



# Selecting Funding Agencies

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# Why Funding?

- Enables research
- Attracts Ph.D. students
- Can build collaborations, increase exposure
- Measure of quality
- Helps Institute-overhead and student support, which provides growth
- Can help in promotion

# Funding Cautions

- Develop coherent research program
- Do not distract from publications or other creative endeavors
- Effort should not be overwhelming
- Better to pass an opportunity, than to embark on one with little chance of success
- Be prepared for rejection



# Creating the Strategy

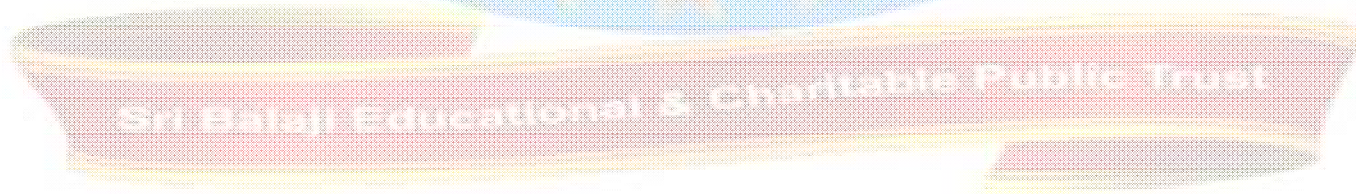
- Set your own vision: what do you want to be known for 5 years from now
  - Assess your own capabilities and passions for research
  - Identify capabilities that you can leverage here at MGMCRI -- do not become isolated
  - Create milestones needed for tenure

# Exercise

- Imagine you are writing your personal statement for tenure promotion, five years for now: describe your area of research and accomplishments as though you have already achieved them
- Assess: how critical is funding in fulfilling your vision

# Next Steps in Securing Funding

- 1. Identify relevant funding agencies
- 2. Research the programs
- 3. Get to know the program officer
- 4. Write a responsive proposal
- 5. Get feedback and revise



# 1. Identify relevant agencies

Goal: find the sources of funding

- Contact your peers, mentors, at MGMCRI and elsewhere
- Find out where other universities get funding in your area
- Attend relevant conferences
- Search the web

## 2. Research the programs

Goal: determine priorities and selection process

- Read material on the web
  - Program priorities, who has been funded and for what, review process; who decides and how peer review is conducted; total dollars; size and duration of awards; success rate
- Contact program officer
  - What is the real story on funding; obtain suggestions on how to structure proposal; volunteer to be on review panel
- Contact other people who have been funded
  - What did it take for them to get funded; get example of a funded proposal



# 3. Get to Know the Program Officer

Goal: Make your research a priority within the program

- Visit and meet in person; present your ideas and get feedback; find out what the program officer cares most about; find out & influence what will happen in future
- Volunteer to serve on a review panel
- Try to connect to program officer through conferences, professional meetings
- Treat him or her like a customer

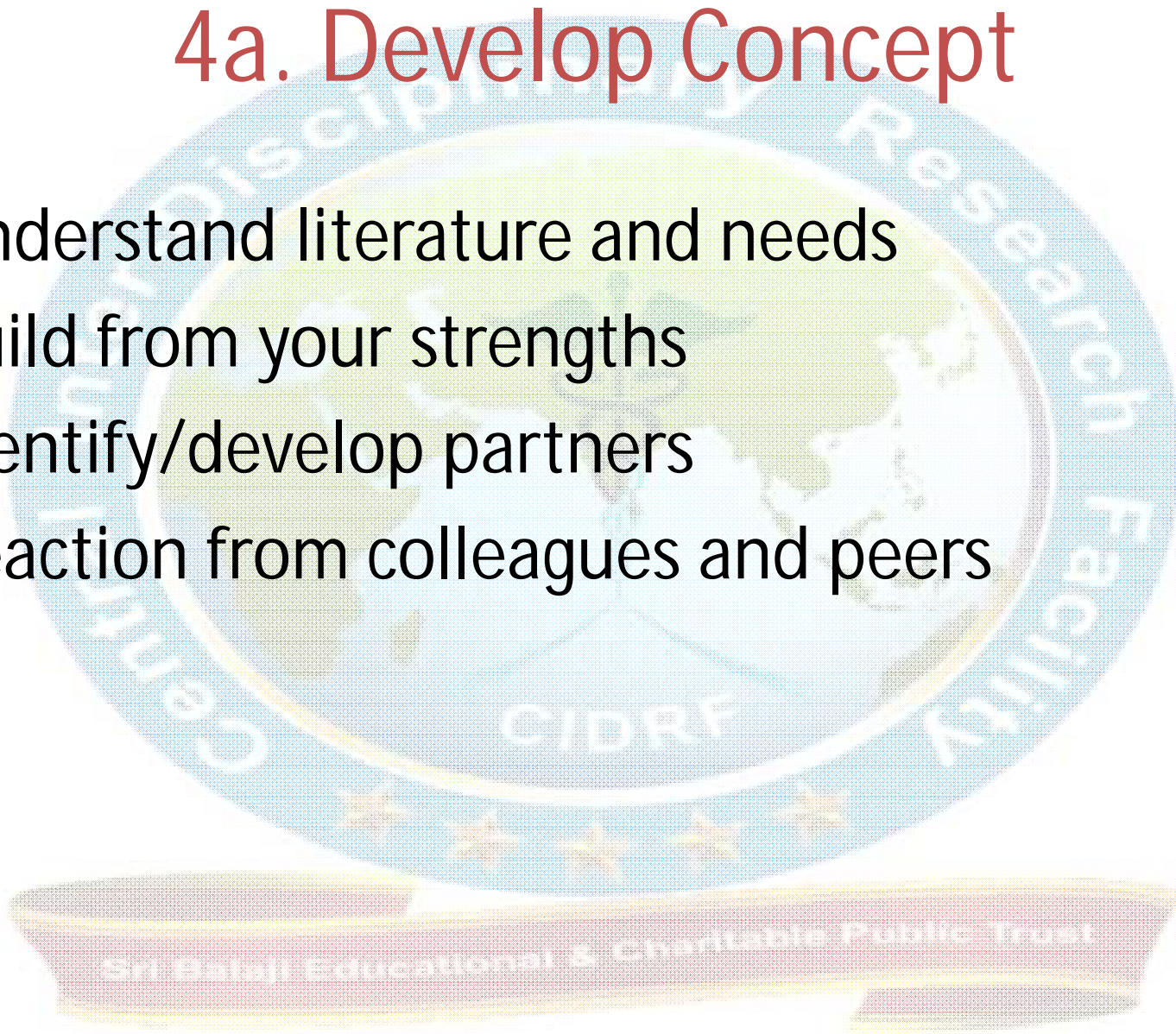
# 4. Write a Responsive Proposal

Goal: Be responsive, innovative and communicate well

- Parse the RFP; make sure that you have addressed all requirements
- Write the proposal for the audience (understand who are the reviewers)
- Create an appropriate budget and plan
- Excel in all categories

