## Join Hands to Cultivate Indigenous Senior High School Science Talents

(Photo/Text: Division of Education for Indigenous Peoples and Special Education)



In order to cultivate high school scientific talents in the indigenous community and implement scientific education for indigenous peoples, the K-12 Education Administration has invited a team of experienced teachers in the international Olympiad contests to offer the "Research Project" training courses. Professor Yi-Chih Chang from National Taiwan Normal University was commissioned to lead the Senior High School Indigenous Student Chemical Science Talent Training Program,

while Yun-An Chen from the National Sun Yat-sen University was commissioned to develop and implement the Senior High School Indigenous Student Bioscience Talent Training Program. These two professors are the chair of the International Chemistry Olympiad and the committee member of the national competitor selection and training committee for the International Biology Olympiad (IBO), respectively. Both have been deeply involved in the international Olympiad contests for many years and have extensive experience in exploring and mentoring indigenous students with great potential in science.

In the chemistry subject, Professor Chang joined hands with Ya-Ping Tsao, a teacher at the Taipei Municipal Zhong Shan Girls High School, to guide students to explore and solve problems in the field of natural science under the new the curriculum guidelines of 12-Year Basic Education. Under the guidance of Professor Chang and Ms. Tsao, three students from the Taipei Municipal Zhong Shan Girls High School, namely Chih-Yu Yang, Ting-An Cheng, and Hsuan-Yi Lien, conducted a research project entitled "Exploration of the Fluorescence Quenching Effect of Benzoquinone and Ruthenium in the Presence of Surfactants" and won the Excellence Award in the 2020 National Senior High School Short Research Essay Contest.

In the biology field, Professor Chen worked with Yu-Shan Chen, a teacher at the Taichung Municipal Taichung Girls Senior High School, to supervise students Yi-Ju Pan and Chih-Wei Lin in a research entitled "Green onions in Daily Life? Exploration of the Relationship between the Growth Environment of Onions and the Amount of Chloroplasts" and won the High Distinction Award in the 2020 National Senior High School Short Research Essay Contest. In addition, Professor Chen and Kuo-Chiang Liu, a teacher at the National Changhua First Girls' Senior High School guided three students, namely Yu-Ting Chien, Yi-Chien Chen, and Yu-Ching Hsiao, in the research entitled "Research on the Relationship between the Electric Impulses Discharged by Apteronotus Leptorhynchus and Its Behavior", and were also recognized with an Excellence Award of the 2020 National Senior High School Short Research Essay Contest.

In the future, the K-12 Education Administration will continue to promote various scientific talent research projects and training programs for indigenous students, and work with senior high school teachers to guide more students to research on natural sciences. The award-winning achievements of the research projects above are available on the Writing Website for High School Students (<a href="http://www.shs.edu.tw/">http://www.shs.edu.tw/</a>), students and people from all walks of life are welcome to take a look.