

# Programme doctoral international

# **Promotion 2016**



Programme doctoral international International doctoral programme

### **Garen AVEDISSIAN**



I was born on May 4, 1992. I am Lebanese citizen from Armenian origin.

On July 2010, I received my Lebanese baccalaureate diploma after which I continued my higher education at the Lebanese University and by July 2014, I graduated holding a BS degree in Physics, then I completed my first year master's degree in general physics with good distinction that included an end year project titled under "Evolution of Dark Properties under reverse biasing of a Silicon Solar cell". During my second year of master my specialization was "Nanosciences and Functional Materials" where the Lebanese University sent me to Valenciennes to complete my master's internship project "Realization of Transducer Array by Vacuum Evaporation" at IEMN/ Department of Opto-Acousto-Electronic of University of Valenciennes and Hainaut-Cambresis, which I completed with good distinction.

I am a person who always tends to enlarge its knowledge horizon to its largest extent, so I am continuing my education at University of Strasbourg to conduct my PhD project "Molecular Switches for Spintronics" which is collaboration between France and Germany. Being ambitious, adventurous and eager of discovery, I am content with what I get and try to make the best of it. Finally, I will try to leave an impact on this world to make it a better place.

**Supervisor:** Eric Beaurepaire, IPCMS

**Monem AYAZ** 

I am a PhD student in the cotutelle framework, between the University

of Strasbourg and the University of Oslo. My field of study is experimental physics, where I study the dynamics of two-phase flow in

porous media. The possible applicability of my research will be an

improved understanding of trapped pollution in the groundwater.

My academical background is from the University of Oslo, where I

completed my master's degree in condensed matter physics. During

my thesis I studied pattern forming processes in capillary tubes. My

research interests are in the area of multiphase flow and complex

pattern forming processes.

I am also generally interested in travelling, soccer, computational

science and music.

Supervisorsat Unistra: Renaud TOUSSAINT and Gerhard Schäfer, Institut

de Physique du Globe de Strasbourg (IPGS)

Supervisor in Norway: Knut Jorgen Maloy

### Udita BAGCHI



started her PhD in the frame of the Neurasmus Mundus joint doctoral program "Neurotime" under the co-supervision of Prof. Arthur Bergen (Department of Clinical Genetics, AMC Hospital Amsterdam, Netherlands) and Marie-Paule Felder-Schmittbuhl, PhD (Institut des Neurosciences Cellulaires et Intégratives, UPR3212, Université de Strasbourg, France).

Udita's PhD project deals with the ontogeny of the circadian clock within the retina. Presence of a circadian clock in the retina is crucial for the timed organization of vision and adaptation to the daily alternation of light and dark and we previously showed that development of retina photoreceptors is impaired when the clock is not functioning. The present project aims at identifying the molecular events controlled by the clock and driving proper development of photoreceptors. It relies on the conceptual and complementary expertise from both laboratories respectively in eye genetics and in chronobiology. It will involve spending half time in Strasbourg and half time in Amsterdam.

**Supervisor at Unistra:** Marie-Paule FELDER-SCHMITTBUHL, Institut des Neurosciences Cellulaires et Intégratives - UPR 3212

Supervisor in Amsterdam: Arthur BERGEN

### Rabei BARHOUMI



### (Doctorant en thèse Cotutelle Unistra(université de Strasbourg) /Kit (Karlsruhe Institute technologies)

Jeune doctorant chercheur spécialisé en nanophysique, s'intéresse plus particulièrement

à l'étude des nanoparticules et les molécules magnétisantes et leur caractérisation morphologique et électronique à l'aide d'un microscope à effet Tunnel (STM).

Rabei Barhoumi est diplômé d'une maitrise en sciences et techniques de l'école supérieure des sciences et techniques de Tunis (ESSTT) puis d'un master1 en instrumentation de l'Université Aix-Marseille où il a travaillé, pendant le stage, sur la caractérisation par microscopie à champ proche des nanoparticules à base de Silicium. Il a poursuivi ses études à la même université où il y obtient un Master2 en micro et nanoélectronique, pendant ce master2 il a intégré l'équipe "mémoires" pour un stage de 6 mois portant sur la fabrication des mémoires résistives à bases de polymères.

Actuellement, il travaille sur un projet de thèse franco-allemande sur le confinement des molécules magnétiques. Ce projet vise à étudier ces interactions par un auto-assemblage des molécules SMMs dans des cavités d'un réseau organométallique composé des chaines « dicarbonitrile polyphenyle » coordonnées par des atomes de cobalt.

