

FEDERAL UNIVERSITY OF CEARA
FACULTY OF MEDICINE
GRADUATE PROGRAM IN MEDICAL SCIENCES



Strategic planning

Quadrennium 2021 – 2024

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STRATEGIC PLANNING PPGCM - UFC (2021 - 2024)

SWOT MATRIX

PPGCM's strategic planning was developed using the MATRIX SWOT, a strategic planning technique used to assist organizations in identifying strengths, weaknesses, opportunities and threats related to the development of its activities. Considering the current scenario of Brazilian postgraduate studies in the area of Medicine I at CAPES and the pandemic context of COVID-19, the challenges of PPGCM / UFC are enormous (next quadrennium, 2021-2024). PPGCM is aware of its critical role since the only program in the area of Medicine I of excellence in the North-Northeast (CAPES level 6). The teaching staff is formed by many medical researchers strongly integrated in the clinical and translational research of the SUS-CE NETWORK and have extensive research experience to cope with endemic tropical diseases and now contribute to many funded projects to cope with COVID-19. These medical researchers and researchers in the basic area of the Faculty of Medicine / UFC, integrating the PPGCM faculty, favor basic-clinical integration and translational research on biomedical topics of great importance for the Brazilian semiarid and for regional problems, but also with strong internationalization. To fulfill the strategic planning, it is necessary to identify internal and external factors that are favorable and unfavorable to achieve the goals of this work guideline.

INTERNAL FACTORS

FORÇAS

- The PPG in Medical Sciences is the only program of excellence in the area of Medicine I in the North and Northeast.
- It has an important regional role of nucleation and reduction of disparities.
- Renewed curricular structure adapted to scientific advances and society's demands.
- Faculty of medical and basic researchers favoring basic-clinical integration and translational research.
- Effective interactions between different areas and lines of research.
- Research groups with a strong internationalization network.
- Good availability of Master and Doctorate scholarships.
- o Highly qualified scientific production and with great participation of students.
- o Involvement of the PPGCM continued in the teaching-research trip and extension in the public SUS network.
- o Integrated PG Secretariat with qualified administrative technicians,
- o Strong head-to-head basic clinical research attracting medical residents to cope with the COVID-19 pandemic.
- o Access to the Vivarium of the Experimental Biology Nucleus (NUBEX) of the University of Fortaleza (UNIFOR), the only accredited vivarium in CNPq's national vivarium network (REBIOTÉRIO) and to the Vivarium of the Drug Research and Development Center (NPDM) of the Faculty of Medicine / UFC, biosafety level 2, with genetically modified animals.

WEAKNESSES

- Low demand for some lines of research and advisors.
- Still reduced attraction of doctors for basic and clinical research of the PPGCM.
- Social media incipience and more interactive tools for publicizing PPGCM products.
- Some advisors are accredited in other UFC PPGs.
- Incipience in the processes of popularizing science, interactive teaching and social return.
- Greater engagement in the area of concentration in Health Education and relationship with public schools.
- Little engagement with the legal framework of science, technology and innovation and University-Company partnerships.

EXTERNAL FACTORS

OPPORTUNITIES

- Proximity to the University hospital network managed by the Brazilian Hospital Services Company (EBSERH) and Pre-clinical Trials (CIEnP)
- Creation of the doctorate in cotutela with the PhD in Health Sciences at the University of Coimbra and start of activities in the second semester of 2021.
- Integration with other postgraduate courses at the Faculty of Medicine and others at the Federal University of Ceará
- PPGCM / UFC participation in the Institutional Internationalization Program (CAPES-PRINT) opportunities to maintain and expand the internationalization of the Program.
- Strong funding for recent scientific projects by several funding agencies (CNPq, CAPES, FUNCAP) to face COVID-19.
- Access to multipurpose centers and equipment, facilities and technology park at the Faculty of Medicine and at the UFC itself.
- Engagement of the UFC medical residency program and new attraction of medical graduates to the PPGCM.
- Collaboration with the Distance Education Technology Center in Health (NUTEDS) of the Faculty of Medicine / UFC for telemedicine, continuing education, remote classes, podcast streaming, virtual ambience, social media and support for internationalization.
- Integration of some professors of the permanent staff in research networks, including the Northeast Biotechnology Network (RENORBIO).
- Proximity to the Ceará Public Health School.
- Treatments for the UFC's MD-PhD program with guiding participation from the PPGCM.
- Creation of a biobank (called notice 04/2018 CNPq-CT Infra) that facilitates future research and creation of cohorts for clinical research, mainly in the context of COVID-19 coping research.
- Beginning of the collaboration with the Reference Center for Artificial Intelligence (CEREIA), recently approved with funding from FAPESP / MCTI / CGI.br, coordinated by prof. Dr. José Soares de Andrade Jr., from the Federal University of Ceará (SOFTEX notice, nº01 / 2020).

