

Cristina Freire Sanz (University of Geneva)

[ISTH 2019 Congress, July 6-10, 2019 in Melbourne \(AU\)](#)

Firstly, I would like to thank the travel grant from Life Sciences Switzerland (LS²) to give me the opportunity to attend the XXVIIIth congress of the International Society on Haemostasis and Thrombosis (ISTH) in Melbourne Australia. The ISTH Congress is the most important meeting in the fields of haemostasis, thrombosis and vascular biology, and gathers together experts from around the world to present, exchange and discuss the most recent advances in scientific research and clinics. Clinicians, researchers, educators and students attending the congress enjoy the opportunity to present their work but as well enjoy the possibility to attend to different educational courses, state of the art lectures and to profit from professional networking connections with healthcare professionals and industry partners also attending the meeting.

The XXVIIIth congress of ISTH started the Saturday 6th of July and lasted until the Wednesday 10th of July 2019. The opening ceremony was held in the auditorium and started with the outstanding performance of an aboriginal tribal dance company. The sessions of the congress were organized by topics: arterial thrombosis, bleeding, coagulation consults, new technologies, platelets, vascular biology, venous thrombosis and women and children coagulation. At the same time, the topics were classified into different themes; for instance: antiplatelet therapy, atherosclerosis, fibrinogen and factor XIII, rare bleeding disorders, and animal models in thrombosis and haemostasis, amongst others. Furthermore, apart from the plenary and oral communication sessions and lectures, the attendants could benefit from career development sessions, exhibitions, laboratory workshops, master classes, and state of the art sessions. The congress was the greatest organized platform to learn, share and discuss about recent discoveries with professionals from different fields.

The 1st of Oct 2015 I joined the laboratory of Professor Marguerite Neerman-Arbez, in the Department of Genetic Medicine and Development from the University of Geneva, to work in my Ph.D. thesis project, which is focused in the study of haemostasis and thrombosis in zebrafish models of human fibrinogen disorders. This project is clinically relevant due to allow us to better understand the pathophysiology of patients with fibrinogen disorders. Due to the ISTH congress is the most important meeting in the field of haemostasis and thrombosis, I decided to submitted two abstracts for oral or poster presentation, which were entitled: "Venous thrombosis and thrombocyte activity in zebrafish models of quantitative and qualitative human fibrinogen disorders" and "Evidence for a mutation in the zebrafish fga gene affecting embryonic haemostasis: a possible functional role for the fibrinogen A α -E isoform". Gladly, I was selected to present my results at the XXVIIIth ISTH; an oral presentation for the first project and a poster presentation for the second project.

The LS² travel grant has allowed me to present two of my Ph.D. thesis projects in the most important meeting in the field of haemostasis and thrombosis. Moreover, the LS² travel grant has given me the opportunity to discuss about my project with experts from around the world, to have feedback for my thesis projects and to do professional networking.



Kathrin Nowak (University of Zurich)

[HUPO 2019 - 18th Human Proteome Organization World Congress, September 15-19, 2019 in Adelaide \(AU\)](#)

The Human Proteome Organization (HUPO) is an international scientific institution aiming to represent and promote proteomics-based research by supporting collaborations, trainings and the development of new technology. For this purpose, they host an annual conference, the HUPO congress, bringing together world-leading scientists and young investigators in order to facilitate the knowledge transfer of researchers. This year HUPO 2019 focused on "Advancing Global Health Through Proteome Innovation" and was held in Adelaide, Australia by the Australasian Proteomic Society (APS). The 5-day program offered a great variety of inspiring plenary talks, theme-specific sessions, lunch seminars and a large poster session with over 700 participants. Despite its far away venue location, over 1000 scientist from all around the world came together discovering the newest research.

Listening to the most recent findings in the field of proteome research was very exciting and fascinating. I really enjoyed the different sessions with excellent research presented by established keynote speakers as well as young researchers at PhD and PostDoc level. In addition, I have been fortunate to present my PhD work during the poster presentation and was enthusiastic to exchange scientific ideas with other attendees.

The intensive scientific day program alternated with various socializing events. The interesting Welcome function brought us closer to the culture as well as animal kingdom of Australia. The conference dinner provided an additional occasion to connect with other scientists. Overall, the organizers created an encouraging atmosphere, which made it easy to interact with young as well as international recognized scientists. Thus, I would recommend every PhD to attend a conference of his field in order to integrate into the research community. The LS² Travel grant enabled me to participate at this conference and gave me the great opportunity to present my own project in front of experts. Furthermore, attending the HUPO2019 conference provided the perfect environment to establish new contacts for my current work, as well as my future career. Therefore, I would like to thank the LS² Committee for awarding me the travel grant.

Axel Tollance (University of Geneva)

17ème Journée de la société Française de Myologie, 20-22 November 2019 in Marseille

I would like first to kindly thank the LS² travel grant committee to give me the opportunity to attend to the “17ème Journée de la société Française de Myologie” which took place in Marseille from the 20 to 22st of November 2019.

This meeting is one of the main events regarding the muscle research field in France, and it gathers internationally recognized researchers working on muscle development and muscular diseases. The program included plenary lecture talks of invited scientists, 10 minutes oral presentations and poster sessions. One of the main purposes of this conference is to give opportunity to young scientists to present and discuss their works.

The meeting brings together teams working from fundamental science to clinical case revolving around the theme of muscle physiology and muscular disease. It started the Wednesday afternoon with two captivating plenary lectures about new gene therapy for neuromuscular disease by Dr. Buj Bello and bioethics issues linked to these new kind of therapies given by Prof. Le Coz. The rest of the day continued with sessions about fundamental myology and a poster session where I could present my work. During the two following days, I attended to sessions focussing on fundamental research and more specifically on the subject of my PhD, the muscle stem cells.

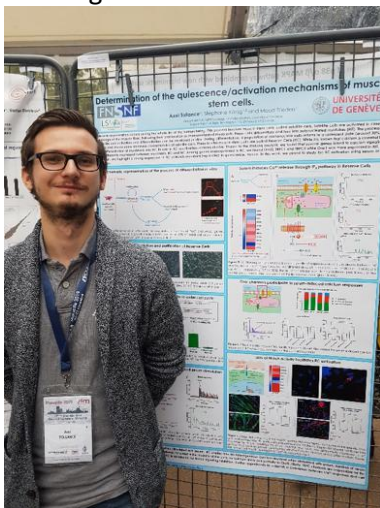
Indeed, my PhD project is involved in the determination of the quiescence and activation mechanisms of human primary muscle stem cells. More precisely, the purpose of my work is to study the involvement of calcium signalling in the activation of muscle stem cells *in-vitro*.

During muscle regeneration, muscle stem cell activation is mandatory. We can mimic *in vitro* these processes of muscle stem cells activation and differentiation. However, the molecular pathways and especially the calcium signalling required for the activation of muscle stem cells are still unclear.

I had the chance to present several times my work and had interesting discussions. The good quality of the scientific presentations, and specially the stimulating discussions around my poster, will allow me to design new set of experiments to improve and go further with my PhD project.

Beside the scientific program, I also attended to the gala dinner, which gave me the opportunity to improve my network. This actually leads me to new planned collaborations with other teams.

To conclude, this was a very positive experience and I am looking forward to the next edition of this meeting.



