Self-Assessment (2021-2024) and Strategic Planning (2025-2028 and 2029-2032) of the Postgraduate Program in Fungal Biology at UFPE

The self-evaluation process was carried out between the end of 2022 and the beginning of 2023 and the end of 2024 and the beginning of 2025. This process was under the responsibility of the Self-Evaluation and Monitoring Committee, which is made up of professors who are compatible with the self-evaluation items, assisted by the student representatives, secretary and PPGBF scholarship holder, indicated in the items below. For the next cycles, monitoring is expected to be annual, generating a report that will be delivered to the course coordination and committee with the aim of maintaining compliance with the PPG goals.

The self-assessment and strategic planning were in line with the documentation made available by Capes, throughout the four-year period, and with the Postgraduate Institutional Plan (PIPG) from PROPG/UFPE (https://www.ufpe.br/documents/39790/2780004/Plano+Institucional/a95bb10c-ef8a-480f-9fe 3-9f4a23fcb885) and, thus, defined the situation and short and/or long-term goals. The PIPG has six objectives: 1) Expand and consolidate Undergraduate, Postgraduate and Basic Education courses; 2) Consolidate and expand internalization; 3) Expand and consolidate internationalization; 4) Promote a Sustainability and Social Responsibility policy; 5) Expand Open and Digital Education; 6) Promote actions that promote propositional policies for Research and Postgraduate Studies. When relevant, and in line with these objectives, six objectives were also established for the PPGBF, detailed below, in addition to several goals to be monitored annually in the four-year periods 2025-2028 and 2029-2032, preferably by the commissions established for the Self-Assessment

1) Invest in the teaching and student quality of PPGBF

Commission: André L. Santiago, Gladstone A. Silva, Tatiana Gibertoni (PPGBF permanent professors), Leonardo Gomes (PPGBF secretary) and student representation from (PPGBF) between 2021 and 2024

The PPGBF always seeks to improve its teaching and student qualification indicators, which is one of the most important items in CAPES' four-yearly evaluations. In this regard, the distribution of guidelines, the production of articles and the H index of professors are observed. Regarding the distribution of guidance for theses and dissertations defended in the period, in accordance with the strategic planning prepared, it was recommended as a goal, for the 2021-2024 cycle, that all professors of the Permanent Core (NP) supervise at least 4 equivalent masters (MEq), in this and the next four-year cycle. In 2021-2024, 50 master's students and 38 doctoral students were trained, resulting in 145 MEq. The 19 NP professors held 82.7% of the students and, on average, 6.2 MEq and 3.8 students, while the Collaborating Core (NC) held 17% (one collaborating professor was dismissed in March 2021 and was not included in the accounting) and, on average, 3.6 MEq and 2.1 students. In the previous cycle, the average was 3.3 MEq and 17.4% for NC and was considered inadequate. Although measures were taken to improve this indicator, it was observed that they were not as effective. For the next cycle, one of the professors responsible for increasing

this metric was dismissed and the other, equally responsible, is currently unable to guide new students. Unfortunately, the reflection of this asymmetry, which began in the previous four years, continued into this four years. For this new 2025-2028 cycle, new guidelines are already being established to ensure a balance of guidance between professors from both PPGBF centers. We highlight that three more professors were dismissed, one due to retirement, one for not meeting the demands of the PPGBF and another at his request.

In relation to production, the goals for the 2021-2024 cycle were expected to be for all NP professors to publish at least 2 articles in the A1-A2 stratum, and 75% of professors from that same nucleus to publish at least 2 articles in the A1 stratum. In this cycle, PPGBF had 100% of NP professors producing at least two articles in strata A1-A2 and 73.6% of NP professors with at least two articles in stratum A1, a significant increase in relation to the previous four-year period (93.7% and 68.7% respectively), practically reaching the target established for this four-year period. For the 2025-2028 cycle, it is expected that all permanent professors will continue to have at least two articles in strata A1-A2 and 75% of the NP with at least two articles in stratum A1. For the next cycle, it is expected to maintain the target of 100% NP with 2 articles A1-A2 and increase to 80% NP with at least 2 articles in the A1 stratum. The reports of the evaluation and monitoring committee, as well as the research committee, will serve as guidelines to evaluate, year by year, the publication of professors and the Program in general, who will be alerted regarding the production, aiming to maintain their quality.

Regarding production with students and graduates, the PPGBF has a ratio of 1.67 in relation to the number of B3+ articles/number of MEq degrees and 0.96 in relation to the number of A4+ articles/number of MEq degrees. The commission considers these ratios, especially A4+/number of MEq, as borderline for a Program that aims to maintain a grade of 6 and indicates the need for targets to overcome these values. For the 2025-2028 cycle, the quotients are expected to reach B3+ = 1.74 and A4+ = 1.18 and, in the following cycle, B3+ = 1.88 and A4+ = 1.27.

To verify the A1-C extracts, the Scopus database was used. When the journal not registered in this database or was counted as N/A, Qualis Periódico (2017-2020) was used. The commissions' reports will serve as guidelines for monitoring the goals. Students will be encouraged to take specific disciplines on scientific research and publication, increasing their knowledge of the processes involved in the preparation and development of research and scientific articles. Furthermore, it was found that some data from dissertations and theses are not published. Therefore, there is a need to further encourage all professors and students to publish data from dissertations and theses in impactful scientific journals, reiterating the importance of this scientific production in the training of researchers and also in the success of the program and the professional placement of graduates. In addition, an Internal Regulation was published (01/2021) that authorizes the publication, by professors, of data from graduates who do not submit their work within 1 (one) year of the date of defense or dismissal. As a goal, it is proposed that at least 90% of dissertations and theses generate scientific articles in qualified journals in successive evaluation cycles. Monitoring will be carried out based on the annual reports of the self-evaluation and monitoring committee, with coordination, professors and students being responsible for implementing the goal. The processes used will also be the same as those described for increasing student production in general.

