

- ▶ COLLABORATIONS..... 1
- ▶ IN THE FOOD VALLEY...2
- ▶ FROM HQP TO HQAP.3
- ▶ LETTER FROM FRANCE 4

The HQPA

Insider

THE OFFICIAL NEWSLETTER OF THE HIGHLY QUALIFIED PERSONNEL ASSOCIATION
AS PART OF THE ADVANCED FOODS AND MATERIALS NETWORK

Collaborative Research through AFMNet

It's a pleasure for me to share with you my experience with AFMNet and more specifically my training experience, funded by the AFMNet travel grant, in the context of our collaborative project – *The beneficial effects of fish nutrients on the obesity-linked metabolic syndrome and cardiovascular risk profile - An integrative genomic and metabolic phenotyping project.*

After completing my BSc. in nutrition, I continued to my MSc. in nutrition at Laval University in Québec under the supervision of Dr. Hélène Jacques. I became a part of AFMNet during my first graduate year and I had the chance to meet everyone in the organization at the *Professional Development School* in January of 2009 and at *AFMNet's 5th Annual Scientific Conference* in June of 2009. These events allowed me to network and gain new knowledge to be more prepared, personally and professionally, to enter my training funded by AFMNet's travel grant. This training occurred in November 2009, in Vancouver at St. Paul's Hospital where I worked with Drs. Hill and Frohlich, our collaborators on our AFMNet project, and also with Eugene Chu, a wonderful Ph.D. student working under Drs. Hill and Frohlich supervision.



Members of Dr. Hills & Frohlich's Team with Eliane Deland-Picard (far right).

During the three-week training, I learned different laboratory techniques directly linked to our project. I performed inflammatory and cardiovascular marker measurements with help from Eugene Chu. I also had the opportunity to learn different laboratory techniques related to lipids and cell culture models. The multidisciplinary training also allowed me to discuss inflammatory markers and lipid metabolism with our collaborators and has led to an increase in our mutual comprehension regarding different aspects of the AFMNet project. The new knowledge will be helpful for the final data analysis and interpretation of the results.

I encourage other HQPs to participate in similar exchanges because it's a wonderful professional experience that creates a bridge of knowledge between the teams and facilitates collaborative research efforts. Also, participation in a training experience not only enables us to acquire new knowledge and meet extraordinary people like researchers, students and health professionals who work in our field of study, but also to open new prospects in our career and offer us possibilities of future collaborative research between different laboratories.

Eliane Picard-Deland, MSc. Candidate,
Dept. of Nutrition, Laval University, Québec.

In the Food Valley

Some time in early September, I was browsing through AFMNet's website and came across a HQP training opportunity. It was titled VLAG School Reaction Kinetics Course. Since my research deals with several kinetics aspects of colloidal stability, I clicked on the link and arrived at information about a course that dealt with various aspects of kinetics in foods. I thought in my head, "Wow, this is exactly what I need to know to advance my research." So I fired off an email to Dérick Rousseau, my supervisor for approval and later to Kelly who quickly arranged an emergency meeting of the Awards committee to review my application. The very next day I received the approval from AFMNet that they would fund my training! I was going to the Netherlands!

It was a gray crisp morning of October 25th 2009 when I had arrived at Schipol Airport in Amsterdam. I made my way through the airport towards the ground transit section and found the train station sign pointing down a set of stairs. I traversed down the stairs and a stylish platform, dotted with minimalistic, yet comfortable chairs, revealed itself to me. I gingerly pulled out my brother's camera and snapped a couple of pictures like a tourist. "I am in Netherlands!" I thought to myself. I hopped on the train and was on my way. My destination was the Food Valley which was named because of its leadership, knowledge and skilled excellence in the agro-food industry. This is a region where international food companies and research institutes are concentrated around the city of Wageningen. The goal of this intense collaboration is to develop innovations that form the basis of new food products. As an academic, just the thought of

being in an applied knowledge environment and gaining a lot of relevant knowledge left me giddy with excitement.

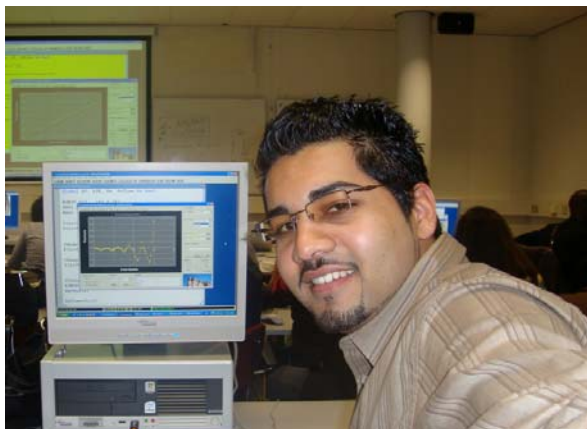
After an hour, I arrived in Ede-Wageningen and took the bus going to the city of Wageningen. The bus dropped me off practically at the doorsteps of my hotel. I checked in, went up to my cozy little room and slept - I had to be ready for the intense training tomorrow. The next morning, after breakfast and extensively charting my course on the map, I eventually made my way to Wageningen University. There I met up with Tiny van Boekel, the coordinator for the course *Reaction Kinetics in*

Foods, and the rest of the participants. We immediately received a massive binder that included all the presentations and a humongous book on reaction kinetics specifically written for food systems by Tiny. Later we also got access to a chemical analysis software for analysing kinetics data.

During the week we heard from prominent professors like Professor Broniek Wedzicha, Professor Marcel Zwietering, Dr.