Rosalie Heilig (University of Lausanne)

[CSHL conference 2019: "Cell Death", Cold Spring Harbor Laboratory, August 13-17, 2019 in USA](#)

The Cold Spring Harbor Laboratory (CSHL) organizes 30 conferences around the year on selected topics. Thanks to the LS² Travel Grant I was able to participate at the CSHL conference on cell death which has been held for the 13th time. The conference took place at the Cold Spring Harbor Laboratory on Long Island, situated one hour outside of New York City. The location was highly suitable in that it was easily accessible, but still outside of the city rush. Nature surrounding the venue provided a friendly, almost idyllic atmosphere, facilitating scientific discussion between professors and young scientists. The program of the meeting was intense, containing morning and afternoon/evening sessions consisting of 15- and 30-minute talks given by leaders in the field, young PI and post-doctoral researchers. In addition, two poster sessions, sessions specific for career development e.g. « meet the PI » as well as social events were organized to facilitate networking and scientific discussions.

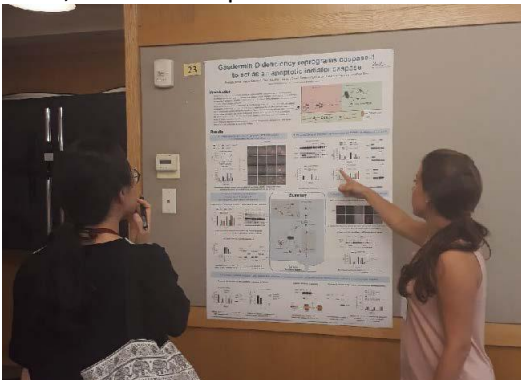
The conference started on Tuesday night after dinner with two inspiring keynote talks by renowned researchers in the field of apoptosis and autophagy namely by Prof. Douglas Green and Prof. Beth Levine.

On the second day two sessions in the morning provided more insights in "cell fate" and "cell cycle" as well as in "toxic cell death/ferroptosis". At lunch the organizers of the meeting provided the possibility to meet with speakers and discuss topics related to science and scientific career development. In the afternoon I was able to present my poster in the first poster session. I was happy to get much interest and feedback from professors, post-docs and scientists. Thanks to questions from poster visitors and discussions during and after the poster session, I have many new ideas to extend, improve and finalize my current projects.

The second part of the meeting comprised many more interesting sessions such as "mitochondria in cell death", "apoptosis", "cancer and cell death", "immunologic and immunogenic cell death", and "cell death regulations". At the second poster session I was able to participate as a poster visitor and interact with different people to gain insights on their current research.

Since the conference covered a range of different cell death types, it allowed me to extend my knowledge in other areas e.g. apoptosis, ferroptosis and necroptosis. I particularly liked the numerous presentations showing new and unpublished data which was encouraged by the general spirit of CSHL meetings. The size of the meeting (150 participants), as well as the friendly atmosphere gave me the possibility to talk to people from many different fields and not only provided me with a more in-depth knowledge, but also allowed me to see my project from a different angle.

All in all, the conference was a success and an outstanding experience! I'm going home with many new ideas, contacts for possible collaborations and new acquaintances.



Fabian Wendt (ETH Zurich)

[HUPO 2019 - 18th Human Proteome Organization World Congress, September 15-19, 2019 in Adelaide \(Australia\)](#)

The LS² Travel grant enabled me to participate at the 18th Human Proteome Organization World Congress, or generally better known as HUPO. In 2019, the conference was hosted by the Australasian Proteomics Society (APS) and held in Adelaide, Australia with focus on “Advancing Global Health Through Proteome Innovation”. Internationally leading researchers and the next generation of early career scientists were brought together for the scientific discourse about new findings and innovations in the field of proteome research. The five days have been filled with an interesting and multifaceted conference program. Obviously, the keynote speakers showed their latest exciting research, but also the more specialized sessions on specific themes were of extraordinary scientific quality. Interesting lunch seminars and an interactive poster session completed the program. Furthermore, the conference was accompanied by complementary pre-and post-satellite meetings, bridging i.e. glycoscience and proteomics. Beside the scientific program, the conference dinner facilitated interactions with researchers from all around the world. Attending the conference gave me the opportunity to gain in-depth knowledge about the most recent findings and novelties. Altogether, it was exceptionally motivating meeting these fantastic researchers in person, you normally only know by their name tag on publications. Additionally, meeting young scientist while discussing their poster contributions was inspiring and helped to boost new ideas.

The HUPO organization committee selected my submitted abstract for presentation within the “Infectious Disease” session next to internationally recognized scientist. Enthusiastic about this fortunate opportunity, I presented our findings of cell surface proteome changes upon viral infection. The oral presentation in front of an expert audience gave me subsequently the possibility of stimulating discussions as well as the integration of my current research work in the scientific community.

Collectively, I would like to thank the LS² Committee for awarding me the travel grant. It enabled me to enjoy this unique opportunity presenting among other international scientist of all career stages, made the exchange of project ideas possible and helped me to form a scientific network for my future career.

Alexandra Iouranova (EPF Lausanne)

[FASEB The Mobile DNA Conference: 25 Years of Discussion and Research, June 23-28, 2019 in Palm Springs, California \(US\)](#)

This summer, I attended the Mobile DNA conference, organized by the Federation of American Societies for Experimental Biology (FASEB). This is a major meeting in the field of transposable elements, attended by many members of the community. The conference was an anniversary one, commemorating the first such meeting that took place in 1994. Mobile or transposable elements, which were the subject of the conference, include any sequence that can potentially move around the genome by various mechanisms such as cut-and-paste transposition or reverse transcription of an RNA intermediate. The magnitude of the effects such insertions can have on the biology of genomes has become easier to assess with the advent of genomic technologies, and those different consequences were widely discussed. These sequences are now known to potentially be able to disrupt protein-coding genes, resulting in disease, but also to have more subtle regulatory roles, due in part to the fact that some of them contain transcription factor binding sites.

An aspect of the conference that was very relevant for me is the role of recently emerged, primate or human-specific elements. Indeed, some young elements that are still capable of retrotransposition can be both a benefit and a danger, but they also have unique regulatory roles that are difficult to study with current technologies. For instance, several talks were devoted to L1HS or HERVK elements that are polymorphic and active in *Homo sapiens*, and to the challenges their genomic study presents. Elements that are almost identical to one another such as L1HS cannot be detected by conventional sequencing technologies because of mapping issues, so RNA-seq/ATAC-seq needs to be coupled with other technologies such as RACE or PacBio. This improves the detection and allows to make conclusions about the behaviour of such transposable elements.

During my PhD, I have been working on a project entitled “LTR12/ERV9 transposable elements and their regulator KZFPs govern the expression of human germline genes”. The LTR12/ERV9 mobile elements I study are also recently emerged and are thought to have regulatory roles in human development and in differentiated cells. I am also interested in identifying their transcriptional repressors among the numerous KRAB zinc finger proteins the human genome contains. I was selected to present this research in a lightning talk and during a poster session. The short talk format allowed me to quickly expose the key points of my work and elaborate on them later while presenting my poster to people that got interested. I was able to discuss with established investigators from the field, but also with junior researchers working on similar topics, which was extremely valuable.

I really appreciate LS²'s support as I was able to receive advice and input from people based in the United States that I might not have met otherwise, only having attended European conferences so far. These discussions allowed me to transition into preparing my work for publication and into thinking about the next steps of my career.

