Duilio Potenza, University of Bern

60th Biophysical Society Annual Meeting, Los Angeles, USA, 27 February to 2 March 2016

My abstract was accepted for a poster presentation scheduled on Monday 29 in the "Intracellular Calcium Channels and Calcium Sparks and Waves" session. The meeting was very stimulating and interesting. I had the opportunity to present my data to interested meeting visitors and specialists in the field from whom I received relevant inputs regarding future steps of my research project. In particular I presented our findings related to the role of different phosphorylation sites on ryanodine receptor (RyR) macromolecular complex. Changes in RyR2 phosphorylation are thought to be important regulatory and disease related post-translational protein modifications. The extent of RyR2 phosphorylation is mainly determined by the balance of the activities of protein kinases and phosphatases, respectively. Increased protein phosphatase-1 (PP1) activity has been observed in heart failure (HF), but the regulatory role of this enzyme on intracellular Ca^{2+}, handling remains poorly understood. Using laser-scanning confocal calcium imaging and cardiomyocytes isolated from transgenic animals lacking specific phosphorylation sites on the RyR, we investigated the physiological significance of increased PP1 activity. We showed that the catalytic subunit of PP1 was able to modulate RyR activity measured as Ca^{2+}, sparks frequency (CaSpF) in permeabilized cardiomyocytes: the enzyme initially increased CaSpF followed by a second phase during which CaSpF returned to control. This may be caused by the depletion of the sarcoplasmic reticulum (SR) Ca^{2+}, content. Therefore we showed that increased PP1 concentration enhances RyR-mediated leak from SR. We further showed that de-phosphorylation of RyR2-52808 site and at least one not yet identified phosphorylation site may be important in RyR2 modulation. Moreover, according to our data, we hypothesise that the other two major RyR2 phosphorylation sites, S2814 and S2030 sites are not involved in the described PP1-dependent mechanism.

The meeting was interactive especially due to the poster sessions during which I had chance to discuss in detail my data with different scientists within my field of specialization and to create new connections that might be useful for future scientific collaborations. In specific, I had opportunity to meet part of the group we are collaborating with (Prof. Dr. Hector Valdivia and the post-doctoral fellow Roberto Ramos Mondragon from Ann Arbor) and to discuss about data and new ideas concerning the development of the project.

I am very grateful to the Swiss Physiological Society (section of LS^2) for for the travel grant, which has allowed me to participate at this meeting.

Marta Bombardo, University of Zurich

6th Clinical Epigenetics International Meeting, Düsseldorf, Germany, 3-4 March 2016

My abstract was reviewed and accepted by the scientific committee of the Clinical Epigenetics International Meeting CLEPSO 2016 in Düsseldorf.

During the meeting, I had the opportunity to present my latest data to an audience of experts from whom I received several inputs regarding the future steps of my research project. In particular, I presented our findings related to the role of histone deacetylase inhibitors (HDACi) during acute and chronic pancreatitis. Pancreatitis is an inflammation of the pancreas. It is caused by premature intrapancreatic activation of digestive enzymes present in acinar cells, leading to auto-digestion of the organ. Mild forms of acute pancreatitis are characterized by severe pain but are in general self-limiting. On the contrary, severe forms of the disease are associated with pancreatic fibrosis, necrosis, infection, organ failure and high mortality rates. Chronic pancreatitis is a long-term inflammation where the pancreas becomes permanently damaged, leading to intestinal malabsorption and endocrine dysfunction. Pancreatitis is still a clinical challenge. There is currently no cure for pancreatitis, and the treatment is limited to supportive therapy. Histone deacetylases (HDACs), repressors of gene expression, have been found to modulate inflammatory responses. Some HDACi have already shown therapeutic effects in animal models of inflammatory diseases such as arthritis, inflammatory bowel diseases, ischemia-reperfusion injury, asthma and diabetes. However, the effect of HDACi during pancreatitis remains to be elucidated. During this meeting I presented that class I HDACs play a crucial role in the acute and chronic phases of pancreatitis, promoting the development of inflammatory response, metaplastic lesions and tissue fibrosis. In addition, our results show that blockade of class I HDACs could be a powerful treatment for this severe disease. The effects of selective inhibitors of class I HDAC were evaluated using biochemical, qRT-PCR and imaging techniques. Moreover, during the meeting, I had the opportunity to meet and discuss with different physicians and scientists within the field of clinical epigenetics. This 2-day conference has also allowed me to extend my knowledge on the study of epigenetic changes in normal and diseased cells in response to internal or external factors and how the basic epigenetic research is being translated into diagnosis, therapy and prevention in clinics.

Protsyuk Darya

The Joint Keystone Symposia "Cancer Pathophysiology: Integrating the Host and Tumor Environments", Breckenridge, Colorado, USA, 28 March to 1 April 2016

The Keystone Symposia is the significant meeting in the cancer biology field. It has narrow topics which gives the opportunity to meet the people that work on the same problem from different international institutions. The Join Keystone Symposia "Cancer Pathophysiology: Integrating the Host and Tumor Environments" was organized in Breckenridge, Colorado, USA on March 28 – April 1, 2016. It had two sessions a day: in the morning and in the afternoon. The poster sessions were hold every evening after the presentations. The talks were done by the leading senior investigators in the field of cancer pathophysiology. The tumor microenvironment plays a pivotal role in all stages of cancer development, including response of tumor cells to the therapy. Research over the last decade has revealed the incredible diversity and plasticity that constitute tumor microenvironment. Thus, this meeting brought together a wide breadth of experts who focus on a various aspects of the tumor microenvironment. During the meeting the goal was to create a more complete picture of the potential therapeutic landscape.

During poster sessions it was possible to access new researchers and to discuss the methodology, future directions, and exchange suggestions on the problematic questions. My poster "L-selectin on myeloid cells facilitates metastasis" described the role of leukocytes and in particular the L-selectin adhesion molecule in development of metastasis. We showed that monocytes mediated tumor cell extravasation in the lungs. L-selectin deficiency leaded to lower recruitment of monocytes and lower endothelial permeability, which decreased metastatic burden in the lungs. In the livers monocytes did not promote tumor cells extravasation. Lack of L-selectin in the liver supported a pro-tumorigenic microenvironment and resulted in a higher tumor burden.

The symposia and the poster sessions were thoroughly organized. The attendees were open for the discussions and sharing the ideas. I got advices about new mouse models, microscopy and flow cytometry possibilities that I can implement in my project. In addition, as most of the presented data was unpublished, I heard new possible mechanism which could be well explained by our model.

I am grateful to LS^2 committee for supporting my participation at this meeting. It was my first experience of a big international conference. I got a new experience and received a new knowledge both for my personal development and for my PhD project progress.

