



BIOTECHNOLOGY INDUSTRY RESEARCH ASSISTANCE COUNCIL

E-YUVA SCHEME DOCUMENT

**Empowering Youth for Undertaking Value Added
Innovative Translational Research**

Version 1: January, 2020

1. About the scheme:

E-Yuva scheme is mandated to promote a culture of applied research and need-oriented (societal or industry) entrepreneurial innovation among young students and researchers. The scheme provides funding support (through fellowship and research grant), technical and business mentoring, exposure to bioincubation model, orientation to entrepreneurial culture etc. to students at various levels including undergraduates, post-graduates and post-doctoral.

This BIRAC's scheme is implemented through dedicated hubs called **E-YuvaCenters (EYCs)** housed within the University/Institute set up and mentored by a BIRAC BioNEST supported bio-incubator. EYCs act as anchors and extend requisite support and mentoring to students. Each EYC has a BIRAC supported pre-incubation space which offers infrastructure and equipment for basic research and experimentation by selected students. Advanced research needs are fulfilled through bio-incubator connect.

The scheme provides support under following two categories:

- a. BIRAC's Innovation Fellows (for post graduates and above)
- b. BIRAC's E-Yuva Fellows (for under graduate students)

BIRAC supported EYCs encompass the following:

- Pre-incubation space (3,000 sq. ft. or more)
- Manage Fellowships for students as per categories mentioned above
- Conduct Entrepreneurial Awareness Workshops for students

2. E-Yuva Centres (EYCs)

2.1. Eligibility of EYC

University/Institution established as a legal entity under the relevant Law of India having at least 51% Indian stakeholders (owners/partners/trustees/members/associates etc.) is eligible to apply. The University/Institution could be Public (Central/State)/Private owned. Other mandatory conditions are as follows:

- Applicant University/Institution should have a Department in Life Sciences stream (Biotechnology/Biosciences/Agriculture /Horticulture/ Food technology etc.) for technical support
- Age of the applicant University/Institution should be at least 3 years or more
- Presence of an Innovation supporting formal body, such as E-Cell/ Institutional Innovation Councils/ IP Cells/ TTOs / Incubation centre etc. is a must

It is desirous for the applicant organization to have:

- Connect with a Bio-incubator
- Network of experts who can provide technical/business mentorship to fellows

Applications for EYCs need to be routed through the Head of the University/Institution. The Head of the University/Institution shall appoint/nominate the Project Lead as a contact point for BIRAC EYC until a dedicated staff is appointed for the same.

2.2. Roles and Responsibilities of EYCs

- a. View and process online applications received for fellowship
- b. Screen applications for eligibility and suitability for the scheme
- c. Carry out online Technical Review of eligible applications through Subject Experts (Reviewers)
- d. Shortlist proposals for interview(F2F/skype/telephonic) by an Expert Panel
- e. Communicate decision to applicants at each step of selection
- f. Seek BIRAC approval on final selection of fellows or their eligibility
- g. Issue fellowship award letter to the selected candidates on behalf of BIRAC
- h. Release fellowship and research grant received from BIRAC
- i. Provide mentorship, handholding and access to facilities at EYC and EYC Knowledge Partner for BIRAC's Innovation and E-YUVA Fellows
- j. Monitor the targeted milestones
- k. Organize periodic review meetings

- l. Provide mentorship and handholding for domain expertise, entrepreneurship and activities including but not limited to IP management, mobilizing resources and other business development related activities
- m. Provide platforms/opportunities for interaction with experts.
- n. Provide periodic updates and reports on progress of Fellows to BIRAC
- o. Conduct entrepreneurial workshops
- p. Any other activity required for effective implementation of fellowships on mutual consent with BIRAC.

2.3. Criteria for selection of BIRAC's E-YuvaCenters

The BIRAC EYC Committee will be responsible for selection of the new centers taking following criteria into consideration:

- a. Allocation of dedicated space & relevant infrastructure ready for use.
- b. Past experience of conducting innovation promoting/entrepreneurial programs desirable
- c. Number of Startups formed by the students (in biotech or any other area)
- d. Number of Patents filed from the University/ Institution
- e. No. of Industry projects handled or Industry connects
- f. Funds received or raised for supporting Innovations
- g. Accessibility to experts/mentors
- h. Willingness & commitment from the Head of the University/Institution to support the program
- i. Availability of IP, regulatory, business support to the EYC fellows. The Institute should be willing to support EYC fellow to facilitate networking through individual/group.
- j. Connects with bioincubators and other organizations actively promoting Entrepreneurship

BIRAC encourages applications from Tier II/III cities for EYCs.