## 4a. Develop Concept

- Understand literature and needs
- Build from your strengths
- Identify/develop partners
- Reaction from colleagues and peers



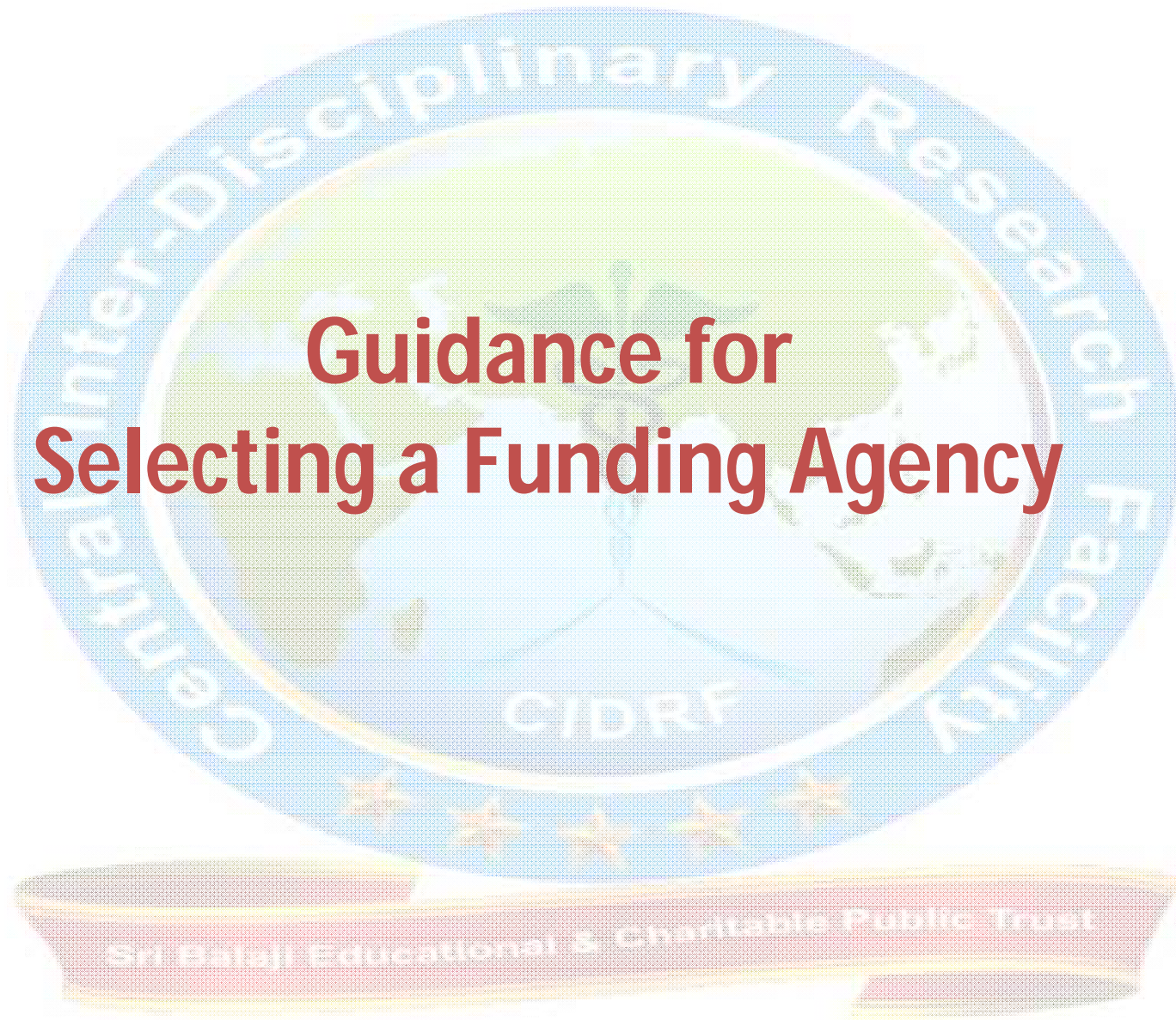
## 4b. Writing

- Follow section format exactly
- Clear statement of benefits and significance: in abstract, introduction, conclusions
- Complete review of relevant literature
- Include clear schedule, and describe the deliverables
- Justify budget expenditures
- Present your qualification

# 5. Get Feedback and Revise

Goal: Make sure you got it right

- Complete proposal at least 3 weeks before deadline
- Show proposal to a peer who knows your area of work well
- Show proposal to a peer who is not a specialist in your area
- Show proposal to a non-researcher



# Guidance for Selecting a Funding Agency

# Find the right program for you and your idea

- Does your idea fit into the thrust areas of the funding agency?
- Find out the abstracts of previously funded projects
- Develop the research proposal within the thrust area
- Check for eligibility restrictions.

- **Funding agencies are more interested in areas where public health is directly involved.**
- **Focus on such problems that have more relevance to public health.**
- **Their findings should have more impact in medical field.**
- **Senior medical professionals who act as advisors for the government look out for publications related to innovations or implementable methods which can improve public health outcomes.**



# Selection of Funding Agencies



# Sponsoring research in India: A boon or bane?

- In India, not much funding is allotted for carrying out **fundamental research in educational institutions, especially graduate level institutions.**
- There are very few funding agencies in India such as **UGC, DBT, SERB, ICMR, DHR, CSIR, DRDO** etc.
- Despite the knowledge, drive, potential and motivation, the Indian youth miserably fail in research activities, because of inadequate funding.
- It is very saddening to note that our country is losing young, energetic and research- oriented students, since they migrate to foreign countries where they are supported by well-equipped research laboratories.