Michael Caracotsios and of course Professor Tiny van Boekel. We quickly became familiar with other participants as well and it was like a big happy family... studying together. Truly it was the best course I have ever taken, which was not only theoretical, but was followed by exercises that entrenched our understanding of reaction kinetics. Sincere thanks to AFMNet for making this possible.

Muhammad Ali Naqvi, MSc. Candidate,
Molecular Science, Ryerson University, Toronto.



Ali working away at Athena Visual Studio in the computer lab at Wageningen University.

From HQP to HQAP!

Et voilà! A few months ago, I went from Highly Qualified Personnel to Highly Qualified Assistant Professor! AFMNet and the Department of Nutrition at the University of Ottawa made it happen. How did I get there? Let me tell you... While I was writing up my thesis, I received an e-mail inviting the community to the opening of a new Department of Nutrition Sciences at the University of Ottawa. Although I was out of the country on that day, I e-mailed the Program director to show my interest and inquire about faculty positions available. The Program director encouraged me to apply, which is what I did. I thought it would be a good opportunity to learn how to build a dossier for a faculty position. A few weeks after I had sent my application, I received an e-mail inviting me for an interview! I then thought it would be a good exercise for a future 'real' job application. After a full day interview, including a 1-hour presentation of my research program and teaching approach, a 2-hour interview, a 1-hour dinner with the selection committee, and a 1-hour meeting with the Dean, I was offered the position. What a surprise! The moral of the story is to keep your eyes open to every opportunity and take your chance. Your future employer might be looking for someone with your specific expertise and background.

You might wonder what my specific expertise and background are. I did my graduate training in the Department of Nutritional Sciences at the University of Toronto under the supervision of Dr. Ahmed El-Sohemy (the AFMNet project leader of the Toronto Nutrigenomics and Health Study). I specialized in the field of nutrigenomics, which investigates how nutrients interact with the human genome to affect various biological metabolic pathways. I examined how genetic variations affecting

inflammation modified the effect of dietary polyunsaturated fatty acids (omega-3 and -6) on biomarkers of cardiovascular disease. After I defended my thesis in February 2008, I embarked upon a short post-doctoral training in genetic epidemiology of cardiovascular disease in Paris, became pregnant and had my baby in December of 2008. It was a very productive year! Seven months later, in July of 2009, I started my new faculty position.



Bénédicte at the University of Ottawa.

How did AFMNet help me get there? In many ways! AFMNet provided me with a solid scientific background and offered me many learning, networking and funding opportunities. For example, I have attended Professional Development Schools, HQP annual meetings (e.g. Mars in March) and the network's Annual Scientific Conference, which enabled me to present my research results and to be exposed to cutting-edge research and top scientists in the field of nutrition, food sciences and technologies. I was also involved in the HQP Association as a Training and Communications Officer, which helped me develop many organizational and leadership skills. AFMNet also supported me financially through post-graduate supplement scholarships, travel and presentation awards, as well as the Marilyn Griffith award. AFMNet definitely contributed to the quality of my training and gave me various useful tools to face the challenges associated with my new endeavours as a professor and researcher in the academia.

Bénédicte Fontaine-Bisson, PhD,
 Associate Professor, University of Ottawa.

Letter From France

Canada has been an unforgettable experience! My name is Laetitia Cardettini and I am currently pursuing a Master of Engineering in Food Science and Technology at the Agrosup Dijon School in France. This school prepares engineers for various sectors of food-processing and food engineering industry. One of the mandates of M.Eng is an internship in an overseas institution of choice for a period of five months, with the goal to hone our English and research skills. I chose a Canadian institution for my internship not only because the youth exchange agreements between France and Canada allowed me to easily obtain a work permit, but also because I was attracted to Canada and wanted to experience it first-hand. Moreover, students from my school also completed their internships last year in the Food Science Department at Ryerson University in Dr Rousseau's Lab. They shared their wonderful experiences with me and really confirmed my desire to travel to Canada.

When I arrived in Canada, I met up with the scientists working in the lab as well as other interns from my school. During my internship, I had the opportunity to work with Dr Rousseau's team and the ambiance was friendly. I was studying drug delivery systems for the microemulsions, which are extremely stable systems made from oil, water and surfactant and which have many applications in the fields of cosmetics and delivery of nutraceuticals. I learned how to use instruments such as the Particle Size Analyzer, Zeta potential Analyzer, the Fluorimeter and also the Rheometer, all of which were useful in my research project! In addition to research opportunities I also had the chance to



French Exchange Students in Ryerson Food Research Lab. From left to right: Hind Hajir, Aliénor Coutouly, Laetitia Cardettini, Léa Arnaud.

experience the culture of Canada, by visiting many of the landmarks in Québec City, Montréal and, of course, Niagara Falls.

I thank everyone in the lab, especially Dr. Dérick Rousseau, for their time and efforts in helping me with my internship.

Laetitia Cardettini, M.Eng Candidate,
 Agrosup Dijon School, Dijon, France

Write for the *Insider!*

Do you have an interesting story to share? Do you have a lab-mate, professor or supervisor who you really admire? Do you like to write about research, food, and/or a day in the life of an HQP?

If you answered "yes" to any of these questions, this is your chance to showcase your writing talents! Send us your story ideas to be featured on the *Insider* or the AFMNet website!

E-Mail Bibiana: bibiana.garcia.bailo@utoronto.ca, Muhammad Ali: mnaqvi@ryerson.ca, or Arfat: Arfat.Anis@dal.ca