Graduate schools. There are also links on this site to help you find out which graduate schools offer the program of your interest. One of these sites include: Association of Universities and Colleges of Canada (AUCC)-
  http://oraweb.aucc.ca/showdcu.html
Some of the other relevant websites include:

- [http://nextwave.sciencemag.org/ca/](http://nextwave.sciencemag.org/ca/) - *Science*'s Next Wave is a weekly online publication that deals with the science job market, scientific training and career development. The Next Wave is published by *SCIENCE* magazine and the American Association for the Advancement of Science. A Canadian edition link is also available.
- [www.canadapharma.org](http://www.canadapharma.org) – information about pharmaceutical research and development companies and organizations, publications, areas of new medicinal research.

Print Resources

**NOC Binders**

There is a wide selection of NOC binders that are applicable to student’s wishing to pursue Careers in Alternatives to Medicine. Here are examples of some of the NOC binders that the Career Centre has available:

- HEA 310 – Health Related (2 binders)
- HEA 311 – Medical Specialties
- HEA 312 – Chiropractic, Naturopathy, Alternative Medicine
- HEA 313 – Pharmacy and Nutrition
- HEA 314 – Therapists
- HEA 315 – Nursing, Public Health
- HEA 316 – Medical Technologists
- NAT 212 – Life Sciences

Plus many more!

**Books**

There are books available in the Career Centre that cater to the interests of students wishing to work in the healthcare field. Examples of some of the books that we have are as follows:

- *Careers for Scientific Types and Other Inquiring Minds*, VGM Career Horizons
- *Great Jobs for Biology Majors*, *Great Jobs for Psychology Majors*, and many more along the healthcare lines.
- *The Wetfeet Insider Guide to Industries and Careers for Undergraduates (2004)* (e.g.: p. 14, pharmaceuticals and biotechnology; p. 72, health care; p. 211, research). *Note: American based information*

**Networking Binder**

The Networking Binder is an ideal resource if you are looking to speak with a professional to learn more about a career choice or want to learn the techniques of doing an information interview. Some examples of professions include: Optometrist (HEA 311); Chief Scientific Officer (NAT 210).