THREATS

- Changes in the national policy for the distribution of scholarships to Postgraduate Programs, difficulties and uncertainties with the availability of public notices for research and reduction of the budget of national and state development agencies.
- Lockdown, social detachment and restriction of mobility due to the COVID-19 pandemic, which can affect the execution of scientific projects and decrease the process of mobility and missions in internationalization projects.
- Low value of master's and doctoral scholarships, which reduces the quality and quantity of the demand for candidates for the PPGCM selection process.
- Increase in the average length of stay of students and increase in dropout of students in the master's and doctorate due to budgetary difficulties in carrying out projects, the COVID-19 pandemic and other socioeconomic challenges in the country.

STRATEGIC PLANNING PPGCM - UFC (2021 - 2024)

ACTION PLAN 2021 - 2024

AXIS: TEACHING BODY

Strategic objectives:

- Improve training, accreditation, updating, academic mobility and internationalization of the faculty. The PPGCM strategic plan includes the continued stimulus to the scientific and technological improvement of the teaching staff, through courses, workshops, webinars, symposia, etc., via remote and in person, in addition to greater mobility for congresses and training / updating at national and international levels. abroad and greater interaction with the student body. Strengthening of collaborative networks and research groups, with a strong international aspect. In addition, the PPGCM has a short-term goal to update its internal regulations, in light of the new guidelines in the area of Medicine I and the new strata of Qualis from CAPES. In addition to new criteria for accreditation and re-accreditation of permanent staff and collaborators, through public editorials directed to areas in greatest need of adjustments, based on self-assessment and / or external criteria, including a course evaluation report by CAPES;
- Faculty participation in a collective action program in favor of Biomedicine of the Future and Precision BioMedicine. Greater insertion of the teaching staff in a biotechnological park, research networks, facilities and multi-user medium and large equipment, and research in biobank / biorepository. Maintain a balanced distribution of teachers in the Program's concentration areas, also with a greater focus on Health Education, with a focus on distance education, popularization of science and dissemination of PPGCM products to society in general and to public schools;
- Melhorar a captação de financiamento internacional em agências de fomento mundial e recrutamentos de pesquisadores e professores visitantes estrangeiros. Consolidar e ampliar os projetos CAPES-PRINT UFC e outros (CNPq). Criação e ampliação de cursos de doutoramento cotutela com Universidades estrangeiras e maior integração de redes de pesquisa.

AXIS: TEACHING

Strategic objectives:

- Integration of PPGCM students enrolled in the teaching internship disciplines at the master's and doctoral level with the Center for Technology and Distance Education in Health (NUTEDS) at the UFC Medical School with a strategic plan to improve the following remote telecommunication paradigms : improve PPGCM's communication with society through social media (podcasts, Instagram etc); improve and disseminate internationalization networks and access to students and teachers; improve and make teaching material available to students (through a virtual environment), promoting health education for public schools and society in general;
- Approaching undergraduate and graduate teaching and encouraging greater exchange of graduate programs in biomedical courses at the Faculty of Medicine, with exchange of experiences and integration of scientific knowledge;
- Create and stimulate an MD-PhD program with the participation of PPGCM. Increase the recruitment / participation of medical and biomedical resident students at PPGCM through mechanisms of remote and distance education with clinical research projects;
- Improve training in bioethics and biosafety and new protocols due to the COVID-19 pandemic of faculty and students;
- Consolidate and increase student follow-up at PPGCM to reduce the student's average length of stay and to achieve quality control goals for ongoing scientific projects at the master's and doctoral level;
- Foster / Increase the recruitment of high-productivity students through the consolidation of the PPGCM Young Talent Award, and the creation of MD-PhD and doctoral programs in cotutela;
- Establish English language proficiency as a selection criterion for graduate programs;
- Perform preventive and educational actions on the integrity of the research carried out and / or published by researchers and students;
- Expand and intensify the offer of courses, events and interdisciplinary disciplines in English.