Another important fact to be highlighted is the high number of B4 and C articles produced in the Program (more than 10% in relation to the previous four years). As a target for the 2020-2024 cycle, the Program should have reduced this number to a maximum of 5% of products in the next cycles. By 2022, this target was being met, but, at the end of 2024, the level reached 11.7%, of which 10.3% with students and graduates. The reports from the evaluation and monitoring committee, as well as the research committee, will also serve as guidelines, in this case, and professors will be alerted as to the level of production. Furthermore, national and international partnerships will be suggested, improving exchanges between professors and the quality of products.

It was also stipulated as a goal that, in the 2021-2024 cycle, all course professors (NP and NC) had an H index above 10 and, at least, 60% of the NP had an H index above 15. In this cycle, only 1 professor from the PPGBF had an H index below 10, while 19 (42%) had an H index above 15. From the NP, 15 professors had an index above 15 (79%) and 8 (42%) above 20, that is, above the percentage established as a target. Another 3 NP professors have rates between 13 and 14, therefore, very close to reaching 15. Continuous improvement in the H index is expected for the next two cycles, with all course professors with an H index above 11 and at least 90% of the NP with an H index above 15. Monitoring of the goal will be carried out by the coordination, committee and course professors. As a process to achieve the objective, professors will be encouraged to disseminate their work more widely, as well as produce with higher quality.

Regarding the Program's professors, it was verified that they have an adequate profile of qualifications, diversification in the origin of training, experience and suitability to the program's proposal. Two NP professors carried out training licenses at institutions in Portugal (Universities of Minho, Coimbra and Lisbon), while 3 from NP carried out technical visits to the Westerdijk Fungal Biodiversity Institute (Netherlands), 1 from NP at the University of Minho and 2 from NP at the University of Nantes (France). As a goal for the next four-year period (2025-2028 and 2029-2032), it is expected to carry out post-doctoral internship training and/or training licenses for at least two professors per four-year cycle. The coordination, committee and professors will be responsible for encouraging the submission of projects from professors and making everything possible so that they can carry out their training.

Also as a way to encourage and monitor teaching qualifications, a teaching accreditation committee was created that prepared Internal Regulation 03/2020 indicating guidelines for accreditation and re-accreditation of new professors for the Program, considering the scientific qualifications of candidates and specialties of interest to the PPGBF. The previous goal was met and two new permanent professors were included in the Program (from 2021), in addition to one collaborator. Thus, the PPGBF had 19 permanent professors and 7 collaborators until 2022 and 6 collaborators in 2023 and 2024. Recently, the Internal Regulation was updated (01/2025), resulting in accreditation, de-accreditation and re-accreditation of professors. For the 2025-2028 quadrennium, the PPGBF continues with 19 NP professors, considering the change of status of one permanent professor and the deaccreditation of 3 others, and 6 NC professors. For the 2029-2032 cycle, the goal will be to

accredit another 2-3 new professors, in the face of requests for dismissal at the end of the 2025-2028 four-year period and following the processes outlined above, with the updating of the selection criteria (aligned with the evaluation criteria for the Biodiversity area) by the accreditation committee and monitoring by the PPG coordination and collegiate body.

2) Strengthen the visibility of PPGBF

a) Committee: Leonor Maia, Patricia Tiago and Roger Melo (permanent professors at PPGBF)

The 2020-2024 Self-Evaluation Committee considered the regional insertion of the course satisfactory through the training of students prepared for elementary, secondary and higher education, in addition to extension projects involving the local and regional community and events promoted by the course, such as the Encontro Pernambucano de Micologia (EPEM) and the Batista Foray Project. For the next four years (2025-2028, 2029-2032), it was recommended the maintenance and regularity of the extension projects and the events mentioned and, also, to improve the social insertion of the program, the maintenance and expansion of extension projects with the involvement of society.

In the 2020-2024 four-year period, several extension actions were coordinated by the PPGBF NP and NC and contributed to the regional insertion and visibility of the program. Among these, the Academic League of Mycology (LAMICO), the Mycological Symposium of the Northeastern Atlantic Forest (FungMA), the aforementioned EPEM, Batista Foray, and others stand out.

LAMICO, coordinated by NP professor Roger Ribeiro Melo, develops teaching and extension activities aimed at undergraduate and postgraduate students interested in deepening their knowledge about fungi. In addition to relevant aspects of biology, the ecology and application of fungi are discussed, relevant and transversal knowledge for students who seek to discuss the areas of greatest interest in mycology, the possibilities of employability and how professionals specialized in this area work, on the national scene. Although LAMICO mainly includes UFPE students, the activities it promotes, including scientific dissemination on social media (see "lamicoufpe" on Instagram), lectures, events and material production, in addition to training courses in mycology teaching, are of great importance as extension actions associated with PPGBF and reach a wider audience. In its first proposal, LAMICO was duly registered, in compliance with Proext-UFPE Notice 03/2021, and was renewed in Notice 01/2024 - registration of UFPE academic leagues. The League's activities included mentoring, the open event "Mycological Conversation" and the first of five modules of the remote Basic Mycology course. Six students from the PPGBF gave lectures and classes as part of the league's activities, promoting interaction between students and mycology enthusiasts and promoting the area.

