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Name of the Institution / Company: Ichthus Unlimited, LLC
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Descriptive title: Thermal adaptations of Atlantic bluefin tuna <i>Thunnus thynnus</i> : implications for hatchery and restocking
ACRONYM: ABENDO
Summary <p>The proposal aims at evaluating the effect of two thermal regimes (20-27 °C) on the onset of regional endothermy in Atlantic bluefin tuna. To this end authors are intending to keep the juveniles (c.a. 5 g) at two thermal regimes and perform sampling of various tissues whenever they will reach 300, 700 and 1,500 g. Some of the fish will also be implanted with heart rate activity and temperature loggers allowing the estimation of their ability to cope with varying water temperatures. Histological quantification of the red muscle distribution and functional rete mirabile is planned. In addition, tissues collected (e.g., blood, muscle, heart, intestine, liver and spleen) will be used for estimation of the effect of different temperatures on their metabolomic profiles.</p>