**Directeur de thèse à l'Unistra :** Jean-Pierre BUCHER, Institut de Physique et Chimie des Matériaux de Strasbourg - UMR 7504

Directeur de thèse au KIT: Mario RUBEN

## Hédi BEN MALEK



<u>Titre de la thèse</u>: Exploration des mécanismes cognitifs de la projection mentale dans le futur chez les sujets sains et les patients souffrant de schizophrénie.

Après avoir obtenu le Baccalauréat scientifique à Helsinki (Finlande), j'ai suivi une formation de cinq années au sein de la Faculté de Psychologie de Strasbourg, qui m'a permis d'obtenir en juin 2015 le diplôme de Psychologue spécialisé en Neuropsychologie. Durant le master, je me suis intéressé aux troubles de l'identité et de la mémoire autobiographique dans la maladie d'Alzheimer. Mon projet de thèse porte sur un champ de recherche novateur et en plein essor. Il vise à explorer plusieurs mécanismes cognitifs complémentaires qui soustendent la capacité à nous représenter le futur, ainsi qu'à évaluer dans quelle mesure l'altération de ces mécanismes contribue aux difficultés que rencontrent les personnes souffrant de schizophrénie à se projeter dans l'avenir. En effet, la schizophrénie est une maladie mentale grave qui impacte la trajectoire de vie des personnes qui en souffrent car elle débute généralement à la fin de l'adolescence, période critique où les buts et les projets personnels guidant les étapes futures de la vie se mettent en place.

En savoir davantage sur l'altération de ces processus cognitifs nous permettra à terme de développer des prises en charge cognitives visant à aider les patients à élaborer et réaliser de façon plus efficace des actions futures en liens avec leurs objectifs personnels.

**Directeur de thèse à l'Unistra:** Fabrice BERNA, Laboratoire de Neuropsychologie Cognitive et Physiopathologie de la Schizophrénie

Directeur de thèse à l'Université de Liège : Arnaud d'ARGEMBEAU



### Oscar CARAVACA MORA

is a Costa Rican Electronic Engineer. In 2010 he completed the bachelor's degree in Electronics Engineering in the Engineering School of the Technological Institute of Costa Rica. After graduating he worked in the private industry in Costa Rica during the years of 2010 to 2014. In 2015, to complete his master's

studies, he carries out his project at the Laboratory of Informatic, Robotic and Microelectronic of Montpellier, after which he is hired for the robotic team as engineer for the first six months of 2016. Currently he has been accepted by the Doctoral School 269 Mathématiques, Sciences de l'Information et de l'Ingénieur (MSII) to do a PhD under the PDI program.

The topic of the research is about Diagnostics and treatment of colorectal cancer with OCT enhanced robotic endoscope, this project intends to make use of the advantages of the Optical Coherence Tomography technology (OCT) and combining it with a robotic flexible endoscope to provide better diagnosis and enhanced treatment of the cancer. The project will be carried out in collaboration with the AVR and IPP teams of the ICUBE laboratory.

**Supervisor:** M. MONTGOMERY, ICUBE



### **David CHEMETA**

Après avoir obtenu un master en Etudes germaniques à l'Ecole Normale Supérieure de Lyon en 2012 puis une agrégation d'allemand en 2014 à l'Université de Strasbourg, je me suis décidé à faire doctorat avec une méthode interdisciplinaire (à cheval entre l'histoire, l'histoire des idées, les sciences politiques, les Cultural Studies

et la sociologie) sur un thème assez proche de celui sur lequel j'avais travaillé pendant mon master: L'histoire de l'immigration et ses effets sur l'identité nationale en France et en Allemagne, vus à travers les textes de rappeurs issus de l'immigration.

Pour ce faire, une cotutelle de thèse a été nouée à partir de 2015 autour de ce projet entre l'Université de Strasbourg (Catherine Repussard) et l'Universität Potsdam (Eva Kimminich). Parallèlement, j'ai également participé à plusieurs colloques internationaux, que ce soit sur les thèmes de l'immigration et l'identité nationale, de la culture hiphop en général ou d'autres sujets (notamment sur la question du développement de l'écologie en Allemagne), pour diversifier et ouvrir mon champ de recherches.

**Directrice de thèse à l'Unistra:** Catherine REPUSSARD, Etudes germaniques

Directrice de thèse à l'Université de Potsdam: Eva KRIMMINICH

### **Marco DE ROVERE**



I am 28 years old, born in Udine, in the extreme north-east of Italy.

