MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN NJSC "Toraighyrov University"

# I APPROVED

# Member of the Board for Scientific

# Work and International Cooperation,

# Vice-Rector Yerzhanov N.T. 2022

# REPORT

Innovation and Technology Park "Ertis" for the 2021-2022 academic year

Pavlodar

The main goals of the “Ertis” Innovation and Technology Park:

* collection and analysis of information on scientific and technological developments and projects for the purpose of familiarization and possible application in educational and scientific activities; work with the teaching staff (teaching staff) of the university to organize scientific and technical activities; participation in exhibition events to present the achievements of university scientists; functioning of the university’s laboratory complexes;
* creation, design and development of presentation material on scientific inventions and technologies;
* Tasks:

- formation of an organizational structure and ensuring the functioning of the university’s laboratory complex.

1Today, on the territory of ToU FEZ there are the following projects:

1) Development and research of a multi-purpose vehicle;

2) Research and design of resource-energy-saving metal-cutting tools;

3) Production of equipment prototypes on a 3d-printer;

4) Development of a protection device against phase loss and supply voltage unbalance;

5) Device for diagnosing the condition of an asynchronous motor;

6) Production of recirculators and electric bikes; 7) Virtual simulators;

8) Production of catamarans and trimarans;

9) Development of electric cars for the tourism industry;

10) Manufacturing of forged products;

1 1 ) Production of metal structures and creative furniture;

12) Study of the introduction potential of medicinal plants in the North-East of Kazakhstan;

13) Production laboratory “bio-greens” for growing microgreens in a hydroponic installation;

14) Diagnosis of viral diseases and obtaining healthy potato planting material;

15) Accelerated reproduction of the genetic potential of record-breaking cows using biotechnology methods;

16) Obtaining vermicompost from organic waste;

17) Staff cеbе - HR agency in the field of catering;

18) “Echo of Art” - educational AR application;

19) Production of hygiene and soap detergents (liquid soap, antiseptic).

On October 16-17, 2021, the university hosted the project “Momentum: Entrepreneurship for Girls”, this project is implemented by the Friends of Tel Aviv University Association in the Republic of Kazakhstan with the support of the U.S. Embassy in Kazakhstan, in partnership with ERG and Toraighyrov University. 60 students of city and district schools aged 14-18 years took part in this project. The participants received training on the topics “Fundamentals of Marketing”, “Finance”, “SMM”, “Business Model “Canva””, “Social Entrepreneurship”, “Speaking” and others. At the “Meet up” stage, schoolgirls presented their business ideas. The Andres Ceramic team became the winner; they received a certificate in the amount of 150,000 thousand tenge for a project for the production of ceramic products.

From October to November 2021, the social marathon Makeathon “TOM: Pavlodar” took place. This is the twelfth makeathon and it is being implemented within the walls of US) Toraighyrov University. Makeathon TOM is a community of inventors represented by students, schoolchildren, teachers and caring people, which aims to improve the lives of people with disabilities. A total of 7 teams participated: Karaganda region, Nur-Sultan, Pavlodar. Teams created prototypes aimed at adapting people with disabilities to society and organizing their full lives. At the end of the 72-hour marathon, each team demonstrated to the jury members finished prototypes that solve the problems of people with hearing, vision, and musculoskeletal impairments.

According to the minutes of the meeting of the jury members, the first place was unanimously given to the “TRINITY” team; the participants demonstrated a prototype - a walker for moving up stairs for people diagnosed with cerebral palsy. The second place was taken by the team from Toraighyrov University "Vector", the participants made special shoes with fixation and ankle support for their sneaker Aigerim with a diagnosis of cerebral palsy. And two third places were taken by the teams “Iskra” and “Quantorium”. The organizers of Makeathon, the Eurasian group ERG, presented the winners with TM Sulpak gift certificates of various denominations. Cash prizes were also awarded from Eurasian Bank JSC. The representative of the Eurasian Bank, Alexander Vladimirovich Naumov, Deputy Chairman of the Board of the Eurasian Bank, awarded three teams. “SocialProjectPavlodar” and “Altensur” received certificates worth 200,000 tenge each, and the “Zhiger. Orthopedics" certificate in the amount of 100,000 tenge, participants will be able to spend the funds received on finalizing the prototype. In April 2022, a number of events were held for students of Toraighyrov University, college and schools: Foresight session, reflexive duel, business game. All activities are aimed at developing leadership, personal effectiveness and achieving success, entrepreneurial thinking.

And also in February 2022, we conducted Film Coaching at Toraigyry University. Students watched and analyzed the film "Gattaca". Film coaching includes not only watching a film with discussions, but also practical analysis of real cases of participants based on what they saw. Students gained practical experience in film analysis.

On April 8-12, 2022, the Department of Entrepreneurship and Industrial-Innovative Development of the Pavlodar Region announced a competition of state grants for young entrepreneurs under the age of 29 (to create their own business) as part of the national project for entrepreneurship development for 2021 - 2025. Approximately applications for this competition were submitted among university students.

Director of ITP "Ertis" Zholdasbaeva A.T.