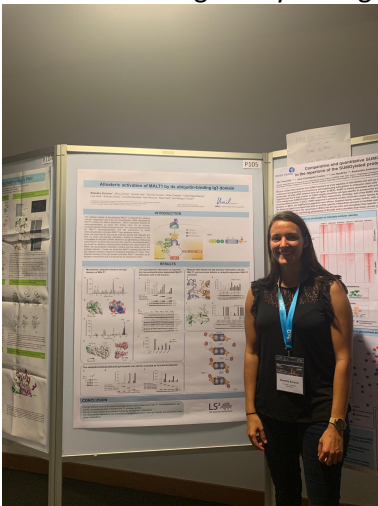
Rebekka Schairer (University of Lausanne)

[EMBO Workshop – The ubiquitin system: Biology, mechanisms and roles in disease, 13. – 17. September 2019 – Cavtat, Croatia](#)

The aim of this workshop was to facilitate scientific interactions among leaders and newcomers to close remaining gaps and stimulate further progress in ubiquitin research. This workshop was held in a beautiful hotel in Cavtat close to Dubrovnik at the coast to the Adriatic sea. Five days were fully packed with long talks from leader in the field like Ivan Dikic, Ron Hay and Titia Sixma, short talks for newcomers and two long poster sessions with over 300 posters from PhD students, Post-Docs and young PIs. Overall, the topics of the presentations had a high range from basic insights into ubiquitination to protein disposal and cellular organization to protein quality control and signaling-related processes to the role of the ubiquitin system in aging and diseases and new approaches for therapeutics. During the coffee and lunch breaks and on the excursion to Dubrovnik on sunday afternoon, we had the chance to network and get in contact and discuss our own research projects with the more experienced invited speakers. Additionally, we had the chance to speak to editors of several journals as EMBO reports that were highly interested in the development of the ubiquitin field.

Thanks to the LS² travel grant I got the chance to attend this workshop, where I had the opportunity to present my own research on the allosteric activation of MALT1 by its ubiquitin-binding Ig3 domain in form of a poster. I appreciated to discuss my work with several people, who gave me good feedback and new ideas and tips to continue my project. Furthermore, during the talks I learned a lot about new developed techniques and methods that I could use for my own purpose. I especially liked the talk of Anne Simonsen about the regulation of mitophagy by lipid-binding proteins and the presentation of the representative of the lab of Huib Ovaas that constantly work on the complementation of the ubiquitin tool kit, which will be helpful for all researchers working on ubiquitin-related projects.

Overall I saw this workshop as a very fruitful conference to see recent progress in the ubiquitin field. It is very estimable that all the speakers and presenters of posters showed recent, unpublished data that always led to lively discussions. I have the feeling, because the ubiquitin and the ubiquitin-like field is so broad that nobody is in competition with anyone. Therefore, everybody is motivated to help their neighbors in any kind of way to further increase the progress of the development and understanding of the ubiquitin system. In conclusion this EMBO workshop is a good opportunity for a “Come together” of the ubiquitin community that I see as a big family willing to include newcomers and I am happy to say that now I am part of it.



Rohan Chippalkatti (University of Bern)

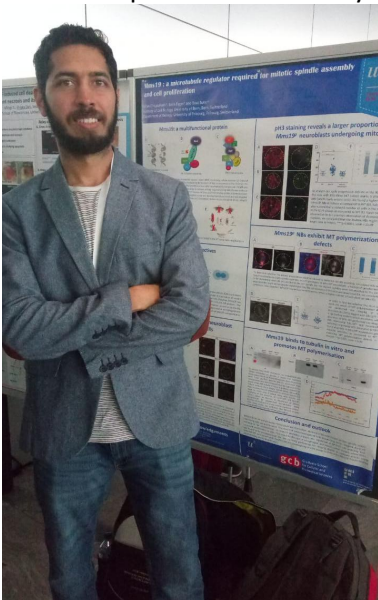
European *Drosophila* Research Conference (EDRC), EPFL Lausanne, Switzerland, 5th-8th September 2019

My Research project: The aim of my project is to elucidate the cell-cycle regulatory function of the gene *Mms19*. I used *Drosophila melanogaster* (fruit fly) brain as a model system for my study. From the experiments I performed, I found that, a mutation in *Mms19* gene results in a reduction in the number of dividing cells and induces defects in the mitotic spindle structure and assembly. I later found that *Mms19* promotes polymerization of tubulin (the building blocks of mitotic spindle) in vitro and in vivo. At the conference, I presented all of these important results which describe a novel function of *Mms19* gene.

Motivation: The EDRC is not only a great opportunity to attend seminars and plenary lectures by illustrious scientists, but also to interact with researchers working in the field of *Drosophila*. I am currently in the 4th year of my PhD and at this juncture, it is very important for me to gain valuable feedback for my project to understand the lacunae in the project and to realize how to improve the quality of data. This improvement would enable me to send my project manuscript to a peer reviewed journal for consideration of publication. The EDRC would be an ideal platform for me to gain such a feedback. Moreover, as around 800 scientists from all over the world are attending the meeting, the probability of meeting researchers from similar fields is high. So, I can not only present my research to get input, but also explore opportunities to collaborate with other researchers in the field.

Experience: I presented a poster of my research work at the EDRC. Around 10 people visited my poster and gave positive feedback on the data that I generated. 2 eminent scientists visited my poster and asked me to do some additional experiments in order to make my experimental model more convincing. By attending seminars and other posters, I found some interesting experimental approaches which I can try to apply in my own project. I also met experts and clarified some doubts I had about some techniques. Furthermore, in the schedule I could see talks in a plethora of fields, from cancer biology to stem cells to signalling. I acquired a great deal of knowledge in many areas of biology by attending all these seminars. In addition, distinguished scientists delivered plenary lectures, which was an enlightening experience. I think the EDRC was an important platform for me to present my research and I immensely benefited, not only by getting feedback on my project, but also by increasing the depth of knowledge in many relevant areas of life sciences.

I would like to thank LS² for kindly providing financial support for this conference and allowing me to attend such an important event in my scientific career.



Inês Borrego (University of Fribourg)

Combined International Symposium for Applied Cardiovascular Biology and Vascular Tissue Engineering (ISACB + ISVTE), Zurich, June 19-21 2019

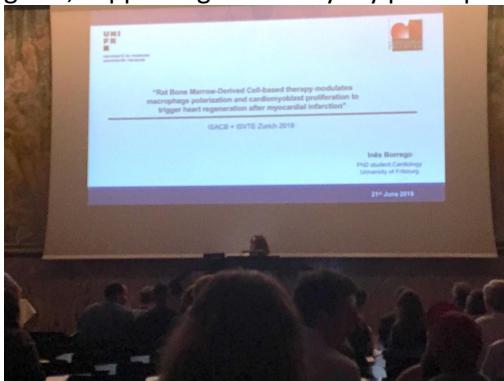
Thanks to the LS² travel grant, I had the chance to attend the first combined International Symposium for Applied Cardiovascular Biology and Vascular Tissue Engineering, and the opportunity to present my work as an oral presentation.

The conference was held from June 19th until June 21st at the main building of the University of Zurich, Switzerland. This meeting joined academic scientists, clinicians and industry representatives within all areas of cardiovascular biology with the common goal to enhance the development and clinical translation of basic research into cardiovascular therapies and diagnostic modalities.

The conference was filled with an exciting program that included many significant keynote lectures, oral and poster communications. I encountered people from all over the world, sharing the same interest for research on vascular tissue engineering and new therapeutic approaches for cardiovascular diseases. This interdisciplinary and multicultural environment made the conference a unique opportunity to keep up to date with the latest developments in the field, ranging from basic research to clinical translation, which allowed extraordinary scientific networking within the community.

I had the opportunity to present my current research work on bone marrow cell-based therapies for myocardial recovery using in vivo approaches. As a result of my oral presentation, I could get relevant and useful feedback, that provided me with new insights to reach my research goal. I have also enjoyed listening and increasing my knowledge from the other presentations since the engagement of people from diverse areas allowed a completely different experience and exchange of ideas.

I feel extremely grateful to had the opportunity to participate in such an outstanding and enriching event. Moreover, I am thankful to the LS² society for selecting my application for the assignment of the travel grant, supporting financially my participation in this conference.



