SARAWAK RESEARCH AND DEVELOPMENT COUNCIL
RESEARCH GRANT SCHEMES 2019

GRANTS DESCRIPTIONS AND QUICK GUIDELINES

CONTACT US:
USER01SRDC@GMAIL.COM
HTTP://SARAWAKRDC.ORG.MY/

Version 2, 2019
GRANTS DESCRIPTIONS AND GUIDELINES

The Sarawak Research and Development Council (Sarawak RDC) research funds will cover disciplines in science and technology from the biomedical and sciences to engineering. Social sciences, economics, and the arts and humanities may be incorporated into submissions as collaboration and synergistic research activities.

Prior to making application, applicants are to review the Sarawak RDC's Funding Priorities in Table 1.
(A) RESEARCH INITIATION FUND

Sarawak has promising researchers and scientists whose desire to contribute to the state’s development through research and knowledge dissemination initiatives is hindered by lack of funds. This situation serves as a barrier to translating promising research and training into scientific outputs that could be applied to promote development. To address this concern and in line with the Council's thrust of promoting, undertaking and coordinating research programs relevant to the development of the state, Sarawak RDC will dedicate funds to be known as the Research Initiation Fund (RIF). The RIF is envisaged to provide chosen research project proposals with start-up funds intended to enhance chances of securing long-term support from federal or state agencies.

FUNDING AMOUNT AND DURATION:
Applicants are advised that grant amount is capped at RM50,000 for a research duration of up to maximum of 3 years.

ELIGIBILITY CRITERIA

1. The principal applicant must be early-career researcher (ECR)* who will be the Principal investigator (PI) for the project.

2. The principal applicant must reside in Sarawak and be full-time employed researchers at a public sector research organization in Sarawak (hospitals, universities, polytechnics, and research institutions), and the proposed project must be carried out at this institution.

3. The principal applicant must have a co-applicant who is at least an Associate Professor level, or show established seniority and research credentials in the subject area, to act as mentor. The co-applicant need not be based in Sarawak.

4. Researchers must be able to bear responsibility for the project throughout the entire project period.

5. For the avoidance of doubt, researchers from industry are eligible to receive funding, but should participate via a joint collaboration with a co-applicant from the agencies or established research
entities. The Sarawak RDC reserves right to exercise discretion on this.

* Early-career researcher (ECR)* – completed a post-graduate research education or post-graduate clinical training, within the past 3 years, and not more than 5 years.
(B) CATALYST FUND

CATALYST grants enable an organization/research team to carry out mission orientated, focus, and output driven innovative research. Funding awards are intended to foster close collaboration and synergy between research agencies within Sarawak, and with counterparts globally and in Malaysia. CATALYST grants support projects carried out by a group of two to four individual researchers, of which one will be designated as the corresponding Principal Investigator (PI). Proposals will be evaluated on the sole criteria of scientific excellence and innovation as well as outstanding intrinsic synergetic effect.

FUNDING AMOUNT AND DURATION:
Applicants are advised that grant amount is capped at RM250,000 for a research duration of up to maximum of 3 years.

ELIGIBILITY CRITERIA

1. The Principal investigator (PI) for the project must reside in Sarawak and be full-time employed researchers at a public sector research organization in Sarawak (hospitals, universities, polytechnics, and research institutions), and the proposed project must be carried out at this institution.

2. PI must present an early achievement track-record or a five-year track-record, whichever is most appropriate. The principal applicant must be at least an Associate Professor level, or show established seniority and research credentials in the subject area, to act as mentor. The co-applicants need not be based in Sarawak, but is ideal.

3. Co-applicants are encouraged to be comprising ECR, and students pursuing postgraduate degree, or clinicians.

4. Researchers must be able to bear responsibility for the project throughout the entire project period.

5. For the avoidance of doubt, researchers from industry are eligible to receive funding, but should participate via a joint collaboration with a co-applicant from the agencies or established research entities. The Sarawak RDC reserves right to exercise discretion on this.
(C) SPECIAL VENTURES FUND (SVF)

Special Ventures Fund provides funding that enables an organization/research team to carry out specific projects, programs and campaigns. Priority for SVF will be given to projects that align with Sarawak RDC's priorities and advance the state of Sarawak’s strategic visions and development goals.

One of the main roles of Sarawak RDC is to drive technological advancement through small medium enterprise (SME) in Sarawak. The SVF will provide early phase funds to Sarawak-based SMEs including technology start-ups to conduct research and development activities geared towards commercialization of the research outcomes, and attract venture capitals to invest in Sarawak. This grant is applicable to all Sarawak-based SMEs conducting research and development activities. The SVF operates on a 1:1 match funding scheme on projects that are identified to be aligned with state vision, economic and development goals.