I have studied Molecular Biology at the University of Trieste for three years, during this period I have spent 7 months in Helsinki, Finland, for an Erasmus exchange.

I have graduated in 2012 with an

experimental thesis in Immunology regarding a research about the protein Periostin and its connection with several types of cancer.

After that I was accepted at the Stockholm University where I have earned my Master degree in Microbiology with an experimental thesis regarding the immune-modulation of macrophages upon infection with *Mycobacterium bovis*.

In 2015 I have started working as an Intern at the International Centre for Genetic Engineering and Biotechnology in Trieste, in a Molecular Virology lab.

Thanks to the knowledge acquired in this lab I was accepted as a PhD here at the Institut de Parasitologie et de Pathologie Tropicale de Strasbourg, in Olivier Rohr lab, where my main topic of research will be the understanding of the silencing mechanism of HIV-1 provirus in Microglial cells, while being part of the EU4HIV Cure Consortium which groups together many international Universities, Hospitals and an International Research Center with the common goal to accelerate the discovery of a cure for HIV infection.

**Supervisor :** Olivier ROHR, EA 7292, Dynamique des interactions hôte pathogène

### **LUC DESAUNETTES**



Après des études de droit entre la France (Université Paris II), l'Allemagne (Université de la Sarre et Ludwig-Maximilian de Munich) et la Belgique (Collège d'Europe), Luc Desaunettes prépare actuellement une thèse sur la protection juridique du secret des affaires.

Ce doctorat est supervisé dans le cadre d'une cotutelle par le professeur Geiger, directeur du CEIPI à Strasbourg et le professeur Hilty, directeur du MPI à Munich.

Cette thèse a pour premier objectif d'analyser l'objet du secret des affaires et de déterminer si et dans quelle mesure une protection juridique de ce dernier est nécessaire. Les résultats trouvés permettront ensuite une analyse critique des ordres juridiques français, allemands et américains.

**Directeur de thèse à l'Unistra :** Christophe GEIGER, Centre d'Etudes internationales de la propriété intellectuelle

Directeur de thèse à la LMU Munich: Reto HILTY

### **Véronique FISCHER**



Early in life, nature and its complexity raised my curiosity and fascination. Following this passion, I started a biology study - the study of life and nature. After finishing my bachelor studies in Austria, I specified my working field to molecular

biology and human genetics during my Master's studies. I accomplished the first year of my Master's studies in Germany and the second year at the University of Strasbourg, France. During the second year, I conducted my master thesis project in Mr. Laszlo Tora's laboratory at IGBMC and discovered my profound interest for the research field of transcription regulation and chromatin structure. For my PhD, I'm continuing the project in Mr. Tora's laboratory which I started with my master thesis work.

Humans possess more than 200 distinct cell types each having different functions and characteristics requiring a precise regulation of cell type specific gene transcription. Transcriptional regulation is thus an essential process to ensure cell fate and development, but is still poorly understood. Transcriptional co-activators are components of this regulation system. During my PhD studies, I'm going to reveal the importance of the highly evolutionary conserved co-activator complexes SAGA and ATAC for transcription in mammalian stem cells and during cell fate determination.

**Supervisor:** Laszlo TORA, Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC)





Je viens d'une petite ville de la Calabre, dans le sud de l'Italie. Après le BAC au lycée de ma ville, j'ai décidé de commencer mes études universitaires à l'université de Pise, où j'ai obtenu ma Licence et mon Master en Lettres classiques.

Après l'université j'ai fait retour à ma ville natale pour une expérience de service

civique. Dans le cadre des travaux d'une association de bénévolat, je me suis occupé d'apprendre la langue italienne aux immigrés, afin de rendre plus facile leur intégration dans mon pays.

Cette expérience a été très précieuse, car elle m'a permis d'être sélectionné pour travailler en tant qu'assistant d'italien dans trois établissements scolaires de la ville de Marseille, en particulier deux collèges et un lycée général.

A partir de septembre 2015 je suis doctorant en histoire grecque à l'université de Padoue, où je mène une recherche sur la représentation des espaces dans l'œuvre d'Hérodote ; une cotutelle vient d'être approuvée avec l'UMR Archimède de l'université de Strasbourg.

Directrice de thèse à l'Unistra: Mme Dominique LENFANT, ARCHIMEDE

Directrice de thèse à l'Université de Padoue : Luisa PRANDI

### Shima GHOROGHI



I graduated with a Bachelor's degree in biology from the State University of New York at Purchase. As a graduate student at the City University of New York at Lehman, my research focus was to define signaling between neural stem cells.