Lalita Oparija

Experimental Biology 2016, San Diego, USA, 2-6 April 2016

This conference provided me with a great platform for presenting my research project to broad audience. The project I presented is my doctoral project, which aims to investigate the regulation of basolateral amino acid transport, more specifically, transporter LAT4 (SLC43A2). This transporter is highly important for cell metabolism and transepithelial transport, as knocking it out in mouse model leads to 100% lethality by postnatal day 10. In my project I am investigating if LAT4 expression, localization within the cell and function could be regulated by phosphorylation. So far we have been able to identify 3 possible phosphorylation sites and, by replacing the crucial amino acid needed for phosphorylation, investigated effects of LAT4 phosphorylation/de-phosphorylation in *Xenopus laevis* oocyte model. The results show that the non-phosphorylated analogue of one of the identified sites (serine274) has higher transport rate and expression on the cell membrane; however the non-phosphorylated analogue of another site (serine297) has severely decreased transport function. This indicates that indeed, transport function, expression and localization of LAT4 might be regulated by phosphorylation or de-phosphorylation. In this conference I got two chances to present my results – my abstract was accepted for poster presentation under Epithelial Biology and Transport section, and also for oral presentation at Pre-EB Epithelial Transport Meeting for Young Researchers. Being selected for a talk was a great honour to me, as only 25 attendees got the possibility to present at this meeting. After presentation I received useful input from audience, regarding some aspects of my work that would be worth to investigate deeper, as well as advice about techniques I could apply to do so. I believe that this presentation helped my career, as I could reach out to bigger audience than in poster session and create some international connections, allowing to find potential collaborators or at least advisors. It also made me to work more on my presentation skills, to deliver the best possible talk I could. During the poster session, multiple visitors gave me worthy advice on tissue de-phosphorylation methods, which is something I have been struggling with a lot in my work. I hope that some, if not all, of these suggested methods will be suitable for my research and I can finally answer the questions I previously was not able to. I also received suggestions regarding future directions of my project, some of which I would be interested to explore. Furthermore, as I am approaching the final phase of my PhD, this conference was also a great opportunity for me to talk to several postdocs and research group leaders from different universities in United States and elsewhere to find out what are the research opportunities there, in case I would decide to widen my horizon and do a postdoc outside Switzerland. Even if I won't do so, networking is important for finding labs and investigators with similar research interests to mine, which eventually might lead to a collaboration. In this conference I attended 15 sessions. About half of the sessions were connected with my research field and interests – I got insight in advances in renal physiology, epithelial physiology and transport, mechanisms of gene and protein regulation in the kidney and protein and amino acid metabolism. I took advantage of the wide range of topics covered in this conference and attended sessions, which covered interesting and/or emerging biological influences and tendencies. I learnt about immune functions of epithelial cells, brain-gut axis and the influence of nutrition on mood and behaviour, what the adaptation mechanisms to different types of stresses are and how these stresses manifest, as well as how psychology plays a role in autonomic physiology. Finding out what other topics are being researched in the field of physiology and other biology fields, might help me to choose my next career path, and I always find it very valuable. I also attended a couple of career related sections about data analysis and reporting, interview skills and writing the doctoral dissertation. I guess I do not have to justify the importance of such sections for my future, because they covered almost everything I am experiencing now or will experience in near future. Of course, I also got a chance to visit San Diego, where I have never been to and even meet a couple of previous members of my current lab, which now are working and residing in United States and also attended the EB conference. In conclusion, attending this conference was a great experience for me, as I could present my data, get feedback on both – my presentation skills and the scientific content, network, learn about current topics in physiology and other biology fields, and meet people from other labs and my former co-workers. I hope that my research work can benefit from the advice I got and I can achieve better results with less struggle.

Elie Jacques Fares

International Congress on Obesity, Vancouver, Canada, 1-4 May 2016

Two weeks ago, I attended the 13th International Congress on Obesity (ICO); hosted by the World Obesity Federation in partnership with the Canadian Obesity Network (CON).The congress took place at the Vancouver convention center, Vancouver, Canada. It started the 1st of May and lasted 4 days.

I was assigned for an oral presentation in the Exercise and Obesity track to speak about a part of my on-going thesis project entitled: 'Energy expenditure phenotyping during low physical activity levels: Validation of very low power cycling exercise in sedentary humans'. The presentation went very well, the aim of my presentation was to develop and validate a standardized test, using bicycle ergometer, for assessing the energy cost of low-intensity dynamic work. This standardized and validated approach to study human delta efficiency in response to very low power cycling exercise open up new avenues for research in human energy expenditure (EE) phenotyping with implications for research into metabolic predisposition to fatness and obesity management. You can find more information in the presented abstract. Very interesting symposia have been held at the ICO 2016, here is a summary of some of the talks I attended:

Nutrient Signaling to the Brain and Energy Metabolism

Behavior and food intake are influenced by the kind of food we eat. This effect is mediated directly by nutrient signaling to the brain (crossing the blood brain barrier) or indirectly through hormone release or vagal afferents informing the brain about the food composition. Overfeeding rats with high fat high sugar diet in addition to chow, made them obese and insulin resistant in a short period of time. What is interesting is that this obesogenic diet had no counter regulatory mechanism but reflects high energy demands. It seems that there is a malfunction in nutrient signaling pathways. The intake of lipids and glucose (diet composition) influence the glucose metabolism by increasing glucose production through the hypothalamus (La Fleur, S).

Microbiota

Gut microbes and the metabolism are deeply intertwined. Interactions are bidirectional (specific microbes can have a tremendous influence on the host physiology; the host by itself regulates its gut microbiota. The innate immune system seems to influence the production of bioactive lipids regulating inflammation and metabolism. Low total diversity within the gut microbiota is generally regarded as less desirable and has been observed in children that are more susceptible to allergies as well as sufferers of IBD, IBS, obesity and *C. difficile* infection. Diversity is also reflected in terms of microbial gene richness. Indeed, high gene richness as well as abundance of a particular species, Akkermansia muciniphila, were inversely related to fasting glucose, waist-to-hip ratio and subcutaneous adipocyte diameter (Dao, Clement et al GUT 2016). High protein intake AND/OR Exercise interventions decreased resting blood pressure. Combined intervention reduced circulating levels of pro-inflammatory cytokine IL-8. The importance of diet with respect to the composition and diversity of the gut microbiota is becoming increasingly clear. Other than diet, few environmental variables in the modern lifestyle of a host exert a greater influence on health than exercise.

Diet, gut microbiome and gut permeability are all inter related - obesity and NASH H Tilg .

Factors proposed to support the gut barrier: 1. Diabetic approach: avoidance of high amount of sugar and fat, avoidance of energy-dense Western-style diet, FODMAP diet, Prebiotic/fiber, Glutamine, other immune-modulating formula, 2. Probiotic approach: Selected probiotics, Probiotic cocktails (multispecies concept), Synbiotics (combination of prebiotics and probiotics), 3. Drugs/others: Short-chain fatty acids, Metformin, Quercetin and other flavonoids (Bischoff SC et al. BMC Gastroenterology 2014) .

Other talks were related to the following topics: Artificial Sweeteners, Digital Health, Obesity Counselling, The 5 A's Approach To Obesity Counselling

Overall, it was a great opportunity for me to meet talented researchers and professors, and to have an update in obesity research, which, without any doubt, gave me a step forward in my research career. And finally, I am very grateful for the LS committee for approving my travel grant application and making this possible.

Samira Asgari, University of Lausanne

The Biology of Genomes Conference, NY USA, 10-14 May 2016

I traveled to New York between May 10th and 15th to take part in "The Biology of Genomes" (BoG) conference in Cold Spring Harbor. I presented , in a 15 minutes talk followed by 5 minutes of questions, part of my PhD work titled: "Loss-of-function mutations in IFIH I predispose to severe viral respiratory infections in children".