The Pernambuco Mycology Meeting (EPEM) has established itself as an event organized by PPGBF postgraduate students, covering results from mycological studies in its most diverse aspects and bringing together students from across the Northeast region. This meeting is one of the main local/regional Mycology events in the country and arouses great interest, as it provides visibility to the work being developed within postgraduate studies, the exchange of information and the expansion of the network of contacts among those interested in mycology. The event has been held since 2009 and is already integrated into the PPGBF calendar. At 6^a edition (VI EPEM), held in 2021, was organized by 25 PPGBF students and contributed to the feasibility of new methods and progress for mycology, the exchange of knowledge with the external public (Impact and social transformation) and new experiences beyond the academic environment (Interdisciplinarity and interprofessionality). In 2023, its 7th edition (VII EPEM) was held and 26 PPGBF students were part of the event's organizing committee. As in previous events, the program consisted of lectures, round tables and mini-courses that covered didactic discussions on topics related to the demystification of mycology, highlighting the importance of conservation and preservation of fungi, in addition to allowing dialogical interaction between experts and participants, expanding the student's prior knowledge (Inseparability between teaching-research-extension). With an organizing committee of 33 members, the event had 65 registered evaluators and the participation of doctoral students (65%), doctors (16.7%) and post-doctoral researchers (18.3%) from 10 Federal Institutions. Seventy simple summaries, 50 expanded summaries, 15 lectures, 4 round tables and 11 mini-courses were presented. EPEM has been contributing to the progress of mycology, allowing the exchange of knowledge with the external public and new experiences beyond the academic world. It is intended that this meeting will continue to be offered biennially.

The Mycological Symposium of the Northeastern Atlantic Forest (FungMA) had its first version in 2020 (https://www.even3.com.br/fungma/) and was coordinated by Tatiana Gibertoni, NP professor at PPGBF, and had 11 PPGBF students as members of the organizing committee. The second version took place during the Mycological Week (2021) (https://www.even3.com.br/semanamicologica2021/), an event that brought together, in addition to FungMa, the IV Semiarid Mycological Symposium (IV SIMS) and the VI EPEM. These events were coordinated by Tatiana Gibertoni and Luis Gusmão, both from the PPGBF permanent nucleus, and 25 PPGBF students were part of the organizing committee. The objective of the symposium was to address various aspects relating to fungi occurring in the Atlantic Forest, considering the importance of the forest for biodiversity conservation. Participating in this symposium are mainly students and professors who present results of projects aimed at expanding and disseminating data on the fungus of this important biome that extends along the Brazilian coast. The event was publicized on social media, in universities and in postgraduate programs in areas related to the project. Four hundred and seventy people confirmed their registrations. It is worth noting that all lectures/round tables available the YouTube are on channel (https://www.youtube.com/channel/UCsWMsHc5cpcMA0XgGlmZwEw).

Batista Foray is an event, started in 2017, which aims to investigate fungal diversity in a practical way, disseminating techniques for recognizing, collecting, identifying and preserving fungi. Batista Foray was coordinated by professor Tatiana Gibertoni. Other PPGBF NP professors, such as Alexandre Reis Machado, Elaine Malosso, Gladstone Alves da Silva, Leonor Costa Maia and Roger Ribeiro Melo, collaborated with the activities developed during the editions that took place from 2021 to 2024. PPGBF students, an average of 7, per edition, also taught activities in the field according to their specific area of mycology. The event also included the participation of PPGBF graduates, Angelina de Meiras Ottoni and Renato Lúcio Mendes Alvarenga, and members of other institutions, such as

Adriano Afonso Spielmann (UFMS), Ana Elisa de Almeida Souza (UPE) and Jordana Alves da Silva Melo (UFRPE). The name of the event is a tribute to Augusto Chaves Batista, who is considered the greatest mycologist in Brazil and who founded the Institute of Mycology, today the Department of Mycology at UFPE. Batista Foray has been held for a few years, awakening curiosity about fungi in students and professionals through field activities, promoting the learning of techniques for recognizing large groups of fungi in the field and in the laboratory, and expanding the training of mycology students. It is an approach that involves specialists, mycology students and the non-specialized public. With this interaction, the student expands their prior knowledge (Inseparability between teaching-research-extension), evaluates their own knowledge and talks about them in a didactic way with the public (Impact on the student's training). Given the little knowledge about fungi, this dialogue allows the exchange of knowledge that allows participants to better understand these organisms (Impact and social transformation). The organization of the event and the interaction with the public allow the student to broaden their horizons beyond the academic environment (Interdisciplinarity and Interprofessionality). In 2021, 30 people attended the Batista Foray online. In 2022, two presential editions were held, one at UFMS, which served 10 undergraduate and postgraduate students, and one on the UFPE campus, as a training course for 17 high school teachers from the Pernambuco state education network. In 2023, the event took place at the Recife Botanical Garden and was attended by an elementary school student, 4 undergraduate students from UFS, 2 undergraduate students from UFPE, 1 undergraduate student from UFRPE and 1 postgraduate student from UFPE, in addition to 1 high school teacher from the public network of Pernambuco and 1 professor from UNEB. In 2024, the action was carried out in conjunction with the discipline BF956 - Basidiomycota: Fundamentals and Application, at REBIO Guaribas, in Paraíba, and included the participation of 8 postgraduate students, including collaborators and tutors. It is intended to continue organizing the event at least once each year, considering its interaction with PPGBF extension activities