I designed methods to identify and quantify cell state and the release of exosomes. To continue my research in exosomes, I decided to join Dr. Goetz's team for my PhD at Strasbourg University. Besides research in science, I am also interested in Persian miniature painting. I believe science is an art.

**Supervisor:** Jacky GOETZ, Immuno-rhumatologie moléculaire (IRM) - UMR\_S 110

### **Emilie GREEN**



Originally from Oregon in the United States (on the west coast, just north of California), I came to France in 2013 to work as an English teaching assistant in Burgundy after finishing my undergraduate degree in Biology at Western Washington University. My interest in biology coupled with a desire to continue exploring and experiencing Europe motivated me to enroll in the Molecular and Cellular Biology Master at the University of Strasbourg, from which I graduated this summer.

As a researcher, my interests encompass the fundamentals of molecular biology and genetics, as well evolution and ecology. These interests led me to the Anopheles group at the Institute de Génétique et Biologie Moléculaire in Strasbourg and to my current PhD project, which is focused on the development of gene drive technology to control and modify insect pests, specifically the agricultural pest *Drosophila suzukii* and the malarial vector *Anopheles gambiae*. A true child of the Pacific Northwest, I love to be outside, be it in the mountains, on the rivers, or simply a bike ride in the city park.

**Supervisor :** Éric MAROIS, IBMC - Réponse Immunitaire et Développement chez les Insectes (RIDI) - UPR 9022

### **Katharina HERZOG**



I am Katharina Herzog, 27 years old from Freiburg, Germany. I studied biology in Freiburg with the focus on immunobiology and virology. I wrote my master thesis at the university hospital Freiburg with the focus on viral infections and the corresponding immune response. I got my master of science in 2016.

Since 2013 I have been working as a research assistant to gain practical experiences in research labs: First I worked till 2015 in the field of microbiology, afterwards I moved to the field of immunology.

I will do my PhD in the lab of Mirjam Zeisel and Thomas Baumert. The topic will be "Hepatitis C virus and liver cancer".

**Supervisor :** Mirjam ZEISEL, Institut de recherche sur les maladies virales et hépatiques (IVH) - UMR\_S 1110

### Ronghai HU



is currently a joint supervised Ph.D. student in remote sensing between University of Strasbourg and Beijing Normal University. He received the B.S. degree in geographic information system from Beijing Normal University, China, in 2012. He was then

enrolled in a successive master and doctoral program in remote sensing in Beijing Normal University. In 2015, he won a Chinese government scholarship for studying abroad and became a joint supervised Ph.D. student between ICube laboratory, University of Strasbourg and School of Geography, Beijing Normal University.

His research interests include the indirect measurement and remote sensing retrieval of vegetation parameters. He is currently working on the Ph.D. thesis "Consistent Forest Leaf Area Index Retrieval using Ground and Airborne Data", which aims to map vegetation more accurately with ground and airborne laser scanner. He has published seven peer-reviewed articles in international journals. He is studying in France now.

**Supervisor at Unistra :** Françoise NERRY, ICube - Laboratoire des sciences de l'ingénieur, de l'informatique et de l'imagerie (ICube) - UMR 7357

Supervisor at Beijing Normal University: Guangjian YAN

### Jiae KIM



I'm from South Korea. I study Economics, and I did my bachelor in South Korea (Economics) and just finished a double master degree program (Economic Development and Growth) in Spain & Sweden with Erasmus Mundus scholarship.

I am interested in international development and especially in environmental aspect. My first master dissertation addresses climate change and its impact on socioeconomic outcomes of Indian women. Now I am starting my PhD here in Strasbourg, with the topic "Biodiversity conservation".

I believe conserving biodiversity and environment is critical because it is a nature-based solution to mitigate and adapt to climate change, that is why this research is important and expected to contribute to sustainable development in the future.

**Supervisor :** Mathieu LEFEBVRE, Bureau d'Economie Théorique et Appliquée (BETA) - UMR 7522

### **Ariane KRÖLL**



With a strong wish of becoming a geneticist one day I started my studies in biology six years ago at the University of Mainz in Germany.

For the Master's degree, I changed to the University of Saarland in Saarbrücken, which offers the possibility to spend part of the Master

studies in France. Hence, after studying Human and Molecular Biology in the first year at the University of Saarland I continued the second year of my Master program at the University of Strasbourg in the program Biology and Molecular Genetics. For the experimental master thesis, I got the opportunity to work six months in the laboratory of medical genetics of Hélène Dollfus. During this internship, my project focused on the identification and functional characterization of a potentially novel gene mutated in a syndromic form of intellectual disability.

