

POLICY & STANDARD OPERATING PROCEDURE

RESEARCH AND DEVELOPMENT CELL (RDC)



GOVERNMENT DENTAL COLLEGE
& HOSPITAL NAGPUR

POLICY

INTRODUCTION

The Research and Developmental Cell (RDC) at the Government Dental College and Hospital (GDCH) in Nagpur plays a crucial role in promoting research and innovation in the field of dentistry. Its primary goals are to enhance the quality of education and address societal challenges in India. The key objectives and functions of the RDC are:

Promoting Research and Innovation for advancing knowledge, improving healthcare practices, and staying updated with the latest developments.

Quality Education Enhancement is achieved by integrating research findings and innovations into the curriculum, ensuring that students receive the most up-to-date and relevant education.

Contributing to Atma Nirbhar Bharat: by implementing strong and effective policies that focus on research, innovation, and technology development.

Catalyzing Multidisciplinary and Translational Research for bringing together experts from various fields to work on common challenges. Translational research involves taking findings from the lab and applying them to real-world healthcare practices, which can lead to better patient care and improved public health.

VISION

To develop a vibrant and strong mechanism for research, innovation, funding and technology development to enhance quality of dental education.

MISSION

1. To develop a conducive environment for research.
2. To encourage collaboration with government, industry, community-based organization and other agencies at national and international level.
3. To facilitate access to mobilization of resources and funding.

OBJECTIVE

1. To formulate research policies and identify thrust areas of research.
2. To formulate policies for requirement of research personnel, procurement of equipment & financial management and adequate autonomy to the principal investigators.
3. To disseminate research outcome to stakeholders of institute and the public at large.
4. To identify potential collaborators for research, innovation and technology development.
5. To act as a link between researchers and relevant research funding agencies.
6. To develop coordination between other cells of institute such as incubation centre, IOAC, innovation and entrepreneurship development and intellectual property management.
7. To develop an institutional research information system (IRIS) for sharing the status of ongoing project/programmes.
8. To engage and utilize the services of superannuated active faculty/scientists of the institute in capacity building of young minds.
9. To develop a nodal center for organizing workshops and training programs and ensuring the integrity of ethical practices in research programmes.