Among other activities developed within the scope of the PPGBF, to be mentioned, include participation in the project "INCT-Virtual Herbário da Flora e dos Fungos", whose headquarters is the Department of Mycology at UFPE and the coordination carried out by Leonor Costa Maia, professor of NP at PPGBF. The scope of this project stands out, with the participation of more than 160 herbaria in Brazil, with representation in each of the States, in addition to 26 herbaria abroad which, integrated by a computer platform (speciesLink), offers users, in a free and open way, data from more than 15 million records and 5.6 million images of algae, plants and fungi that occur in the country. Among the activities linked to the INCT-Herbário Virtual, a permanent exhibition stands out, which was inaugurated in 2003, in a room provided by the Biosciences Center, located in the building of the Biodiversity Center of the same Center; expanded, this room operates with a new name and interactive structure, constituting the "Museum of the Diversity of Fungi and Plants". The exhibition has been visited by a diverse audience, including students of all levels, professors, and other interested parties, both from UFPE and the community in general. Within the scope of the PPGBF, the project involves the participation of students and professors who, in addition to depositing the specimens studied in the herbarium and in the Department of Mycology's own culture collection, have the opportunity to expand their knowledge and interact with colleagues in the

area. During the pandemic period, most of the PPGFB activities, linked to the INCT-Herbário Virtual, continued to be carried out remotely, highlighting, despite the difficulties in carrying out collections, the delivery, by students and professors, of more than 800 new specimens for registration/deposit in the URM herbarium and the inclusion of images of the collected fungi. With the return to face-to-face activities, PPGBF's participation in the project increased again, with emphasis on the inclusion of new data and information, correction/updating of nomenclatural names of species, the loan of exsiccates to researchers from other institutions in the country, in addition to offering training to scholarship holders.

The "Mycology in schools" project, under the coordination of Cristina Maria de Souza Motta, NP professor at PPGBF, sought to establish dialogue and continuity in the transformative and innovative relationship between the University and Society. The objective of the project was to carry out recreational activities, thematic exhibitions and practical experiences during remote classes in public and private schools in the metropolitan region of Recife, as well as in two cities in the state of Pernambuco that requested interventions in the area of Mycology through prior scheduling. The extension actions were aimed at students from public and private elementary, secondary and vocational schools. During the pandemic (2020-2021), these actions were developed through activities using videoconferencing platforms and/or recorded videos of thematic exhibitions, practical and playful activities about fungi, in addition to online games, E-books, quizzes, etc. In 2021, the project was titled "Mycology in connection with schools" and coordinated by another professor (not from PPGBF). It involved the participation of 20 students and several professors from PPGBF, as well as undergraduate students from UFPE. The activities of this project ended in 2022 with the return of in-person activities at UFPE.

Since 2017, under the coordination of Professor Tatiana Gibertoni, the project "Training in identification of macroscopic fungi (Agaricomycetes)" has provided training for students in study practices on fungi from the aforementioned group. The activity includes theoretical and practical explanations given by team members to the target audience (Dialogical Interaction). These explanations involve material selection activities for identification, collection of material in the field, theoretical-practical explanations for morphological identification of the material and recognition of practices of molecular analysis and cultivation of fungi in culture media (Inseparability between teaching-research-extension). Three graduates (Angelina de Meiras Ottoni, Renata dos Santos Chikowski and Renato Lúcio Mendes Alvarenga) and four PPGBF students also taught theoretical and practical activities during the execution of the project.

In 2021 and 2022, the FELACC Workshop - Preservación ex situ y Gestión de Datos en Colecciones de Cultivos Microbianos was held, organized by the Faculty of Engineering and Sciences of the Universidad de La Frontera (Chile) through cooperation with the Latin American Federation of Culture Collections-FELACC. The 2021 workshop was organized by Cledir Rodrigues Santos, from the PPGBF collaborating core and who also organized the 2022 event, and Cristina Maria de Souza Motta, from NP. The theme of the workshop was the ex situ preservation of microorganism cells and data management in microbial culture collections and their respective impacts on scientific production and the bioeconomy, through industrial biotechnology. The Workshop was divided into two Modules and featured presentations by Brazilian scientists and scientists from other nationalities (Argentina, Colombia, Spain, Mexico and Portugal).

Another project, called "Decomposition and the invisible friends of the soil (2021)", under the coordination of professor Elaine Malosso (member of the PPGBF NP), had as its main action the production of paradidactic material to assist the professor's work in the classroom, especially in those with few resources. In this way, children and young people from schools in the region, through information leaflets and comic books, have access to the results of scientific research addressing microfungi in soil and leaf litter, as well as the role of these organisms in the decomposition of organic matter and nutrient cycling. Thus, the training of human resources (two undergraduate and four postgraduate students) is enriched with the practice of interdisciplinary thinking and the acquisition of new skills. This project also had the contribution of two PPGBF graduates, Elder George Rodrigues do Nascimento and Marcela Alves Barbosa.

In the project Participatory monitoring of microorganisms in agroecological transition polycultures in the Chico Mendes III Settlement: an approximation of scientific knowledge and farmers' knowledge, some teaching, research and extension activities have been carried out with farmer families who are in the process of agroecological transition in the Chico Mendes III Settlement, in the municipality of Paudalho, Pernambuco. The project was coordinated by professor Patricia Vieira Tiago and has the participation of other professors from NP of PPGBF, such as Cristina Souza Motta, Neiva Tinti Oliveira and Roger Ribeiro Melo. The project also has the participation of members from other institutions, such as Jorge Luiz Schirmer de Mattos (UFRPE) and Antônio Félix da Costa (IPA). The Mycology Department has been working in this settlement since 2013 and four PPGBF students and one graduate (Ana Carla da Silva Santos) participated in the project by developing action research. The identification of fungi and forms of alternative and biological control are some of the PPGBF's technical contributions to these farmers. In 2023, the booklet "New species of fungi are discovered in Brazil and named after defenders of nature and agrarian reform" was created, which is available on the Instagram of the Laboratory of Fungal pathogens and Biocontrollers (@labfitoufpe). The booklet has simple language, being a great resource for teaching and disseminating scientific information and has contributed to the popularization of science. Some of the results of the project were also presented on the program "Trilhas do Nordeste #45 (2023)", in the report on "Notícia da hora (TV Pernambuco)", in 2023, and in an interview for "Rádio Brasil de Fato", in the same year. Many of the fungi isolated from the soil were deposited in the Micoteca URM Culture Collection (UFPE) and could be used in other research projects. At the end of 2021, soil samples were collected from five properties, which were sent for metagenomic analysis. The data is being analyzed for the submission of two scientific articles to be published in specialized journals. These data will expand information about soil fungi in these areas and their functions, reinforcing for farmers the importance of soil management practices. Collections of arthropods parasitized by fungi have also been carried out by PPGBF and scientific initiation students (2022-2024). Preliminary results have shown a high diversity of these fungi, including the description of new species. We are observing that plant diversification is helping natural biological control events to occur.

