

Project name	109 [Research & development of innovative teaching resources for the transformation of precision medicine therapy - General plan: development and promotion plan of precision induction target drug technology transformation teaching module (3 / 3)]
Project host	Lien-Hui Lance Horng/Yang-Wei Lin

1. Project summary:

The purposes of this project are to improve the national cutting-edge scientific and technological literacy; provide rich and enlightening innovative educational resources and learning activities for the general public in the standard or non-standard education field; enhance the general public's interest in, appreciation of, understanding of, and participation in biotechnology and medicine; and connect K-12 schools at all levels to construct a teaching and learning garden of biotechnology medicine. It will develop curriculum modules on induction target drugs, focused controlled drug release, and induced drug release; improve teachers' professional quality; hold various biotechnology medicine promotion and research activities; and transform forward-looking materials into materials accessible to the public and promote them to the public.

2. Results: Please provide the implementation results of relevant projects in 109 (200 ~ 500 words), and try to present the relevant contents in tables, charts or photos.

(1) Visualization teaching aids: There are five sets, including MRI diagnostic image teaching aids, magnetic guided near-infrared light drug release teaching aids, light and energy, light-induced chemical reaction, and cancer cell discrimination.

(2) Popular science articles: Complete four articles, which are 'Water knows the secret of the body!', 'Magnetic resonance imaging and cancer detection', 'Cancer treatment all in one: one grasp of diagnosis and treatment, light and energy, unique skills of Qi collection and amplification' and 'Distinguishing cells'.

(3) Popular science activities: 1,860 people participated in 3 sessions.

Date	Activity	Audience	Times/persons
2020/03/07	Scientific activities of National Changhua University of Education, College of Science	High school students	1/60
2020/10/27	Popular science roundabout train – hands-on activities	Elementary school students	1/1500
2020/10/31	Open FUN day of science, College of Science	Elementary school students	1/300

<p>Corresponding SDG Index</p>	<p>SDG01 □ SDG02 □ SDG03 □ SDG04 □ SDG05 □ SDG06 □ SDG07 □ SDG08 □ SDG09 □ SDG10 □ SDG11 □ SDG12 □ SDG13 □ SDG14 □ SDG15 □ SDG16 □ SDG17</p>
<p>Supporting photos (please directly paste representative photos (2-4), and fill in the text description of each photo (within 20 words), in JPG format, 800 * 600 pixels, more than 200K)</p>	
	
<p>Illustration: Explaining the principles of photo-released drugs</p>	<p>Illustration: Popular science roundabout train – hands-on activities</p>
	
<p>Illustration: Science open FUN day of the school of Science - Introduction to DNA aptamer and configuration changes</p>	<p>Illustration: Popular science activities - senior high school gifted physics promotion class</p>
<p>Links (Please attach the links of webpages or news reports)</p> <ul style="list-style-type: none"> ● None 	