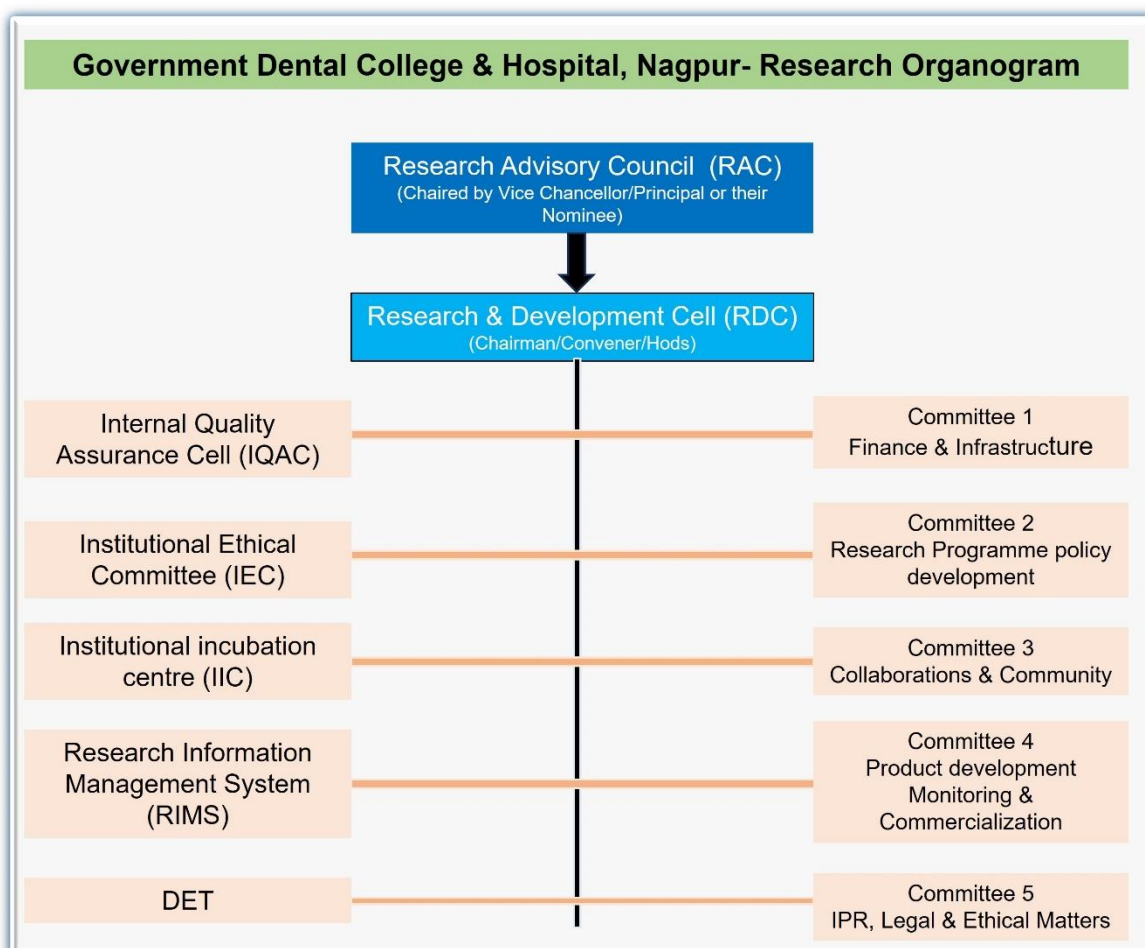
GOVERNANCE

Research and developmental cell of Government Dental College and Hospital, Nagpur had dedicated leadership and experienced researchers to establish effective and robust research governance.

Research and developmental cell of GDCH, Nagpur fosters human element (faculty, staff, scholars and student), logistic element (land, building and facilities), knowledge resources (research equipment, project utilities, consumables) and fund flow through a steady, effective governance.

The research governance of Government Dental College and Hospital, Nagpur is having a Research Advisory Council which is led by Dean of the institute
Heads of various department/committee drives the governance of research of Government Dental College and Hospital, Nagpur.

Research and Developmental Cell has formed various such committees to smoothen the functioning of research between respective subcommittee nominated by Chairman of Research and developmental cell and approved by Research Advisory Council.



ADMINISTRATION

Established organisational structure (organogram) of RDC will check planning implementation and monitoring of research activities in GDC Nagpur. It will also formulate rules regulations and policy framework for utilisation of facilities. RDC will prepare close contact with ministry innovation cell to make use of various innovative plans facilitating research.

RESEARCH COLLABORATION

RDC will provide a meaningful thrust for sustainable research and innovation that leads to quality research and enhance productivity. RDC will promote collaboration between

Government university (National and international institutions) focusing on inter-disciplinary, trans-disciplinary and multidisciplinary research area.

RDC will promote joint research activities and also focus on strengthening resource and sharing.

INFORMATION MANAGEMENT SYSTEM.

Government Dental College and Hospital Nagpur will create research information management system (RIMS) to collect and manage research-oriented information database, publication research, project fellowship collaboration, patents, and innovations.

RIMS will provide a platform for assessing resource centre information pertaining to human capital, physical capital, and knowledge capital.

RIMS committee will also create a blog or portal for institutional research information and institutional repository and sign an MOU with UGC INFLIBNET to assess and upload the research information through Shodh Ganga, Shodh Gangotri, Shodh Sindhu, Shodh Chakra and Shodh Shuddhi.

HUMAN RESOURCES

Members of RDC and various committee as well as administrative or technical staff should ensure smooth conduct of research activity.

Distinguished faculties or research scientist should groom young talent to fulfil the void as a result of superannuation of faculty/researcher.

RESEARCH PROMOTION AND GUIDANCE

RDC will carry out research activities that are aligned with the mandates of various national missions, start-up India leading to an Atma Nirbhar Bharat.