BoG is one of the most prestigious conferences in the filed of human genomics and one of the most competitive ones to get an oral presentation in. The conference is reputed as a meeting for presenting and discussing the latest scientific discoveries of the field of genomics; the presenters are highly encouraged to present unpublished data and the participants to actively take part in discussions. Furthermore , a major advantage of this conference is its small size that favors networking, an opportunity that I used to find a postdoctoral position and got several job/interview offers.

Please find below links covering the work I presented in the BoG conference in two different news reports:

https://www.sciencenews.org/article/faulty-gene-can-turn-colds-deadly-babies-toddlers

https://www.genomeweb.com/sequencing-technology/bog-speaker-ties-loss-functionvariants-ifihI-severe-pediatric-viral

Finally I would like to thank you again for giving me the opportunity to participate in this conference by accepting my travel grant application.

Sandra Bosshard, University of Lausanne

Conference "Mechanisms of Recombination 2016", Alicante, Spain, 16-20 May 2016

The LS^2 travel grant gave me the great opportunity to attend my first international conference on "Mechanisms of Recombination" in May 2016. This conference has a longstanding tradition in the field of DNA repair and brought together many leading researcher scientists with outstanding research achievements. During this conference talks covered functions and mechanisms of DNA repair pathways in various model organism ranging from bacteria, yeast, plants, to mammals, highlighting the diversity, similarities, and differences between theses model systems. Hence, I gained a great overview about repair processes in various cellular contexts and I could especially deepen my knowledge about meiosis and replication associated DNA repair. I appreciated that many talks showed unpublished data, which gave valuable insights into current trends in the field. I was selected to present a poster entitled "Identifying rate-limiting factors for targeted gene correction". My work shows that homologous recombination-mediated gene correction is limited in Chinese hamster ovary cells and that reduction of competing DNA double strand break pathways does generally not enhance its efficiency. Presenting my poster gave me the possibility to explain and discuss my project with other students as well as PIs. I also obtained new inputs and ideas, in particular about chemical inhibitors for DNA repair proteins. Furthermore, I enjoyed discussing posters of other conference participants. During these discussions I learned a lot about new techniques and I could ask question in an informal setting. Finally, these uncountable scientific discussions help me to get in touch with researchers working in the same field, potentially providing a basis for future collaborations.

Viola Puddinu, University of Bern

Gordon Research Conference and Seminar, Girona, Spain, 28 May - 3 June 2016

Thanks to LS^2 foundation I was able to attend to both the Gordon Research Seminar (GRS) and the Gordon Research Conference (GRC) on Chemotactic Cytokines held at the PGA Catalunya Buisness and Convention Centre in Girona, Spain. The GRS seminar consisted in two days of oral presentations and poster shows among students and young post-docs under the supervision of limited elder scientists. It was specifically organized by the young researches Dr. Maud Deruaz and Dr. Douglas P.Dyer. The seminar intended and succeeded to create an informal and friendly setting in order to encourage students' interactions and sharing of ideas. The seminar provided a great occasion to attend to high quality presentations regarding cutting edge unpublished research on the field of chemokine functions and roles during homeostasis and disease. During the seminar I had the chance to present the data regarding my project entitled "ACKR3 on B cell Lymphomas" both through a short oral talk (10 min) and a poster presentation. In both occasions I received invaluable suggestions for further development of my work.

Gordon Research Conferences are well known and established congresses that recruits the main leaders of the topic from all over the world. The chairs Dr. Tracy M. Handel and Reinhold J. Forster, organized 5 days of intense program consisting of speeches and poster presentations that allowed also to PhD students to show their data. The program included sessions of oral talks on the following 8 different topics: Atypical Receptors and Atypical Interactions in Chemokine Function and in Disease, Chemokines in Immunity, Host Defense and Inflammation, Therapeutic Targeting of Chemokine Receptors, Mechanisms of Cell Migration and Gradient Sensing, Chemokines, Inflammation and Cancer, Control of Cell Function by Chemokines in the Microenvironment, Novel Mechanisms for Regulating Chemokine Function, and Mechanisms of Immune System Development and Homeostasis. The conference provided me a great opportunity to meet and interact with students as well as PIs, improving therefore networking that might be relevant for my future career. Moreover as during the GRS, I had the chance to show a poster on my data and receive new hints to improve my research. In conclusion I think that attending both the GRS and the GRC enriched not only my knowledge of the field but was also an excellent bond-creating experience that will treasure also in the future. For all these reasons I'd like to thank the LS^2 society for its generous support.

Egle Radice, University of Bellinzona

Gordon Research Conference and Seminar, Girona, Spain, 28 May - 3 June 2016

The conference is taking place every two years and every time is changing the location (not only in Europe). This is one of the biggest international meetings in the chemokine field. Before the conference I attended the GRS organized by two senior PostDocs known in the field (Maud Deruaz and Douglas P. Dyer). The seminar consisted in two fully days of talks and posters held just by PhdD students and PostDoc, under the supervision of the GRC organizers (Tracy M. Handel and Reinhold J. Forster) together with other few important exponents. During this seminar I had the opportunity to present the data of my PhD project in a form of 10 minutes talk followed by 5 minutes of discussion. During the coffee break we also presented the project in a poster format. This seminar posed a unique opportunity for me to present my data in a more informal environment. I found a lot of discussing points talking with other students and with the group leader expert in the chemokine filed, which provided me new ideas for my project advances and suggestions regarding the presentation of my data. My project focuses on the role of the atypical chemokine receptor ACKR3 in the B cell compartment. Attached here there is the talk and the poster I presented during the first day of seminar. The poster attached is also the one I presented during the GRC.

At the end of the GRS, the conference GRC, started in the evening with the dinner followed by the welcome introduction held by the conference organizers (Tracy M. Handel and Reinhold J. Forster). Starting from the day after a rotation of major exponents in the filed gave their talks. Most of the talks were held by group leader and in some case the short talks were performed by Post Docs or even PhD students. The talks were grouped according to the variety of disciplines which are emerging in the chemokine field: functional roles during steady state conditions, in cancer, during the inflammatory diseases and the newest therapeutic applications. (I attach the link of the conference site where you can find the program and the partecipants: http://www.grc.org/programs.aspx?id=12492). All the talks were great and the science level was high: every talk was rich in discussion; most of the talks were very close to the topic of my project, thus it was useful for me to enrich my knowledge.

During the coffee breaks and also after dinner almost all of participants, me included, had the opportunity to show their posters for two consecutive days. As for the GRS also for the GRC the people who came to my poster were interested to my work and were discussing long about my data giving me a lot of good suggestions. I also found very interesting the poster section and the other poster presented, in particular I had the opportunity to discuss with people known in the field and to build new networks for a future post doc.

One of the most important aspects of the conference to me was the networking: for the first time I had the possibility to introduce myself to the most important experts in this field. This was useful for me not only to improve my knowledge in science, but also because I had the opportunity to discuss about possible future prospective for my carrier after the PhD. In general I found the conference very satisfying and I found a lot of new take home messages.

Sandro Käser, University of Bern

Gordon Research Conference (GRC) Mitochondria & Chloroplasts, Mount Snow, VT, USA, 19-24 June 2016

First of all I would like to thank the board of the section Molecular and Cellular Biosciences for approving my application and the LS^2 organization for such a generous contribution.