FUNDING AMOUNT AND DURATION:
Applicants are advised that grant amount is capped at RM500,000 from Sarawak RDC. The duration of research will be up to maximum of 3 years with heavy emphasis on outcome deliverables i.e. product and/or technology.

ELIGIBILITY CRITERIA

1. Main applicant must be a legitimate start-up company incorporated in Sarawak.

2. Company must provide a 1:1 challenge match. A company that is offered the SVF will be required to raise or have already secured an equal amount of funding from other sources in order to claim this award. This must be a cash match — "in-kind" services will not qualify as meeting the match.
(D) COMMERCIALIZATION FUND

Commercialisation Fund (PCF) is aimed at assisting local researchers, agencies, and companies to commercialise their proven and market driven product/solutions/services. Funding is available on a competitive basis and is intended to support focussed, performance-based projects whereby applicant must show realistic and achievable technical and commercial targets. Products/services/solutions with high commercial potential are sought for our support.

FUNDING AMOUNT:
Applicants are advised that grant amount is capped at RM50,000 from Sarawak RDC. Applicants may only access this fund once per project.

Table 1. Sarawak RDC Research Priority Areas

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<th>1.</th>
<th>Bioindustry and Biomedical Health Sciences</th>
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<td>Healthcare and biomedical sciences sector including life science is a rapidly growing and evolving global market. It is an important contributor to the health outcomes of the people of Sarawak and holds huge potential in contributing towards Sarawak’s economy. The health and biomedical sciences research direction will be geared towards public health, drug discoveries, translational science from laboratories to communities, hospitals and industries, and innovative medicines or medical devices, with the aim of improving health outcomes, accessibility and affordability particularly in rural Sarawak. The areas of interest and research activities are aligned with the areas identified by the World Health Organisation, Sarawak State Health Department and Ministry of Health Malaysia which are cardiovascular diseases, cancer, emerging and re-emerging infectious diseases and antibiotic resistance. Drug discovery programme tapping into the vast natural product resources of the Sarawak rainforest will be developed further incorporating state research institutes, local start-ups and enterprises, and multinationals in collaborations with international research institutions. Such synergy will enable outcome-based programmed that will drive research and development, and state economic growth.</td>
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Priority areas

<p>| New drug/chemical entity discovery from Sarawak biodiversity, activity testing against diseases identified above incorporating high throughput screening and product development; applied research on sustainable use of Sarawak | Public health research in the areas identified above focussing on updated prevalence data, disease diagnosis and eradication; and rural health awareness and accessibility. |</p>
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<th>Biodiversity and Environment</th>
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<td>Sarawak, being part of the Borneo island, is blessed with the oldest rainforest in the world and its immense biodiversity ranging from terrestrial to marine life. This vast ecosystem is the centre of evolution for many endemic species some of which have not been discovered and/or documented. Further, traditional usage of Bornean flora and faunas for medicinal, culinary and various other purposes have not been thoroughly documented, investigated and commercialised. Such knowledge may hold potential key to discovery of new drugs and other products useful to the global community. With increasing demand for food, agriculture and forest-based products, intensified agriculture and forest production are expected to impact on our ecosystem and biodiversity. One of the key challenges will be to identify solutions for a greener more sustainable economy that balance and utilise potential synergies between biodiversity, conservation and various classes of ecosystem services, including agricultural and forest yields. However, current models are weak in their ability to predict the impacts of climate and landscape changes on biodiversity, while empirical evidence for hypothesised systematic effects of biodiversity changes on ecosystem functioning, particularly in Sarawak, remains uncertain.</td>
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<th>2. Agriculture and Food</th>
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<td>The goal of the Agriculture and Food domain is to support innovation for more efficient and sustainable agricultural production to enhance food security, incomes, and nutrition that benefit small-scale farmers. Such programme will inculcate participation of poor and vulnerable sectors of rural societies in food and agricultural value chains and agribusiness commodity systems, food and nutrition security, productivity-enhancing innovations and modern technologies, natural resource management, climate change mitigation and adaption in agricultural and rural development to create resilient agricultural systems and community. The focus areas are on new or underutilised crops and high-value animal products to boost local economy as well as accessibility to affordable nutrition, new technology and approach in sustainable agriculture and food safety, and commercialisation and globalisation of Sarawak produce. Priority is also given to research that contributes to the development of improved market access and agricultural value chains for small holders.</td>
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<td>Utility of new or underutilised crops as new cash crop</td>
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<td>New technology and approach in sustainable agriculture and food security including plant genetics, adaptive responses and disease resistance</td>
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<td>Soil and bio-enrichment research to find the right crop for the right soil-nutrient condition.</td>
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<td>Improving global market accessibility and value chains</td>
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sparse and contradictory. Biodiversity research domain encompasses various sectors from biodiversity, forestry, conservation science and commercialisation of products through sustainable and greener processes. The goal is to foster closer cooperation and synergy among the sectors identified above through research on conservation science, sustainable forestry, green production processes, climate-ecosystem adaption and cultural traditional knowledge and practice with community enabling policy i.e. Access and Benefit Sharing scheme and approaches embedded.