RDC will provide research guidance to the stake holders in view of conceiving ideas, preparing research proposals for funding, organizing events like capacity building programs, theme-based workshop so that the stake holders could actively involve in process of ideation and innovative research in emerging areas.

RDC will introduce research incentives and recognition for catalyzing research interest among scholars and faculties.

Research Incentives may be awarded in the form of:

- Conference registration fees and travel grant when paper presentation is done in conferences/workshop
- Institutional level research award for best researcher/innovation

TECHNOLOGY DEVELOPMENT AND BUSINESS CENTRED FACILITY

Platform for technology development and business central facility for stake holders will be provided for RDC for strategic partnership/collaboration, sponsored or contract research, technology transfer, commercialization of research incubation, entrepreneurship and start-up ventures in consultation with Director Medical Education & Research and Medical Education & Drugs Department.

FINANCE

RDC will facilitate resource mobilization and create a corpus for research and development from government, industry and other funding agencies.

RDC will channelize corporate social responsibility funds for sustainable research activities.

RDC will also explore venture capitalists and angel investors for funding in research and innovation.

INTEGRITY AND ETHICS

RDC will ensure that researcher should comply the ethical code of research and publishing practice at institutional, national and global levels. A standard plagiarism check has been mandatorily implemented and the requisite software (Smallseotools.com) in this regard is made assessable to all researchers of the institute.

RDC will also sensitize the stake holders about dubious research and publishing practices and predatory journal.

CAPACITY BUILDING

RDC will carry out capacity building for stake holders to undertake research problem in line with the latest advances in diverse disciplines to push the boundaries of knowledge through publications and contribute to technological development.

RDC will define policies to attract more fundings, improve its accreditations rankings and enhance its brand image.

Regular workshop, refresher courses, group discussions, will be organized for capacity building.

RESEARCH MONITORING

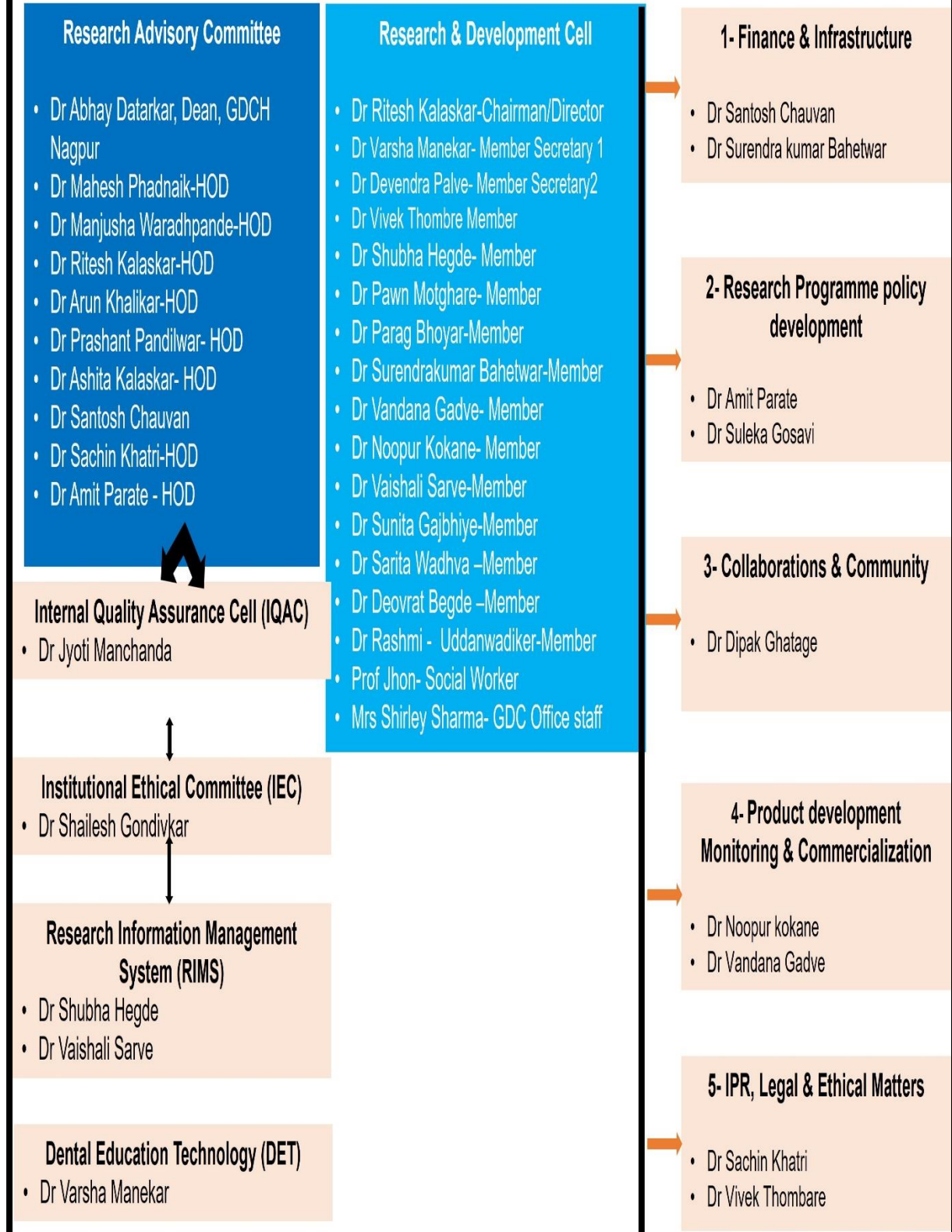
RDC will regularly monitor the research progress, optimal utilization of resources and timely review of research activities for completions of the projects as per schedule.