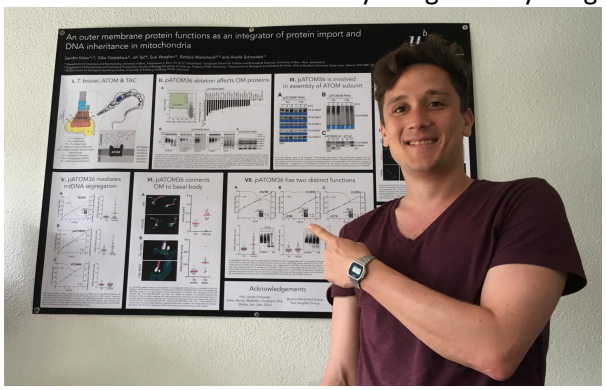
I was attending the Gordon Research Conference (GRC) Mitochondria & Chloroplasts that took place in Mount Snow, VT, USA from June 19th to June 24th 2016. The conference was organized in nine sessions, which covered the most important fields in mitochondrion and chloroplast research. A discussion leader introduced each session and the corresponding speakers and thus, gave an brief overview of the current state of the research field and the future tasks of the research area. At GRCs the talks are normally distributed among professors or senior postdocs and were therefore of very high quality.

I was able to profit a lot from all the different topics that were addressed during the conference. It gave me an overview of the current topics in the field and I had the chance to meet the people behind the research. A policy at the GRC is to get the afternoons off. Thiswas especially valuable for me as a PhD student, since I could spend time in a small group of

people and thus, could interact with faculty members in a rather informal environment. This helped a lot to come in contact with established group leaders and to discuss possible future career opportunities.

Poster sessions were held every day and I had the chance to present my poster on two consecutive days. Both poster sessions were extremely interactive and I had the chance to present my data to numerous people with different academic and research backgrounds. Since I had two sessions the time to discuss my results and science in general was never an issue.

Overall, the GRC Mitochondria & Chloroplasts was one of the best conferences I've ever attended and I therefore would like to thank you again for your generous travel grant.



Maysam Mansouri

Annual Meeting of the ''ISSCR'', San Francisco, USA, 22-25 June 2016

First of all, I would like to thank LS^2 and Swiss Society for Molecular and Cellular Biosciences (SSMCB) for supporting me to attend the global conference on stem cell research ''ISSCR'' which took place 22-25 June in San Francisco, USA. The conference was consisting of plenary and focus sessions, followed by poster exhibition every day. It was very well organized. It covered a variety of subjects in both clinical and basic biological sciences. Main topics which were presented in ISSCR conference included: stem cells and cancer, tissue growth and morphogenesis, cellular plasticity and reprogramming, gene network and epigenetics, gene therapy and stem cells, disease modeling using stem cells, and cell therapy in clinical trials.

Keynote talks were presented by Dr. Shinya Yamanaka, Nobel prize winner in Physiology or Medicine 2012, and Prof. Rudolf Jaenisch, Professor of Stem Cell Biology at MIT.

Dr. Yamanaka presented a nice review about the discovery of iPS cells and recent progresses in the field, current challenges and future perspectives. Prof. Jaenisch described how the development of iPSC revolutionized biology to study human disease. Anyway, he addressed some of the problems that iPSC, especially human iPSC, can harbor. First one is pluripotency state of these cells (primed in human vs. naïve mouse). Second, the challenges of disease modeling and iPSCs in 2D culture. To better study diseases, his lab developed 3D organoids and mouse-human chimera.

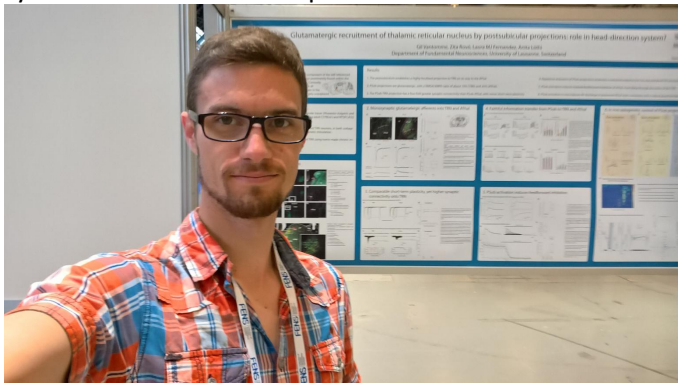
Here, I will describe only very interesting talks which had a real great influence on me. Smith from Cambridge showed that by using inhibition of two singling pathways, they were able to keep the ESC in ground state; i.e., a stable and homogenous population of naïve pluripotent cells. Dick from Margaret Cancer Center showed a role of cancer stem cells in therapy. He decribed many nice results that clearly have shown competition between germline cells, stem cells and even between mouse and human cells. One of the nicest example is expression of CD47 on cancer cells to avoid attack by MQ. Fuchs from Rockfeller Institute described a regulatory circuity and its balance during aging and cancer. She used hair follicles and showed that Wnt and BMP expression are upregulated during aging. Pan from John Hopkins Institute described Hippo signaling pathway in cancer. He focused on the event leading to phosphorylation of an onco-protein (Yki). He also described some strategies to inhibit this pathway. Watt from London presented plasticity of epidermal stem cells in response to tissue damage, transplantation or tumor development. One of the best talks was the one of Parmar from Lund. She described the potential of brain repair by using induced neurons. She also provided some data about trans-differentiation of fibroblasts to induced neurons *in vitro* and *in vivo*. Because I have done efficient direct reprogramming by the MultiPrime system that I developed (Mansouri et al., Nat. Commun.), this talk was very interesting and we had a great discussions after her talk. The conference also was consisting of a great poster presentation time. I could present my data as a poster and had a good discussions with many scientists. Also, some scientists found my system (MultiPrime) very beneficial. For example, a group from Max-Planck-Institute that is working on the retina, asked me to prepare a virus harboring three genes for them that they will inject into mice.

Gil Vantomme, University of Lausanne

10th FENS Forum of Neuroscience, Copenhagen, Denmark, 2-6 July 2016

This year, the FENS forum took place in the beautiful city of Copenhagen. The Bella Center held the conference and was located 10 minutes away from the city, the airport and the hotels. The public transportation service in Copenhagen was beyond reproach and allowed easy travel back and forth to the city center. Even though Copenhagen is a small town, it offers affordable and unique opportunities. Among them I would like to mention the little mermaid, Nyhavn canal, the Guiness world record museum and the parliament. The parliament still houses installations for the King and Queen of Denmark, which are splendid and worth a visit. **The Workshop** I started the forum by participating to a workshop about light that cures, which I found very interesting. I am working with optogenetic tools in mice on a regular basis and I was surprised to see that these same tools are applied in pre-clinical researches. Among the presentations I want to highlight the novelty of using optical manipulation of neurons to restore muscle function after stem cell-derived motor neurons transplantation, development of new cochlear implant using LEDs as stimulators and restoration of visual function by expression of melanopsin in the retina. **The Forum** There were two plenary lectures per day where major researchers presented their past and present work. I had the chance to meet and listen to the 3 winners of the Nobel Prize of physiology or medicine in 2014: Edvard Moser, May-Britt Moser and John O'Keefe. They identified how spatial navigation is encoded into the brain and characterized the different cell types required for this. As my project focus also on one part of the spatial navigation system of the brain, I was pleased to learn how they designed their first experiments, the difficulties they encountered and how they managed to overcome them. The parallel symposia were a good opportunity to alternate between topics that are of general interest or closely related to my projects. I discovered new technologies that are being developed such as chronically implantable 2 photons microscopes, recent and unpublished data from well-known laboratories about brain mechanisms that are relevant for projects that are ongoing in the lab and I had the chance to listen to Prof. Arthur Konnerth that accepted our invitation to come to the DNF to give a seminar. The poster sessions were amazing moments of exchange with young scientists. It is probably during these sessions that I learned the most. I targeted posters that presented technics and analyses that I want to use or that are related to the topic of my project. Depending on the time constrains, I also looked at posters that were related to the spatial navigation system and close to topics of research in our lab. I discussed extensively about the Head-Direction system and the subdivision of the subiculum in that matters and I invited people to come to my poster and share their opinion and comments. **Poster Presentation** On the last day of the forum I had the chance to present my own project on a poster. I was happy to meet again with a couple of researchers that I met during the week and that I invited to join me that day. They, and many others, kept me busy for the whole poster session. I received many inputs about Subiculum inner circuitry, comments on technical issues, suggestions for the next experiments that I'm planning and congratulations for the overall project.

