



Workshop IODP-Italia “Lo stato delle proposte di perforazione nell’area mediterranea”
Scientific Drilling in the Mediterranean Sea
Roma, 15-16 gennaio 2018

Abstract
Opportunità in ambito ECORD-IODP

ECORD School of Rock 2018

CLAUDIA LUPI (*¹), ANGELO CAMERLENGHI (2), ALESSIA CICCONE (3,4)

(*¹) Dipartimento di Scienze della Terra e dell’Ambiente, Università di Pavia;

Corresponding author claudia.lupi@unipv.it

(2) Istituto Nazionale di Oceanografia e Geofisica Sperimentale di Trieste;

(3) Scuola di Scienze e Tecnologie, Università di Camerino;

(4) Liceo Classico "F. Stabili - E. Trebbiani", Ascoli Piceno.

Key words: Science Education Initiatives; Research Experience for Teacher (RET); Laboratory training; Enhancing Students’ Motivation.

Abstract

“School of Rock” are educational workshops during which teachers become familiar with the International Ocean Discovery Program (IODP), scientific drilling and Earth Sciences through the interactions with IODP scientists and former Education/Outreach Officers. This initiative was created in 2005 by the IODP US Implementing Organization (IODP-USIO) as an expedition designed for Earth and Science teachers onboard the “*JOIDES Resolution*” during a transit of the drillship. Since 2014, ECORD teachers who sailed onboard the “*JOIDES Resolution*” as Education/Outreach Officers take initiative to organize an educational workshop in their home country to share their at-sea experience and to teach their colleagues on how to bring IODP science into the classroom. Since 2015, the workshop is named “ECORD School of Rock” as it drew its inspiration from the US School of Rock.

Italy has acquired the right to host the school thanks to the recent participation of Alessia Cicconi (IODP Expedition 367) as Education/Outreach Officer. “ECORD School of Rock 2018” will take place in Pavia in July 2018 at the Department of Earth and Environmental Sciences of the University of Pavia. Lupi and Cicconi were involved in the Expedition IODP 367 and during the expedition they organized 40 video connections from the ship with Italian schools touching around 1500 students. In every broadcast the students were able to see the ship, the labs and interact with the scientists on board. Using a qualitative approach, they documented the effectiveness of this educational activity in terms of 1) improved teacher proficiency; 2) Involvement of other teachers; 3) enhancement of students’ motivation in Science. For these reasons, they decided to candidate Italy as host country for the next ECORD School of Rock. The Italian school will focus on “Paleoclimatic studies through deep sea sediments” and the scientific committee is composed by Claudia Lupi, Angelo Camerlenghi and Alessia Cicconi. The school will open to 20 teachers of secondary

schools and to 10 students of the master's degrees and of the doctoral schools that carry out projects on sediments collected during IODP expeditions. Participants will be selected in base on the curriculum and a letter of interest. The school will include scientific lectures and practical hands-on activities





Workshop IODP-Italia “Lo stato delle proposte di perforazione nell’area mediterranea”
Scientific Drilling in the Mediterranean Sea
Roma, 15-16 gennaio 2018

Abstract
Opportunità in ambito ECORD-IODP

conducted by the participants on IODP cores. This immersive experience will provide Italian teachers with an opportunity to work side-by-side with IODP scientists, using current state-of-the-art approaches to solve scientific problems of global interest, and gaining first-hand knowledge of the results of science expeditions. This activity could be considered as Research Experiences for Teachers (RET). The RET is a kind professional development where teachers are immersed in research activities, doing Science with scientists as a scientist and exploring all the stages of the inquiry process. RET programs have been in existence for more than 20 years in the USA but, basically, do not exist in Italy. However, it is well documented in literature that this kind of experience improves teacher’s self-efficacy, confidence, and job satisfaction and encourages students to take a more active role in the classroom, leading them to be better able to apply their new knowledge.