# Sponsoring agencies from Government of India



## Ministry of Science & Technology

- Department of Science & Technology (DST)
- Department of Scientific & Industrial Research (CSIR)
- Department of Biotechnology (DBT)
- Department of Ocean Development (DOD)

## Ministry of Environment & Forests

- National Biodiversity Authority (NBA)
- Aquaculture Authority of India (AAI)
- Zoological Survey of India (ZSI)
- Botanical Survey of India (BSI)

## Ministry of Agriculture

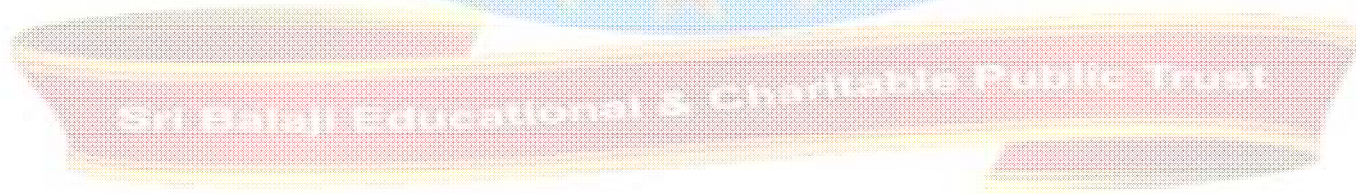
- Department of Agriculture (ICAR)
- Department of Animal Sciences (ICAR)
- Department of Fisheries (ICAR)
- Fisheries Survey of India (FSI)

## Universities Grants Commission (UGC)

- National Universities
- State Universities
- Private Universities

# Department of Health and Family Welfare, New Delhi

- Department of Health Research,  
New Delhi
- Indian Council of Medical  
Research, New Delhi



## ICMR Extramural Research Programme

	<b>Short Duration, Low cost</b>	<b>Ad-hoc</b>	<b>Task Force</b>	<b>CAR</b>
<b>Type of projects</b>	<b>Investigators oriented</b>	<b>Investigators oriented</b>	<b>National priority areas</b>	<b>priority areas, Scientist of eminence</b>
<b>No. of centres</b>	<b>One</b>	<b>One or more</b>	<b>multicentric</b>	<b>One</b>
<b>Duration</b>	<b>1 year or less</b>	<b>Normally 3 years</b>	<b>3-5 years</b>	<b>5 years</b>
<b>Financial ceiling</b>	<b>Upto 10 lakhs</b>	<b>Upto 1.5 crores</b>	<b>Upto 5 crores per center</b>	<b>Upto 10 crores</b>
<b>Review Mechanism</b>	<ul style="list-style-type: none"> <li>▣ <b>In house review</b></li> <li>▣ <b>Within 4 weeks</b></li> </ul>	<ul style="list-style-type: none"> <li>▣ <b>External Peer Review</b></li> <li>▣ <b>PRC</b></li> </ul>	<ul style="list-style-type: none"> <li>▣ <b>Task Force Committee</b></li> </ul>	<ul style="list-style-type: none"> <li>▣ <b>CAR advisory committee</b></li> </ul>

Type	Duration and Finance
Cohort Study	5 years or more, 2 crore per year per centre
National Registry	5 years or more, 2 crore per year per centre
Capacity building Under privileged area	5 years or more, 2.5 crore per year

## **1.1. Short duration low cost proposals**

The ICMR sponsors and supports short-term result-oriented Extramural Research Projects which aim at filling critical gaps in the biomedical field. Scientists / Professionals who have a regular employment in the Medical College, Research Institute, University, Recognized Research and Development Laboratory, Govt. and Semi Govt. Organization and NGOs (documentary evidence of their recognition including DSIR certificate should be enclosed with the application).

### **1.1.1 Genesis / Submission of low cost proposal**

Scientists / Professionals from the above mentioned institutions may submit low cost proposal to ICMR online. Only the proposals received online on the designated ICMR website will be considered.

### **1.1.2 Financial Ceiling**

A project costing not more than Rs. 10.0 lakhs.

### **1.1.3 Duration of Project**

Duration of one year or less.

## **1.2. Ad-hoc projects**

To promote research in the country in the field of biomedical research ICMR provides financial support in the form of ad-hoc projects to Scientists / Professionals who have a regular employment in the Medical College, Research Institute, University, Recognized Research and Development Laboratory, Govt. and Semi Govt. Organization and NGOs (documentary evidence of their recognition including DSIR certificate should be enclosed with the application).

### **1.2.1 Genesis / Submission of the ad-hoc Projects**

Scientists / Professionals from the above mentioned institutions may submit ad-hoc project to ICMR online. Only the proposals received online on the designated ICMR website will be considered.

### **1.2.2 Financial Ceiling**

Not exceeding Rs. 1.5 crores for the total duration of the project.

### **1.2.3 Duration of Project**

Not exceeding three years (however, extension can be granted by DG, ICMR on yearly basis for maximum up to 5 years after the approval of PRC / PRG / Experts Committee and recommendation from respective Head. Beyond 5 years the approval of ICMR Executive Council is required).

### 1.3. Task Force Projects

Task Force studies are national projects, centrally planned and coordinated and usually implemented on a multi-centric basis. These projects are time-bound, with a goal-oriented approach and clearly defined targets, specific time frames and conducted by standardized and uniform methodologies. These task force projects are formulated taking into consideration the national priority areas of research. Collaborating scientists with expertise and infrastructure available to undertake such activities are identified by the ICMR itself through its Task Forces and other Expert Committees.

The ICMR's permanent Institute / Centre can be one of the participating centres of Task Force multi-centric project and ICMR Hqrs. may act as coordinating centre of the task force project. In such cases the project has to be approved by the Scientific Advisory Committee of the respective Institute / Centre:



## 1.6. Centers for Advanced Research (CAR)

To encourage in-depth research on an identified research problem with the aim of generating new knowledge and having a better understanding of a disease or a health condition the proposal for CAR may be submitted to ICMR. The proposal could focus on one or multiple aspects like causation, progression, management, and prevention. The CAR is generally created around a scientist of eminence, who is undertaking excellent work on a specific area of medical importance. Assistance is provided to him to continue and expand the work with the aim that the facility so created would continue to function even after the funding from the ICMR is over. After five years, the host institution would be expected to take over the activities of the centre as permanent activity. If the host institute proposed to absorb the staff, undertaking to that effect would need to be furnished.

# Vision-DHR

- Bring modern health technology to people through innovations related to diagnostic, treatment methods and vaccines for prevention
- Translate them into products and processes
- Introduce these innovations into public health service.