Encounters The organizing committee of the FENS forum planned a party on Monday evening. I met a lot of researchers that night, from pre-graduated students to post-doc. I have got to know people from Oxford with whom I share many interests in Neurosciences and hobby's. We keep in touch and I'm looking forward the next international meeting where I will see them again. **Epilogue** The 10th FENS forum was of high scientific interest. I have learned a lot about my field of research and came back to Switzerland with a lot of ideas for the next steps of my project. It allowed me to meet the major researchers in the spatial navigation system of the brain and open the door to discussions and potential collaborations.



Sibylle Horat, University of Fribourg

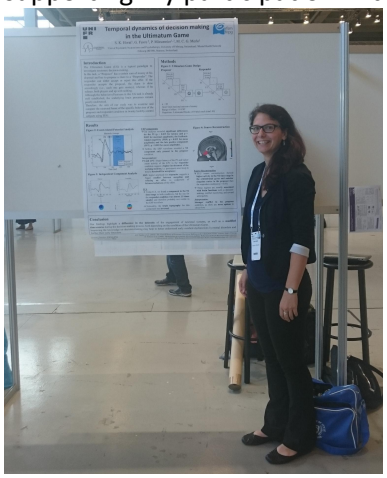
10th FENS Forum of Neuroscience, Copenhagen, Denmark, 2-6 July 2016

The biannual FENS meeting is the biggest European meeting in the field of neuroscience. The scope was very broad and includes every aspect of neuroscience. The plenary speakers are all well-known experts in their specific fields of work. They gave overviews of their fields and insights in their most recent research projects. The wide variety of symposia further assured that everybody was capable of finding talks that were interesting for their own work. Even though this congress had no specific focus on cognitive neuroscience, which is my main interest, it was very interesting to widen my horizon and learn more about all the possibilities and advances in neuroscience. Still, I found some talks related to my work that improved my knowledge. Last, the immense amount of poster presentations provided a great possibility to get in touch and discuss with other researchers in a smaller and more personal environment. I consider my own poster presentation a success, as a lot of people showed their interest in my work. I was engaged in various discussions that helped me reflect on my study and brought up interesting questions for further consideration.

Specifically, my poster was about the temporal dynamics of decision-making in the Ultimatum game. The Ultimatum Game is a typical paradigm to investigate economic decision-making. Although the behavior of humans in this task is already well established, the underlying cognitive processes remain poorly understood. Therefore, we aimed to examine the neuronal bases of the proposer and responder conditions by performing event related potentials, independent component analysis and source reconstruction. Three major ERP components (P2, feedback-related negativity (FRN) and late positive component (LPC)) were observed in both conditions, whereas we identified a negative deflection around 180ms (N2) in the proposer condition only. The responder condition revealed a significantly decreased amplitude and delayed latency for the P2, and an increased mean amplitude for the FRN the LPC. Moreover, an independent component was observed in the range of the negative deflection of the proposer condition only, and with source reconstruction we found that the anterior cingulate cortex was one of the underlying sources of this N2 component.

Together, our findings indicated that intensity and time-course of neuronal systems engaged in the decision-making processes diverge between both UG conditions. Improving the knowledge on decision-making may help to better understand early cerebral dysfunctions in mental disorders and further their early detection.

Beside the intellectual gains of this conference, it was also a very good opportunity to socialize with other researchers from around the globe. I would like to thank the LS^2 society for making this possible and supporting my participation in this great event.



Jonas Streit, University of Bern

10th FENS Forum of Neuroscience, Copenhagen, Denmark, 2-6 July 2016

The Forum of Neuroscience FENS, taking place every two years, is the largest meeting of the neuroscience community in Europe. With my PhD project in the final stages, the 10th FENS meeting from 2nd to the 6th of July 2016 in Copenhagen posed a unique opportunity for me to present my research to a larger audience and to closely interact with leading researchers in the field. The forum itself took place at the Bella conference center in the modern district Ørestad. It was preceded by workshops on specific topics among which I attended the session entitled "Light that cures" about the use of optogenetics and synthetic photo-switchable chemicals for therapeutic use such as recovery of vision and hearing as well as for basic research application. The next four days where densely packed with exciting talks, among them the fantastic presidential lecture by John O'Keefe, Edvard Moser and May-Britt Moser about the representation and memory of spatial information in the hippocampus and entorhinal cortex as well as plenty of interesting posters. I presented my poster entitled "High-Precision All-Optical Method for Cell-Based Drug Screening on Voltage-Gated Ion Channels" in the session "physiological methods – optogenetics". I introduced our novel, entirely optical drug screening technique for fast voltage-gated ion channels, which combines optogenetic channel activation with an optical voltage readout. Voltage-gated ion channels such as $Na_v1.5$ and hERG are important targets for pharmacological control of cellular excitability as well as highly relevant safety checkpoints during cardiac drug safety testing. We showed that the light-activated microbial ion channel ChR2 and ArchT proton pump could activate $Na_v1.5$ and hERG by laser illumination protocols. By simultaneous imaging of fast membrane potential changes through genetic or dye-based fluorescent voltage indicators we were able to measure the activity of individual voltage–gated ion channels in specifically engineered cell lines. This system enabled all-optical and contact-free quantification of drug inhibition on the target channels and could be used in the future to achieve faster and more cost-efficient throughput during screening than is currently possible by automated patch-clamp. My poster received a fair amount of attention and I had lively discussions over my research and got some useful input.

Over the course of the meeting, I had enjoyable and very interesting conversations with other researchers and was able to obtain an overview over current scientific efforts as well as learn about future directions, especially in the field of all-optical electrophysiology for interrogation of neuronal activity. I got some valuable pieces of advice with regard to potential postdoc positions and in addition was able to meet people from collaborating labs of my supervisor and catch up with members from former labs I worked in.

Overall, I enjoyed an interesting and inspiring conference. I could gain valuable experience for directing my future career and I am very grateful for the financial travel support I received from the LS^2 society (section physiology) for this meeting.