Anne Jomard (ETH Zürich and University Hospital Zürich)

ESC Congress, Paris (FR), 31.08.-04.09.2019

About the ESC Congress :

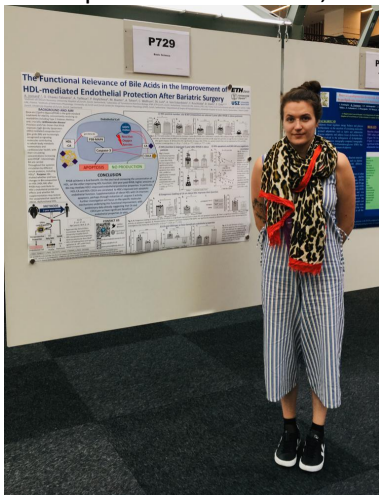
The European Society of Cardiology annual meeting is widely regarded as one of the most respected world congresses in the field of cardiology, bringing together clinicians from diverse backgrounds and basic scientists. The theme of this year's meeting was Global Heart Health, with a strong accent on health inequalities around the world and inequalities in cardiac care across genders and ethnic groups. Through several talks by eminent cardiologists, the World Health Organization and other NGOs, we were exposed to the gap in knowledge and treatment inequalities still facing the world today. The ESC Congress also places a strong accent on networking and professional development, offering services such as professional CV photography, one-on-one mentorship sessions and CPR workshops, all of which I was lucky enough to participate in.

About my contribution to the ESC Congress :

I was fortunate enough to have an abstract accepted in the field of basic science, discussing my work on bile acids as regulators of endothelial function. I had a lot of interested interactions during the poster walk and made some connections relevant to my field. The opportunity to interact with other young investigators during my poster session was incredibly scientifically inspiring, and gave me several new ideas for other lines of investigation.

About my main take-aways from the ESC Congress :

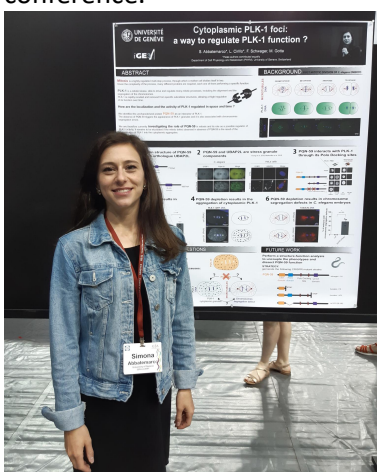
Because of the sheer size of the congress, I was able to attend a wide variety of talks on obesity and cardiovascular risk, which is an area of personal interest. I was particularly impressed by the high quality of talks from young basic scientists. Of course, the opportunity to hear some of the best doctors and professors of the field allowed me to gain a new perspective on my own topic. The professional development seminars and mentorship sessions were a wonderful addition to the congress and allowed me to begin shaping my future career goals in a more concrete way. I would like to deeply thank Life Science Switzerland for awarding me a travel grant, which allowed me to significantly further my development as a scientist, both from a research and professional perspective.



Simona Abbatemarco (University of Geneva)

[22nd International C. elegans conference, 20-24 June 2019, UCLA, Los Angeles](#)

The participation to the International *C. elegans* conference has been a wish that I really wanted to realize during my PhD. This is a biennial conference, taking place on the campus of the UCLA, in Los Angeles, recognized as one of the most important meeting for researchers using the nematode *C. elegans* as a model system. The International *C. elegans* conference is the perfect environment to learn a lot about this powerful model system. The research areas and topics covered are indeed very wide including cell biology, development, neurobiology, aging and disease, as well as cutting-edge technologies applied to *C. elegans*. This meeting hosts a big number of attendees every year, reaching 1600 scientists this time. Among them big names were present, such as Craig Mello (Nobel Prize in 2006 for its work on RNAi interference), Andrew Fire, Martin Chalfie, Julie Ahringer, Fumio Motegi, Lesilee Rose, Dan Dickinson, Asako Sugimoto. Therefore the International *C. elegans* conference is also the perfect environment where to meet face-to-face with the *C. elegans* research community from all over the world, giving a great opportunity to networking and build community, discuss and share ideas and research tools. Thanks to the LS² travel grant I had the chance to be one of the attendee this year, having the opportunity to present my work in the format of a poster, which I discussed during the session of the 23rd of June. My poster has been visited by many participants, including junior and leading scientists in the field. As a result I could get important and useful feedback which will help me to pursue my project. Not only I really enjoyed the discussion of my research with the other participants, but I also enjoyed and benefit a lot from the other poster sessions. I had indeed the time and the opportunity to visit several posters and to discuss ideas, projects and methods with other scientists. The poster sessions have certainly been one of the parts of the conference that I enjoyed the most and that gave me the chance to create new and important connections. The four days of the conference (started on the 20th and ended on the 24th of June) were filled with an intense and interesting program. Besides the talks given by keynote speakers as well as by students and junior scientists, we also had the opportunity to participate to daily workshops of our choice. I personally took part to the following workshops: “CRISPR: New Techniques and Best Practices” on the 21st of June, “microPublication Biology: How to Publish your Single Experimental Findings” and “Wormbase 2019: Data, Tools, and Community Curation” on the 22nd of June and finally “New Tools for Conditional Expression or Degradation” on the 23rd of June. The knowledge I could acquire during these interactive workshop session is of great significance for my everyday work. For instance, from the CRISPR workshop I got important tips on how to optimize a protocol that I am currently testing in the lab. I feel grateful to have had the opportunity to participate to such an outstanding and enriching event. And I am grateful to the LS² society for selecting my application for the assignment of the travel grant, supporting financially my participation to this conference.



Natália Carolina Drebes Dörr (EPF Lausanne)

Gordon Research Conference and Seminar: Animal-Microbe Symbioses
Mount Snow, VT (USA) - 15th to 21st of June, 2019

Travel Grant Report

Gordon Research Conference and Seminar: Animal-Microbe Symbioses
Mount Snow, VT (USA) – 15th to 21st of June, 2019

This was the third edition of the Animal-Microbe Symbioses Gordon Research Conference and Seminar. This year, the meeting had as unifying theme “Animal-microbe symbioses as nested ecosystems” and was chaired by Prof. Ute Hentschel from Geomar (Helmholtz Centre for Ocean Research Kiel) and co-chaired by Prof. Angela Douglas from Cornell University. Additionally, prior to the conference I had the opportunity to attend the Gordon Research Seminar, which is a meeting organized by early-career researchers (ECR) for PhD students and postdocs. It was a wonderful opportunity to meet these other younger scientists in a less formal and somewhat less intimidating setting, which fostered significant interactions between these ECRs. Both meetings were characterized by an intense schedule of talks by professors, post-docs and PhD students. Symbiosis refers to any kind of close and long-term interaction between two or more organisms. These interactions can be characterized by different outcomes in a continuum that can range from mutualism to parasitism. I was pleased by the wide variety of symbioses systems that were introduced to the audience at the GRC. Below, I present a few representative examples.

First, we introduced to mechanisms and diversity found in marine symbioses between bacteria and corals, sponges, gutless worms, squids; and also, in insects like bees, beetles, ants and flies. Microbiome, which is such a widely-discussed topic nowadays, was addressed in the meeting with examples in bees, worms, and tetrapods. We also learnt more about the influence of symbiosis within the Archaea and their role in the deep branches of eukaryotic evolution.

I feel very fortunate for the opportunity to attend such wonderful talks. I learned tremendously about different systems and biological problems, saw varying approaches used by other researchers to address these questions, and was stunned by some of the answers they have gotten so far.