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<td>Assessment of current and emerging threats to Sarawak biodiversity such as climate change</td>
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<td>Impact and expansion of Access and Benefit Sharing programme and PIC acquisition on provision and utilisation of biodiversity.</td>
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4. **Engineering science**

Engineering science is one of the key components in Sarawak that strengthen our existing industries particularly in oil and gas, and energy. It is also one of the key factors that enables us to progress from labour-intensive economy to innovation-led economy. Engineering and manufacturing are sectors that significantly contributed to state gross domestic product, and employment. In light of increasing external competitive pressures and internal factor constraints, research and development in engineering science play key roles in strengthening current existing sectors, enhancing productivity whilst seeding growth in new niches. Within the domain of engineering science, several focus areas have been identified to enable Sarawak to compete in global arena and creating knowledge-intensive jobs for Sarawakians including technology development for renewable energy, manufacturing process and development of medical devices, improve industrial waste management including repurposing, and offshore engineering for oil and gas industry as well as renewable energy. Such areas will require several intersecting technologies to be established including robotics and automation, and advance material research and manufacturing.

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<td>Medical device manufacturing and technology development</td>
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<td>Inland and offshore technology research and development for renewable energy</td>
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<tr>
<td>Industrial waste management, recycling and repurposing</td>
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<td>Technology development for the energy industry.</td>
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GUIDELINES FOR BUDGET PREPARATION

SCOPE OF FUNDING

Funding provided may be used for:

- Pre-clinical testing/ clinical testing/ field trials/ stress test/ user acceptance test;
- IP preparation and registration/copyright in Malaysia only (excluding maintenance);
- Regulatory and standards compliance;
- Accessories needed include items that are necessary to upgrade the capability of existing equipment directly related to the project;
- The costs, minor modifications and repairs of existing equipment used during the duration of project period;
- Raw materials/consumables directly related to the project, and
- Market testing and evaluation
- Small equipment, provided these are not available at host agencies/institutions and is related to the project.
The funding can be utilized for the following categories:

(1) **Wages and Allowances for Temporary and Contract Personnel** (For Institution of Higher Learning and Research Institute only)

- Include wages and allowances for temporary and contract personnel are up to **RM2,500 per month/ per head inclusive of deductions for SOCSO/EPF.**

(2) **Travel and Transportation** (For Institution of Higher Learning and Research Institute only)

- Includes travel and transportation expenses for domestic and overseas trip directly related to the project. Overseas trip must meet the following criteria:
  - Only oral presentation at conferences or seminars on the findings of the project;
  - When domestic facilities and expertise are inadequate to conduct a portion of the research. However, the venue must be suitable in terms of facilities, expertise and technology transfer.
  - The **project leader or collaborator or team member** is only allowed to go **once** for the duration of the project; Travel is limited to economy class using the shortest direct routes be either MAS or AirAsia except under extenuating circumstances;
  - The project leader or collaborator needs to send an application for approval to Sarawak RDC before attending the conference together with a copy of the abstract/paper that is going to be presented.
• The allocation for travelling overseas trips will be funded up to a **maximum of 15% of the total expenses of the project or RM15,000.00 whichever is less.**

(3) **Rentals**
• Only rental for special equipment not available in the institutions involved in the project and any other items directly related to the project can be included.

(4) **Special Services**
• **Funding will be approved for only services directly related to the project such as :**
  • Consultancy - agreement/letter of intent must be submitted together with the project proposal;
  • Payment for enumerators;
  • Sample testing and analysis;
  • Data processing;
  • Paper publications related to the project;
  • Registration fees for conference; and
  • Engagement of foreign expert(s) will be considered on a case-by-case basis.
The funding cannot be used for:

- Capital purchases (equipment, facilities, etc.). However, if specialised equipment is required for the success of the project, justification for its purchase must be given. Project leader will need to provide information on the availability of such equipment and why it cannot be used or shared;
- Purchase of capital assets such as building, vehicles and furniture;
- Purchase of personal computer, laptop, printer, scanners;
- Utilities;
- Purchase of books, stationeries, and subscriptions to journals etc.
- Salary and allowances of any personnel (except as stated for IHLs and GRIs);