Luca Cirillo, University of Geneva

12th ICCB Congress, Prague, Czech Republic, 21-25 July 2016

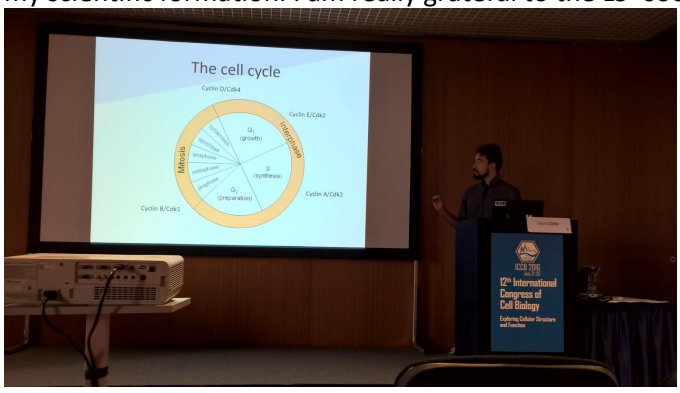
The International Congress of Cell Biology (ICCB) is a well-known conference in cell biology. Every year outstanding scientists attend the conference and students have the opportunity to meet them. This year, the 12th ICCB meeting took place in Prague from the 21th to the 25th of July. The topics were very broad, spanning from neuroscience to mitosis and from functional genomics to the newest techniques in microscopy. In my opinion earing talks from different fields is really important for the formation of young scientists. With my PhD project in the second year I have started to look forward to continue my career in academia. I chose to attend the 12th ICCB meeting to have a broader view of my field which, in my opinion, will help me to choose a postdoc position.

During the meeting I had the opportunity to attend to presentation of important scientists regarding different aspects of cell biology. Among them I could hear the talk of Chalfie Martin, a Nobel prize awardee, and Susan Gasser. Like our group, both of them use C. elegans as a model system, to study neurobiology and genomics, respectively. In my lab we use microscopy techniques to answer specific scientific questions. For this reason I could not miss the talk or Eric Betzig, another Nobel prize awardee, who spoke about recent advances in super resolution microscopy. Moreover I had the opportunity to attend to the talks of Erich Nigg, Mónica Bettencourt-Dias, Bill Earnshaw and Ian Cheeseman which are considered leading scientist in the field of mitosis. I found very interesting also talks not strictly related to cell division, among them I particularly enjoyed the talks of Kai Simons, Peter Walter, Maria Leptin and Pier Paolo di Fiore.

During the second day of the conference I could present my scientific results in a parallel session chaired by Bill Earnshaw and Ian Cheeseman. This was my first oral presentation in a meeting and it was really important for me to improve my presentation skills. At the end of the presentation I had to answer some questions and people gave me ideas on how to continue my project.

Importantly, during the meeting, I met several PhD students from all over the world with which I had interesting scientific discussion and a lot of fun.

Overall my experience at 12th ICCB meeting has been very positive and it represented an important step in my scientific formation. I am really grateful to the LS^2 society for the financial support.



Damla Tas, University of Geneva

Neurofly 2016: 16th European Neurobiology of Drosophila Conference, Platanias, Crete, Greece, 2-6 Sep 2016

My PhD project is to understand the molecular mechanisms underlying the degeneration of dopaminergic neurons in Parkinson's disease (PD), by using a new Drosophila model of PD established by our group. Since it is one of the most outstanding conferences in our field, it was a pleasure to attend NEUROFLY conference.

It was a five day meeting which involves number of different sessions. Each session was focused mainly on different subtopics. The major sessions were about: Development and Differentiation, Synapses and Circuits, Sensory Systems, Rhythmicity- Sleep Aggression, Plasticity and Disease Models. Attending all these interesting talks enables me to have a better understanding about the current status of fly brain research. In addition, number of new and different techniques was mentioned in various talks, which might also be useful for our work.

Among all those sessions, 'Disease Models' was the far most important part of the conference to me, since I am also interested in neurodegenerative diseases. There were number of interesting talks, from very good researchers. Namely, the biggest one was Prof. Linda Partridge (Max Planck Institute for Biology of Aging, Germany & Institute of Healthy Ageing and GEE, UCL, UK). Her talk was mostly about the alterations and the defects in the aging fly nervous system. She reported that, her group investigates the role and the importance of proper and adequate glucose transport in a fly model of Alzheimer's disease (AD). It was exciting to learn that they found a relation between glucose transport levels and AD related neurodegeneration. Besides, they also showed that a diabetic drug (called Metformin) can be used to decrease the proteotoxicity due to AD. All these information is also quite relevant and applicable to what I am currently working on. In this sense, I could obtain remarkably valuable knowledge.

I could also have a chance to present my work as a Poster. Gladly, a lot of people were interested in my research, so I had very useful and interesting scientific discussions with the colleagues. I noted down all the comments and the feedback, which I discussed already in our group, and I am going to fill these missing parts to improve my work.

In this meeting, I could have a lot of opportunities to meet and discuss with the big shots in the Fly Neuroscience community, and I could obtain very good feedback which will help me to improve my research. I could also have a chance to meet with people from the community with whom we are now starting to make collaborations.

I am currently in the 4th year of my PhD research, and I will be graduating next year. Get to know people in the field and make good connections in this period is also important and necessary for my future career. Therefore, I hope these new connections will also help me to find a Post-Doc position of my interest.

Lastly, I would like to thank to the LS^2 community for the support and giving me the opportunity to attend this great conference.

Yves Widmer, University of Fribourg

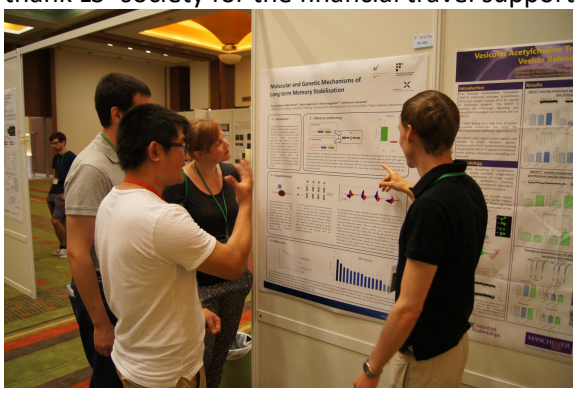
Neurofly 2016: 16th European Neurobiology of Drosophila Conference, Platanias, Crete, Greece, 2-6 Sep 2016

The travel grant of Life Sciences Switzerland (LS^2) allowed me to participate in the Neurofly meeting that took place in Crete. This five--day conference covered a broad range of Neurobiology fields using Drosophila melanogaster as a model. The program included plenary lecture talks of invited outstanding scientist, 15 minutes oral presentations and three poster sessions. In addition, there were also informal get--togethers and an excursion on the program to stimulate discussions and to promote interactions.

I got the opportunity to present my data in form of a poster. I appreciated to present and discuss my research project. I also received useful feedback and input, which will help me to improve my future work.

I was able to profit a lot from the Neurofly meeting. I gained a great overview about the research in the Drosophila Neurobiology field and could acquire new knowledge. People were not only showing published data, but also new results, so that I could learn about the newest progress and techniques in the field. The meeting had numerous presentations focused on learning, memory and plasticity, which is my topic of interest. The speakers were very available during the conference and I had the opportunity to discuss with experts from my field.

In summary, I enjoyed an interesting conference, which was very valuable for my career. I would like to thank LS^2 society for the financial travel support that made this possible.