An important topic developed by professors and students from PPGBF is the study of cave mycobiota in Brazil, supported by funding from ICMBio/IABS, CNPg and FAPEG. These studies have increased scientific knowledge and contributed to the conservation of underground biodiversity, as well as collaborating with the Chico Mendes Institute for Biodiversity Conservation (ICMBio) in the development of Speleological Management Plans (PME) and other technical documents, which regulate tourist activities and reduce the risk to visitors in caves. The results of these studies have already resulted in the conclusion of twoP PMEs, in Rio Grande do Norte, that of Caverna Furna Nova (approved through Ordinance ICMBio No. 1074, being the first SME approved in the Northeast) and that of Caverna dos Crotes (resulting in the IDEMA Simplified License - No. 2023-197885/TEC/LS-0317), in addition to the PME of Caverna Catedral, still in technical analysis by IDEMA. In addition to these caves, similar studies are underway in at least 15 other caves in Pará, Ceará, RN, Bahia and Goiás, involving seven federal and state conservation units in three Brazilian biomes. All of these activities are carried out in conjunction with the National Center for Cave Research and Conservation (Cecav), linked to ICMBio. Lectures and workshops are also held on the management and conservation of fungi in cave environments, aimed at ICMBio, IDEMA employees and tourism drivers.

Another project associated with PPGBF is called "Animated Fungi", which began in 2021, and was coordinated by professor Tatiana Gibertoni and with the collaboration of professor Roger Fagner Melo. Aiming to comply with the new guidelines for Extension in Brazilian Higher Education, established by the MEC, the project consists of actions carried out by undergraduate students, mainly, but not only, from UFPE, which aim to enhance students' training in scientific dissemination and the ability to intervene for the benefit of society, bringing UFPE closer to the external community, made up mainly of pre-school and elementary school children and their families. These actions include the creation of cartoons about fungi, informing, clarifying, approaching and awakening the population's curiosity about issues related to these organisms. Two graduates and three students from PPGBF participate in the project activities.

The project "Disseminating knowledge about fungi in the conservation units of Pedra Talhada and Monte Pascoal", under the coordination of professor Patricia Vieira Tiago, was carried out in the previous four-year period, but some products were published in the current four-year period. Two booklets were produced in 2022: "Fungi: knowledge and diversity" and "The knowledge of a rural people: ethnomycological knowledge in the Brazilian northeast". These booklets were sent to FUNAI, Regional Management 2 - ICMBio, Associação NORDESTA and Escola Municipal de Educação Básica Rodrigo Jacinto Tenório. These booklets are also available on the Instagram Fungal pathogens and Biocontrollers (@labfitoufpe) and the UFPE Basidiomycota Laboratoris (@labb.ufpe).

The "Let's color" project, coordinated by professor Tatiana Gibertoni, aimed to enhance the training of the team involved in scientific dissemination and the ability to intervene for the benefit of society, bringing UFPE closer to the external community, made up mainly of elementary school children, professors and family members. The project generated the book "Let's color, know and respect mushrooms and other macrofungi", organized by Larissa Trierveiler Pereira, Nelson Menolli Junior, Riccardo Mazza, Rosana Maziero, Tatiana Gibertoni and with ISBN 978-65-01-05898-6. This project had the collaboration of professors

from other institutions, such as Adriene Mayra da Silva Soares (UFRA), Alexandre Gonçalves dos Santos e Silva Filho (IFSP), Larissa Trierveiler Pereira (UFSCAR), Marina Pires Corrêa dos Santos (IFSP) and Nelson Menolli Jr. (IFSP).

The project "Unraveling Candidemia in Pernambuco: from the construction and dissemination of knowledge to prevention" began in 2021 and aims to disseminate knowledge about candidemia, covering: epidemiology, diagnosis, prevention and treatment, through the activities proposed in the project, such as creating a digital platform and social network, where lectures and discussion groups will be held. This action aims to encourage health care through educational actions that arouse interest and curiosity, and that are directly linked to scientific knowledge. The project was coordinated by professor Rejane Pereira Neves and has the collaboration of other PPGBF professors, such as Oliane Maria Correia Magalhães and Danielle Patrícia Cerqueira Macedo. Two PPGBF graduates (Cícero Pinheiro Inácio and Franz de Assis Graciano dos Santos) and a postdoctoral researcher (Maria Daniela Silva Buonafina) collaborated in the development of the activities.

Another important activity carried out by some PPGBF students and professors is the service offered at the Medical Mycology Laboratory of the Department of Mycology at UFPE. This activity is regulated through ordinance No. 2258, of June 13, 2024, issued by the UFPE rectory and Registered in the National Registry of Health Establishments-CNES No. 4781716, which serves patients sent by Public Hospitals, such as the Hospital das Clínicas of UFPE, and Private Hospitals, in addition to the general public by spontaneous demand. The Laboratory also worked during the pandemic, providing a service by diagnosing COVID-19 using the **RT-LAMP** method (https://www.gov.br/mec/pt-br/assuntos/noticias 1/teste-rapido-desenvolvido-na-ufpe-e-no-h c-pode-detectar-a-covid-19-em-uma-hora-e-meia). Furthermore, national and international professors, researchers and students make use of the Laboratory's multi-user space (https://www.labmicomed.com.br/), carrying out vital studies involving diagnosis, prospecting for new bioactive compounds, virulence and pathogenicity tests, among others.