# DHR

- Special focus on encouraging innovation, their translation and implementation by collaboration and cooperation with other agencies by laying special stress on implementation research so that there is a better utilization of available knowledge.
- Proposals in fundamental/ strategic research; development and evaluation of a tool, and operational research will be considered for financial support.

# DHR Extramural Research Programme

	Research studies with emphasis on public health	Translational research projects	Inter-sectoral co-ordination including funding of joint projects
Type of projects	Investigators oriented, NCD	Investigators oriented	National priority areas
Type of Research	Research studies on disease burden, risk factors, diagnosis & treatment, etc of major diseases.	Projects to translate the already identified leads into products and processes in the area of human healthcare, through coordination among the agencies involved in basic, clinical and operational research for use in the public health system	Promote joint/collaborative research projects with other agencies involved in bio-medical/health research in the country for optimum use of resources and transfer of knowledge.
Duration	1 – 3 years	1 – 4 years	3-5 years
Financial ceiling	50 lakhs-3 crores	3 -10 crores	50 lakhs-20 crore

**I. Development of new drugs, Diagnostics and devices in areas of:**

1. Cancer
2. Stroke
3. Diabetes
4. Vector borne diseases
5. Tuberculosis
6. Leishmaniasis  
(DBT, DSIR/CSIR/DRDO)

**II. Vaccines for:**

6. Vector borne diseases and others identified to be of public health importance.  
(DBT, DSIR/CSIR/DRDO)

**III Other projects:**

7. Use of traditional/alternative system of medicines in cardio-vascular diseases, diabetes, stroke and neurological disorders, maternal and child health care. (AYUSH, MoW&C)
8. Effect of Pollution due to chemicals, pesticides, other toxic waste and climate change on human health (MoE&F)
9. Bio-terrorism & Development of disaster management tools (NDMA)
10. Diagnostics, treatment and control of diseases on Zoonosis, Human nutrition, Agricultural instrumentation and Pesticide safety. (DARE)
11. Tele-epidemiology and Telemedicine (DOS)
12. Socio-behavioural factors related with maternal health (MoH&FW, MoW&C)
13. Under-five morbidity pattern. MoH&FW, MoW&C
14. Nutritional interventions in schools. (MoH&FW, MoW&C)
15. Studies on Low Child sex ratio, female feticide, domestic violence and sexual violence at work place. (MoH&FW, MoW&C)

## UGC Innovative Programmes “ Teaching and Research in Interdisciplinary and Emerging Areas”

### Eligible Target Groups

The Universities / Institutes / Colleges which are fit to receive financial assistance under Section 2(f) and 12(B) of UGC Act

### Nature of assistance

on 100% basis

Essential and critical requirements of laboratory equipment, contingency, staff etc.

The limit of the financial assistance will be **Rs.50.00 lakhs for nonrecurring and recurring items plus staff (for courses only) on actual basis.**

### Duration of the programme

5 years.

### Financial assistance

**Non – Recurring Total (NR) = 34.00**

**Recurring Total 16.00 + staff**

**Grand Total 50.00 lakhs + staff (on actual basis)**

**Overhead 10% (NR &R)**

### Procedure for applying for the scheme

**Circular to Vice – chancellors / registrars of all eligible universities / institutes**

## Department of Science and Technology (DST)

❖ Established in May 1971

### Main goals

❖ promoting new areas of Science & Technology and to play the role of a nodal department for organising, coordinating and promoting S&T activities in the country under the Ministry of Science & Technology.

### Responsibilities

- ✓ formulation of policies relating to science and technology matters relating to Scientific Advisory Committee of Cabinet (SACC).
- ✓ promotion of new areas of S&T with special emphasis on emerging areas
- ✓ Coordination and integration of areas of Science and Technology

### Major activities

- It undertakes or financially sponsors scientific and technological surveys, research design and development;

- Providing support and grants-in-aid to the scientific research institutions, scientific association or bodies.
- It plays a key role in matters regarding the interagency/ interdepartmental coordination for evolving science and technology missions,
- Matters concerning domestic technology particularly the promotion of ventures involving the commercialization of such technology other than Council of Scientific and Industrial Research (CSIR).
- Establishment of new institutions/ infrastructure. It assists in harnessing and application of science and technology for weaker sections, women and other disadvantaged sections of the society.



# Who can apply?

- ✓ **Young Researcher: ECRA, NPDF**
- ✓ **Senior Scientists**
- ✓ **Woman Scientist Schemes**
  - **DST-WOS(B), WOS (C)**
- ✓ **Special categories (INSPIRE, TARE, FIST, High Risk High Reward)**
- ✓ **Return home Fellowships –**
  - **Ramanujam fellowship, Margdarshi fellowship**
- ✓ **Superannuated: by DST - USERS**
  - **Utilisation of Scientific Expertise of Retired Scientists**

# Core Research Grant

- This scheme encourages emerging and eminent scientist in field of science and engineering for individual centric competitive mode of research funding, called for in July and Dec every year.

## **Nature & Duration of Support:**

- The funding is provided @ upto Rs. 3 crores for a period of three years.
- The research grant is provided for equipment, manpower, consumables, travel and contingency.
- “Overheads” is also be provided to the implementing institution as per prevailing norms of SERB.

# Start-Up Research Grant (Young Scientists)

- Start-up grant for Young Scientists is restructured **w.e.f. 1st September, 2015** into two new schemes:
- Early Career Research Award (ECRA)
- National Post-Doctoral Fellowship (NPDF)

# Early Career Research Award (ECRA)

- Research support to the young researchers who are in their early career for pursuing exciting and innovative research in frontier areas of science and engineering.
- First assignment of the applicant in a regular capacity in a recognized academic institution or national laboratory or any other recognized R & D institution in India.
- One-time award and carries a research grant **up to Rs. 50 Lakhs (excluding overheads) for a period of three years.**
- Grant covers equipment, manpower, consumables, manpower, travel and contingency apart from overheads.

# National Post-Doctoral Fellowship (NPDF)

- Aimed to identify motivated young researchers and provide them support for doing research in frontier areas of science and engineering, under a mentor, and it is hoped that this training will provide them a platform to develop as an independent researcher.

## **Eligibility:**

- The applicant must have obtained Ph.D./M.D./M.S. degree from a recognized University.
- The upper age limit for the fellowship is 35 years at the time of the submission of application, age will be calculated by taking the date of closure of the respective call. Age relaxation of 5 (five) years will be given to candidates belonging to SC/ST/OBC/Physically Challenged & Women candidates.