RDC will formulate and adhere to specific quality benchmarks for research to meet the global/international standards.

RDC will conduct quality review (SWOC analysis) or internal evaluation of research paper and suggest Scopus indexed, web of science, or UGC CARE recognized journal for appropriate publication.

RDC of the institute will ensure that research labs of the institution fulfill the norm of good laboratory practices and safety reassures, recognized as QIP center and by National Accreditation Board of Laboratories (NABL).

Government Dental College & Hospital, Nagpur- Research Committee(RC)



STANDARD OPERATING PROCEDURE

The RDC at GDCH Nagpur is responsible for overseeing research activities related to various academic levels, including Undergraduate, Postgraduate, Fellowship, PhD, and Faculty research.

RDC will work in coordination with other entities, including the Internal Quality Assurance Cell (IQAC), the Institutional Ethics Committee (IEC), and the Institutional Incubation Centre of GDCH Nagpur.

The Research & Development Cell, in conjunction with a Research Advisory council, will meet twice a year. If at all needed, RDC can meet third time in a year with the permission of Research Advisory Council. These meetings are likely intended to review and plan research initiatives, share progress, and make decisions related to research activities.

All research proposal (Invitro, In vivo) will be given IEC clearance.

- Invivo Studies are the studies that involve living organisms, such as humans or animals. IECs will evaluate the ethical aspects of research involving human or animal subjects. Research proposal/synopsis that meets the required ethical standards will be given IEC certificate signed by IEC Chairman.
- In vitro studies typically involve experiments conducted in a controlled environment, such as a laboratory, using isolated cells, tissues, or biological molecules, rather than in living humans or animals. To such research proposal/synopsis IEC exemption certificate will be issued signed by Member Secretary, IEC.
- In charge of various academic programs (Undergraduate, Postgraduate, Fellowship, PhD, and Faculty) should communicate the submission deadlines for research proposals to the RDC in advance. The purpose of this communication is to allow the RDC to plan and carry out further steps in the research proposal review process.
- All Incharge of various academic programs (Undergraduate, Postgraduate, Fellowship, PhD, and Faculty) should ensure that research proposals are submitted to them within the specified timeframe to prevent any delays in submitting the research proposal or synopsis to the RDC.
- The Undergraduate, Postgraduate, Fellowship, PhD, and Faculty incharges should submit research proposals/synopses to the RDC, Member Secretary in electronic format. Subsequently, the incharge should obtain an acknowledgment from the RDC Member Secretary.

