



# The DDTP Hands-on Practice Program





# EXPERIENCING THE INDUSTRIAL MILIEU

**Contact:** 

Aube Mamias

Phone: 514.934.1934 x34460

Fax: 514.843.1511

E-mail: trainingindrugdev@mcgill.ca











### Bioconjugate Chemistry Internship at Angiochem

Angiochem is seeking a highly motivated biochemistry student interested in participating in an ongoing research projects for 2 to 3 months. The student will be trained by a senior scientist and involved in the chemical synthesis of novel bioconjugates between enzymes and peptide molecules. The candidate will also learn several techniques for purification (AKTA etc.) and characterization (SEC, MALDI-TOF, SDS-PAGE, Western Blot etc.) of those bioconjugates. The therapeutic utility of the conjugates will be further evaluated in enzymatic and pharmacological assays, which will be performed by other colleagues, but if interested, the student may learn some of those techniques. Angiochem offers a dynamic work environment and strong support for the student career development.

**Eligibility:** Students of DDTP mentors

**Location:** Angiochem

201 President-Kennedy Ave., Suite PK-2880

Montreal, Quebec H2X 3Y7

angiochem.com

**Duration:** 2 to 3 months

**To Apply:** Send CV to <u>trainingindrugdev@mcgill.ca</u>



#### **Internship at Neomed**

Created in November 2012, and located in the Technoparc Montreal, NEOMED is a not-for-profit, public-private alliance dedicated to drug discovery and development of new drugs for very early stage (target validation) to clinical proof-of-concept (early phase II). NEOMED acts as a foster home for promising assets emerging from academia and biotechnology companies. NEOMED is pioneering an innovative approach to drug development, with a clear mission to bridge the gap between early stage innovations and the healthcare needs of society.

We provide industry-level drug discovery and development expertise and funding to bring promising therapeutic approaches up to human proof-of-concept, a stage where the projects will become attractive to the biopharmaceutical industry or as the basis for the creation of solid start-up companies in Quebec.

NEOMED has a sophisticated model where selection of assets entering the portfolio is based on multiple parameters: science, feasibility and value to patients and the bio-pharma community. We would like to improve the model used for selection of assets, more specifically with regards to potential assets in oncology during the clinical phase.

**Eligibility:** Students of DDTP mentors

**Location:** Technoparc

Montréal, Ville Saint-Laurent

**Duration:** 2 to 3 months

**To Apply:** Send CV to <u>trainingindrugdev@mcgill.ca</u>



#### Biology Research Internship at Pharmascience Inc. - January 2015

DEPARTMENT: Biology (Research Division)

JOB DESCRIPTION:

Pharmascience Inc. is currently seeking a highly motivated candidate for an internship position within the Biology Group. The student will be involved in a diversity of research activities focused on the characterization of novel compounds for the treatment of inflammatory diseases. The candidate will participate in the development and performance of disease-specific in vitro cellular assays for evaluation of compound potency. He (she) will also be trained to perform assays for measurement of in vivo compound effects in plasma/tissues from rodent models of inflammatory diseases. The student will work within a small dynamic group with cross-functional activities supporting multiple teams in the drug discovery process. The candidate will have the unique opportunity to liaise with colleagues in Medicinal Chemistry, In Vivo Pharmacology, Biochemistry and Bio-Analytical Chemistry. This will provide an opportunity to gain an enhanced understanding of the steps involved in the discovery and optimization of novel compounds, and the impact of their work on this process.

**Eligibility:** Students of DDTP mentors

**Location:** McGill University

**Duration:** 2 to 3 months

To Apply: Send CV to <a href="mailto:trainingindrugdev@mcgill.ca">trainingindrugdev@mcgill.ca</a>



## Intern Biology student – Janvier 2015 VERTEX PHARMACEUTICALS (CANADA) INC.

**DEPARTMENT:** Biology **JOB DESCRIPTION:** 

Vertex creates new possibilities in medicine. Our team discovers, develops and commercializes innovative therapies so people with serious diseases can lead better lives. Vertex scientists and our collaborators are working on new medicines to cure or significantly advance the treatment of hepatitis C, cystic fibrosis, rheumatoid arthritis and other life-threatening diseases.

