

## Project Update: May 2017

The end of the April and almost entire May have been primarily dedicated to the education and workshops. Our RSG project took an important part within the PATHOGEN 2017 (1st School of pathology and molecular genetics) under the auspices of the Ministry for education and science of the Federation of Bosnia and Herzegovina. The Ministry (as well as the organizing committee) have recognized the enormous importance of our research and conservation of elasmobranchs within the Neum bay, which may present the first important step in legal protection of the species and habitats. After the completion of the PATHOGEN by the end of April, we have begun with our internal workshops with undergraduate students. Although we have planned only five separated workshops in our project, we have decided to hold lectures and laboratory practice related to our project, for students in Sarajevo, through entire May and to continue them in June (minimum two hours, twice a week). We put an emphasis on the importance of the understanding of basic biology and pathology in the process of conservation and protection of elasmobranch species (as I do in this project). Besides, we gave the opportunity for 30 students to participate in all our RSG project activities in order to gain experience and share knowledge.

During May we have also continued our efforts to link observed pathological changes (diseases) to the specific anthropogenic pressures detected within the Neum bay together with control samples from the other parts of the eastern Adriatic sea. We have used special staining and immunohistochemistry in order to prove specific diseases and conditions of studies samples. Besides, we are also organizing the next field studies in order to fully map potential spawning areas of batoids that inhabit our territorial waters.

A link to the PATHOGEN 2017 School is provided: <http://sharklab-adria.org/pathogen/>  
Disclaimer: all the studies samples have been brought to our research team by local fisherman, the project team haven't caught or killed any live animal for this studies.



Left: Andrej (me) while discussing the importance of the pathological studies conducted during his Rufford Small Grant project for proper in-situ long-term conservation. Right: Andrej (me) describing the functional anatomy and macroscopic pathological analysis of the thornback ray, *Raja clavata* L. (Rajiformes: Rajidea) during PATHOGEN 2017, as the part of studies conducted on my Rufford Small Grant project.



Observation of macroscopic pathological changes on the Thornback ray, *Raja clavata* (L.)