Francisco Javier Bernardo Garcia, University of Fribourg

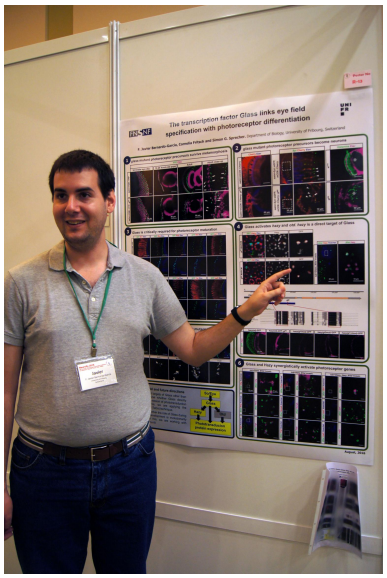
Neurofly 2016: 16th European Neurobiology of Drosophila Conference, Platania, Crete, Greece, 2-6 Sep 2016

I would like to confirm that I have profited from my attendance to the 2016 Neurofly Meeting in Platanias. This is an international conference which takes place once every two years. The main reason why I decided to attend is that this is the biggest meeting on Drosophila neurobiology in Europe, and thus it congregates a big number of researchers who are working on very diverse topics. As a consequence, I could explore what is it the state of different subjects, and this has greatly helped me to decide what direction should I follow for my career in the future. I would also like to thank Life Sciences Switzerland (LS^2) for supporting me with their PhD Travel Grant.

The meeting was very well organised: posters and talk sessions were classified according to their topic, and thus presented on different days or at different times. Surprisingly, I could see that my own research (photoreceptor development) would have been absolutely absent from the meeting if it would have not been for me. I think that this would not have been the case some years ago. As a consequence, I have decided that during my post-doc I should change the topic for something that is currently more popular.

Overall, I found more work on Drosophila behaviour than I expected. This seems to be a growing field, full of interesting topics, such as the role of glial cells in locomotion, the perception of magnetic fields, or how sexual differences encoded in the brains of males and females. It seems also that new tools are being generated to address these questions, such as software to analyse movies of living animals, new glial cell subtype-specific Gal4 drivers...

To conclude, I think that it was a fantastic meeting and I am happy both for what I have learned and for the new people that I have met. I really recommend it to other people who are also working on Drosophila neuroscience.



Charlotte Avanzi

19th International Leprosy Congress, Beijing, China, 18-21 Sep 2016

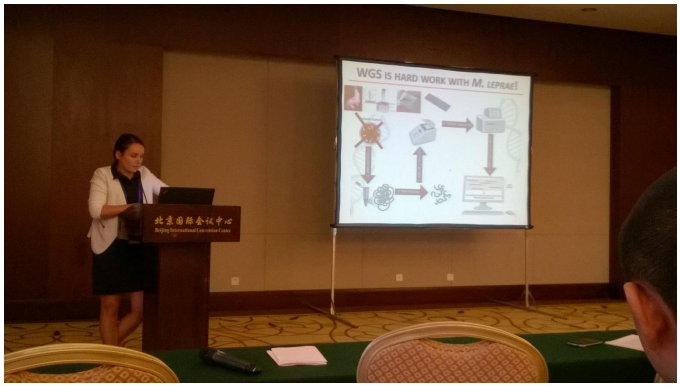
The international Leprosy Congress (ILC) is the biggest conference in the field and takes place every three years. This year around 1300 people attended the conference including researchers, clinicians, nurses, associations and also patients. The conference was organized in morning plenary sessions given by leading senior investigators or clinicians from the field. The afternoon was dedicated to parallel sessions and workshops. There were 49 parallel sessions and three workshop sessions. The conference covered several aspect of the disease: epidemiology, clinical issues, and social aspects such as stigma, history, treatment, surgery and basic research. My abstract entitled "whole--genome sequencing of leprosy bacilli: from efficient DNA extraction methods to analysis of 100+ genomes" was accepted for an oral presentation in the session molecular biology. Leprosy is a chronic mycobacterial infection caused by Mycobacterium leprae and the newly described species M. lepromatosis. While 'wet lab' research on leprosy remains challenging due to the in vitro uncultivability and the slow growth of leprosy bacilli, genomics have the potential to reveal new insights into their biology, genetics and evolution. High throughput sequencing methods are cost--effective with pure DNA, but expensive and less efficient with DNA extracts from clinical samples.

During my two first years of PhD I have developed efficient DNA extraction methods for the leprosy bacillus, tailored for various types of samples. These methods are therefore primordial for routine whole genome sequencing applications. Thanks to these methods, we are now able to multiplex and sequence up to 30 genomes on an Illumina HiSeq lane, which decreases the sequencing costs considerably. So far, we have analyzed whole genome sequences of more than 150 M. leprae strains from 20 different countries as well as 9 M. lepromatosis strains from 3 different countries. This analysis offers an unprecedented overview of the genetic diversity and phylogeography of leprosy bacilli.

This conference was a unique opportunity to connect basic science with applied research. During the meeting, I had the chance to meet and discuss with different scientists as well as clinicians. With this, I could learn and understand the day--to-- day work with leprosy patients and the global challenges of the disease. Therefore, I also realized the importance of basic research and how it could be translated into new diagnosis tool and therapy.

Moreover, it was also a very good opportunity to meet other researchers in the field and specially our collaborators from West Africa, Japan, Brazil and U.S.A with whom I exclusively communicated by email.

Thus, I would like to thank the LS^2 society for their support and for giving me the opportunity to attempt the conference.



Jan Paul Dudzic

25th International Congress of Entomology, Orlando, USA, 25-30 Sep 2016

The 25th International Congress of Entomology in Orlando, Florida, USA took place under the slogan: Entomology without borders. Hosted by the Entomological Society of America, more than 6000 international attendees presented a summary of over 3000 oral presentations and scientific posters.

The congress covered broad topics: There were ecologically focused topics like the control of various pests and insect disease vectors for example Drosophila suzukii as an agricultural pest, or the Zika Virus vector Aedes aegypti. Other symposia covered basic science in physiology or immunity related topics.

I had the opportunity to contribute to the congress with an oral presentation in an immunity related symposium called “Insect gut microbe interactions” in which I talked about a recent project in which we discovered that in Drosophila melanogaster, blood cells can send signals to gut after those flies experience a wound to the body. The intestine responds to these signals with a specific repair program due to stem cell activation, and this repair program is critical for the optimal survival of the fly. The talk gave me the chance to present this work in front of a very large and broad audience, and led to fruitful discussions and the exploration of potential future collaborations. It was also a chance to meet researchers from similar fields in person.

During the congress I also had the chance to attend to several keynote presentations from outstanding researchers, of note are the two Nobel prize laureates Jules Hoffmann and Peter Agre. Both gave a broad overview about their fields of research and how those developed over time.

Also worth of mentioning was the huge exposition of companies related to research and insect matters. A variety of big international pharma companies was supplemented by a number of small start-up companies. There were interesting conversations about a future outside the academic system possible.

Another useful thing you notice while attending such a huge congress are changes in the research direction of the whole community. I noticed a few biases in the general topic variance, this can give you a feeling of where your area of interest is heading in the future.

To sum up, attending this congress was a very good opportunity for a young researcher to renew/establish connections to other researchers and to get input and new ideas for your

own research project. With this I want to thank the LS^2 for the generous travel grant which helped me to experience the International Congress of Entomology.