Founded more than 20 years ago in Cambridge, Mass., we now have ongoing worldwide research programs and sites in the United States, United Kingdom and Canada.

Vertex Pharmaceuticals (Canada) Inc. (located in Laval, Quebec) is currently seeking a candidate within the Biology Department. As part of this internship, the candidate will have the opportunity to work with a team of more than 20 biologists. He (she) will participate to various activities within the Biology Department, but mainly on the evaluation of new therapeutic approaches to treat inflammatory bowel diseases.

The candidate will participate to cellular and/or molecular biology experiments and to the characterization of small molecules in various biological assays using advanced instruments. He (she) will have to follow good laboratory practices and security rules and regulations as specified by Vertex heath and security guidelines.

At Vertex, learning by doing is what we're all about. As an intern with us, you will have the opportunity to learn about the pharmaceutical industry from a hands-on perspective. You will learn from some of the brightest people in the industry, while working on projects geared toward helping you obtain real life experience.

The Vertex Internship Program offers you the opportunity to be part of a unique, fast-paced, and innovative pharmaceutical company – one that is focused on creating new possibilities in medicine, so people with serious diseases can lead better lives. The company offers a base salary and the reimbursement of transportation.

The prerequisites in order to apply for the internship program at  $\mbox{\sc Vertex}$  are :

M.Sc. (In progress) in the following areas: Biology, Pharmacology, or biopharmaceutical sciences;

Ideally proven experience in at least one internship completed;

Good knowledge of techniques in cell biology;

Strong ability to read and understand scientific articles. Integrate, analyze and interpret results;

Demonstrates the ability to effectively work in a team with interactions with members of a multidisciplinary team and the ability to work independently;

Be eligible to a funding for the internship course; Good communication in English and French is an asset.

Eligibility: Students of DDTP mentors

Location: Vertex, Laval, QC Duration: 2 to 3 months

To Apply: Send CV to <a href="mailto:trainingindrugdev@mcgill.ca">trainingindrugdev@mcgill.ca</a>

## Stagiaire en Biologie - Janvier 2015 VERTEX PHARMACEUTIQUES (CANADA) INC.

**DÉPARTEMENT :** Biologie **DESCRIPTION DE POSTE:** 

Vertex crée de nouvelles possibilités dans le domaine de la médecine. Nos équipes découvrent, développent et commercialisent des thérapies innovantes pour que les personnes atteintes de maladies graves puissent vivre mieux. Les chercheurs de Vertex et nos collaborateurs travaillent sur de nouveaux médicaments pour guérir ou améliorer significativement le traitement de l'hépatite C, de la fibrose kystique, de l'épilepsie, la polyarthrite rhumatoïde et d'autres maladies potentiellement mortelles.

Fondée il y a plus de 20 ans à Cambridge, dans le Massachusetts, Vertex a aujourd'hui des programmes de recherche dans le monde entier et des sites de recherche aux États-Unis, au Royaume-Uni et au Canada.

Vertex Pharmaceutiques (Canada) Inc (situé à Laval, Québec) est actuellement à la recherche d'un ou d'une candidat(e) au sein de son département de Biologie. Dans le cadre de ce stage, le ou la candidat(e) aura l'occasion de travailler avec une équipe de plus de 15 biologistes. Il (elle) prendra part à la plupart des activités courantes du département de biologie, mais principalement à l'évaluation de nouvelles approches thérapeutiques pour le traitement des maladies inflammatoires de l'intestin.

Le ou la candidat(e) participera à des expériences en culture cellulaire et/ou biologie moléculaire et à la caractérisation de molécules dans différents essais biologiques à l'aide d'instruments de pointe. Il (elle) devra respecter les bonnes pratiques de laboratoires de

même que les normes de sécurité au travail telles que spécifié dans le guide de santé et sécurité de Vertex.

