TRGS TRANS DISCIPLINARY RESEARCH GRANT SCHEME

Adapted from presentation by ASSOC PROF DR SABARINAH SH AHMAD, 24 MARCH 2014
Other sources: Prof RahaKPT, 2015

MoHE’S R&D ROADMAP:
Value Chain Pathway

Source: KPT, 2015
WAY FORWARD in RDC&E: BEYOND IMPACT

Consolidating and Strengthening R&D through Research Consortiums

Fostering University-led Growth Economy

Branding and Positioning R&D for global prominence

Translating R&D into Business and Value

Source: KPT, 2015

WAY FORWARD in RDC&E: BEYOND IMPACT

Public & Private research Institute
Private University
Research University / Public University

Pathway to provide solution

Venture capital
Large companies
Startups / Spin-offs / SMEs

Academia
Industry

Incubate, develop and create new innovative ideas

Financial supply

Government
Community

Top talent

MOE, MOSTI, MOF, EPU
Consumers
Customers

Source: KPT, 2015
Impact of Universities’ Research in Malaysia

**Talent Development**
- Innovative Talent
- Relevant Workforce
- Increase competitive advantage

**Research Prominence**
- Scientific publications and IPs
- Multidisciplinary and collaborative research
- Attract research talents and best students
- Renowned CoEs

**Wealth Creation**
- Enhancing industry
- Attract investment
- Enhance government agencies and NGOs
- As solution providers to the industry and community

**Bridging the Grand Challenge**
- Transforming society through knowledge extension and assimilation

Source: KPT, 2015

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What the Sponsor WANTS?
Overview: Government Transformation Program

The Four Pillars of Transformation

**Vision 2020**

1. *Malaysia: People First, Performance Now*
   - April 2009
   - Preservation and enhancement of unity in diversity

2. *Government Transformation Programme (GTP)*
   - January 2010
   - 6 National Key Result Areas (NKRAs)

3. *Economic Transformation Programme (ETP)*
   - March 2010
   - 8 Strategic Reform Initiatives (SRIs)

4. *10th Malaysia Plan*
   - June 2010
   - Macroeconomic growth targets & expenditure allocation

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**Economic Transformation Programme (ETP) with New Economic Model**

- **Targets**
  - US$15,000 – US$20,000 per capita by 2020

- **Rakyat**
  - Quality of Life
  - Enables communities to fully benefit from the wealth of the country

- **High Income**
  - Meets present needs without compromising future generations

- **Sustainability**
  - Understand the mechanism

- **Inclusiveness**
ETP via 12 NKEA & 6 SRI

GTP through the 6 National Key Result Areas (NKRAs)

6 Strategic Reform Initiatives (SRIs)
TRGS 1/2014

LAST DAY TO SUBMIT ONLINE via MyGrants:

TRGS

FRGS Trans Disciplinary Programme (FRGS-TD) has been rebranded as TRANS DISCIPLINARY RESEARCH GRANT SCHEME (TRGS) in 2014.

This grant is open to all Public Universities to encourage peer collaboration across research clusters.
TRGS PHILOSOPHY

▪ Transdisciplinary Research Scheme (TRGS) covers fundamental and exploratory research that promotes the generation of new knowledge that can contribute to enhance the intellectual level, the development boundaries of knowledge, creation of new technologies and the proliferation of a dynamic culture in line with national aspirations.

▪ TRGS can build collegial collaboration across multiple clusters and trans-disciplinary research, to put Malaysia on the world map in terms of fundamental research in a particular research cluster.

TRGS definition

▪ TRGS Research is fundamental and exploratory research that can produce theories, concepts, and ideas for the advancement of knowledge.
TRGS Objectives

- TRGS research aims to boost the generation of theories, concepts and ideas that can be a catalyst for new discoveries that break the boundaries of knowledge and innovative creation.

Examples of Transdisciplinary Research

Problem Identification and Problem Structuring

Sustainable River Basin Management in Kenya: Balancing Needs and Requirements
Boniface P. Kiteme and Urs Wiesmann

Designing the Urban: Linking Physiology and Morphology
Peter Baccini and Franz Oswald

CITY: mobil: A Model for Integration in Sustainability Research
Matthias Bergmann and Thomas Jahn

Shepherds, Sheep and Forest Fires: A Reconception of Grazing land Management
Bernard Hubert, Michel Meuret and Joseph Bonnemaire


Fischernetz: Involving Anglers, Authorities, Scientists and the Chemical Industry to Understand Declining Fish Yields
Patricia Burkhardt-Holm

Nanoscience and Nanotechnologies: Bridging Gaps Through Constructive Technology Assessment
Arie Rip

Chimeras and Other Human–Animal Mixtures in Relation to the Swiss Constitution: A Case for Regulatory Action
Hans Peter Bernhard and Rainer J. Schweizer

RESEARCH CLUSTERS

The program must involve a minimum of three (3) projects under different research clusters from the same institution (min tiga (3) projek di bawah kluster yang berbeza dari institusi yang sama).