The services provided by Micoteca URM, such as supply, identification and preservation of fungal cultures, in addition to training students and/or professionals from public and/or private institutions, carried out through disciplines and/or extension courses, contribute to the dissemination of the activities of the Department of Mycology and PPGBF. These requests come from teaching and/or research institutions, public and/or private, national and international, from laboratories that use fungal samples in tests for the manufacture of medicines and/or foods, enzymes and other metabolites of economic interest, biological control and from those that diagnose mycoses; and the community in general.

In addition to the UFPE extension projects, Felipe Wartchow, a PPGBF collaborating professor at UFPB, led the project "Scientific literacy and the teaching of fungi content in science and biology in a school in the state of Paraíba", approved by PROBEX/UFPB in 2020 and completed in 2021. This project worked remotely in elementary and high school classes on fungi, taught during the 7th year of elementary school and 2nd year of high school, aiming to stimulate the development of critical sense to perceive incorrect, incomplete and/or missing content about fungi in textbooks. This project has a social network channel (https://www.instagram.com/projetofungospb, followed by 922 accounts).

As part of the activities integrated into the celebration of the 70th anniversary of the Mycology Department, the Mycology Expo was promoted on 10/11/2024, under the coordination of professor Elaine Malosso. At the event, which was hosted in the department itself, lectures and presentations were held by all the Department's research teams, such as workshops, contests and integrative activities, presenting fungi, their relevance, how they act in biological and technological processes, applications in industry and society. The event attracted media attention, being televised in the local newspaper, and was widely publicized on digital media, promoting visibility inside and outside the university. EXPO was also part of the 2024 National Science and Technology Week, held at UFPE.

As part of the proposals of the FACEPE 22/2024 notice – Support for the popularization of science in the National Science and Technology Week of 2024, the Department of Mycology and PPGBF participated in the action "Knowing the biodiversity of the Caatinga", a traveling exhibition to popularize science. The event was attended by several professors and students, contributing to the popularization and dissemination of the work carried out by the teams.

Other proposals also contribute to the program's visibility. With the curricularization of extension in undergraduate courses, other extension projects are included in the Program's activities, such as the expansion of the didactic collection, installed in the herbarium and used for practical classes (and for exhibitions outside the university), the implementation of a didactic laminarium for the same purpose, among others. For greater visibility and transparency of the program, the 2020-2024 Self-Assessment Committee recommended maintaining and updating the program's website containing all information about it, including event productions, theses, dissertations and procedures for students and interested parties. This has been maintained and improved over the last four years.

To increase the attractiveness of the program, the 2020-2024 Self-Evaluation Committee recommended, for the next four years (2025-2028; 2029-2032), the intensification of its dissemination on social networks and the participation of professors and students in conferences in the area. Currently, the **PPGBF** has social profile а (@ppgbiologiadefungos ufpe) and most of the laboratories and collections linked to the PPGBF, both at UFPE and in other institutions, also have profiles on social networks: (@labdiagnose ufpe, @labb.ufpe, @labmicorrizas, @laba.ufpe, @lab.micologiamed, @labfitoufpe, @labzigo ufpe, @amigos.invisiveis, @lab.ecoevo.microfungos. @micotecaurm, @herbario hurm, @laliq ufs, @lmtf.ufpb). The participation of professors in events was quite significant, both in the scientific committee and as speakers at the X Congress of Mycology (CBMic 2024), Brazilian in Belo Horizonte (MG). (https://cbmic2024.com.br/programa) and also during the 12th International Mycological (IMC12, 2024,) in Maastricht (Netherlands) Congress (https://imc12.org/scientific-programme/). These two events, together with the XI Latin American Mycology Congress (XI CLAM, 2023), are the most important events for general mycology. We emphasize that, due to the pandemic, IMC12, which should have been in 2022, was postponed to 2024, while CBMic, which should have been in 2022, was postponed for technical reasons, creating a gap in large mycological events between 2021 and 2024.

3) Encourage internationalization

a) Committee: Cristina Souza-Motta, Jadson Bezerra and Reginaldo Lima-Neto (professors permanent members of the PPGBF) and Leonardo Gomes (secretary of the PPGBF)

The 2017-2020 Self-Assessment Committee detected little interest in post-doctoral internships, qualification, training and updating by professors, recommending encouraging post-doctoral internships and training in centers of excellence in Brazil and abroad and, as a goal, for each of the next four years, post-doctoral internship training and training licenses for at least two professors (2021-2028).

Between 2021 and 2024, we highlight the periods of training leave at the Universities of Lisbon and Coimbra, carried out by Leonor Maia and internships and training leave and internships in 2021, 2022 and 2024 at the University of Minho, and by Tatiana Gibertoni. Furthermore, André Santiago, Cristina Souza-Motta and Jadson Bezerra carried out a technical visit to the Westerdijk Fungal Biodiversity Institute (Netherlands), while Reginaldo Lima-Neto and Rejane Neves visited the University of Nantes (France).

Furthermore, the involvement of foreign students, the offering/teaching of courses in English/Spanish and the participation of foreigners as co-supervisors and on examination boards is one of the activities in which PG has worked with the aim of increasing international insertion. Based on the objectives/execution of the CAPES-PrInt project "Polyphasic approach to the study of fungal diversity in Brazil" (process 88887.311891/2018-00), PPGBF has encouraged the completion of sandwich doctorates by students at partner institutions: University of Minho (Portugal), Universidad de La Frontera (Chile) and Westerdijk Fungal Biodiversity Institute (Netherlands). During the four-year period, 2 students went to the Universidad de La Frontera and 1 to the Universidad Autónoma de Coahuila (Mexico). A student started his sandwich doctorate at the Botanischer Garten und Botanisches Museum Berlin-Dahlem - Freie Universität Berlin (Germany), returning in March 2025.

