

Dr. Sameh Soliman awarded The First place in the category of Universities-energy environment
And applied Science for their project “Anticancer Substance from Endophytes Isolated
From their plant *Calligonum Comosum* subsp.”

Think Sciences Competition-2019

Think Science is one of the Emirates Foundation’s youth development efforts that have been specifically designed to guide young students by developing their skills in the fields of science and technology. Students at this competition are encouraged to pursue their passion and uncover solutions to tackle real-world problems. Think Science Competition, which rewards the best science-based innovations that respond to society’s most pressing needs; and Think Science Connect, a platform that links young scientists with the event’s Science Ambassadors and scientific leaders, in order to help the brightest young minds realize their scientific dreams.

A group of 5th year students; Haifa Mhithawi, Alaa Alkaabi, and Aisha Alketbi, under the supervision of Dr. Sameh Soliman at the college of Pharmacy has been awarded THE FIRST place in the category of Universities-energy, Environment and Applied sciences for their project "Anticancer Substances from Endophytes Isolated from the Plant *Calligonum comosum* subsp. *comosum* " in the 2019 Think Science National Competition.



The competition started by sending an abstract on October 10th, 2018, which is accepted for

further competition steps. The competition had different stages, where the first one is was to send a full article and several other materials to fulfil the requirement of competition. Early on 2019, the students’ article was accepted for another stage of competition. The students had to present their project on February 15th, 2019 in Dubai, Sheikh Zayed University to 3 different judges, and the project was evaluated accordingly. The next stage of the competition was on March 3rd, 2019 in Sharjah Center for Astronomy and Space Sciences, where the students presented the project to different students from schools and universities who came to visit the Think Science Fair, they also presented the project to journalists from Sharjah TV, and to the Social Media Journalists of Abu Dhabi National Geographic Page. in addition to doctors, researchers and professors from different universities, on this day everyone who visited the fair had an opportunity to vote for one project that they thought it is the best.

Regarding the project, endophytes (which are bacteria and fungi that live inside the plant tissue and exert beneficial protecting and growth factors to the plant) were isolated from *Calligonum comosum* subsp. *comosum*, a plant lives in the harsh and dry environment of UAE dessert and which had multiple use by the old UAE locals. The isolated endophytes were re-subcultured until 100% purity. Those endophytes were extracted and tested for their anticancer activity on MCF-7 Breast cancer cell line by using MTT Assay. The endophytes extracts showed astonishing killing activity that ranged from 60%- 87.05%.