These meetings (GRC Seminar and Conference) were also characterized by the extremely interactive poster sessions that took place every day. As can be appreciated by the provided picture, I had the opportunity to present my work as a poster in both the GRS and the GRC. I was involved in lively discussions with my peers and experts in the field and got invaluable feedback on my project. I was happy to see that many of the follow-up questions that I received are currently being addressed by our team.

Finally, I don't want to end this short report without mentioning the great asset that this meeting had on my scientific career. I love science and doing research, and over the years I could see that the topic that I love the most are the interactions between organisms. More specifically, I am fascinated by the molecular mechanisms that are orchestrated in these symbioses. I cannot stress enough how much this was the perfect conference for me to attend considering my career interests. I could grasp cutting-edge research in the field and had the pleasure to see many renown scientists and rising stars who presented their work. It was a great opportunity for me to start considering the next steps in my career.

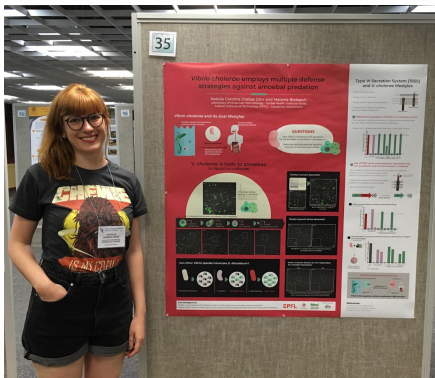
I feel very honored to have been awarded a travel grant by LS2 to attend this conference and I would like to take this opportunity to wholeheartly thank you for your help in supporting my career in such a significant way.

Sincerely yours,

Natália Dörr

Natália Carolina Drebes Dörr, MSc.

3rd year PhD student at the Laboratory of Molecular Microbiology (Blokesch lab), Global Health Institute, School of Life Sciences, Swiss Federal Institute of Technology Lausanne (EPFL)



Igor Tokarchuk (University of Bern)

11th annual meeting of the ENBDC members

May 16-18th, 2019 - Weggis, Switzerland

Methods in mammary gland biology and breast cancer (11th ENBDC workshop)
Conference report from Igor Tokarchuk

This report summarizes the experience of the high-level international conference Methods in mammary gland biology and breast cancer, convened by the European Network of Breast Development and Cancer Labs (ENBDC) in Weggis, Switzerland on May 16-18, 2019.

The conference was opened by Zuzana Koledova, ENBDC Chair from Masaryk University (Brno, Czech Republic), who welcomed over 90 participants from Europe and Australia.

The objectives of the conference were: 1) To provide a platform for discussion about the mammary gland biology, especially premalignant disease progression as well as advanced breast cancer mechanisms. 2) To foster interactions between labs working on mammary gland development and cancer worldwide.

The programme covered quite a diverse range of interests, such as high-resolution genomics/proteomics, breast cancer signalling, preclinical models and mammary gland morphogenesis.

Delphine Merino (Australia) in her talk "Genetic and optical barcoding to follow tumour and metastasis heterogeneity" disclosed a clonal approach as an analogy to Darwin's approach. She hypothesized that the primary malignant tumours grow as a clonal mosaic and presumably, particular clones have tropism to certain organs. Their lab divided all clones on shedders and seeders. Therefore, the "take-home message" is: *This is not about HOW MANY cells do we kill, but WHAT kind of cells.*

Besides, a couple of great talks showed the role of microenvironment (e.g. cancer-associated fibroblasts) in breast cancer development, confirming that CAF's stiffness rate can directly influence the drug delivery efficiency in mouse models. Promising markers for CAFs identification have been shown as well. I was particularly interested in this part since one of my new projects is on the intersection of CAFs and autophagy modulation in breast cancer progression.

During the poster session, I had a chance to present my research project "Reversing EMT in breast cancer by retinoic acid and autophagy modulation". During 1 hour, together with experts from the field and students, we were discussing the achievement and pitfalls, resulting in valuable suggestions for my future project planning.

Overall, 11th ENBDC workshop united a great scientific community in the field of breast cancer development and I very much appreciate the contribution of LS2 into my PhD progress.

07.06.19
Bern



Anuradha Rajendran (University of Zurich)

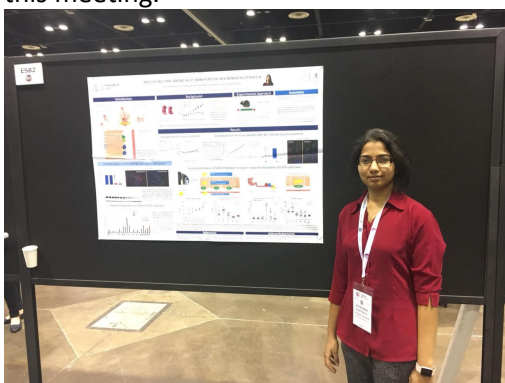
[Experimental Biology 2019, 6-9 April 2019, Orlando, USA](#)

Experimental Biology meeting is a prestigious annual conference jointly organized by the American Physiological Society (APS), the American association of Anatomists, the American Society for Biochemistry and Molecular Biology, American Society for Investigative Pathology and the American Society for Pharmacology and Experimental Therapeutics. In 2019, the conference was held from April 6th until April 9th (4 days) at the Orange County Convention Center, Orlando, FL, USA. The conference included many significant keynote lectures, symposia and featured talks, oral and poster communications from scientists all over the world and focused on a wide range of topics in not just Physiology but also other interdisciplinary fields owing to the participation by other host societies mentioned above. This makes the conference a unique opportunity to keep up to date with the latest advancements in the field and for excellent scientific networking within and outside the community.

During the conference, I had the opportunity to present my work in the topic category 'In Vitro and In Vivo Epithelial Transport In Intestine' of the APS as a poster communication on 7th April. My work is focused on studying the role of a neutral amino acid transporter LAT4 (SLC43A2) in the small intestine and kidney epithelium in vivo in mice. During the poster session, I got the opportunity to interact with many scientists from my research field and gained more knowledge from experts in the field which helped me improve my research strategies. In addition, on April 6th, APS also hosted the Epithelial Transport Group (ETG) annual meeting for early career scientists (PhDs and early postdocs) wherein I got the opportunity to give an oral presentation on my research project to the young scientists in the field and also gained insights into new ideas in epithelial transport research. On the other hand, the symposia also covered a wide range of topics in gastrointestinal and renal physiology, and interdisciplinary topics like the involvement of the gut-brain axis in the control of metabolism.

Among the other physiology lectures, the most fascinating one for me was from Prof. Juleen Zierath (who also received the Solomon Berson Award for 2019), from the Karolinska Institute, Sweden on how acute exercise exerts epigenetic control on metabolically important genes in the mitochondria and its regulation of circadian clock genes. She also highlighted the importance of exercise during the afternoon which improves blood glucose control that also lasts on the days of rest and vice versa for morning exercise in type 2 Diabetes Mellitus (T2DM) patients treated with metformin. Other fascinating symposia talks on metabolism involved novel insights into circadian rhythms in obesity and the regulation of insulin release, delivery and function, and the involvement of insulin in neurodegenerative diseases like Alzheimer's.

In addition, the EB meeting also provided a hub for enriching the career by organizing various career planning sessions and by setting up micro learning hubs with brief 15-30 mins talk on career planning, scientific publishing, scientific communication, building a CV, etc. Overall, the EB and ETG annual meeting helped me broaden my knowledge in various disciplines of physiology and provided a great platform for networking and career development. I sincerely thank LS² for supporting me with the travel grant to attend this meeting.