In 2021, PPGBF used the international mobility project adopted by UFPE to teach courses via eMOVIES (Espacio de Movilidad Virtual en Educación Superior), in Portuguese and/or English: BF-923 Fungal Molecular Genetics, BF-920 Phytopathogenic Fungi, BF-933 Taxonomy and Ecology of Mycorrhizal Fungi Arbusculars - Glomeromycota (Arbuscular Mycorrhizal Fungi's Taxonomy and Ecology - Glomeromycota), BF-946 Advanced Topics in Mycology IV - Molecular taxonomy and phylogenetic reconstruction, BF-932 Advanced Topics in Mycology II - Resupinate fungi in Basidiomycota: taxonomy and phylogenetic delimitation (Resupinate Fungi in Basidiomycota: Taxonomy and Phylogenetic delimitation), BF-946 Advanced Topics in Mycology IV - Ecological Data Analysis and BF-931 Advanced Topics in Mycology I - Introduction to Fungal Conservation. The latter was taught by Gregory Michael Mueller from the IUCN SSC Fungal Conservation Committee and Chicago Botanic Garden (USA). In the following years (2022-2024), other courses were offered with the participation of foreign professors/researchers, including: BF968 - Advanced Topics in Mycology IV - Scientific Writing and Communication in English, taught in English (Nelson Lima and Maria da Graça Ferreira Simões de Carvalho, Portugal) and BF931 - Advanced Topics in Mycology I - Identifying arbuscular mycorrhizal fungi and BF967 - Advanced Topics in Mycology III - Theory and practice for identifying arbuscular mycorrhizal fungi (Friedrich Bruno Oehl, Switzerland). With the resumption of in-person classes, eMOVIES was discontinued.

The PPGBF has worked to attract foreign students through public notices (e.g. PAEC OEA-GCUB and PEC-PG, currently inactive), and had two foreign students enrolled, one from Guatemala (master's degree) and the other from Ecuador (doctorate), the latter with a thesis in completion. Additionally, the selection notice for new students includes online tests with the possibility of answers in Spanish and English, with the aim of attracting foreign candidates. In addition, foreign researchers/professors served on defense boards and/or as co-supervisors of PPGBF students, mainly at the Doctorate level. In the period (2021-2024), among the defenses carried out at the PPG, 8 had 6 foreign members on the panels. In addition, 6 foreigners acted as co-supervisors of PPGBF students. Additionally, several professors participate as members of executive committees of international associations (IMA, https://www.ima-mycology.org/; ICTF, https://www.ima-mycology.org/) and as associate editors of high-impact international journals (Mycosphere, https://www.mycosphere.org/editors.php; IMA Fungus, https://imafungus.pensoft.net/board/).

It is noteworthy that the PPGBF has an international cooperation agreement with the Universidad de La Frontera (UFRO, Chile), until 2026 (Protocol of Intent No. 57/2021), and a co-guardianship agreement with the Université de Nantes (France), finalized in 2024 (process 23076.007691/2019-11), and two with the Universidad de La Frontera (Chile) until 2026 (process 23076.079798/2021-82).

4) Strengthen the theme "Sustainability" in research lines

a) Committee: Adriana Melo and Patricia Tiago (permanent professors at PPGBF) and Leonardo Gomes (PPGBF secretary)

This item had not been addressed by the 2017-2020 Self-Assessment Committee, since the PROPG/UFPE PIPG was prepared in 2021 (https://www.ufpe.br/documents/39790/2780004/Plano+Institucional/a95bb10c-ef8a-480f-9fe 3-9f4a23fcb885).

One of the objectives of PPGBF is to strengthen the theme "Sustainability in lines of research". To understand the perception and adherence to projects developed by PPGBF students and professors, we applied a prospective questionnaire. Initially, two forms were created, one for professors and another for students, in order to identify the projects that are contributing to achieving an SDG. The program has 26 professors and 18 responded to the form. Among the professors who responded, 50% are from the area of Fungal Taxonomy and Ecology/Diversity, Conservation and Molecular Biology of Fungi, 27.8% are from Fungi of Agricultural Interest and 16.7% are from Fungi of Medical Interest. This caveat is important so that we can also understand the scope of the sustainability theme within each line of research, aiming to adopt strategies to strengthen this theme in the PPGBF. In general, it appears that the majority (94.4%) are aware of the SDGs and 83.3% claim that their research projects adhere to some SDG. Among the SDGs, 50% of professors reported that their projects meet SDG 15 (Lives on Earth), 38.9% SDG 2 (Zero hunger and sustainable agriculture), 27.8% SDG 3 (Health and well-being) and 27.8% SDG 9 (Industry, Innovation and infrastructure). Other SDGs that were reported by professors were: SDG 4 Quality

education (16.7%), SDG 13 Action against climate change (11.1%), SDG 5 Gender equality and SDG 12 responsible consumption and production (5.6%). Two professors (11.1%) reported that the research projects do not meet the SDGs. Among the 17 SDGs, professors report contributing to nine of the objectives. In July 2022, when the form was applied, the PPGBF had 35 master's and 44 doctoral students enrolled, but only 25 responded to the form, which aims to verify whether postgraduate students know the SDGs and how their research projects are contributing to achieving any of them. Responses from master's (48%) and doctoral (52%) students indicated that 36% did not know the SDGs. Regarding the distribution of projects in the different areas of concentration of PPGBF, the result follows the same pattern observed through the professors' form, with projects predominating in the area of Diversity, Conservation and Molecular Biology of Fungi (52%). The majority (76%) reported that their projects will contribute to achieving some SDG. The greatest adherence occurs for SDG 15 Life on land (48%) and for SDG 2 Zero hunger and sustainable agriculture (32%). Four students (16%) reported that the research projects do not meet the SDGs. Among the 17 SDGs, students report contributing to sixteen objectives. Analyzing the data, it appears that 100% of projects in the areas of concentration of Fungi of agronomic interest and Fungi of medical interest seek to achieve some SDG, while projects in the areas of Fungi of biotechnological interest and Diversity, Conservation and Molecular Biology of Fungi have an average percentage of 63%, indicating the need to encourage an approach in projects that also considers the SDGs.

