Welcoming our international researchers!

Jessie Ringo is an American PhD student studying chemistry at the University of Cincinnati (Ohio, USA).

Why did you choose to carry out this mobility experience at the University of Bordeaux?

The existing strong collaboration between the University of Cincinnati and the University of Bordeaux was the main reason I first thought of coming to Bordeaux. What made my decision final, was the cutting-edge level of research and the collaborative nature of the laboratories/institutes which was all the more interesting and valuable for my project.

What work did you accomplish during your stay here?

Over the four months, I worked on a project that involves the fabrication of solid-state dye-sensitized solar cells (ss-DSSCs) combining porous semi-conducting metal oxide layers, plasmonic nanoparticles, organic sensitizers and organic hole transporters, in order to improve the light-harvesting abilities of existing ss-DSSCs. The majority of work completed in this field has largely been on liquid-based solar cells which can be challenging for large-scale production and use because of leakage and corrosion. With an all solid-state solar cell, the problem of leakage would be eliminated. At the IMS laboratory I worked on the actual device fabrication and testing, while at the ISM I worked on physical chemistry characterizations (i.e. thickness, morphology, optical properties) to compliment the work.
Jessie Ringo is an American PhD student studying chemistry at the University of Cincinnati

What were your impressions of the University of Bordeaux, the people, the city?
I have a hard time putting into words the positive emotions I feel about the university, the city, and especially the people. I felt welcomed and included from day one. Since I worked on a collaborative project between the IMS laboratory and ISM, I was exposed to two different research groups on campus. This was a really excellent opportunity that is not often possible at my home institution.

As for Bordeaux, I was blown away by the architecture every time I visited the center. It is a beautiful city, rich in history, with so much to do and see. In addition, the city is safe and inviting with the tramway, a great form of public transportation.

What did you learn from your international experience here in Bordeaux?
First of all, I discovered a larger range of scientific fields. The research I conducted in Bordeaux was very different from my research in Cincinnati, and I believe this will be invaluable when applying for future jobs.

Aside from the scientific benefits, I also learned a great deal about myself. I had never been out of the USA before this trip. I was nervous about a lot of things – the language barrier (I didn’t know any French), the cultural differences, and living away from my family. However, these seemingly big, scary things quickly became small and manageable. Upon my arrival, I immediately signed up for a French language course, and my new labmates became my family away from home.

Immersing myself in another culture was a wonderful experience. It’s forced me to see things that I consider “normal” with another perspective. I think this is an extremely important aspect to learning, especially within STEM (Science, Technology, Engineering and Mathematics) fields. One of the goals of PhD programs is to develop students’ ability to think deeper or in a different way, and what better way to help develop this capacity than to engage them in another way of life!

Chateaubriand Fellowship
Jessie’s outgoing mobility experience from the USA to France was supported by the Chateaubriand Fellowship. This grant, offered by the Embassy of France in the United States, supports outstanding Ph.D. students from American universities who wish to conduct research in France for a period ranging from 4 to 9 months. Chateaubriand fellows are selected through a merit-based competition, through a collaborative process involving expert evaluators in both countries. The program is divided into two subprograms: Science, Technology, Engineering, Math (STEM) and Health / Humanities and Social Sciences.

> For more information, consult the website
Welcoming our international researchers!

Prof. Timothy Deming, University of California Los Angeles

Professor Timothy Deming, the 2015/2016 Fulbright–Tocqueville Distinguished Chair, has just arrived at the University of Bordeaux (UBx) to conduct research and teach from February to July 2016. Professor of Bioengineering and Professor of Chemistry and Biochemistry at the University of California Los Angeles (UCLA), Prof. Deming is hosted at UBx by Professor Sébastien Lecommandoux, Director of the Laboratoire de Chimie des Polymères Organiques (LCPO – Organic Polymer Chemistry Laboratory).

Just a week after his arrival in Bordeaux, we had the opportunity to meet with Prof. Deming, a regular visitor to our city and university, to find out what his plans are for the next six months.

Why Bordeaux?

For collaboration reasons that go back over 14 years! I was first invited by Prof. Lecommandoux in 2002 for a seminar and since then, our collaboration has constantly moved forward. In 2010, we launched a multinational, multi–university project funded by a grant from the IUPAC (International Union of Pure and Applied Chemistry) within the field of polymer chemistry and this was followed by my first visiting professor experience at UBx for two months in the spring of 2012. In 2013 and 2014, workshops were organized in both UCLA and UBx bringing together researchers from both sides of the Atlantic.

