



- **Establishing the Targeted Research Groups at The University of Tabuk**



Introduction

The Deanship of Scientific Research is committed to staying ahead of future challenges and creating an ecosystem that supports distinction and creativity in scientific research. To achieve these goals, the Deanship is keen to support researchers from various disciplines and to build a knowledge-based economy through sustainably focused research groups. These groups will direct scientific research and transform qualitative research at the university into products. The Deanship plans to achieve this through long-term research phases that extend for three years, ensuring the research groups approved at the university achieve scientific products with high economic feasibility.

The primary objective of this idea is to strengthen the university's research identity, develop its research capabilities, and establish the necessary infrastructure for research and innovation to support the success of research groups. By doing so, we can improve the competencies and skills of our researchers, enabling them to achieve high levels of excellence and leadership.

Objectives of establishing the Targeted Research Groups:

- **Enhancing the university's research identity.**
- **Transforming high-quality research into economically feasible products.**
- **Supporting research partnerships and foster collaboration with public and private research entities.**
- **Attracting investment opportunities with our university partners by developing promising research products with high potential for commercialization.**
- **Creating scientific references within specific specialized research areas.**
- **Ensuring research sustainability.**
- **Enhancing the research infrastructure in accordance with the university's research identity.**

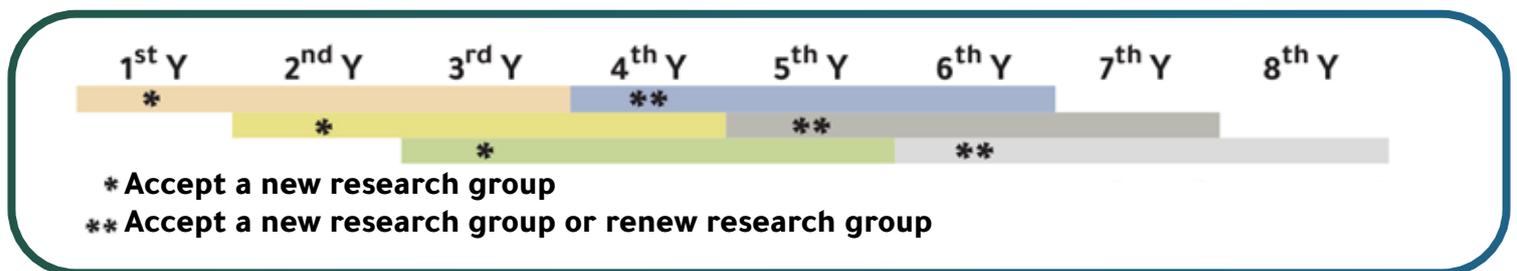
General requirements for the establishment of the Targeted Research Groups:

- **The principal investigator (PI) should be an associate professor or assistant professor who has published at least two research papers indexed in the Web of Science (WOS) database within either Science Citation Index Expanded or Social Sciences Citation Index.**
- **An eligible researcher can be a PI in one research group and a co-researcher (CO-I) in another group.**
- **The researcher can join two research groups as a CO-I.**
- **Members of research groups from the University of Tabuk must create and activate their accounts in Google Scholar, ORCID, and WOS which are linked to their affiliation with the University of Tabuk, their faculty, and their department.**
- **Most of the research should be conducted at the University of Tabuk, while ensuring that research partnership agreements and contracts with external CO-Is are not violated.**

Special requirements for the establishment of the Targeted Research Groups:

- **The PI must choose a name for the group that accurately reflects its domain, specialization, and objectives (an illustrative example is attached on page 10).**
- **The research plan of the group should align with the research identity of the faculty, which in turn reflects the research identity of the university and the research priorities announced by the Deanship of Scientific Research (the research priorities for 1444 H are attached on page 11).**
- **The research group should focus on producing original research suitable for publication in high-quality journals. Additionally, they should aim to create an applied product that can be adopted by a public or private entity.**
- **The objectives of the research group should be clear and should serve a large segment of society. Additionally, a three-year research plan should be developed that clearly outlines the research group's plan to achieve economically feasible products (a form for this plan is attached on page 9).**
- **The research groups should prioritize interdisciplinary collaboration among their members. Interdisciplinary studies draw on two or more fields of knowledge to address a broad topic that cannot be sufficiently addressed by one specialization alone. These fields of knowledge can be from the same or different departments or colleges.**
- **The research group must consist of between four and twelve members, with at least 50% of the members being affiliated with the University of Tabuk.**
- **The funding amount will be increased if a new faculty member, who holds the rank of assistant professor for less than two years, is added to the group.**
- **The group must include at least one expert from outside of Saudi Arabia who is at least an assistant professor from one of the top 500 universities according to the Shanghai, Times, or QS classification. However, the expert may be affiliated with any university ranking as long as their H-index is at least 20 according to the Web of Science database.**