## **Grants:**

- Research grant can be used for minor equipment, consumables, contingencies and domestic travel.
- There is no provision for providing manpower support under this scheme.
- The Fellow is expected to undertake the research objectives by himself/herself during the entire duration of the fellowship.

# Fund Details

Sl. No.	Budget Head	Amount
1.	Fellowship	Rs. 55,000/- per month (consolidated) Rs. 35,000/ p.m for candidates who have submitted the thesis but degree not yet awarded
2.	Research Grant	Rs. 2,00,000/- per annum
3.	Overheads	Rs. 1,00,000/- per annum

# Scheme for funding High Risk - High Reward Research

- Supports proposals that are conceptually new and risky, and if successful, expected to have a paradigm shifting influence on the S&T. This may be in terms of formulating new hypothesis, or scientific breakthroughs which aid in emergence of new technologies.
- The funding is provided normally for a period of three years. In exceptional cases, the duration can be up to 5 years as assessed by the expert committee.
- No budget limit is prescribed for this type of projects. The research grant covers equipment, consumables, contingency and travel apart from overhead grants.

# Ayurvedic Biology Program

- Research in Ayurveda has been dominated by studies on medicinal plants and the development of herbal drugs, which has a large market growing at 15% per year.
- However, **basic research which employs modern biology, immunology, and chemistry to investigate the concepts, procedures, and products has received little attention.**
- Against this background, the SERB constituted a Task Force to promote the application of basic sciences in the investigation of Ayurvedic concepts, procedures and products, and nurture the discipline of Ayurvedic Biology by supporting research projects, capacity building and institutional growth.



## Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST) Program

- Intended to provide basic infrastructure and enabling facilities for promoting R&D activities in new and emerging areas and attracting fresh talents in universities & other educational institutions.
- Optimal infrastructure facilities for post-graduate teaching and research, such as, renovation of existing laboratory space (no fresh constructions) and cold room, modernization of labs involved in PG teaching and research, acquisition of essential equipment, up-gradation of existing facilities, networking & computational facilities including software & databases, scientific & technical books (no journals), maintenance & refurbishing of existing and new facilities etc..
- **Duration** : The duration of support for each project will be for a period not exceeding 5 years.

## Department of Biotechnology (DBT)

- ❖ Since its inception, the Department has promoted and accelerated the pace of development of biotechnology in the country through several R&D projects, demonstrations and creation of infrastructural facilities, a clearly visible impact in this field has been seen.
- ❖ The Department has made significant achievements in the broad areas of agriculture, health care, animal sciences, environment and industry.
- ❖ An unique feature of the Department has been the deep involvement of the scientific community of the country through a number of technical task forces, advisory committees and individual experts in identification, formulation, implementation and monitoring of various programmes and activities.
- ❖ Patenting of innovations, technology transfer to industries and close interaction with them have given a new direction to biotechnology 24 Indian Council of Medical Research .
- ❖ (DBT) working under the Ministry of Science and Technology in 1986 gave a new impetus to the development of the field of modern biology and biotechnology in India.

Call Announcements	Last date
<a href="#"><u>Call for Proposals for the "Mission Programme on Biotech-Krishi Innovation Science Application Network (Biotech-KISAN)</u></a>	<b>31<sup>th</sup> May, 2018</b>
<a href="#"><u>Call for proposals under strengthening component of Star College Scheme from UG colleges of India</u></a>	<b>15th May, 2018, for Remote Areas: 31st May, 2018</b>
<a href="#"><u>DBT Alumni Scheme for Newton International Fellows (NIFs)</u></a>	
<a href="#"><u>Indo-Swiss Joint Research Programme (ISJRP), 2018-19 : Blue sky research/basic research in the life sciences</u></a>	<b>16th April, 2018</b>
<a href="#"><u>DBT-European Commission H2020 call (2017-18)</u></a>	

# Who can apply?

- ✓ **Young Researcher: RGYI**
- ✓ **Woman Scientist Schemes**
  - **DBT-BIOCARE**
- ✓ **Special categories (COE, NER, Glue Grant)**
- ✓ **Return home Fellowships –**
  - **Ramalingaswami fellowship, DBT-Wellcome Trust Fellowships**
- ✓ **Superannuated: by DBT-Emeritus Scientists**

# Centres for Excellence

- Augment and strengthen institutional research capacity for promotion of excellence in interdisciplinary science and innovation in specific areas of biotechnology.
- Flexible long-term support for highly innovative research (both basic and translational in nature) in biotechnology, which creates not only high-quality publications and intellectual property but also translational outputs through mid and high end innovation.
- The overall aim of the CEIB programme is to establish Centres of Excellence, provide long-term support to outstanding scientists and provide institutional / departmental Programme Support.

# Research Resources, Service Facilities and Platforms

- The grant support enables research institutions or universities to establish state-of-the-art instruments or to set-up central laboratories, research service facilities like, animal house, generating scientific knowledge through basic and advanced R&D; validate and disseminate research outcomes like GM plants, vaccines, diagnostics and maintain genetic stocks, repositories, platforms for advanced research in specified national priority areas.
- The principle of establishing such biotech facilities within or outside the university or institution as shared research facilities are cost-effective and stimulate cross-disciplinary collaboration.

## Special Programmes-North-East region

- NER constitutes one of the richest hotspots of biodiversity of the country, and most of it remains to be characterised for its medicinal, aromatic, edibility, ecological and ornamental values.
- Thus, NER offers **unique potential for biotechnology-based interventions for overall development of the region.**
- North Eastern Region-Biotechnology Programme Management Cell (NER-BPMC) for coordination and monitoring of biotechnology programmes in the North Eastern States of India as part of its commitment towards the promotion of biotechnology activities in the North Eastern Region.

# Glue Grant

- Links clinical science departments through inter-institutional linkages with basic science institutes & university departments with medical or veterinary school departments.

The key components of the scheme include

- Ph.D. programme in which focus is on disease biology, early translation, interdisciplinary research, or technology innovation. Each Ph.D. student would have a guide from each partner, and share responsibility for structured education and training in the initial period of Ph.D. programme.
- Joint participation in mutual education and training activities at post-graduate or Ph.D. level with focus on building science competency of medical background scholars and faculty, and disease orientation of basic scientists in areas of interest.
- Joint workshops, small science meetings, research priority development exercise in areas of mutual interest.
- Initiated collaborative research projects which are in progress.