Over these past years, we have built up a very strong, active partnership that we would like to develop to further fields of research, and other projects such as student exchanges and jointly supervised PhD students between the universities.

What are the specific strengths that UBx offers in your domain?

The lab headed by Prof. Lecommandoux has expertise that is very complementary to the expertise of my own lab in UCLA. While both labs carry out research in the domain of polymer assemblies, Bordeaux is advanced within the domain of polymer assembly and characterization while UCLA has specific skills within the domain of polymer synthesis and modification.

Brought together, we will be able to make significant progress, specifically for biopolymer – based on synthetic materials that can mimic the properties of natural materials. Our collaborative research aims to lead to the development of biopolymers that may be used for medical diagnostics and applications (regeneration of tissues, therapeutic treatments, biological experiments etc.)

What is the topic of your inaugural lecture?

It will naturally be based on the subject of my research here which is biopolymers and how to create synthetic polymers that replicate the properties of natural polymer materials such as viruses, tissues, and proteins. I will present and discuss this field that involves studying biological structures in order to understand their properties and interactions and then, attempting to re–create these with bio–inspired synthetic materials to create polymers that interact positively with the human system.
What do you hope to achieve from your experience in Bordeaux?

Over the next six months, we would like to structure and extend the collaboration between UCLA and UBx. One of the main ideas we will be working on with Prof. Lecommandoux is the creation of a virtual CNRS (French National Scientific Research Center) laboratory at UCLA with dedicated resources where American and French researchers may carry out their work together on joint projects.

The curiosity of a researcher is never satisfied so whereas I plan to make good progress with these projects between now and July, I’m also sure to uncover many new questions and ideas on the way that will lead to yet more plans for joint research!

How has your welcome and integration been so far?

Unfortunately it’s impossible to avoid a mass of paperwork when arriving in a new country. The Welcome Center for International Researchers has helped by providing the necessary information in order to tackle the various administrative tasks. At the laboratory, the staff has been extremely welcoming and accommodating. What helps is that I know Bordeaux fairly well at this stage, even though it has changed quite a bit over the past decade and more. Within the city and the campus sites, new buildings have been constructed and old ones are being renovated.

With my stay lasting 6 months this time, my family and I hope to make the most of our time and plan on visiting more of the surrounding region and of France. For the moment though – during the winter months – we’re happy to just focus on getting settled with my four-year old daughter already off to her French school and delighted to splash in the puddles on the way – we don’t get this kind of rain in Los Angeles!!

Fulbright–Tocqueville Distinguished Chair

The Fulbright–Tocqueville Distinguished Chair award was created in 2005 in commemoration of the bicentennial celebration of Alexis de Tocqueville’s birthday and the centennial celebration of U.S. Senator J. William Fulbright’s birthday. The award, the most prestigious offered by the Franco–American Fulbright Commission, aims to reinforce collaborative research between France and the United States in France.
International Buzz @

Meet our researchers!

Three professors from the University of Cincinnati came to spend the summer months researching in Bordeaux.

Kelly Cohen
Professor of Aerospace Engineering & Engineering Mechanics

The topic I wish to pursue here in Bordeaux is "Bio-inspired Approaches to UAS Flight Control". The main goal is to develop a new and unique bio-inspired flight controller for a Quadrotor UAS. This research topic follows the visit of Prof. Franck Cazaurang (Automatic Control & Maintenance Engineering in Aerospace) in October 2014 to the University of Cincinnati. During his stay, new and interesting ideas were exchanged concerning possible educational/research collaboration in the area of Unmanned Aircraft System (UAS). I was thus very excited when Prof. Claude Pellet, Director of the IMS (Material and System Integration) Laboratory, sent me a letter of invitation for a Visiting Scholar position in his lab for the summer of 2015. The visiting scholar stay will provide a unique opportunity for educational and research collaboration between faculties at both universities in the existing area of UAS. An extended stay of 1.5 months gives a better opportunity (as opposed to a short visit of a few days) to better appreciate and explore mutually beneficial partnerships.

Having obtained all my educational degrees at the Technion, Israel where lessons were in Hebrew, I have learned to appreciate cultural diversity. I feel that looking at technical and non-technical problems from different perspectives is enriching and often productive.