Sofia Zaganelli (University of Geneva)

[Gordon Research Conference on Mitochondria in Health and Disease, March 17th-22nd, 2019 - Ventura, CA \(US\)](#)

I would like to thank the LS² for giving me the opportunity to attend the Gordon Research Conference on Mitochondria in Health and Disease, which was held in Ventura (California, US) from the 17th to the 22nd of March 2019.

This conference was the first Gordon Research Conference organized on “Mitochondria in Health and Disease” and focused on “Mitochondrial dynamics and Signaling”. In the spirit of Gordon Research Conferences, the meeting was attended by about 200 participants, and it provided an excellent opportunity to interact with different scientists from all over the world.

The rich scientific program of the Conference addressed different aspects of mitochondrial biology, such as lipids in the mitochondria, mitochondrial contact sites, mitochondrial dynamics and exchange of content. The several talks presented during this conference were organized in different sessions, nicely introduced and chaired by renowned scientists for each session topic.

The panel of speakers was excellent, and I had the opportunity to learn more about cutting-edge research on mitochondrial biology. I particularly appreciated that most of the presentations given during this conference disclosed unpublished recent work.

The program of the conference also dedicated a good amount of time to the posters, giving the opportunity to present each poster for two consecutive poster sessions. I especially enjoyed having enough time to visit several posters and to discuss data extensively with other scientists.

I had the great opportunity to present my PhD work as a short talk during this meeting, as well as to present a poster. This allowed me to share my PhD project on the biophysical properties of mitochondrial RNA granules and their role in mitochondrial gene expression. The chance to discuss my results with leading researchers in the field, their questions and feedback on my work, have been of extreme importance for my research. Moreover, presenting my research was an excellent opportunity to network with different leader scientists and discuss with them not only about my results, but also about my future career in science.

Mattheus Wildschut (University Hospital Zürich / ETH Zürich)

Keystone Symposium “Proteomics and its Application to Translational and Precision Medicine”, Stockholm, 7th-11th of April 2019

Thanks to LS², I was able to attend the Keystone Symposium “Proteomics and its Application to Translational and Precision Medicine”, which took place in Stockholm from 7th-11th of April 2019. At this conference, I managed to both obtain a thorough overview of developments and interests of many of the important labs in the field of my PhD project, and present to, interact with, and receive feedback from researchers working on the same topic as I am.

Given that I am a shared PhD student between the hematology department of the University Hospital Zürich and the proteomics lab of Prof. Bernd Wollscheid at ETH Zürich performing translational proteomics, the topic of this four-day conference was very relevant to me. I currently have mainly investigated cell line proteomes but have banked purified cells from a substantial cohort of patients to determine their patient-specific proteomes. I aim at translating the information gathered from these proteome characterizations into clinically applicable findings, such as elucidating targetable processes being upregulated in our patients.

Working with clinical samples poses specific challenges including the well-described and vast interpatient heterogeneity. Therefore, this meeting, at which I could hear how an impressive line-up of keynote speakers I so far only knew from high-impact publications approached these issues, was very interesting and at the right time of my PhD. Even short talks were generally held by group leaders and contained lots of data. This offered an extensive overview of both the technological side itself, as of applications of proteomics technology that labs worldwide are working on.

The aspect of the conference that I found the most impressive was that the amount of data that is being generated in clinical proteomics is huge. Studies included thousands of participants, quantifying “deep” proteomes with up to 16.000 proteins. Furthermore, many labs are integrating various other sources of big data with proteomics, including not only standard omics, but also activity trackers and even the exposome: all compounds or organisms one gets exposed to. Another interesting trend presented was that instead of only defining differences between individuals, tracking proteomes longitudinally provides additional insight on a person’s health status.

For me and other PhDs and postdocs, there was the opportunity to present our work in one of three poster sessions. Despite still being at a point in my PhD where I have not gathered much clinical proteomics data, people were generally interested in my work and I had some interesting discussions. Some of the raised points I implemented as soon as I returned back to the lab, something I have had not experienced at other conferences so far.

I am overall excited about having attended this Keystone Symposium and am very grateful to the LS² for helping me enable this!

Anna-Maria Olziersky (University of Geneva)

[EMBO workshop: Chromosome segregation and aneuploidy, 11-16 May 2019, Cascais, Portugal](#)

The Chromosome segregation and aneuploidy workshop is organized every three years in different places in Europe and it is one of the most important meetings in this research field. This year the workshop took place in Cascais in Portugal with overall 163 participants. We had the pleasure to hear 58 oral talks – 34 from scientists invited by the organizing committee and 24 by participants selected to present their science through an oral presentation. The rest of the participants presented their science through poster presentations. The workshop started on the 11th of May with the keynote lecture of Prof Don Cleveland, a leading scientist in the field of chromosome segregation and ended in the evening of the 15th of May. The workshop was divided in 11 sessions of 4-6 talks/session. The first two days, the talks mostly focused on the kinetochore structure, spindle formation and centrosome biology, whereas later on the modelling of aneuploidy arising in cancers, its potential causes and its contribution to chromosomal instability.

It was a great opportunity for me to participate in this workshop, as I had the chance to hear about the unpublished recent work of different labs on chromosome segregation. More specifically, I was particularly interested to listen to the talks of Prof Beth Weaver focusing on the effect of microtubule targeting agents in cancer cells and of Prof Lee Zou talking about the effect of replication defects on mitosis. In general, I felt very privileged to be a participant of this workshop, as it is an event that is not organized that frequently and the number of group leaders was kept high compared to students/post-docs, indicating a very intense selection process.

I had the chance to present my research in a poster format in one of the poster sessions. My poster was visited by many participants and as a result I could get important feedback for my project and advice on how to put it in a context of a manuscript for publication.

Finally, during the workshop there was enough time to discuss with other group leaders and students/post-docs about scientific and non-scientific subjects. This allowed me to meet people from different labs and expand my scientific network.

To sum up, I am grateful to have participated in the chromosome segregation and aneuploidy workshop 2019 in Cascais, Portugal. I strongly believe that I will take advantage of the feedback I got during the workshop and that the new contacts I have made will help me take decisions about my future career. Thus, I would like to sincerely thank the LS² for supporting my participation in this meeting.

Mannekomba Roxane Diagbouga (University of Geneva)

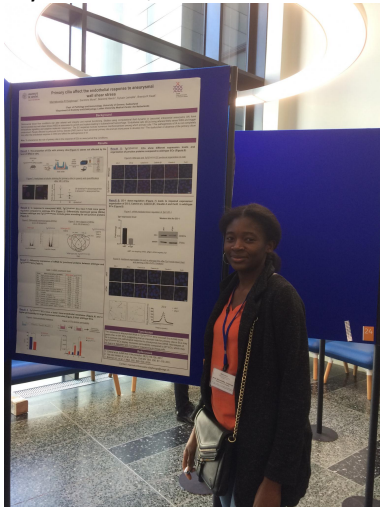
14th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, Imperial College London (UK), 11th-12th April 2019

The annual meeting on Biomechanics in Vascular Biology and Cardiovascular Disease took place this year at Imperial College London.

The two-day conference was very intense in knowledge exchange and sharing. Indeed, experts in various fields were present to cover many aspects of vascular biology and clinical research related to biomechanics. Prof. Yiannis Ventikos from UK gave the keynote lecture about the role of blood flow and inflammation on cerebral aneurysm formation. Furthermore, oral communications were organized by topic: Cellular mechanosensors, Mechano-Predictors of Atherosclerosis, Imaging of Blood Vessels, Gender and Cardiovascular Disease, Pulse Wave Analysis, Atherosclerotic plaques stability, and Cellular Signaling. Each session was highly organized and impactful with a minimum of two internationally renowned scientists presenting data. In addition, the sessions were complemented with a selection of high quality submitted abstracts.