## Biotechnology Career Advancement and Re-orientation Programme (Bio-CARe) for Women Scientists

- The programme is mainly for Career Development of employed/unemployed women Scientists upto 55 years of age for whom it is the first extramural research grant.
- Research Grant Opportunity (RGO), under which a 3-5 year research grant is provided.
- Build capacities for women Scientists employed fulltime in Universities and small research laboratories or unemployed women Scientists' after a career break so as to help them undertake independent R&D projects.
- Under this scheme the women Scientists who are unemployed will be provided a monthly emoluments ranging from Rs. 50,000/- to 60,000/- p.m. The employed women Scientists in addition to salary will get an amount of Rs.10,000/- p.m as an incentive. A research grant of Upto Rs. 50.00 lakhs is provided

# Fellowships for Scientists

- **Ramalingaswamy Re-entry Fellowship**  
Welcoming Indian scientists working abroad back to our institutions.
- **TATA Innovation Fellowships**  
Promotes innovations towards path-breaking solutions for major challenges.
- **TWAS fellowships**  
For doctorate & post-doctorate students from developing countries at Indian institutions.
- **Cutting-Edge Research Enhancement and Scientific Training (CREST) Award**  
Granted to biotech researchers for advanced scientific training abroad.
- **Wellcome Trust/DBT India Alliance**  
Building excellence among Indian bio-medical scientists by supporting future leaders.

## **Ministry of Environment and Forests (MoEF)**

- ❖ The Ministry of Environment and Forests, is classified as a 'Scientific Ministry' under the Government of India.
- ❖ Since its inception in 1985, the Ministry has funded research by diverse research institutions in several disciplines concerned with environmental protection.
- ❖ Some indicative areas include: forest conservation, wildlife protection, biodiversity inventories, R&D in environmental management technologies, climate change, public health impacts of environmental degradation, etc.
- ❖ The present Guidelines set forth the Objectives of research support, the Thrust Areas for research support, procedures for inviting/receipt and processing proposals for funding support, norms for funding, conditions of support and dissemination of research findings.

### **Objectives :**

- ✓ To generate information and knowledge required for developing strategies, techniques, and methodologies for better environmental management.

## Defence Research and Development Organisation (DRDO)

- ✓ The Defence Research and Development Organisation working under the Ministry of Defense

### Objectives

- ❖ Formulation and execution of programmes of scientific research
- ❖ Design and development, testing and evaluation leading to induction of state-of-art weapons and equipment.
- ❖ supports a substantial amount of extramural research in academic institutions and other laboratories on defense related problems through various grants-in-aid schemes and other sponsored projects.
- ❖ The organization encourages and supports basic research in academic institutions through a scheme of extramural research and four Research

#### Boards devoted to

- i. Aeronautics,
- ii. Naval Research,
- iii. Life Sciences,
- iv. and Armaments.

## LSRB

- ❖ The purpose of Life Sciences Research Board (LSRB) is to expand and deepen the knowledge base of life sciences in the country through strengthening and use of national resources .
- ❖ The research supported by the LSRB is to enhance the core competence in the fields of knowledge (and their application) germane to development, manufacture and use of biomedical and biotechnological products as also preventive and curative procedures.
- ❖ Accordingly LSRB supports research proposals in broad topic areas in Life Sciences viz., biological and biomedical sciences, psychology and physiology, bioengineering, specialized high altitude agriculture, food science & technology etc.
- ❖ Innovative ideas and proposals from young scientists are encouraged.
- ❖ The boards provide grants-in-aid for collaborative defence-related futuristic frontline research having application in the new world class systems to be developed by DRDO.

# Council of Scientific & Industrial Research (CSIR)

- Research proposals of applied nature as well as those falling under basic sciences which attempt to solve specific problems being pursued by CSIR laboratories, or in newer and complementary fields, are considered for CSIR support.
- Priority is given to multi-disciplinary projects which involve inter-organisational co-operation (including that of CSIR laboratories). Preference is given to schemes which have relevance to research programmes of CSIR laboratories.
- EMR schemes are not intended to support establishment (de novo) of specialized facilities, centres or divisions.
- These schemes are intended to supplement on-going R&D efforts in institutions/laboratories/departments, etc. where basic infrastructure exists.

# NIH Funding

[https://www.youtube.com/watch?v=rNwsg\\_PR90w](https://www.youtube.com/watch?v=rNwsg_PR90w)



# NIH Funding

- Did you know that NIH is the largest public funder of biomedical research in the world, investing more than \$32 billion a year to enhance life, and reduce illness and disability?
- NIH funded research has led to breakthroughs and new treatments, helping people live longer, healthier lives, and building the research foundation that drives discovery.



# Grants Process Overview



## GET STARTED

### Learn the Basics

Learn how NIH approaches grant funding and how your research fits into our research portfolio. Make sure to explore the different types of grant programs offered at NIH, along with the eligibility requirements.

### Plan Your Approach

Find and understand funding opportunities, ensure your research is original, understand your organization's internal procedures, and prepare to write a competitive application.



## APPLY FOR GRANT FUNDING

### Prepare to Apply

Ensure all registrations are in place, get familiar with requirements, and choose which of the available submission options you will use.

(1-6 WEEKS BEFORE SUBMISSION)

### Write Application

Obtain and complete application forms following provided instructions. Find information on developing your budget and formatting attachments.

### Submit

Submit your application to NIH.Track and view your application to verify receipt and to confirm that the assembled document correctly reflects your submission.

(SUBMIT EARLY!)



## APPLICATION REFERRAL & REVIEW

### Receipt & Referral

Applications compliant with NIH policies are assigned to an NIH Institute or Center and to a scientific review group for evaluation of scientific and technical merit.

(MONTH 1 AFTER SUBMISSION)

### Peer Review

Applications undergo a rigorous two-stage review. The first level is carried out primarily by non-federal scientists, while the second is performed by Advisory Councils or Boards.

(MONTHS 2-8 AFTER SUBMISSION)



## PRE-AWARD & AWARD PROCESS

### Pre-Award & Award Process

Applicants who have scored well submit "just-in-time" information. Final administrative reviews are conducted and Notice of Award documents are sent to successful applicants.