- Each research group may include CO-Is or consultants from outside the university, in addition to the expert from outside the KSA. These individuals should be affiliated with the top 500 universities according to the Shanghai, Times, or QS classification, or have an H-index that exceeds 20 according to the Web of Science database. Alternatively, CO-I or consultants may be affiliated with other Saudi universities and research centers, provided that the only affiliation mentioned in the publication is a Saudi research entity. Additionally, the research group may include CO-Is or consultants from reputable medical institutions or other development sectors approved by the deanship. It is not necessary for these individuals to hold a PhD.
- Any changes or additions to the CO-Is of the group must be approved by the Deanship of Scientific Research through providing the necessary justifications for the change or addition to for review and approval.
- The PI is required to obtain approval from the Deanship of Scientific Research before adding co-authors who are not members of the research group to any published article resulting from the work of the group. (Note: This applies only for co-authors who are affiliated with entities other than the University of Tabuk).
- The faculties may establish new research groups annually, in addition to the previously registered groups with the Deanship. However, these new research groups must not have similar research activities to the existing groups, as illustrated in the figure below.
- Research groups with the Deanship of Scientific Research will be subject to review and evaluation every three years.



Duties of the group's PI:

- **A representative of the research group at the Deanship of Scientific Research.**
- **Submitting periodic reports on the activities and achievements of the group.**

Procedures for establishing the Targeted Research Groups:

- **Fill out the research group establishment request form (attached on page 8).**
- **Obtain approval from the Dean of the faculty following the approval from the scientific committee of the PI's faculty. Ensure that research group names and activities are not duplicated across faculties.**
- **In cases where there are two research groups with similar research activities in the same faculty, priority will be given to the group with higher impact research and registered or granted patents from approved entities by the Deanship of Scientific Research.**
- **The Dean of the faculty should send the completed form and required documents to the Deanship of Scientific Research to request approval from the Council of the Deanship of Scientific Research.**

The basis for evaluating and canceling the research group:

The research group will be evaluated based on its compatibility with the university's research priorities, alignment with the region's major projects (such as NEOM, the Red Sea, and others), and ability to address the region's needs related to the vision of the kingdom 2030.

General provisions:

- **The research group is subject to the regulations of the Deanship of Scientific Research in terms of financing and managing research projects.**
- **Priority for funding in the future will be given to groups that were funded during the current year 1444 AH and demonstrated continuous progress in their research activities and achievements.**
- **Any research group that does not receive approval from the Council of the Deanship of Scientific Research will not be eligible for funding.**
- **The Deanship of Scientific Research reserves the right to make exceptions to these rules and conditions in the interest of the public.**

Required Documents to approve the Targeted research group:

- **Oriented Research Group Establishment Form (attached).**
- **If the principal investigator is an assistant professor, two published research papers in the Web of Science database (Science Citation Index Expanded or Social Sciences Citation Index) must be attached.**
- **CV of members of the research group from outside the university.**
- **The approval of the scientific committee of the faculty.**
- **Approval of the Dean of the faculty.**

The proposed timetable for the establishment of the Targeted research groups:

| | | |
|--|---|---------------------------------------|
| Introductory workshop | Deanship of Scientific Research | 21-3-2023 |
| Approval of the proposed groups | The scientific committee of the faculty is approved by the Dean of the faculty | 16-3-2023 To 30-3-2023 |
| Approval of the proposed groups | Council of Scientific Research Deanship | 2-4-2023 |

Research group establishment form:

First: Group member information

1. Principle investigator

| Name | Department | Faculty | Major and Specialization | academic degree | University Email | Mobile number | ORCID Account | WOS ACCOUNT | Google scholar account link |
|------|------------|---------|--------------------------|-----------------|------------------|---------------|---------------|-------------|-----------------------------|
| | | | | | | | | | |

2. Group members from the university

| Name | Faculty | Department | Major and Specialization | Academic Degree | Official Email | ORCID Account | WOS Account | Google Scholar Account Link |
|------|---------|------------|--------------------------|-----------------|----------------|---------------|-------------|-----------------------------|
| | | | | | | | | |

3. Group members from outside the university

| Name | Employer Name | Major and Specialization | Job Title | Nationality | Specify their position in the research group (Associate expert - CO-I - Consultant) | Official Email | H-index |
|------|---------------|--------------------------|-----------|-------------|---|----------------|---------|
| | | | | | | | |

Second: Group information

Group name (in line with the research identity of the university)

Group identity

Group goals

Group activity

Third: A summary of the research plan for a period of three years (it is not considered a research proposal to obtain funding)

Year

Summary of the research plan (targets)

First
(No more than 200 words)

Second
(No more than 200 words)

Third
(No more than 200 words)