Since October, I am working as a PhD student in the same laboratory. Beside the continuation of my former project, I will focus my work on the identification and validation of novel ciliopathy genes by analyzing whole exome sequencing data of patients and by performing molecular, cellular and biochemical analyses to prove the pathogenicity of variants. Moreover, I will cooperate with the University of Karlsruhe KIT to develop zebrafish knock-out models of my candidate genes by using the CRISPR-Cas9 system.

Supervisor: Hélène DOLFUS, Laboratoire de Génétique Médicale (LGM)
- UMR S 1112



### **Charchit KUMAR**

Currently, I am working as a Cotutelle (joint)
PhD researcher at the University of
Freiburg (Germany) and University of
Strasbourg (France). My PhD thesis work is
to investigate the "Adhesion and Friction on
Textured Surfaces: Inspiration from InsectPlant Interactions" (project funded by
German Research Foundation (DFG) —

International Research Training Group (IRTG)).

This project represents an interdisciplinary study based on the collaboration of biologists/biomechanics of the Plant Biomechanics Group from the University of Freiburg with polymer tribologists of the Physics-Mechanics and Tribology of Polymers Group from the Institut Charles Sadron, University of Strasbourg. Before joining this project, I received Master of Technology (M.Tech) degree in Material Science from Indian Institute of Technology (IIT) Kanpur, India.

**Supervisor at Unistra:** Vincent LE HOUEROU

Supervisor at Freiburg University: Thomas SPECK

### **Pulchérie MATSODOUM NGUEMTE**

is from the West region of Cameroon, the smallest of the country's ten regions and having the highest population density. She was the third born in a family of eight children. She excelled at primary school in Douala and completed her school education in Yaoundé, the capital of Cameroon, with a Baccalaureate from the Lycée

Général Leclerc.

Pulchérie studied at the Faculty of Science of the University of Yaoundé I, where in 2010 she received a BSc in Plant Biology and Physiology. This was followed in 2013 by an MSc in Plant Biotechnology. She is now in joint supervision between the University of Yaoundé I and the University of Strasbourg to conduct her PhD studies.

The PhD research relates to phytoremediation – the use of living plants to clean soil, air, and water contaminated with hazardous chemicals. In particular, she is focusing on the identification of tropical plant species that can help clean soils polluted by hydrocarbons. Accidental spillage of petroleum products may occur in several industries and activities, where they can potentially damage the environment and biodiversity. If passed into drinking water or food crops, these chemicals can also contribute to diseases such as cancer. Pulchérie's interest in the topic relates to sustainable economic development while protecting people and the environment from the effects of pollution, and her project is in line with the Cameroon government's "Vision 2035" objectives for sustainable growth. Pulchérie expects that the results of her research will benefit the work of the country's Ministry of Environment, Nature Protection and Sustainable Development, and will also be of interest to petroleum-related industries in tropical regions around the world.

After completion of her PhD, Pulchérie plans to return to teaching and research at the University of Yaoundé I. She also hopes to establish a non-governmental organization focused on phytoremediation, and to work on environmental protection projects in Cameroon

Supervisor at Unistra: Adrien WANKO NGNIEN, ICUBE, UMR 7357

Supervisor at University Yaoundé 1: Ives Magloire KENGNE NOUMSI

### Viktorija MEKLESH



**2014-présent: thèse, cotutelle** entre l'Université de Strasbourg et l'Université Nationale Taras Shevchenko de Kiev en Physique, Ecole Doctorale de Physique et Chimie-Physique (E182), Strasbourg, France et Faculté de Physique, Université Nationale Taras Shevchenko de Kiev, Ukraine.

Titre: "Effet de polymère confiné sur la structure de mésophases lamellaires lyotropes".

**2013–2014: Master de Physique** option "Matière Condensée et Nanophysique", Université de Strasbourg, France.

**2008 –2012**: **Licence de Physique**, Département de Physique Moléculaire, Faculté de Physique, Université Nationale Taras Shevchenko de Kiev, Ukraine.

Physique des liquides, physique de la matière molle, biophysique, physique des polymères, physique des cristaux liquides, dynamique moléculaire, RMN de l'état solide.

Ukrainien –langue maternelle, Russe –langue maternelle, Anglais –niveau avancé, Français –niveau intermédiaire

Directeur de thèse à l'Unistra : Patrick KEKICHEFF

**Directeur de thèse à Université Nationale Taras Shevchenko :** Leonid BULAVIN

### **Catalina MORALES**



I am from Chile, a thin country located in South America. Chile is located in one of the most seismic zone in the world, has a lot of earthquake and volcano, this motivated me to study Geophysics.

