Alena Pecinová joined the Department of Bioenergetics at the Institute of Physiology AS CR as undergraduate student of Biophysics. During her master and doctoral studies she was specialized in mitochondrial biochemistry and genetics and her PhD project was focused on the development of new fluorescence based approaches to monitor mitochondrial function. This research was supported by two successfully defended student grants (FRVS, GaUK), where Alena was principal investigator. Later on, this methodological basis proved invaluable in many other projects of the department that dealt with various aspects of inherited mitochondrial disorders associated with deficiencies in several complexes of oxidative phosphorylation, namely cytochrome c oxidase and ATP synthase. While still honoring her roots in biophysics, in the course of her PhD Alena embraced many biochemical and molecular biological methods that helped her to become independent researcher able to supervise the whole projects. Worth mentioning is her involvement in cooperation with University in Lyon (laboratory of Prof Godinot), where she studied adaptations of mitochondrial metabolism in clear renal carcinoma cells or short term stay at the laboratory of Prof. Duszyński at Nencki Institute in Warsaw, Poland. In 2009-2010 she left the department for postdoctoral position at Wayne State University in Detroit, U.S.A. in the laboratory of Prof. Hüttemann. Her research here focused mainly on post-translational modifications of the enzymes of oxidative phosphorylation. After the postdoc she returned to the Institute of Physiology, but soon took a carrier break to give birth to her two children. Two years later, she is back at the department ready to further pursue her career. Currently, she focuses on changes in mitochondrial metabolism of cancer as a principal investigator (supported by Grant Agency of the Czech Republic) and is also interested in mitochondrial disease models.