An illustrative example of the name, identity, and activity of a research group

| | |
|--|---|
| Research group name (in line with the university research identity) | Cancer Immunotherapy Group (Medical Technology) |
| Theme | Our research program focuses on developing cancer immunotherapies, which include engineering oncolytic viruses, checkpoint inhibitors, cell therapies, and cancer vaccines. Our aim is to develop novel treatments for breast, colon, and brain tumors. Currently, we are working on combining various experimental drugs to enhance the efficacy of the treatment. |
| Aims | <ol style="list-style-type: none"> 1. Invent and develop vaccines and cell-based therapies for the treatment of cancers. 2. Promoting a culture of innovation and creativity in the field of vaccines and immunotherapy. 3. Technology transfer and localization for designing vaccines and immunotherapies. 4. Ensure the sustainability of the research program through the development of the capacities and capabilities of faculty members and postgraduate students in the field of vaccines and immunotherapy. |
| Research activities | <ol style="list-style-type: none"> 1. Developing oncolytic VSV virus platform for the treatment of breast and colon cancers 2. Developing Maraba virus platform for infectious disease vaccine uses 3. Identifying and exploring the oncolytic activities animal and plant viruses for as potential cancer therapeutics 4. Developing CAR-T therapy for hematological malignancies. |

Research Priorities:

| Research Identity of University of Tabuk | National priority | Activities within the University priorities | Beneficiary | | |
|--|--|---|--|----------------|--|
| Environmental Technology | Leadership in energy and industry | Solar and wind Energy. | Renewable Energy and Environmental Technologies Center | | |
| | | smart networks | | | |
| | | Hydrogen Energy | | | |
| | Environmental sustainability and Essential needs | | Monitoring & Enhancement strategies for Birds | Red Sea Global | |
| | | | Strategy for ecosystem restoration and afforestation | | |
| | | | Marine Environmental Monitoring. | | |
| | | | Bees role in mangrove pollination. | | |
| | | | Seagrass seeding and translocation. | | |
| | | | Artificial Beach Sand for Beach Nourishment While at the same time ecologically accommodating | | |
| | | | Waste water treatment plans sludge reuse | | |
| | | | Nutrients Management via Biological Agents | | |
| | | | Carbon-Natural Solutions | | Renewable Energy and Environmental Technologies Center |
| | | | Biomass Energy | | |
| | | | Environmental Monitoring Sensors | | |
| | | | Sustainable water resources management | | |
| | | | Solid Waste Management | | |
| | | | Decontamination of site | | |
| | | | Fuel Cell technology | | |
| | | | Energy Storage, efficiency, management, control and transformation | | |
| | | | Monitoring and cleaning PV panels | | |
| | | | Cooling the PV panels | | |
| | | | environmental bylaws | | |
| | | | renewable energy bylaws | | |
| | | | Automation: harvesting of fruits automatically while maintaining quality of products | ASTRA | |
| | | | Environmental – Compost from waste and utilization for fertilizers as per landscaping project standard | | |
| | | | Marketing – The need to study the benefits of quails and develop stamps of recommendation for the products (Tabuk is the only producer of quails in KSA) | | |
| | | | Quail production: A study of raising the weight of the Quail through genetic research or nutrition and reducing the slaughter age to 26 days | | |
| | | | Fruits production: Studying any solutions that help reduce the impact of freezing on agricultural operations | | |
| | | | Monitoring fruit production farms through drones, including irrigation, its quantities, growth, safety, the general condition of trees and insect infestations | | |
| | | | Flowers production: Study of fertilizers used in flowers and genetic development to reduce dependence on fertilizers | | |
| Dairy production: Studying to raise the cheese production factor by reducing the quantities of milk used to produce each kilogram | | | | | |
| Fruits & Flowers production: Study on the use of biological enemies (biological control) to control insect pests and plant diseases as an alternative to chemical pesticides | | | | | |

| Research Identity of University of Tabuk | National priority | Activities within the University priorities | Beneficiary |
|--|--|---|--|
| Environmental Technology | Environmental sustainability and Essential needs | Sensors and Sensor Network | Artificial Intelligence and Sensor Technologies |
| | | Surface and Aerial Vehicles | |
| | | AI and Related Technologies | |
| | | Water desalination | |
| | | Innovative technologies for measuring the depth of water in running valleys | Civil Defense |
| | | Antiquities and heritage in the Tabuk region | Archaeological Studies Unit |
| Medical Technolgy | Human Health | Aging and lifelong health | Prince Fahd Bin Sultan Chair for Biomedical Research |
| | | Infection and immunity | |
| | | Common genetic disease in Tabuk region | |
| | | Cancer and biomedicine | |
| | | Phytomedicine and therapeutics & translation | |
| | | Cardiovascular bioscience | |
| | | Medical genetics and pharmacogenomics | |
| | | Managing health crises (such as epidemic diseases and public health) | |
| | | Telemedicine | |
| | | Minimally invasive surgeries | |
| ———— | Future Economics | Legal frameworks for sustainable technologies | ———— |
| | | Artificial intelligence bylaws | |
| | | Tourism bylaws | |
| | | digital marketing | |
| | | Tourism Marketing | |
| | | Internet of Things (IoT) | |
| | | Eco-tourism | |
| | | Artificial intelligence in business | |
| | | Fin-tech | |
| | | Business intelligence and competitive intelligence | |
| | | Business sustainability | |
| | | Digital education | |
| | | Digital health | |
| | | Smart cities | |
| | | Cyber security | |
| | | | |
| | | Cybersecurity issues and solutions for industrial IoT | |
| | | Identity Security in Cyberspace | |