- **The electronic copies (PDF FORMAT) of research proposals and synopses should have a clear and well-structured file name for better identification.**

For example, the file name should follow this format: 'Pedo PG Ritesh K D 2023.

WHERE –

- Pedo -is the short form of dept
 - PG- post graduate
 - UG- for undergraduate
 - F-Faculty
 - Fe- Fellowship
 - D-Doctorate (PhD)
 - Ritesh -is the first name of researcher
 - K- stand for initial of surname
 - 2023- is the year.
 - De- Dissertation (PG)
 - T Thesis (PhD)
 - SS- Short study (anyone other than PG, PhD thesis)
- **The concern incharges should educate researchers about the guidelines, emphasizing the need for correct formatting in research proposals or synopses before they are submitted to the RDC.** If the formatting is not done correctly, **THE ENTIRE PROPOSALS** will not be accepted and will be return back to concern incharges till it is formatted as per guidelines/SOP.

The researcher to take care to rename the synopsis/proposal file as per the guidelines of the respective bodies/organization to avoid identity disclosure.

- The research proposals or synopses of various academic programme (Undergraduate, Postgraduate, Fellowship, PhD, and Faculty) are forwarded to the Member Secretary IEC for ethical clearance. The submissions are made in a digital format via email to **an email address**
- IEC Secretary will send the research proposal/synopsis to the IEC Committee (SOFT COPY, VIA EMAIL) to opinion on whether the research adheres to ethical standards and regulations.
- The IEC Committee is expected to review the proposal and provide their feedback within a week, ensuring a timely response in the ethical review process. Clarifications related to the research proposal will be Informed to the concerned incharges of Undergraduate/ Postgraduate/ Fellowship/ PhD/Faculty via email.

(Note: IEC committee should maintain the data of IEC Committee clarification of the research proposal in soft and hard copy for future correspondence).

- It is the responsibility of the concern incharges to ensure that the department/Head of Department/ students/and faculty members are made aware of any queries or concerns brought up by the IEC Committee in relation to the research proposal. This helps facilitate communication and resolution of the queries.
- Concern department/faculty/students should submit the clarification sought by the IEC Committee to concern incharges within the speculated time given by concern incharges of Undergraduate/Postgraduate/Fellowship/PhD/Faculty (SOFT COPY), Via email, so that **PHYSICAL IEC MEETING** can be conducted as per schedule.
- The concern in charges at different academic levels should compile and submit clarifications for research proposals/synopses to the IEC Secretary. The submission is done via email, and a WhatsApp message is used to inform the IEC Secretary of the submission.
- In **PHYSICAL IEC MEETING** the researcher should incorporate and present the necessary clarification sought by IEC.
- Once the IEC is satisfied with the clarifications provided by the principal investigator/Reacher the IEC certificate for the research proposal signed by IEC chairman will be given handed over to the concern in charges. Accordingly, the concern in charges should provide the IEC certificate to the concern Department/faculty/students.
- Before issue of IEC certificate, the IEC Member Secretary should ensure that the undertaking (regarding incorporation of institute/faculty name in publication, if the publication is done after passing) is submitted by the researcher to the IEC secretary.
- Each synopsis/ research proposal will be issued IEC serial number, that number should be use in all sort of communication for better reference. IEC will define a pattern of serial number, as this serial number will be used for publication/record purpose.
- A template (word file) will be provided to the IEC committee on which they will be addressing the clarification/modification needed for particular research project/synopsis.

VERIFICATION OF RESEARCH PROPOSAL BY RDC

Simultaneously the research proposal will be presented in-front of the RDC Chairman/ Secretary/member/, Subject expert, Statistician, Guide and HOD of the concern. department.