(MONTHS 7-10 AFTER SUBMISSION)

### Post-Award Monitoring & Reporting

NIH monitors grantees carefully. Active monitoring includes reports and correspondence from the grantee, e.g., reports, site visits, and other information.

(DURATION OF AWARD)

***RESEARCH FELLOWSHIPS  
CSIR – UGC NET***

## **CSIR – UGC NET**

### **Objective:**

**This *national level test* is conducted to determine the eligibility of Indian nationals for the award of Junior Research Fellowships (JRF)-NET and eligibility for appointment of Lecturers (NET) in certain subject areas falling under the *Faculty of Science***

### **Eligibility Criteria**

#### ***Educational Qualification:***

**M. Sc., or equivalent degree, with minimum 55% marks**

#### ***Age Limit:***

**The upper age limit for JRF shall be 28 years, which is relaxed upto 5 years in the case of candidates belonging to Schedule Castes/Schedule Tribes, Women, Physically Handicapped and**

**Some of the leading Research Institute where you can apply after qualifying JRF**

**1.IISc Bangalore: [www.iisc.ernet.in](http://www.iisc.ernet.in)**

**2.IIT-Bombay: [www.iitb.ac.in](http://www.iitb.ac.in)**

**3.IIT-Delhi: [www.iitd.ac.in](http://www.iitd.ac.in)**

**4.IIT-Kharagpur: [www.iitk.ac.in](http://www.iitk.ac.in)**

**5.IIT-Roorkee: [www.iitr.ernet.in](http://www.iitr.ernet.in)**

**6.AIIMS: [www.aiims.edu](http://www.aiims.edu)**

**7.ICGEB, New Delhi: [www.icgeb.res.in](http://www.icgeb.res.in)**

**8.Institute of Genomics and Integrative Biology: [www.igib.res.in](http://www.igib.res.in)**

**9.IARI: [www.iari.res.in](http://www.iari.res.in)**

**10.Central Drug Research Institute: [www.cdriindia.org](http://www.cdriindia.org)**

**11.ACBR, Delhi University: [www.acbrdu.edu](http://www.acbrdu.edu)**

**12.JNU: [www.jnu.ac.in](http://www.jnu.ac.in)**

**13.Delhi University South Campus: [www.south.du.ac.in](http://www.south.du.ac.in)**

**14.NCPGR, New Delhi: [www.ncpgr.ac.in](http://www.ncpgr.ac.in)**

**15.National Institute of Virology: [www.univpmc.ernet.in](http://www.univpmc.ernet.in)**

**16.National Chemical Laboratory: [www.ncl-india.org](http://www.ncl-india.org)**

**17.National Botanical Research Institute: [www.nbri-iko.org](http://www.nbri-iko.org)**

**18.Bose Institute: [www.boseinst.ernet.in](http://www.boseinst.ernet.in)**

**19.Central Food Technological Research Institute: [www.cftri.com](http://www.cftri.com)**

**20.Cancer Research Institute: [www.tatamemorialcentre.com](http://www.tatamemorialcentre.com)**

***INDIAN NATIONAL SCIENCE ACADEMY (INSA)***

29 June 2018

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## **Objective:**

- **For conducting advanced research or undergoing specialized training in Indian Research Institutes/Laboratories**

## **Criteria for selection:**

**Scientific contributions and the purpose of the visit**

## **Eligibility details of Award:**

- **The applicant should be a scientist and hold a regular position in any R & D organization including Universities or Affiliated Colleges in India.**

**These Fellowships will be awarded on a competitive basis to the scientists for furtherance of their research and/or research capabilities for carrying out collaborative research, undergoing training in specific techniques, or utilizing facilities not available in their own institutions**

**Support to INSA Young Scientist Awardees:**

**Provides opportunity to visit abroad under the Bilateral Exchange Programme with full travel support once within the five years of having received the award**

**Countries offering positions available under exchange programme are as follows:**

<b>The Netherlands</b>	<b>Brazil</b>
<b>Philippines</b>	<b>China</b>
<b>Poland</b>	<b>Czech Republic</b>
<b>Russia</b>	<b>France</b>
<b>Slovak Republic</b>	<b>Germany</b>
<b>Republic of Slovenia</b>	<b>Hungary</b>
<b>Ukraine</b>	<b>Kyurghy Republic</b>
<b>U.K</b>	<b>South Korea</b>
	<b>Nepal</b>



# ***FULBRIGHT PROGRAM***

29 June 2018

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**Congress created the Fulbright Program in 1946 at the end of World War II to increase mutual understanding between the people of the United States and other countries, through the exchange of persons, knowledge and skills.**

<b>Field of Study</b>	<b>Advanced research, graduate study, language study or teaching at the university, secondary or elementary level</b>
<b>Type</b>	<b>Graduate</b>
<b>Place of Study</b>	<b>Over 140 countries</b>
<b>Award amount</b>	<b>Travel &amp; educational expenses; language or orientation courses; maintenance for one academic year; supplemental health and accident insurance</b>
<b>MIT Deadline</b>	<b>September 11</b>
<b>National Deadline</b>	<b>October 20</b>

## **Eligibility criteria**

**Hold an undergraduate degree before the beginning day of the grant, but not have been awarded a doctoral degree at the time of application**

- **Be in good health; grantees will be required to submit a satisfactory Certificate of Health from a physician**
- **Have sufficient proficiency in the written and spoken language of the host country to communicate with the people and to carry out the proposed course of study**
- **Preference will be given to students who have received a majority of their high school and undergraduate college education in the U.S.**
- **Preference will usually be given to candidates who have not resided or studied in the country to which they are applying for more than six months.**
- **Duty abroad in the Armed Forces is not considered disqualifying. Nor are junior year study abroad programs (such as the Cambridge-MIT Exchange), where the total actual time in residence does not much exceed six months in aggregate, considered disqualifying.**

# ***HUMBOLDT FELLOWSHIP***

29 June 2018

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**• The Alexander von Humboldt Foundation is a non-profit foundation established by the Federal Republic of Germany for the promotion of international research cooperation. It enables highly qualified scholars not resident in Germany to spend extended periods of research in Germany and promotes the ensuing academic contacts**

**Humboldt Research Fellowships for postdoctoral researchers are the instrument with which the Alexander von Humboldt Foundation enables highly-qualified scientists and scholars from abroad who are just embarking on their academic careers and who completed their doctorates less than four years ago to spend extended periods of research (6-24 months) in Germany.**