Chez Vertex, nous préconisons l'apprentissage par la pratique. En tant que stagiaire avec nous, vous aurez l'occasion d'en apprendre davantage sur l'industrie pharmaceutique à partir d'un point de vue pratique. Vous allez apprendre auprès de certaines personnes les plus brillantes de l'industrie, tout en travaillant sur des projets orientés vous aidant à acquérir une expérience concrète.

Le Programme de stages Vertex vous offre la possibilité de faire partie d'une société unique, rapide et innovatrice - celle qui est axée sur la création de nouvelles possibilités en médecine, afin que les gens atteints de maladies graves puissent mener une vie meilleure. La compagnie offre une rémunération de base ainsi que le remboursement des frais de transport en commun.

Les prérequis pour pouvoir appliquer dans un programme de stage chez Vertex sont :

M.Sc. (en cours) dans I'un des domaines suivants : Biologie, pharmacologie, ou sciences biopharmaceutiques;

Idéalement, une expérience démontrée d'au moins un stage en entreprise doit avoir été complétée.

Posséder de bonnes connaissances des techniques en biologie cellulai-

Fortes capacité à lire et à comprendre des articles scientifiques. Posséder des capacités à intégrer, analyser et interpréter des résultats.

Posséder une habileté à travailler en équipe et interagir avec les membres d'une équipe multidisciplinaire, aussi bien qu'une capacité démontrée à travailler de façon autonome

Être éligible à une bourse pour le stage en cours.

Être apte à communiquer clairement en français et en anglais.

## Miscellaneous Opportunities / Hands-on Practice



**McGill University** 

#### Hands-on Practice in Proteomics

The workshop would offer practical, hands-on training in a small group environment. It will begin on August 18 and held over 7 consecutive days, for up to 10 people. Methods will include sample preparation, 2D-gel analysis, tryptic digestion and LC/MS, data analysis, and possibly phosphopeptide enrichment. There is a \$500 fee per registered student. The DDTP will cover this fee for student working with DDTP mentor's lab. Interested laboratories should contact Aube Mamias: aube.mamias@mcgill.ca.

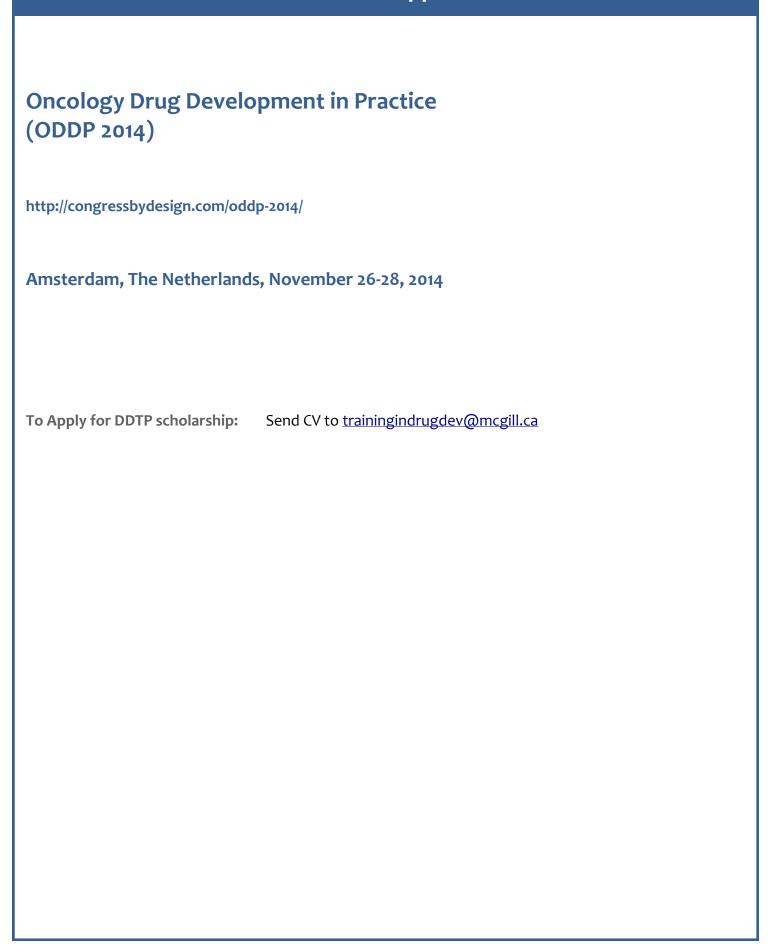
**Eligibility:** Students of DDTP mentors

