

# In Formentera Apnea Reigns!

An apnea workshop with Umberto Pelizzari: what an excellent opportunity for our DSL (Diving Safety Laboratory) to collect relevant data for our research activities on free diving! Also a chance to continue studying a phenomenon that the scientific community has been investigating for years: the Taravana.

In the magnificent scenery of the Balearic Islands, our researchers monitored Umberto and his staff, composed of Apnea Academy instructors. They concentrated on the search for silent bubbles, through Echocardiography and Doppler examinations after each diving session.

Dr Danilo Cialoni developed and applied a new protocol for data collection, specifically designed for apnea. The monitoring began on the boats, continued a few minutes after each dive, up to 90 minutes after the dive. The Vellmari diving centre offered logistical support in Formentera.

The moments preceding a free dive are marked by an exciting countdown, an emotion that involves the audience as well. Then the descent begins. It's a fascinating and silent journey, in which you look into yourself and explore the deepest parts of your soul.

“In such particular conditions – says Dr. Cialoni – our body reacts with a series of changes in the cardiac and pulmonary system. When properly analyzed, these changes allow us to deepen our understanding of some diseases that can affect divers. Our research now mainly focuses on Taravana (a kind of decompression sickness found in free divers), the causes of which are not yet clear. In addition, data collected under extreme conditions, such as the ones experienced in apnea, are often useful to better study common diseases and disorders, like pulmonary edema, syncope and sleep apnea “.

By cross-checking our data with dive profiles downloaded from dive computers, researchers are gaining valuable information on the study of Taravana. Research and data analysis will continue in the next few weeks, with our researchers busy studying the Spanish National Spearfishing Team. Our work continues and we really hope to contribute to a better understanding of the phenomenon. We wish safe diving to everyone of you: hold your breath, look within yourself and discover the fantastic and silent inner world...