All the talks were very interesting and I was excited to hear about latest finding on blood flow and vascular patho/physiology. Poster sessions were organized during lunchtime and I had the opportunity to present my PhD project data. My thesis project aims to identify the effects of biomechanical factors on the structure and composition of the vascular wall in intracranial aneurysms. My poster received a lot of attention and experts in the field contributed with nice ideas, scientific input and advice to further my work. I really enjoyed the poster sessions because mostly young investigator or doctoral student were presenting. This created the opportunity to have nice discussions about experiments, technical issues and PhD life in general.

Beside this very rich scientific program, we also had a conference dinner that favored networking. I would like to thank the LS² to for the travel grant and I am very grateful I could attend this meeting and expand my network, which will facilitate my search for a postdoctoral position.



Andrea Buccarello (University of Bern)

Gordon Research Seminar & Conference "Cardiac Arrhythmia Mechanisms", Renaissance Tuscany Il Ciocco, Lucca, Barga (Italy) / March 30 – April 5, 2019

About the Gordon conferences:

Gordon Research Conferences are well known and established congresses that bring together young and senior researchers to discuss the latest science in the field, much of it unpublished, thanks to the GRC policy of not allowing public disclosure of presented material (any photographing is prohibited).

Gordon Conferences have a limited number of participants (typically <200 people) and are often held in remote places (e.g., isolated resorts) to promote the interaction between scientists at all levels (from undergraduate students to senior investigators).

The Gordon Research Seminars (GRS) usually take place just before the main conference and are intended to be the opening of the official conference.

About the 2019 Seminar and Conference on Cardiac Arrhythmia Mechanisms:

The seminar consisted of one day of oral presentations and poster sessions under the supervision of a limited number of senior scientists. During this time, young researchers had the possibility to know each other and share their scientific experiences and ideas. I had the opportunity to discuss with young researchers from Johns Hopkins University and from the Universitäts-Herzzentrum in Freiburg about electro-mechanical interactions between cardiomyocytes and myofibroblasts, topics that are quite related to my project.

The conference itself lasted 5 days and comprised an intense program. Every day, plenary talks (mostly given by senior investigators) were scheduled in the morning and in the evening, and the afternoons were dedicated to poster sessions and networking. The talks were carefully organized in different sessions. One session was on emerging approaches for cell and tissue imaging, in which I learned about the interplay of macrophages and fibroblasts in the heart during fibrosis. Another session was on neuromodulation of the heart rhythm, during which I learned how cardiac innervation density still plays a pivotal role in diseased hearts. A further session was on different approaches to arrhythmic therapy, where I discovered that it is possible to target genes involved in atrial fibrillation using *Drosophila melanogaster* as a models for cardiac disease.

One special thing was that everyone could sign up to have lunch or dinner with the professors in order to discuss longer about their research topic. I had the opportunity to have lunch with Prof. Julia Gorelik and her colleagues from the Imperial College in London and we debated about the acute and time-course effects of a cholesterol-removing agent on the membrane of cardiomyocytes, a drug I used quite recently to investigate the stretch-dependent mechanisms linked to the cell membrane.

The poster presentations were scheduled every afternoon in such a way that everyone had the chance to show its own data and have a look at other posters. The poster sessions was the part of the conference that I enjoyed the most, since it created an amazingly friendly atmosphere among senior and young researchers. Furthermore, thanks to several exciting discussions and stimulating debates, I have got invaluable suggestions and new ideas for my project. For example, Alexey Glukhov, from University of Wisconsin-Madison and former scientist at the Imperial College in London, gave me some ideas on which family of stretch-activated channels I can target and how to extract as more information as possible in my experiments.

In summary, during both the Gordon Research Seminar and the Gordon Research Conference, I learned a lot from all the scientists in the field of cardiac arrhythmias and I received important positive feedback as well. I think that presenting a poster at such a conference is a great opportunity to meet and interact with many people within the same field.

I believe that for a young scientist, Gordon conferences are a must for shaping his or her own future in scientific research. These conferences are unparalleled not only because of their high scientific level, but also because everyone has the great opportunity to create new connections and to improve therefore networking, a necessary step for a future career.

For all these reasons, I express my gratitude to the LS² Society for this travel grant.

Daniel van Leeuwen (ETH Zurich)

Keystone Symposia Conference on Small Regulatory RNAs, April 14-18, 2019, Daejeon Convention Center, Daejeon, South Korea

I attended the Keystone Symposia Conference on Small regulators RNAs, from 14 to 18 April 2019, in the Daejeon Convention Center in Daejeon, South Korea. It was the first Keystone Small RNA meeting since 2016 and organised by Narry Kim, Gregory Hannon, Lin He and Victor Ambros. The conference was co-organized by the South Korean Institute for Basic Sciences, an overarching organisation for scientific research in the country, which was also super helpful in helping everyone to reach the conference locations and catch their flights back home.

The conference started with one of the Keynote lectures by David Bartel, which is one discoverers/founders of miRNA research. Afterwards a wide range of topics was covered during plenary sessions with invited speakers and workshops with speakers from selected abstracts. Some of the topics covered were diverse small RNA pathways, lessons from CRISPR, mechanisms of RNA silencing, miRNA biogenesis and miRNA function in development and disease and miRNA turnover. The final keynote lecture was given by Philip Sharp, a Nobel prize laureate (for his work on RNA splicing).

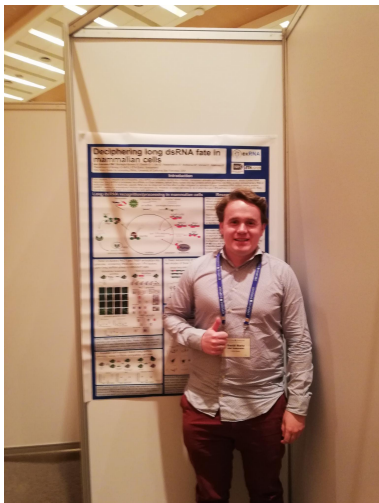
I was especially amazed by the presentations on siRNA therapeutics. First, Alnylam Pharmaceuticals, who recently managed to get the first approved siRNA drug, presented their latest results on siRNA-GalNac conjugates. In addition, Anastasia Khvorova shared the latest results from her lab which managed to achieve functional, long term distribution of siRNA in various regions of mouse, goat and monkey brains. These impressive results shed light on the immense potential of siRNA therapeutics to treat monogenic diseases in the future.

Around 300 researchers working on small RNAs from all over the world were present in this conference. During European meetings I previously attended attendance from Asia and North America was usually quite low so it was especially good to meet and discuss some of the colleagues from far away during this conference.

Besides the plenary sessions, colleagues also presented their latest, unpublished results in three rounds of poster sessions. I presented my work on 'long dsRNA fate in mammalian cells' in the 3rd poster session. This is my main PhD project and we are currently putting it together into a manuscript. Therefore, this meeting was especially important for me to see how the story would be received by the field and to get useful feedback on it. Overall the feedback was very good and fruitful discussions led to new insights and ideas and even a potential collaboration for my second PhD project.

Finally two workshops, meet the speakers and meet the editors, were organized to help young researchers with their career path and to give them more understanding of the publishing process. Especially the meet the speakers workshop was very useful for me because some of the speakers which I look up to, such as Victor Ambros, David Bartel and Phillip Zamore, commented on their career path and answered our questions in a very informal setting.

I would like to thank LS² for the financial support which allowed me to attend the Keystone Symposia Conference on small RNAs in Daejeon.



