Contact: sona.kontsekova@meduniwien.ac.at &#65533; Background M.Sc. Molecular biology (Comenius University, Faculty of Natural Sciences, Bratislava, Slovakia) &#65533; Project description Malignant melanoma is one of the most common forms of fatal skin cancer. The annual incidence of this serious disease has increased dramatically over the past few decades. The disease is often characterized by activating mutation BRAF^{V600E} in the BRAF gene. The RAS-RAF-mitogen-activated protein kinase pathways mediate the cellular response to growth signals. Several BRAF inhibitors have been developed to target the BRAF^{V600E}mutation. However, secondary or acquired mutation has been observed after few months of treatment with BRAF inhibitor PLX4032 (vemurafenib). That&#65533;s why a single-target therapy is not effective and multiple targets should be aimed. The chondroitin sulfate proteoglycan 4 (CSPG4) is a cell surface protein highly expressed by melanoma cells and plays an important role in the activation of several signaling pathways important to tumor cell growth, survival, migration, progression. We decided to analyze the effect of combinational treatment of three melanoma cell lines A375, 518A2, M14 on cell migration, proliferation and expression profile under normoxic and hypoxic conditions. &#65533; &#65533; Courses Courses from Network meeting in Basel, March 2014 Courses from Network meeting in Copenhagen, August 2014
 Network meetings Basel,&#65533;Switzerland, March 18-19, 2014 Copenhagen, Danmark, August 25-28, 2014 Bremen, Germany, February 23-24, 2015 &#65533; Conferences XXII International Pigment Cell Conference, September 4-7, 2014 Singapore 5th Centrum Retreat, 16. September 2014 Bremen, Germany, 24. February 2015