TERMS OF APPLICATION

This grant is open to academic staff in Higher Education Institutions (HEI) with the following conditions:

1. Head of Programme should be Malaysian citizen, permanent academic staff (Professor or Associate Professor) and lead one of the projects in the program;

2. Minimum two (2) Project Leaders should be Malaysian citizens;

3. For Project Leaders who are not citizens, they must have co-researchers who are citizen and permanent academic staff from the same institution.

4. Project Leader on a contract, he/she must have co-researchers who are permanent academic staff from the same institution.
TERMS OF APPLICATION

Applicants are only allowed to be Project Head for only one project.

New applications for TRGS for those with TRGS grants from the previous phase will be considered with proof of completion of the project at the rate of 75%.

The total allocation requested should not exceed the set ceiling of RM1.5mil.

Each proposed should aim to create human capital development. Therefore, for a three (3) year research, there is a requirement to train at least four (4) Ph.D student or eight (8) students of Master or a combination of both.

Lecturer on study leave should not serve as Head of Programme / Project but can remain as a member of the research group.

Project Leader who transferred to another university shall relinquish his/her position as the leader but can remain a member of the research group.

Application Rules

Applicants should use the latest TRGS application form from the Department of Higher Education, Ministry of Education Malaysia (mygrants.gov.my)

Application for TRGS is open to all research projects that meet the conditions above.

All applications must be reviewed and endorsed by the Research Management Centre (RMC) of the respective university. The evaluation report shall be submitted to MOE secretariat along with the application form. Only applications that are supported by the RMC could be submitted to the MOE.

For research projects funded by TRGS and other sources, researchers must declare all funding obtained for the project.
ASSESSMENT CRITERIA

The proposed research must be able to produce an idea / theory / concepts / methods / models / processes, and

The research could improve a policy, methodology and model the existing solutions, or

The research covers issues of humanitarian and community for the purpose of increasing the life of the nation and the universe

The research has the potential to contribute to the country's strategic agenda

TRGS set up

Program Leader
(Prof./Assoc. Prof., citizen & permanent)
Cluster A

Project Leader 1
(same person as Prog leader)
Cluster A

Team Members
(to train 1-2 PhDs or 2-4 Masters)
Min 3 ISI/Scopus journal articles

Project Leader 2
Cluster B

Team Members
(to train 1-2 PhDs or 2-4 Masters)
Min 3 ISI/Scopus journal articles

Project Leader 3
Cluster C

Team Members
(to train 1 PhDs or 2 Masters)
Min 2 ISI/Scopus journal articles

KPIs:
Train: 4 PhDs
Pubs: 8
ISI/Scopus journal articles incl. TWO Q1s

*The program must involve a minimum of three (3) projects under different research clusters from the same institution
**RESEARCH CLUSTERS**

- **PURE SCIENCE**
- **APPLIED SCIENCE**
- **TECHNOLOGY & ENGINEERING**
- **CLINICAL & HEALTH SCIENCES**
- **SOCIAL SCIENCES**
- **ARTS & APPLIED ARTS**
- **NATURAL & CULTURAL HERITAGE**
- **ICT**

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**TRANSDISCIPLINARY**

- **Disciplinary**: Epistemologies, assumptions, knowledge, skills, methods within the boundary of a discipline. E.g. Physics; History; Psychology

- **Multidisciplinary**: Using the knowledge/understanding of more than one discipline. E.g. Physics and History; Biology and Architecture

- **Interdisciplinary**: Using the epistemologies/methods of one discipline within another. E.g. Biochemistry; Ecophilosophy; Astrophysics

- **Transdisciplinary**: Focus on an issue such as pollution or hunger both within and beyond discipline boundaries with the possibility of new perspectives.

http://www.hent.org/transdisciplinary.htm
WHAT IS TRANS-DISCIPLINARY

**TRGS set up**

- **Program Leader**
  - (Prof./Assoc. Prof., citizen & permanent)
  - Cluster A

- **Project Leader 1**
  - (same person as Prog leader)
  - Cluster A
  - Team Members:
  - (to train 1-2 PhDs or 2-4 Masters)
  - Min 3 ISI/Scopus journal articles

