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### Assessment of Matej Horvath during his PhD studies

Matej Horvath joined our laboratory as the first PhD student, only a couple of months after establishing the lab. This was brave of him as it was obvious that there would be many things that he would need to set and optimize before doing the actual experiments. Luckily, it turned out that this is exactly the role that Matej enjoyed. He liked to read protocols, optimize conditions and fine tune the experimental setups. Sometimes this went to an extreme when optimization became the purpose rather than the way to achieve the results. Nevertheless, Matej's contribution towards the smooth start of the lab is indispensable and I thank him for that.

The main aim of Matej's PhD was to elucidate the interplay between Sirt1 and Notch signalling. At the onset of the project hardly anything was known about the regulation of Notch signalling by metabolism and the newly identified connection with Sirt1 as its metabolic sensor was an exciting discovery made by our lab. The cold shower came within the next two years when suddenly Notch became the centre of attention and several papers emerged that connected Sirt1 with Notch signalling. On top of that, these papers came from mammalian field and suggested a model that was not consistent with our observation in *Drosophila*. It was clear that continuing in this project would mean to go against the flow and that we would need to prove carefully any conclusions we make. In fact, we were thinking to stop this project. However, at the end we decided to persevere and finish our story. Therefore, Matej's way toward his PhD was not easy and took longer than expected. At the same time, it gave him the opportunity to learn whole range of techniques and also to fully enjoy the roller coaster of scientific work. In fact the roller coaster probably made him so dizzy that he decided not to stay on it till the rest of his life. The longer I am holding on the more I understand and accept these decisions. The appreciation of hard work in science is not proportional to the effort invested in it and competition is fierce. Nevertheless, Matej did a good job during his PhD and I hope he will find an employment where his knowledge and skills will be appreciated.

His path through the PhD was not straightforward, as it hardly is with a PhD student; there were failings, many dead ends, but also exciting new observations that lead to a success and a solid publication at the end. It was a steep learning curve and it was a pleasure to watch Matej growing scientifically over the years. He was rewarded the EMBO travelling grant to spend three months in the laboratory of Yuri Moshkin in the Erasmus Medical Centre in Rotterdam, to learn protein purifications from embryonic extracts and mass spec analysis. On top of that he was selected as one of the participants of the EMBO PhD course where he had the opportunity to meet and connect with the best PhD students from top labs in Europe. I hope that despite various pitfalls on the way towards his PhD Matej enjoyed the time he spent with us in the lab and I wish him all the best for his future.



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In summary, I believe the PhD thesis of Matej Horvath represent a solid work and that he deserves to pass with the grade excellent.

Sincerely,