After my studies, I noticed that I really love investigation and I decided that I want to be a scientist. For that, I did a master degree in the Universidad de Chile also in geophysics. This gave me the possibility of knowing Strasbourg during my master thesis.

I came to Strasbourg for an internship that lasted one and a half month, and I loved this city, because it has a lot of cultural exchange, good people, good food, a lot of things to do and the Université de Strasbourg has really good seismologists, good research and is a really important university with a good position in the international rankings.

For all of this, I decided to apply for a PhD program in here, and now I just arrived a few weeks ago in Strasbourg for doing my PhD in geophysics with focus in seismology. I hope to become a great scientist and seismologist.

**Supervisor:** Luis RIVERA, Institut de Physique du Globe de Strasbourg (IPGS) - UMR 751

### **Mattia PEREZ**



I come from Florence, in Italy, where I obtained my bachelor in Biological sciences with some late respect to my colleagues since I was studying another subject for two years and a half, Science of Communication, which is under the faculty of

literature. My purpose was to attend an important school of theater, but then I changed my mind and I moved to scientific studies. After the bachelor I moved to the University of Pisa where I obtained my Master in Cellular and Molecular Biology with full marks. After my Master thesis, which concerned mitochondrial genetics, I decided to focus on Neuroscience, and with this purpose I moved to Milan.

First I gained some experience in the Lab of Prof. Carlo Sala, where I learned basic techniques which are routinely performed in this field of research such as neuron primary cultures, and how to handle experimental animals. Then I had a brief experience with Dr. Giovanni Piccoli at San Raffaele hospital, which is an outstanding research center, university and hospital structure. In 2014 I found a one-year fellowship at the VIMM center in Padova; under the supervision of Professor Claudia Lodovichi I've been investigating the olfactory system and related neural circuits performing extracellular recordings within the Olfactory bulb, since this brain region is believed to be involved in the generation of the so called "gamma oscillation", a possible mechanism to explain how neurons synchronize their operations, thus giving rise to cognitive functions as learning and memory. Finally I found an interesting doctoral proposal from the Lab of Dr. Luc Dupuis in Strasbourg, which has a longstanding experience in Amyotrophic Lateral Sclerosis, and, with a bit of luck, I was assigned to the project. SLA is a fatal pathology which results in complete loss of voluntary movements. The research project want to assess if a common mutant protein linked to the familiar form of this pathology (FUS) is able to propagate its loss of natural conformation to the normal ones, and how this mechanism is achieved ("Prion-like Hypothesis"). This will help to explain how the pathology progress from a partial loss of movement gradually to the complete paralysis of patients, and hopefully to find a way to prevent its degenerative consequences.

**Supervisor:** Luc DUPUIS, Mécanismes centraux et périphériques de la neurodégénérescence (MCPN) - UMR\_S 1118

### Flavio PICINI



I was born in Rome on 16/05/1991.

I obtained my Master's degree in Organic and Biomolecular chemistry at "La Sapienza" University last March. For both my Bachelor and Master degrees I worked on a project focused on the synthesis and characterization of amphiphilic compounds derived from biomolecules, such as carbohydrates, bile acids and peptides, in order to produce molecules able to form several kind of aggregates via self-assembly (nanotubes, nanofibers, nanovescicles, etc.).

Once I graduated, I decided to continue my training with a PhD and, for this purpose, I sought a project that could merge my interests. I have found that Nicolas Giuseppone's group, in Strasbourg, has several projects concerning the aggregation of organic molecules and their relative synthesis. I decided to join this group for three years where I believe that this choice will be the best for me in order to reach a better knowledge in this field and to provide a unique life experience.

Supervisor: Nicolas GUISEPPONE, Institut Charles Sadron (ICS) - UPR 22



### **Mechthild RICHTER**

I'm from Berlin, Germany. After high school I went to live and work as a volonteer in Thailand for one year. Working with kids from ethnic minorities in a completely different environment shaped my personality and career. During my bachelor's

degree in Special Needs Education and Social Sciences I spent one semester in Budapest for studying and an internship. Besides my studies I always had small jobs like taking care of children with special needs, tutoring refugee children etc.