- **Project Leader 2**
  - Cluster B
  - Team Members:
  - (to train 1-2 PhDs or 2-4 Masters)
  - Min 3 ISI/Scopus journal articles

- **Project Leader 3**
  - Cluster C
  - Team Members:
  - (to train 1 PhD or 2 Masters)
  - Min 2 ISI/Scopus journal articles

*The program must involve a minimum of three (3) projects under different research clusters from the same institution*

**KPIs:**
- Train: 4 PhDs
- Pubs: 8 ISI/Scopus journal articles incl. TWO Q1s

**FINANCIAL REGULATION**

**Kementerian Pendidikan Malaysia**
Vote 11000

- Wages and Allowances for Graduate Research Assistant (GRA)
  - Wages and allowances to fund Graduate Research Assistant (GRA) only.
  - The ceiling of wages and allowances not exceeding RM2300 for PhD students and RM1800 for masters students or by IHE guidelines.

Vote 21000

- Travel and Transport
  i. Expenses include all domestic travel and transportation-related projects.
  ii. Overseas trips (based on the approval of the Evaluation Committee) must meet the following criteria:
  iii. Overseas travel is allowed subject to the adequacy of the grants that have been applied. Only the researcher and the PI are authorised to travel overseas. GRAs are allowed to attend conferences, seminars or workshops related to their research in Malaysia.
Vote 21000

- Travelling abroad is allowed to attend the conference / seminar / workshop / colloquium to present research output.
- The travel destination must be the most suitable and economical in terms of facilities, expertise and technology transfer.
- Those travelling abroad must also follow the rules of their respective institutions.
- To attend conferences and other activities in addition to field work, 20% of the total project allocation is allowed.
- Total expenses for travel shall not exceed 40% of the total grant.

Vote 24000 – (Rental)
- Rental is only allowed for buildings, equipment, transportation and other items that are directly involved with the research.

Vote 27000 – (Research Materials & Supplies)
- Only expenses related to the research is allowed

Vote 28000 – (Minor Repairs and Renovation)
- Only expenses for repairs and minor modifications to buildings, laboratories, equipment or other items related to the research site.
- Maintenance of existing equipment during project implementation is allowed. Maintenance cost for equipment after completion of the project shall be borne by the grant.
Vote 29000 – (Professional Services)

- Include other services (printing, hospitality, honorarium, professional services, consulting, computer, data processing and other services) related to the research project
- Special Services / Consumables (*belanja pakai habis*)
  - including the cost of attending courses, short-term attachments (one (1) only) to learn specific techniques associated with the research project.
  - The period must not exceed three (3) months.
  - Total expenditure (b) does not exceed 5% of the total grant.

Vote 35000 (Accessories and Equipment)

- Only the purchase of special equipment and accessories (including increase the capacity of existing equipment) related to the research project is allowed.
- Each application must be accompanied by justification (mentioned in method) and abide by Treasury circulars.
- Not allowed to buy communication equipment that is not directly related to the research project.
- Total amount requested does not exceed 40% of the total grant.
Research Output

Human Capital

• Each program must train at least **four (4) Ph.D student or eight (8) Master students** or a combination of both.

Publication

• Each program must produce at least **eight (8) publications** in indexed journals and **two (2) are Q1**.
• Acknowledgement to TRGS must be clearly stated in each article.

Research Output

Intellectual Property Rights

• For projects funded by TRGS, researchers are encouraged to apply for registration of intellectual property in the country before the international level.
• IP from TRGS jointly belongs to the Government of Malaysia and the University.
• Management of IP is the responsibility of the institution.
• At **least one (1) IP for each programme**.
ON-LINE REGISTRATION PROCESS

Garis Panduan TRGS

SKIM GERAN PENYELIDIKAN TRANS DISIPLINARI (TRGS)

“TRGS Trans-Disciplinary Program (TRGS-TD) telah dijenamakan semula sebagai Skim Geran Penyelidikan Trans Disiplinari (TRGS) mulai tahun 2014. Geran ini dibuka kepada Institusi Pengajian Tinggi Awam (IPTA) bagi menggantikan kerjasama keseluruhannya merentasi kajian penelitian.”