**• Candidates choose their own research projects and their host in Germany and prepare their own research plan**

## **Criteria for Assessment:**

**The academic quality and feasibility of the research proposal submitted by the candidate**

- Academic publications in internationally-reviewed journals and for publishing houses**
- Statements on the candidate's academic achievements and potential contained in the expert references submitted by the candidate**

## **Fellowship specifications**

- The fellowship is worth 2,250 EUR per month. This includes a mobility lump sum and a contribution towards health and liability insurance**

## Application requirements

- **Doctorate or comparable academic degree (Ph.D., C.Sc. or equivalent), completed less than four years prior to the date of application. Candidates who have nearly completed their doctoral degrees are eligible to apply provided that they submit the manuscript of their dissertation or publications containing the results of their dissertation.**
- **Academic publications reviewed according to international standards and printed in journals and/or by publishing houses.**
- **Confirmation that research facilities are available and a detailed expert's report by an academic host at a research institution in Germany.**
- **Expert references from the doctoral supervisor and other academics qualified to comment on the applicant's eligibility, preferably including reviewers not working at the applicant's own institute.**
- **Language skills: scholars in the humanities or social sciences and physicians must have a good knowledge of German if it is necessary to carry out the project successfully; otherwise a good knowledge of English; scientists and engineers must have a good knowledge of German or English.**

# Myths of Proposal Writing

- Technical and scientific merits alone determine winners
- Proposals should always be written for the top experts in your field
- Only peers pick proposals
- Don't ask your colleagues to review your proposal -- they won't appreciate it anyway



# More Myths

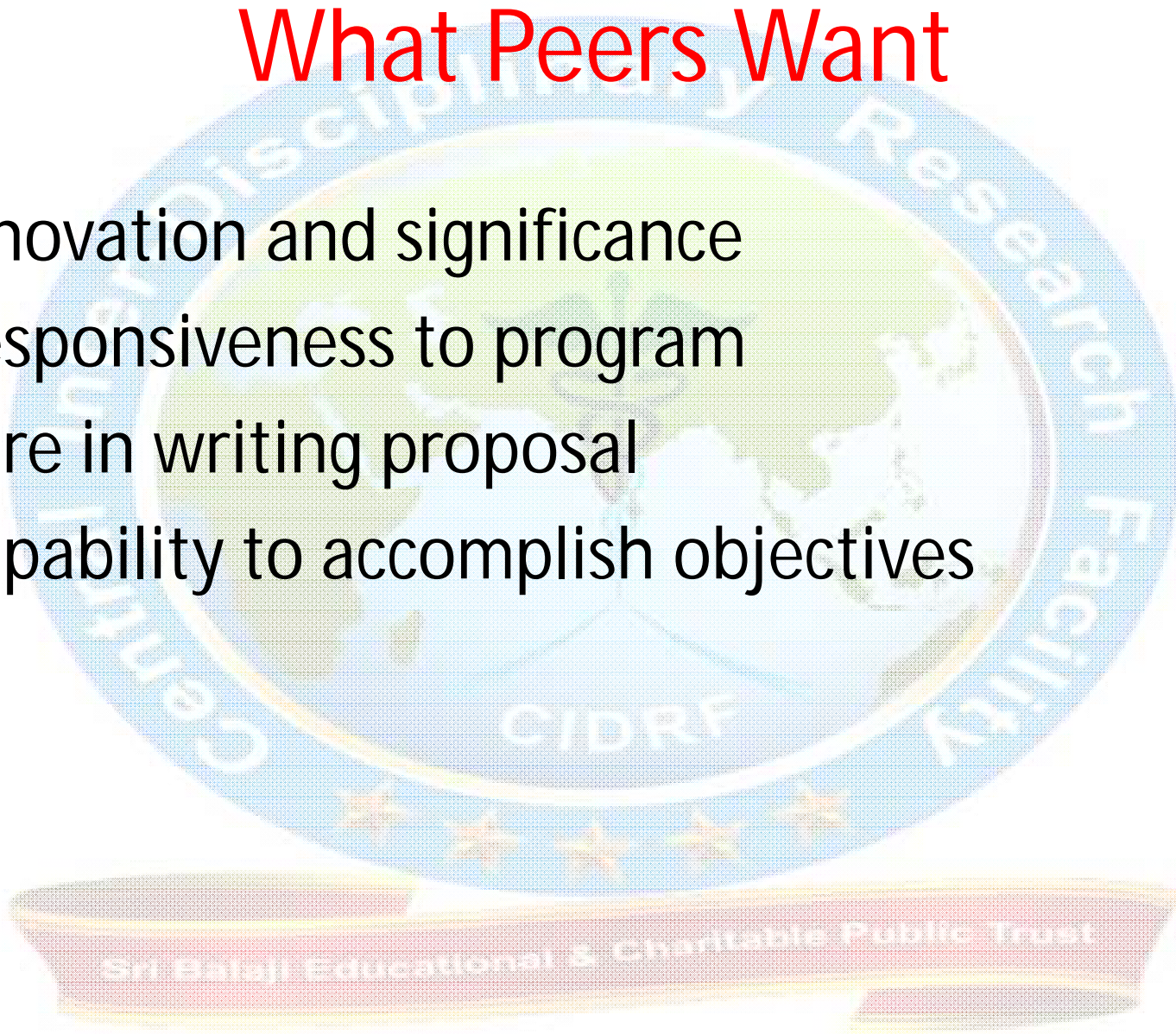
- It's a good idea to submit the same proposal to several agencies
- Follow your own writing style -- reviewers don't care about the guidelines
- Don't worry about schedules and deliverables -- this is research

# Reality

- Reviewers often do not read proposals carefully, and they frequently look for the “big idea”
- Reviewers also look for reasons to deny proposals -- there should be no holes
- Reviewers are not always experts
- Managers make the final decision, and influence the process

# What Peers Want

- Innovation and significance
- Responsiveness to program
- Care in writing proposal
- Capability to accomplish objectives



# What Program Officers Want

- Proposals that fulfill programmatic priorities
- Complementary work (no duplication)
- Investigators who are good to work with
- No black marks (always deliver on promises)



# Summary

- Begin with innovation and significance
- Treat programs like customers -- you need to be responsive
- Get as much feedback as possible -- avoid risks -- you can raise the probability of being picked

# THANK YOU

- <https://www.ncbs.res.in/rdo/sponsor-grants>

Gold Mine of information where grant information is available in one place and updated regularly.