My bachelor was followed by a master's degree in Comparative and International Education at the University of Oslo. After an internship as Student Advisor I travelled through Latin America for a few months. When coming back I started to look for Phd-positions and was very happy to be accepted in Professor Clément's research project: "Identification et réponses aux besoins des élèves avec un trouble du spectre de l'autisme lors de la transition entre le 1er et le 2nd degré" in Strasbourg.

This project aims at improving the transition of students with autism spectrum disorders in French mainstream schools, where they are often targets for social exclusion and bullying.

**Supervisor:** Céline CLEMENT, Laboratoire Interuniversitaire des Sciences de l'Education et de la Communication (LISEC) - EA 2310



# Yoseline ROSALES CABARA

Je m'appelle Yoseline, née à La Paz- Bolivie le 10 décembre 1992. J'ai fait un Bachelor en Physique à l'Université de Genève suivi d'un master en physique avec une spécialité en Interactions lumière-matière. Ma thèse de master consistait à étudier la fluorescence d'un milieu aqueux induite par l'absorption d'un pair des photons intriqués.

En Octobre 2016, j'ai commencé un Doctorat en Physique sous la supervision de Dr. Cyriaque Genet dans le groupe du Prof. Thomas Ebbesen à l'Institut de Sciences et Ingénierie Supramoléculaires.

Le thème de recherche est l'interaction de lumière chirale avec la matière chirale, le projet vise à étudier comment des champs plasmoniques agissent sur de nano-objets chiraux. Pour cela, on va se servir des mesures des forces optiques par des moyens des pinces optiques et de la nano-fabrication de structures chirales.

**Directeur de thèse :** Cyriaque GENET, Institut de Science et d'Ingénierie Supramoléculaires (ISIS) - UMR 7006

### Livia SANI



was born on 25/11/1988 in Rome, Italy. She studied Psychology at La Sapienza University and she attended seven months at Université Paris 8 as an erasmus student. After obtaining the title as psychologist and some work experience as clinical psychology, in 2015 she earned the Second Level Postgraduate Master in Psychology of Emergency and Psychotraumatology at Lumsa University, Rome.

After graduating she started working as clinical psychologist and supervisor in the emergency department at "Policlinico Gemelli" hospital, in Rome, participating in a research project about the observation and treatment of psychiatric and pseudo psychiatric emergencies.

In August 2015, she won the open competition "Torno Subito" issued by Regione Lazio, co-fundedby the European Social Fund. This award led her to work for six months as a research assistant at Clinical Psychology Department at VU Amsterdam University, Netherlands, mostly working on Post Traumatic Stress Disorder researches.

In October 2016 she started her PhD in psychology at University of Strasbourg about the psychological consequences of the loss of a child less than one year old. The goal is to study the effects of young child loss with a broad interview and questionnaires at different times: during the first meeting with the parents, six months after the beginning of the support group, and then one year after the first meeting. She is sure that the PhD at University of Strasbourg will provide her with the perfect opportunity to combine her background in clinical work, research experience and interests, giving her the best support and preparation.

**Supervisor:** Marie-Frédérique BACQUE, Subjectivité, Lien Social et Modernité (SULISOM) - EA 3071

### **Alice SANTORO**



was born in Brescia (Italy) on 15th October 1991. She has pursued her studies in Chemistry at the University of Padua (Italy) where she obtained both her bachelor's and master's degrees. In addition, during her master studies, she spent a period abroad, within the Erasmus Program, at the University Eötvös Loránd in Budapest (Hungary).

Throughout these years, she developed an interest for topics that link chemistry and biology. Thanks to the research experience she had during her master's thesis, she discovered the world of Bio-inorganic Chemistry and its intersection with neurological diseases.

Working on this project, she had the possibility to start the study of the molecular events involved in Alzheimer's disease (a progressive, irreversible neurological disorder affecting people all over the world), and to investigate a therapeutic approach for its treatment. She is currently part of Peter Faller's group at Institut de Chimie UMR7177, in Strasbourg, where she carries on studies on this topic, trying to elucidate and understand the role of Metal Ions present in our body (mostly copper and iron), in the development of the disease.

**Supervisor:** Peter FALLER, Institut de Chimie de Strasbourg (Chimie) - LIMR 7177

# Ana Filipa SEICA



I'm 24 years old and I'm from Portugal. In Portugal, I live in the center, in a city called Coimbra (The city of the students), because it is the site of the oldest universities in Europe and one of the largest universities in Portugal.