POST GRADUATE STUDENTS RESEARCH PROTOCOL:

- The research proposal/synopsis (soft copy) of first year post graduate (Dissertation) **WHICH HAD BEEN** submitted to Secretary RDC by PG Incharge will be considered for research proposal approval.
- No separate research proposal/synopsis need to be submitted
- Other post graduate students (second/third), fellowship students, Faculty, under graduate student and PhD Scholar can also submit their research proposal/synopsis along with first year post graduate students within the stipulated time provided by PG incharge.
- Research proposal/synopsis will be sent to the concern subject expert (working or retired faculty having a PG teaching experience of more than 5 years and who should not have completed more than 70 years of age) and statistician via email, one day prior. But the date of meeting should be informed well in advance to the concerns by Secretary RDC.
- It will be the responsibility of the Concern Department/subject HOD to suggest the name of subject expert (working/retried faculty) and statistician to RDC. They should also provide other details such as designation, institution name, email address, phone number etc. as applicable.
- Research proposal/synopsis will be presented on the schedule date (provided by Secretary RDC) by post graduate student in front of the subject expert, statistician, concern post graduate student guide, Head of the concern department, RDC Chairman/ Secretary/member.
- Suggestion/modification suggested by RDC needs to be incorporated by the post graduate students.

- It will be the responsibility of the post graduate student and guide to make the necessary changes before it is presented to Board of Research Studies (BORS), (FOR PG dissertation only).
- Letter of RDC Approval (on standardized format) will be issued by the RDC to all the research proposal/synopsis including dissertation/thesis signed by Chairman RDC and Secretary RDC.
- Post graduate student incharge should make sure that after RDC approval to the dissertation, BORS meeting should be conducted for fulfilling the necessary requirement of MUHS Nashik.
- It will be the responsibility of the post graduate incharge and member Secretary of BORS to make the necessary arrangement related to BORS meeting for postgraduate research proposal/synopsis approval

UNDER GRADUATE RESEARCH PROTOCOL:

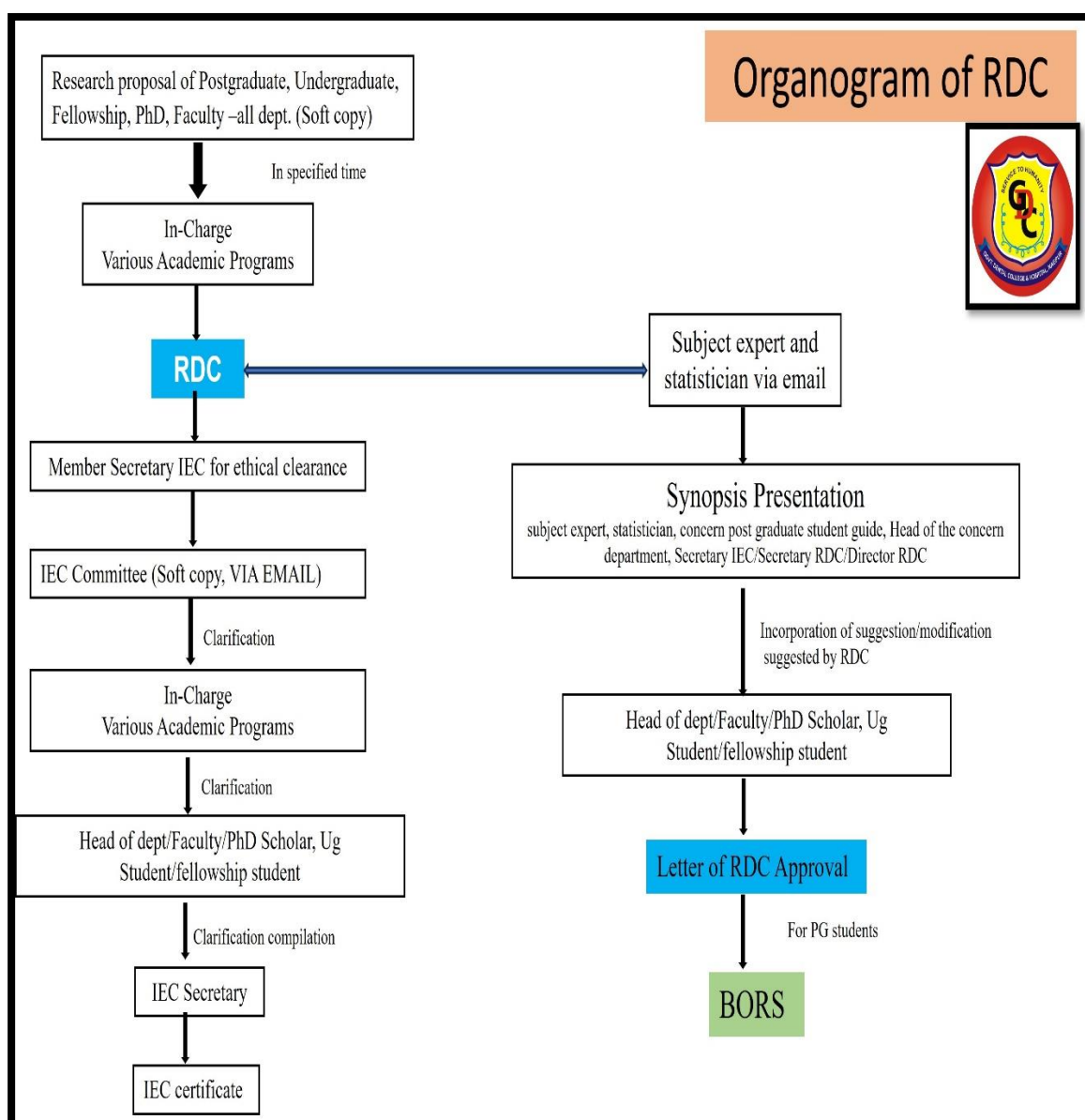
ICMR RESEARCH GRANT/STRG/LTRG (Faculty):