Sheila Fleming
Assistant Professor, Department of Psychology

I am a Parkinson’s disease researcher. My area of expertise is in behavioral neuroscience and I am particularly interested in understanding how to mitigate abnormal protein aggregation and toxicity in neurons in order to delay the development of motor and non-motor symptoms that dominate the disease and significantly reduce the quality of life in patients.

Because of our mutual interest in a particular Parkinson’s disease protein, I began to collaborate with Dr. Benjamin Dehay at the Institute of Neurodegenerative Diseases, directed by Dr. Erwan Bezard. The goal of our research collaboration is to investigate mechanisms, both genetic and environmental, that contribute to abnormal protein accumulation and cell death in Parkinson’s disease.
Meet our researchers! (cont.)

Sheila Fleming
Assistant Professor, Department of Psychology

I started working in Bordeaux in the beginning of May. This is the first time I have worked for an extended period of time outside of the United States. Both my research and personal experiences in Bordeaux have been wonderful and exceeded expectations. The University of Bordeaux researchers are extremely talented and graciously welcomed me into their lab.

Bordeaux is also an impressive and beautiful city. I’ve always loved French food and wine. When I have time on weekends, I like to walk along the river-front and visit the shops and markets in my neighborhood. I’ve already learned so much about the political and cultural history of the region. I recently discovered the dessert specialty, “Canelés”, and I just bought a book about Alienor of Aquitane, so I plan to learn even more!

Bill Connick
Professor of Chemistry

My background is in physical-inorganic chemistry, and my research interests include chemical sensing, multi-electron transfer, light-to-chemical energy conversion, radiochemistry, and nuclear forensics.

I was drawn to the University of Bordeaux because of the extraordinary depth, range of expertise and creativity in chemistry. I was particularly impressed with the research of Professor Thierry Toupance and his colleagues at the Institute of Molecular Sciences, where they have developed new understanding and methodologies in nanomaterials. I also was especially impressed by the open and welcoming attitude of members of the University, which indicated to me that this is a place where one can form long-term, productive professional connections.

When I was a child, I lived in England for a year, and at the age of 13, I spent a year in Lausanne. Later I studied for two years at the University of Cambridge. From those experiences, I learned the value of seeing the world from other perspectives and being flexible.

Although I have only been in Bordeaux for a few days, my experiences have confirmed my first impressions, namely that members of the University and the city are very welcoming and helpful. The city is lovely, and the excellent public transportation system makes it very accessible.
Meet our researchers!

Anjan Chakravorty is an Associate Professor at the Electrical Engineering Department of the Indian Institute of Technology (IIT) Madras in the city of Chennai in south India.

Anjan, 37 years old, will be spending a sabbatical period of one year here in Bordeaux. He tells us why he has come to Bordeaux and how his experience is going so far!

Tell us about yourself

I work at the IIT Madras in Chennai, India. I completed my Ph.D. at IIT Kharagpur, located in east India. After my Ph.D., I travelled to TU Dresden, Germany in January 2005 to carry out my postdoctoral research. I now work on compact modeling of microelectronic devices in general and bipolar transistor in particular. My research also involves inductor design and computational electronics.

Why come to Bordeaux?

I have known Prof. Thomas Zimmer and his team in the IMS (Material and System Integration) Laboratory, UBx for a long time and had heard about their work in the area of bipolar transistor characterization and modeling. This team has a strong theoretical and experimental background for modeling research. In addition, they have developed interesting partnerships with industry players. In my home institution, IIT Madras, I had developed some ideas on bipolar transistor modeling research, and need to collaborate with such a team to further these ideas. The warm and welcoming attitude of Prof. Thomas Zimmer helped me choose the University of Bordeaux for this sabbatical period.

Your first impressions?

It goes without saying that my choice of destination was helped by the fact that Bordeaux is a beautiful city with rich surroundings. Since my arrival, I have discovered just how beautiful the city really is. As for the University environment – it is very international and the people are very approachable and helpful. A special mention for the Welcome Center – the team there has provided great support since my arrival, guiding me with all the necessary administrative procedures. It has been very reassuring to receive such welcome and advice.

Your expectations?

Apart from learning the language and culture of France, I hope it will be a fruitful year of research at Bordeaux. I am planning on building a strong and lasting research partnership between our team at IIT Madras and the research group at IMS Lab UBx.