2.4. Selection Process

- a. The EYC Committee will be responsible for evaluation and selection process

- b. After eligibility check, the proposals received will be evaluated by the EYC Expert Committee on various parameters mentioned in the previous section.
- c. The shortlisted proposals will be called for presentation at BIRAC.
- d. On the basis of presentation, the Committee will recommend the proposals for a site visit or direct consideration.
- e. After the site visit (if recommended) the recommendations of the site visit committee would be presented to the EYC committee chair for final decision on funding.
- f. Once recommended for support, GLA signing will be done with the applicant after financial due diligence.

2.5. Tenure of EY Centres

EYCs will be engaged for an initial duration of 3 years, extendable further based on performance review. The performance of the EYCs would be evaluated annually.

2.6. Financial Support to each EYC:

	Year 1 (INR in lakhs)	Year 2 (INR in lakhs)	Year 3 (INR in lakhs)	Total (INR in lakhs)
A. Non-recurring Head (Creating pre-incubation space)				
Refurbishing Cost	10	0	0	10
Equipment Cost	30	0	0	30
Sub Total (A)	40	0	0	40
B. Recurring Head				
4 Workshops @1 lakh each	4	4	4	12
Manpower for EYC (@5% increase/ yr) Coordinator - 1 @75000, Project assistant - 1 @25000 and Office assistant - 1 @15000	13.8	14.49	15.21	43.5
Travel for EYC staff	1	1	1	3
Outreach, publications etc	1	1	1	3
Honorarium for conducting review meetings	1	1	1	3
Contingency	1	1	1	3
Sub Total (B)	21.8	22.49	23.21	67.5
Total Support A+B	61.8	22.49	23.21	107.5

3. E-Yuva Knowledge Partner

For the mentoring of Innovation Fellows and for providing overall guidance to EYCs, BIRAC will assign engagement with BioNEST supported Bio-incubators. Each EYC will be formally associated with a BioNEST supported bioincubator, which shall provide necessary handholding and mentoring to EYCs and Innovation Fellows. The knowledge partner will engage with the fellows throughout the award period and provide overall guidance. Bio-incubators will act as brand ambassador for the program and will help in its outreach.

4. BIRAC's Innovation & E-Yuva Fellows:

The scheme provides support under following two categories:

- I. BIRAC's Innovation Fellows (for post graduates and above)**
- II. BIRAC's E-Yuva Fellows (for under graduate students)**

Fellows will be selected through National level application and shortlisting process in collaboration with EYCs and EYC knowledge partners.

Areas covered

BIRAC Innovation Fellowship proposals can be submitted in any domain including Healthcare, Lifesciences, Diagnostics, Medical Devices, Drugs, Vaccines, Drug Formulations and delivery systems, Industrial Biotechnology, Bioinformatics, Agriculture, Secondary agriculture, Waste Management, Sanitation, Clean Energy and Artificial Intelligence/IoT/ Automation with application in any of these areas.

BIRAC encourages interdisciplinary proposals from any stream that can help conversion of innovative ideas into biotech products and technologies in any of the above fields.

4.1. BIRAC's Innovation Fellows:

4.1.1. Eligibility:

- An Indian Student who has completed Masters/ Ph.D in any discipline is eligible to apply for this fellowship.

- In case of PhD candidates, the fellow should apply within 2 years of completion of degree.
- In case of Masters candidates, the fellow should apply within 3 years of completion of degree.

Female candidates are exempt from the above condition.

Other requirements:

- BIRAC's Innovation fellows are required to work full time at EYC
- Students pursuing Ph.D cannot be considered for fellowship grant
- Selected fellows cannot pursue Ph.D. during the fellowship tenure

4.1.2. Nature of Proposals supported:

- Translational research (Refer definition at the end of document) proposals to develop innovative products and technologies with a potential to address unmet needs
- BIRAC's Innovation Fellows are expected to initiate biotech start ups. Hence, only proposals with potential to commercialize innovative products and technologies will be considered for support.

4.1.3. Number and Duration of Fellowship:

- Each EYC can have 3 Innovation Fellows at any given time.
- Fellowship is provided for a period of 18 months with a provision of 6 months extension only for deserving cases.