- The research proposal/synopsis (soft copy) of under graduate students applying for ICMR GRANT/STRG should be submitted to Secretary RDC through UG Incharge will be considered for research proposal approval.
- Post graduate students, fellowship students, Faculty and PhD Scholar can also submit their research proposal/synopsis along with under graduate students within the stipulated time through their incharge (procedure for research proposal/synopsis will be followed as per post graduate research protocol.
- Research proposal/synopsis will be presented on the scheduled date by the undergraduate students in-front of their guides, RDC chairman/Secretary/member, and HODS of all the department of Government Dental College and Hospital, Nagpur and statistician.
- Suggestion/modification suggested by RDC needs to be incorporated by the under graduate students.
- Letter of RDC Approval (on standardized format) will be issued by the RDC to all the research proposal/synopsis signed by Chairman RDC and Secretary RDC.
- It will be the responsibility of the undergraduate incharge to communicate to make the necessary arrangement related to RDC meeting for undergraduate research proposal/synopsis approval.

PhD RESEARCH PROTOCOL

- The research proposal/synopsis (soft copy) of PhD Scholar (THESIS) **WHICH HAD BEEN** submitted to Secretary RDC through PhD Incharge will be considered for research proposal approval.
- No separate research proposal/synopsis need to be submitted
- Other post graduate students (second/third), fellowship students, Faculty, under graduate student and PhD Scholar can also submit their research proposal/synopsis along with first year post graduate students within the stipulated time provided by concern incharges
- It will be the responsibility of the Concern Department/subject HOD to suggest the name of subject expert (working or retired faculty who is having PhD students) and statistician to RDC. They should also provide other details such as designation, institution name, email address, phone number etc.
- Research proposal/synopsis will be sent to the concern subject expert and statistician via email, one day prior. But the date of meeting should be informed well in advance to the concerns by Secretary RDC.
- Pre synopsis meeting is schedule on the date provided by PhD incharge. PhD Scholar should present the synopsis in front of Research Advisory Council/Committee of the institute, subject expert and statistician and RDC Chairman/Secretary. Suggestion/clarification sought by the committee should be incorporated by the Scholar.
- It will be the responsibility of the PhD scholar and Guide to make the necessary changes.
- Once's the necessary changes are made as per the suggestion made by Research Advisory Council/Committee, certificate of research approval will be issued by Research Advisory Council.

NOTE: RDC will not be responsible for any sort of delay in research proposal approval/forwarding etc if concern incharges UG/PG/PhD/Fellowship/Faculty didn't submit the research proposal on time.



Undertaking from researcher