AXIS: SCIENTIFIC AND INTELLECTUAL PRODUCTION

Strategic objectives:

- Improve and expand internationalization actions that may contribute to high impact publications, within the scope of the CAPES PrInt project of PPGCM / UFC and biotechnological products;
- Increase the quantity and quality of publications with students and alumni, following the new CAPES guidelines and within the highest strata of QUALIS;
- Increase national and international funding;
- Compliance with the requirements of one or more publications in accordance with the PPGCM Regulation, encouraging the participation of the student / graduate in a scientific article as the first author.
- Offer specific disciplines on ethical and technical aspects of writing scientific articles. Encourage the PhD qualification document to be written in English in the format of a review article.
- Stimulate English proficiency and TOEFL, IELTS or other scores from the student / graduate to increase internationalization;
- Standardize research identifiers for professors and academic units, promoting the correct, comprehensive, updated and standardized publicity and visibility of research data and postgraduate training, e.g., on ORCID, ResearcherID platforms, among others;
- Monitor the preparation of the annual PPGCM evaluation reports, improving the collection and presentation of data and proposals and making self-criticism and self-evaluation for technical improvement of the program, if possible, with the participation of independent external members;
- Articulate research groups in PPGCM concentration areas and subareas, encouraging the collaborative increase of quality indicators.

AXIS: PROMOTION AND INNOVATION

Strategic objectives:

- Promote permanent articulation with agents and institutions from Ceará's entrepreneurship and innovation ecosystem, increase PPGCM-Incubators of Enterprise and Innovation, including economic agents such as FIEC, SEBRAE, CDL, FUNCAP, SECITECE, SDE, ADECE, BNB, incubators / accelerators, among others;
- Map and publicize UFC research that involves innovation, motivating students and teachers and providing greater social visibility to the UFC;
- Consolidate, structure and institutionalize, within the scope of the UFC, initiatives to foster the formation of entrepreneurial skills and the creation of innovative ventures, leveraging the use of existing structures at the university, such as the Technological Innovation Coordination and the Entrepreneurship Centers (Fortaleza and campuses in the interior);
- Give due visibility to PPGCM / UFC partnerships with public, private or mixed capital organizations and companies, seeking to register the impact of the innovations produced in these partnerships;
- Participation in specific calls for proposals for innovation and entrepreneurship, including open calls for proposals for open innovation in the UFC directly financed by companies;
- Promote the participation of PPGCM teachers / students in startups, entrepreneurship in digital health, according to legal frameworks of innovation, expanding their budget and / or outsourcing part of the services demanded, and contributing to the development of the UFC Technology Park in partnership with national and international public and private organizations;
- Encourage the creation of co-working spaces to host entrepreneurship and innovation initiatives (eg academic spin-offs and startups) in a decentralized manner in the academic units / laboratories and in the UFC Technology Park;
- Stimulate the partnership of postgraduate programs with national and international companies in the search for financial support to carry out research and technological development projects;
- Increase the participation of the PPGCM teaching staff and students in the UFC Technology Park and other multi-thematic and networked structures.

AXIS: SOCIAL INSERTION AND VISIBILITY

Strategic objectives:

- Increase and consolidate extension projects involving PPGCM teachers and students in the SUS-CE public network and aimed at public schools, facilitating the integration of medical education for society in general. Estimular a realização de Seminários, ações de Pint of Science webseminars com intuito de popularização da ciência e pesquisa biomédica para sociedade geral;
- Publicize PPGCM products to society in general through the HomePage's continuous updating of the program, media and social networks of the program, expansion of web radio and podcasts with accessible language for laypeople;
- Continuously monitor the graduates of the PPGCM and their future performance in the market or in the academy;
- Retake and expand the adhesion and dissemination of awards and recognition of merit in the various dimensions of teaching, research, extension and innovation;
- Increase nucleation, communication and collaboration with researchers from advanced UFC campuses.