TARAFAN
Skim Penyelidikan Trans-Disiplinari (TRGS) memaklumi penyelidikan fundamental dan aplikasi yang dapat menggalakan pengetahuan baru yang menempatkan kurang teramat penting untuk memajukan kehidupan masyarakat sesuai dengan ekspresi negara. TRGS dapat membantu kerjasama keseluruhannya merentasi pelbagai kajian penelitian dan berasa manfaat bagi pelbagai Malaysia dalam pelbagai daripada segi penyelidikan fundamental dan pelbagai pelbagai dicipta.

DEFINISI
Penyelidikan TRGS merupakan penelitian asas dan eksplorasi yang telah menghasilkan teori, konsep dan ide baru dari penelitian sebelumnya.

TUJUAN
Penyelidikan ini bertujuan untuk memupuk kajian pengetahuan, konsep dan ide yang baru yang dapat menjadi pengetahuan kepada peneliti baru yang menempatkan kurang penting untuk pembangunan masyarakat sesuai dengan ekspresi negara.

NILAI PERMODALAN
Jumlah nilai penyediaan bagi kajian penelitian adalah RM 4,000,000.00 (4.5 juta). Tahun pertama tidak lebih 90% daripada jumlah yang didiskalkan.

KLUSTER PENYELIDIKAN
Program ini membentuk minimum tiga (3) projek dalam kajian kajian yang berasa daripada institusi yang sama.

1. Sains Tukar (Pure Science)
2. Sains Gunaan (Applied Science)
3. Teknologi dan Kejuruteraan (Technology and Engineering)
4. Sains Kesihatan dan Klinik (Clinical and Health Sciences)
5. Sains Sosial (Social Sciences)
6. Sains dan Budaya (Arts and Applied Arts)
7. Sains Tadzil dan Warisan Negara (Natural Sciences and National Heritage)
8. Teknologi Maklumat dan Komunikasi (Information and Communication Technology)

SYARAT-SYARAT PEMBIHAN
Geran ini terbuka kepada kajian akademik di Institusi Pengajian Tinggi Awam (IPTA) dengan syarat-syarat berikut:-

1. Ketua Program hendaklah warganegara Malaysia;
2. Ketua Program adalah kajian akademik tetap (Professor atau Profesor Madya) dan mengetahui salah satu projek dalam program tersebut;
3. Minimum dua (2) Ketua Projek hendaklah warganegara Malaysia;
4. Bagi Ketua Projek yang berasa warganegara, dimaksudkan mempunyai pengalaman bersama warganegara Malaysia kajian akademik yang bertaraf tetap daripada institusi yang sama;
5. Ketua Projek yang bertaraf kontak, dimaksudkan mempunyai pengalaman bersama kajian akademik bertaraf tetap daripada institusi yang sama;
6. Penyelidikan dan penghasilan modul inang masih diakui dalam negara;
7. Penyelidikan yang banyak biberi modal kepada Ketua Projek bagi satu projek sahaja;
8. Permohonan baru bagi mereka yang telah diluluskan geran TRGS pada fase yang terkait akan diterima permohonan dengan menggantungkan bula tahap seleksi projek pada kadar 75 permulaan (75%);
9. Jumlah penentuan yang dipilih hendaklah tidak melampaui nilainya yang telah ditentukan.
10. Semua program yang dipilih dihargai dapat melaksanakan Model Insan dalam menyelidikkan. Setelah menerima laba, bagi penyelidikan tiga (3) tahun dapat melaksanakan kurangnya empat (4) pelajar PhD atau tiga (3) orang pelajar Sarjana atau peningkatan kedudukannya;
11. Peserta yang berlok belajar tidak diberikan menjadi Ketua Program/Projek. Walau bagaimanapun, beliau boleh menjadi ahli dalam kumpulan penyelidikan;

KRITEIRA PENILAIAN

* Penyelidikan yang dipilih mesti mempunyai pengetahuan yang dapat menghasilkan suasana idea/teori/kesedaran model/proses baru; dan
* Penyelidikan yang dapat memanfaatkan sesuai polis, metodologi dan model penyelidikan yang sedang ada; atau
* Penyelidikan yang menggalakan ilmu keusahawan dan kemasyarakatan bagi tujuan peningkatan nilai kehidupan dalam negara dan sejagat; atau
* Penyelidikan yang tepat dalam memenuhi agenda strategik negara.

TEMPOH PENYELIDIKAN

Tempoh penyelidikan adalah tiga (3) tahun.

[-butang] Mustur Tunom Geran Panduan TRGS
Proses Permohonan TRGS Menggunakan Sistem MyGRANTS

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