Amalia Ruiz Serrano (UZH)

Knowledge transfer in Mouse Embryology practical training course, Illkirch, France, 8-9/04/2019

The practical training course “Knowledge transfer in mouse embryology” is a customized course provided by the centre of excellence in mouse phenogenomics, PHENOMIN-ICS, France. The course was held from the 8th to 9th October in Illkirch, France. Each year this course is organised for a group of people, however, this time I had the unique opportunity to have a personalised course according to my PhD project needs. Furthermore, this is one of the few courses covering the content of mouse embryology in detail, taught by leading experts of this field.

During the course, state-of-the-art techniques and theoretical knowledge on perinatal mouse lethality were covered. In particular, during the course I learned about techniques on fetal viability, necropsy of the fetus and phenotyping of mouse embryos including histology and observation with confocal microscopy. The experienced researchers Dr Olivia Wendling, head of the Histopathology Department, and Yves Lutz, engineer at the imaging platform of IGBM actively participate in the supervision and teaching of the content.

In addition, I had the unique opportunity to discuss my data with the experts, which I obtained during 3.5 years of my PhD, working on the phenotyping of a knockout mouse that displays perinatal lethality. The interest in my project was great and the outcome of the discussion was very fruitful and constructive. During the course, I was introduced not only to the supervisors of the course but also to other scientists working at PHENOMIM-ICS, who gave me many helpful comments and suggestions. Moreover, I was able to make contacts for potential future collaborations and I currently keep in contact with the main supervisors of the course, who displayed a great interest in scientific discussions and networking.

Overall, attending this course not only gave me the marvellous opportunity to deepen my knowledge on mouse embryology techniques, which are going to be very useful for my PhD project, but I also got to know experienced researchers in my current research field as potential collaborators. My project will definitely benefit from the feedback I got and the techniques I learned. I feel very thankful to the LS² for making my participation at this course possible through their support.



Marc van Oostrum (ETH Zurich)

[XIII. Annual Congress of the European Proteomics Association, 24-28.3.2019, Postdam, Germany](#)

Thanks to the LS² travel grant I was able to attend XIII. Annual Congress of the European Proteomics Association: From Genes via Proteins and their Interactions to Functions, in Potsdam from 24-28st March 2019.

The event was hosted by the German Society of Proteome Research (DGPF e.V.) in cooperation with the European Proteomics Association(EuPA) with the goal to provide a network comprising academic institutions, commercial companies and special institutions at the national and international level in order to support the extension of scientific knowledge in the field of proteome research and protein analysis.

For me personally, the conference was a great opportunity to hear about the latest research going on in laboratories from all over the world and see distinguished scientists I only knew from reading their publications. Besides the plenary talks, the conference featured more specialized session on specific themes – many of which covering topics of direct relevance to the field of study I am pursuing during my PhD thesis work. In between there were sessions reserved for poster viewing, which provided the opportunity to gather more information about interesting projects ongoing in different laboratories, and most importantly directly contact and interact with the presenting researchers. With my registration to the conference I also submitted an application for the European Proteomics Association Young Investigator Prize in Proteomic Sciences. I was very excited that my application was selected for a presentation during the EuPA Young Investigators Prize session, providing the opportunity to present my research to the proteomics community. In a short talk, I described our current efforts in global analysis of the glycoprotein population residing in the plasma membrane (surfaceome) of primary neuronal cultures. Using chemoproteomic technologies we took snapshots of the neuronal surfaceome during differentiation in vitro and thereby provide a quantitative map of surfaceome dynamics throughout different developmental stages ranging from neurite outgrowth to synapse formation. After my presentation, I had interesting discussions with other researcher working in the same field, which I found very encouraging to further develop the scientific questions I'm currently working on. I was thrilled to hear that the jury liked my presentation and awarded the EuPA Young Investigators prize to me during the awards ceremony at the end of the congress. Last but not least, I had many interesting interactions with people coming from all over the world and working in different environments, I believe this broadened my own perspective on the research field and the scientific community in general.

In conclusion, it was a great opportunity for me to attend the Annual Congress of the European Proteomics Association 2019: From Genes via Proteins and their Interactions to Functions, and am very grateful to the LS² for supporting this endeavour.



Jiayi Lan (ETH Zurich)

1st European Top-Down Proteomics Symposium, Paris, February 12-14, 2019

I am a PhD student in Professor Renato Zenobi's group, at ETH Zurich, focusing on analysis of intact protein complexes using high

resolution mass spectrometry. Thanks to the financial support of LS² Proteomics section, I was able to attend the 1st European Top-Down Proteomics Symposium held at Institut Pasteur in Paris.

The 1st European Top-Down Proteomics Symposium gathers around 150 researchers in the top-down proteomics field. The conference covered a wide range of topics, such as instrumentation and analytical strategies, proteoform-centric bioinformatics, technological developments, native top-down and human health. The aim of the conference is to bring together the leading scientists in this emerging field, form a research community and discuss current state and challenges for top-down proteomics.

The conference consists of 4 plenary lectures given by internationally renowned scientists, 15 keynote talks, 3 round table discussions and poster sessions. Personally, I enjoyed the most the round table session where we discussed technical challenges and potential solutions in the top-down proteomics field. We also discussed about the future directions of top-down proteomics. The community expressed large interest in understanding the regulation of proteoforms at DNA, RNA and post-translational levels in health and disease conditions, comprehensive proteoform profiling as well as method standardization for diagnostics and therapeutics.

I was selected to present my work during poster session. Thereby I had a chance to present my first project during the PhD study. My project is aimed to direct characterize the ferritin, a 24-subunit iron storage protein complex, via high-mass detection mass spectrometer. I learned a lot during the conference on how to advance my own project.

The participation to the 1st European Top-Down Proteomics Symposium was highly beneficial for my PhD study, particularly because I am a beginner in the field. I had the precious chance to talk to the top researchers in the field, also to present my work and get feedback from them. I would like to thank the LS² Proteomics section again for supporting me.



Alma Salim (University of Zurich)

9th Asian Biological Inorganic Chemistry Conference, 9 – 14 December 2018, Singapore

The AsBIC conference is an important event for the bioinorganic chemistry community and provides an excellent platform for researchers to discuss latest developments in all fields at the interface between inorganic chemistry and life sciences. This conference is in its 9th edition and it has become a highly established international meeting. This year the conference was hosted on the tropical island of Singapore from 9-14 December 2018. The conference is about sharing knowledge, exchanging ideas, and building friendships among the diverse representatives from the wide range of countries that constitute bioinorganic chemistry community. The five days conference has been structured with dynamic and exciting schedule covering:

1. plenary lectures covering broad range of subtopics
2. interesting keynote and invited speakers lectures
3. poster sessions
4. workshops
5. social events (excursions, dinner, etc.)

The AsBIC conference is an event happening every two years and together with EuroBIC and ICBIC, is the most important conference in the field of biological inorganic chemistry. It is a unique chance for every PhD student to get in touch with the experts of all branches of BIC research. This event was particularly important for me as it gives final conclusion to my PhD and allowed me to make connections and expand opportunities for the future career.

The research of our group focuses on a small proteins, rich in cysteine residues which can coordinate divalent metal ions in the form of the thermodynamically stable metal- thiolate clusters. They have been reported to play a role in the various physiological functions, as homeostasis of essential metal ions, heavy metal detoxication, protection against oxidative stress, signal transduction, DNA damage repair, and etc. As my project is at the interface of structural biology, coordination chemistry and biochemistry, this conference make an great opportunity for me to keep in touch not only with latest developments on metalloproteins and metalloenzymes, but also with the different methodologies that could improve my research. Also, during the poster session, I had a chance to present my work and have interesting discussions with other students, postdocs and group leaders which gave valuable input for my research. Therefore, I am grateful to LS² to support my participation in this conference.