In September 2010 I began with my Bachelor in Chemistry at University of Coimbra, where I spent 4 years learning, understanding what is chemistry, its use and how it can be applied, and then I decided to do a Master in Biochemistry. During the Master I decided to do an Erasmus internship for 6 months in Málaga as a condition to complete my master thesis where I analyzed the behavior of molecule-colloidal particles interactions: raman spectroscopic studies. With the results obtained from the master I published an article in the Journal of Vibrational Spectroscopy in May 2016.

Due to my background in physics-chemistry and vibrational spectroscopy I decided to apply for a project with the name infrared spectroscopy study of conformational movements in membrane proteins from the respiratory chain by introducing a CN label in critical positions under the supervision of Professor Petra Hellwig, who works at Laboratory of Biolectrochemistry and Spectroscopy.

**Supervisor:** Petra Hellwig, Chimie de la matière complexe (CMC) - UMR 7140

### **Taras SYCH**



I was born on 12/08/1992 in Ivano-Frankivsk, Ukraine. There I attended school and Physical – Technical lyceum. After graduating from lyceum in 2009 I entered the Taras Shevchenko University of Kyiv, faculty of Physics. On the third year of my

studies I choose specialization "photonics", offered by Experimental physics division. In June 2013 I received a Bachelor degree of Science, title of bachelor thesis: "Interaction of some small ligands with DNA".

In 2013 – 2014 I completed the first year program at Taras Shevchenko University of Kyiv on the same specialization. In September 2014 I entered the M2 program "Physical chemistry and material science" at the University of Strasbourg, Faculty of chemistry. After performing an Internship in the Laboratory of biophotonics and pharmacology, Faculty of Pharmacy, University of Strasbourg I received my Master degree. Thesis title: "Characterization of plasma membrane by advanced fluorescence microscopy techniques".

In September 2015 I started a PhD – program in biophysics under joined supervision of Jun. Prof. Dr. Winfried Römer, BIOSS and Faculty of biology, University of Freiburg, Germany and Prof. Dr. Yves Mely, LBP, Faculty of Pharmacy, University of Strasbourg. Research topic: "Controlled deformations and modifications of synthetic and living cell membranes"

**Supervisor at Unistra:** Yves MELY, Laboratoire de Biophotonique et Pharmacologie (LBP) - UMR 7213

Supervisor at Freiburg University: Winfried RÖMER

### **Rodrigo TELES HERMETO**

I'm from Brazil. In 2012 I finished my undergraduate course in Computer Engineering at Federal Institute of Ceará (Brazil). After that, I was accepted into a master degree program in Teleinformatic Engineering at Federal University of Ceará (Brazil) and I received my master degree in 2015.

During this time, my research focused on Wireless Sensor Networks. I have 4 publications in this field and an award of second best paper in a national conference in Brazil. In this PhD, my research will focus on interconnect heterogeneous wireless networks and make them work together.

In the future, several kinds of heterogeneous networks will be sharing the same medium (air) and the problem is these networks are not able to talk to each other; it is like several people talking different languages.

This gets worse when one network starts to hinder or disrupt another one. If we consider a fire monitoring network, when a fire starts this network must be able to communicate as faster as it can.

**Supervisor:** Fabrice THEOLEYRE, ICube - Laboratoire des sciences de l'ingénieur, de l'informatique et de l'imagerie (ICube) - UMR 7357

### Vishnu VIJAYAKUMAR



I was born and brought up in Kerala, a state in South India.

I have done my master (2014) and bachelor (2012) in Chemistry at Mahatma Gandhi University, Kerala. I have done my Master thesis on Hydrothermal synthesis and characterization of Cobalt ferrite nano magnetic materials in School of Chemical sciences under the guidance of Prof. Suresh Mathew.

After my Master, I have worked as a research assistant (2015-2016) in one of the most reputed reseearch institute, National Institute of Interdisciplinary Science and Technology (CSIR-NIIST). My topic of research was the preparation of Polymer-Nanocomposites films for the Thermoelectric application, which was supervised by Dr.C Vijayakumar.

Supervisor: Martin BRINKMANN, Institut Charles Sadron (ICS) - UPR 22

### **Firat YASAR**



BSc in Mathematics, Istanbul Bilgi University, July 2011 Graduation Project: Fuchsian Groups

MSc in Mathematics, Koç University, February 2014 Thesis: Grothendieck's "dessins d'enfants"

Instructor Position in Istanbul Bilgi University 2014-2016

Research Topic: Teichmüller space of a surface of topologically infinite type, Asymptotic Teichmüller theory, mapping class groups

**Supervisor:** Athanase PAPADOPOULOS, Institut de Recherche Mathématique Avancée (IRMA) - UMR 7501