Location: McGill University

**Duration:** 7 days starting August 18th

To Apply: Send CV to <u>trainingindrugdev@mcgill.ca</u>

## **Miscellaneous Opportunities**



## **Miscellaneous Opportunities**

Second	Annual	
--------	--------	--

## Phenotypic Drug Discovery

Maximizing Information in Early Drug Discovery for Better Target and Drug Selection

November 17-19, 2014

http://www.fastcongress.com/Phenotypic-Drug-Discovery

To Apply for DDTP scholarship: Send CV to <a href="mailto:trainingindrugdev@mcgill.ca">trainingindrugdev@mcgill.ca</a>

## Guidelines for Industrial On-site Internships

#### 1. Objectives

The primary objective of this internship program is to give students a hands-on experience on practices in industry and an opportunity for acquiring new research skills, including project management principles, and understanding the decision making drug development processes. This experience will provide them a unique insight into the *modus operandi* in industry and eventually contribute to their employability. On the other hand, this type of internship gives the host companies the opportunity to train highly qualified personnel whom they may eventually recruit to advance their company's interests.

#### 2. Description

This program consists of supporting students to work on-site on drug-related projects in industry. The internship can be achieved in any company dealing with therapeutics at any level of development, including discovery, pharmacokinetics, phase I-III clinical trials etc. Since the drug development process is a multi-disciplinary and risk management approach, the interns may be exposed to additional facets including: regulatory, manufacturing, quality control and validation, marketing, business development etc., providing them with a unique opportunity to appreciate the complexity of transitioning ideas from the lab bench to market. Generic drug companies involved in applied research are eligible, providing that the internship is project oriented.

The placement can last a minimum of 2 to 4 months.

A total of 5 scholarships in the amount of up to \$5,000 will be available to support the students during their internship period.

#### 3. Eligibility

#### 3.1 Students eligibility

The competition is opened to all students studying under the supervision of one of a DDTP mentor (see list of DDTP mentors at <a href="http://www.medicine.mcgill.ca/trainingindrugdev/mentors.htm">http://www.medicine.mcgill.ca/trainingindrugdev/mentors.htm</a>)

Students should be at the late phase of their PhDs (3<sup>rd</sup>, 4th or 5<sup>th</sup> year of studies) or Masters (last year). They shall abide by the confidentiality policies of the participating company.

#### 3.2 Companies eligibility

The company must be able to assign a drug-related internship to the student.

The company must be able to assign a qualified employee or member with a mentoring role to supervise the student. The company must provide an internship that is project oriented.

The placement must be characterized by the ability of the industrial site to allow the student to gain industrial research experience.

The company must provide the DDTP with an assessment of the student at the end of the internship.

The company can provide a stipend to the student but this is not mandatory.

#### 4. Application Procedures

Students must first obtain approval from their supervisors and subsequently apply to the DDTP. If the application is successful, the applicant will meet with a DDTP executive who will explain the procedure to him/her and assign him/her to a participating company.

#### 5. Funding Conditions

Trainees must provide the DDTP with a two-page report within 3 weeks of completion of the internship. In order to allow a maximum number of students to benefit from these internships, there will be no renewal procedures.