Abstract of presented talk: Introduction: The JAK/STAT pathway is a key signaling pathway in the regulation of development and immunity in metazoans. In contrast to the multiple combinatorial JAK/STAT pathways in mammals, only one canonical JAK/STAT pathway exists in Drosophila. It is activated by three secreted proteins of the Unpaired family (Upd): Upd1, Upd2 and Upd3. Methods: We used mutations in upd2 and upd3 to investigate the role of the JAK/STAT pathway in the systemic immune response. Results/conclusion: Our study shows that haemocytes express the 3 upd genes and that injury markedly induces the expression of upd3 by the JNK pathway in haemocytes, which in turn activates the JAK/STAT pathway in the fat body and the gut. Surprisingly, release of Upd3 from haemocytes upon injury can remotely stimulate stem cell proliferation and the expression of Drosomycin-like genes in the intestine. Our results also suggest that a certain level of intestinal epithelium renewal is required for optimal survival to septic injury. While haemocyte-derived Upd promotes intestinal stem cell activation and survival upon septic injury, haemocytes are dispensable for epithelium renewal upon oral bacterial infection. It also reveals that release of Upds by haemocytes coordinates the wound-healing program in multiple tissues, including the gut, an organ whose integrity is critical to fly survival.

Valentin Flury, University of Basel

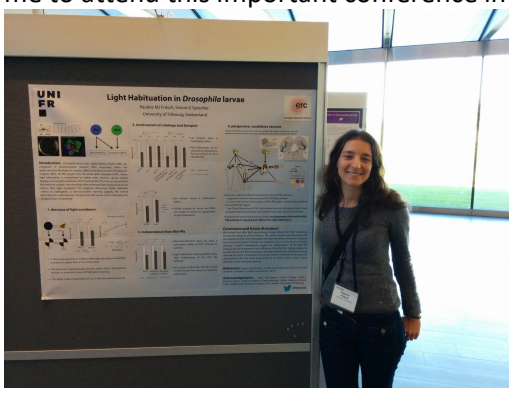
FEBS Workshop on Chromatin Proteomics, Heraklion, Crete, Greece, 3-8 Oct 2016

Mass spectrometry (MS) aims at identifying molecules due to their specific mass charge ratio (m/z) and characteristic fragmentation patterns, when they are collided with inert gas and therefore break into characteristic fragment ions. Proteomic approaches use this technique to identify proteins and their post-translational modifications (PTMs) and quantify their relative abundances comparing different states (such as interactors of a bait protein, subcellular localization, abundance or modification upon external stimuli and many others). Distinguishing different cell states is particularly important in the context of chromatin, which is highly regulated by many chromatin readers and post-translational modifications of (mainly) histones and directly impacts the gene expression profile of a cell in any given time, cell cycle state, developmental stage and cell type. Misregulations in the gene expression can lead to many diseases and can cause also cancer. In order to understand better how MS-based approaches can help in firstly, identifying and characterizing the proteomic chromatin state and secondly, starting to predict a phenotypic outcome (disease, cancer) according to the relative proteomic state of chromatin, I wanted to attend this very nice workshop and was kindly provided a travel grant by the LS^2 society. The workshop was very well organized and highly interesting in many ways. Since MS is still rather a young method (10-15 years) and being under constant development, there were presentation addressing different research areas in MS: Talks covered areas from the very technical side (sensitivity, resolution, middle-down and global approaches, reducing input) to addressing more biological questions (quantifying histone modifications, identifying interactors, purifying chromatin in certain chromosomal regions). Also the soft skills of young researchers were promoted by having special career development and problem solving sessions with experts in the field. Even more, the interaction with participants and speakers was very informal, we were able to talk with experts during coffee breaks, lunch, dinner and also could schedule a specific 1-to-1 meeting with group leaders. I learned a lot about MS in these days, could chat with many group leaders and this definitely fostered my interest in MS, which in my opinion will be of great help and importance in characterizing proteomic states of chromatin and thus eventually lead to identification of new drug targets in many diseases as well shed light on chromatin contribution in cancer cells. I had the opportunity to present my main PhD project as a poster and got very positive feedback and helpful comments on rounding up my story, which will definitely be of great help now, as I am starting to write the manuscript. Therefore, I would like to thank the LS^2 society for awarding me a travel grant and making the participation of this workshop possible!

Pauline Fritsch, University of Fribourg

Behavioral Neurogenetics of Drosophila Larva, Ashbury, USA, 23-26 Oct 2016

The Behavioral Neurogenetics of Drosophila Larva meeting is a small but of high-level international conference held every two years. About 60 persons were selected to attend. With a total of 35 talks, all given by labs leaders, in 2.5 days plus two poster sessions, the meeting was a dense stream of impressive talks and discussions. With a close focus on larval behavior control, as well as neural development, this meeting fitted perfectly my own research on larval light learning behavior. I had the chance to meet with many labs members and labs heads from all over the world in a pleasant atmosphere all day long. I was happy to strengthen my contact with labs that I already knew and I loved meeting many more people. In particular, I met one person who had observed similar plasticity in the light response of Drosophila larva and had collected very interesting preliminary data that she never had a chance to pursue but that she was keen to share with me. Poster cessions were slightly too short as many people wanted to know about my project while I also wanted to see several other posters. Thankfully I managed to talk with all the persons I wanted to and got many great advices about complementary experiments that I should perform. Overall, this meeting gave me a complete overview of the diversity and current state of research topics in my field. This will now help me decide which path to follow for my career. Finally, after the meeting, my professor and I had the chance to meet with one of our collaborator, from the Janelia Research Campus, about the publication that we are currently writing. Therefore I would like to sincerely thank the LS^2 for supporting me to attend this important conference in my field.



Franziska Heidenreich, Paul Scherrer Institut and ETH Zürich

ASCEPT-MPGPCR 2016 Joint Scientific Meeting, 27-30 November 2016, Melbourne, Australia

First of all, I would like to thank LS^2 and the Molecular and Cellular Biosciences Section for supporting my attendance at the ASCEPT-MPGPCR 2016 Joint Scientific Meeting in Melbourne on 27-30 November. The meeting takes place every two years and brings together clinical and experimental pharmacologists as well as researchers working on all aspects of G protein-coupled receptors.

This year, the conference was attended by almost 500 participants and offered more than 150 presentations in parallel sessions and over 200 posters. Two of the keynote lectures were given by the Nobel laureates in Chemistry 2012, Prof. Brian Kobilka and Prof. Robert Lefkowitz.

In addition to lectures by well-established researchers, the conference gives PhD students and postdocs the opportunity to present their work. My abstract titled “The inner workings of a GPCR: Molecular basis for biased G protein activation and beta-arrestin recruitment” was chosen for an oral presentation during the MPGPCR student oral prize session. This year five abstracts were selected for talks and a jury composed of Brian Kobilka, Robert Lefkowitz and Stephen Hill selected my presentation for the Molecular Pharmacology of G protein-Coupled Receptors 2016 Best Student Oral Presentation Prize.

The feedback and suggestions I received after my talk and during the poster sessions are very helpful for the writing of my current manuscript. I think that many potential reviewers will have similar questions as the audience of the talk.

The conference was also a great opportunity to meet researchers from all over the world. The meeting was well attended by Australian and New Zealand researchers, who might not necessarily go to conferences in Europe, especially during their early career stages. In addition, the presentation of my research attracted possible future collaborators, and one collaboration has been initiated already.

In general, I think it is a great opportunity for PhD students to attend conferences because of the exposure to high quality research, the possibility of presenting their own work, establishment of contacts and the start of collaborations.