4.1.4. Support provided to fellows under the scheme

BIRAC's Innovation Fellows will receive fellowship grant and annual research grant as mentioned below:

Fellowship grant:

- INR 30,000 per month for Post-graduate fellow
- INR 50,000 per month for Post-doctoral fellow

Annual research grant:

- INR 2,00,000 per year for Post-graduate fellow
- INR 5,00,000 per year for Post-doctoral fellow

EYCs and BIRAC provide continuous mentoring support to fellows, including but not limited to Technical Mentoring, IP Support, Legal Support, Networking and Outreach, Trainings, Regulatory Advice, Business Mentoring and Fund raising.

4.1.5. Expected Deliverable:

The scheme's mandate is to promote and encourage young students for embracing translational research to develop innovative products and technologies addressing unmet needs. The work supported through BIRAC's Innovation Fellows are expected to work towards

- Individual to Company(I to C) conversion
- IP creation

4.2. BIRAC's E-Yuva Fellows:

4.2.1. Eligibility:

- A team of upto 5 Indian students from Indian Institutes/College pursuing under graduation in any domain. Teams with students from different disciplines are encouraged. One team can have students from same/different college/institute.
- The team should be supported by a mentor/guide.
- The team should apply through an E-cell of a College/Institute. In case, the team comprises students from different colleges/institutes, each team member student's college/institute should have an E-Cell/Institutional Innovation Council/ Incubation centre.

BIRAC's E-Yuva Fellows shall pursue their research work at their College/University labs and will also be allowed access to facilities at EYC and EYC Knowledge Partners as and when required. It will be mandatory for all the fellows to spend 3-4 weeks at EYC/EYC Knowledge Partner during their fellowship period.

4.2.2. Nature of Proposals supported:

Proposal should:

- be original
- apply interdisciplinary knowledge
- aim at development of innovative Biotech products/technologies with societal/commercial potential

4.2.3. Number and Duration of Fellowship:

- Each EYC will support up to 5 teams with upto 5 students each every year.
- Fellowship is provided for a period of 12 months.

4.2.4. Support provided to fellows under the scheme

BIRAC's E-Yuva Fellows will receive quarterly stipend and annual research grant as mentioned below:

Quarterly Stipend: INR 7,500 per quarter per student of the team

Annual research grant: INR 2,50,000 per team

Note: Stipend is released quarterly to student's account, subject to Mentor's approval.

Annual research grant is released in two installments (1st installment: 75%; 2nd installment: 25%) to the Institute's account and is managed by the mentor/guide.

EYCs, EYC knowledge partners and BIRAC provide continuous mentoring support to fellows, including but not limited to Technical Mentoring, IP Support, Legal Support, Networking and Outreach, Trainings, Regulatory Advice, Business Mentoring and Fund raising.

4.2.5. Expected Deliverable:

- Create a culture of innovation at Undergraduate student level in academic Institutions.
- Capacity building at UG level
- Opportunity creation and access for Biotech Entrepreneurship facilitated by BIRAC

4.3. Application & Selection process for both categories of fellowships:

- a. The applications for both categories of fellowships will be invited at the national level through advertisements in national dailies/website/ suitable magazines. The application will be submitted online through BIRAC portal. In the application form, the applicant will be asked to indicate up to 3 choices for E-Yuva Centres.
- b. The Centre-wise list of applicants will be created and sent to E-cells/respective Centre for eligibility check and further evaluation.
- c. The shortlisted applicants/teams will be called for a presentation before a Technical Expert Committee along with BIRAC nominee at respective EYCs.

- d. The selected applicants will be called as BIRAC's E-Yuva Fellows & BIRAC's Innovation Fellows and will enter into an agreement with EYC.

5. Intellectual Property

The IP generated during the fellowship program would rest with the innovators and neither BIRAC nor EYCs would claim the IP rights.

6. Definitions:

Translational Research: Translational research refers to application of knowledge for advancement of basic research to clinical research. This can be quantified on a Technology Readiness Level scale of 1 to 9 (ref. Annexure 1/www.birac.in).

Indian Citizen: An Indian citizen is defined as one who is in possession of a government approved proof of nationality such as a valid passport. NRIs are Indian citizens. OCI/PIO cardholders are not eligible for this scheme. As per Article 9 of the Constitution of India 1949, people voluntarily acquiring citizenship of a foreign state are not deemed to be citizens. In case, a student does not have a valid passport, Adhaar Card along with a declaration attested by a Class I gazetted officer can be submitted as a proof of nationality.