It was suggested that the master's and doctoral project models include an item on SDGs and that this item be worked on in the Project Preparation discipline. This suggestion was incorporated and, during the course, students were able to clarify and discuss the SDGs a little more, facilitating the preparation of the project regarding this theme. Thus, since 2022, the research project model for postgraduate students has the following item: "Indicate which SDG from the 2030 agenda (https://brasil.un.org/pt-br/sdgs) your project adheres to, explaining how achieving the objectives of your project can contribute to the SDGs". The inclusion of this item in projects and discussions about the SDGs in the Project Development disciplines Seminars M1, D1, M2, D2 have provided greater awareness and are stimulating the development of projects that can effectively contribute to sustainability.

5) Improve the curriculum and the scope of courses and defenses

a) Committee: Adriana Melo, Elaine Malosso and Neiva Oliveira (permanent professors at the

PPGBF)

In relation to the targets relating to the courses offered by PPGBF, the target for the 2021-2024 cycle of offering at least two remote courses and two hybrid courses was completely met in the quadrennium, with in 2021, the courses were remote, due to the pandemic, in 2022 the hybrid courses and in 2023 and 2024 almost all face-to-face, with the exception of those offered by professors not assigned to UFPE. The courses offered in 2021, remotely, facilitated the participation of several specialist professors external to the course (11), in the courses Advanced Topics in Mycology I, II, III and IV. The goal of including foreign professors in the program when offering courses was also achieved, as we had the

participation of Gregory Michael Muller, from the University of Chicago, Nelson Manuel Viana da Silva Lima and Maria da Graça Ferreira Simões de Carvalho, from the University of Minho, Portugal, and Friedrich Bruno Oehl, from Agroscope, Switzerland, in the course Advanced Topics in Mycology I, III and IV.

The goal of updating the curriculum was achieved in 2021, with a course committee being created to take charge of the matter, and an update has already been sent to PROPG/UFPE. After the update, we have 14 reformulated electives that replaced the previous ones. Individual guidance activities were added to the mandatory courses, as recommended by PROPG/UFPE. In the new schedule, we have, for the Master's degree, 6 mandatory courses plus 2 individual guidance activities and 20 electives (total 26); for the Doctorate, 5 mandatory courses plus 4 individual guidance activities and 22 electives (total 27), achieving a reduction in the number of courses of around 30% at both levels, but still covering the varied courses of Mycology. The goal of evaluating remote, hybrid and in-person courses was partially met in 2021 and 2022. Since all courses had to be offered remotely, due to the pandemic, only this modality was assessed using a questionnaire implemented by the course coordination. In general, the courses were evaluated positively, but we detected that the form needs improvement to better meet the evaluation objectives.

The goal of encouraging entrepreneurship among students and indicating new paths in private companies was partially achieved. Vivianne Lays Ribeiro Cavalcanti gave the short course "Introduction to industrial information - patents" and Cícero Pinheiro Inácio gave the lecture "What is that smell!? New perspectives related to pathogen identification". Regarding the intention to offer at least two courses that address entrepreneurship in the next four years, it has already been possible to offer and carry out two courses with this connotation: a course in Advanced Topics in Mycology III - Development of Social Technologies in Technological Incubators of Popular Cooperatives, taught by two Post-Doctoral Students from the Therapeutic Innovation Research Center/ UFPE, Douglas Carvalho Francisco Viana and Tiago Rafael de Sousa Nunes (NUPIT/UFPE), and the course Advanced topics in Mycology II - Cultivation of edible mushrooms, taught by Marcos José Correia (UFRPE).

It is noteworthy that, after the pandemic, PROPG/UFPE recommended that disciplines return to face-to-face mode. Exceptional and justified cases of hybrid disciplines will be evaluated by the Board, in accordance with Normative Instruction No. 2, of December 3, 2024, from Capes.

- 6) Submit proposals for hiring visiting professors
- a) Committee: Alexandre Machado and Elaine Malosso (PPGBF permanent professors)

Due to the Covid-19 pandemic, in 2021, no visiting professors were hired by PPGBF. Three financing opportunities were not taken advantage of that year, namely FACEPE's Continuous Flow, CNPq's Call 25/2021 and the resource for this purpose from the Print CAPES project approved. In 2022, the Propesqi-Propg-DRI Visiting Professor notice n° 13/2022 was opened and two candidates were selected. Renato Lúcio Mendes Alvarenga was selected to work in the Postgraduate Program in Fungal Biology (PPGBF) and Danielle Karla Alves da Silva, to work in the INCT-Herbário Virtual da Flora e dos Fungos project, a project linked to PPGBF, both starting in 2023. In 2024, these visiting professors requested the

renewal of the contract with UFPE, which were granted. and are guiding students, teaching undergraduate courses, at the PPGBF and carrying out various research, contributing to the strengthening of the PPGBF and collaborating with the Department of Mycology, CB, UFPE. Thus, the goal of hiring visiting professors was successfully achieved.

For the four-year period 2025-2028, at least two proposals will be sent for hiring visiting professors, following notice no. 14, of December 18, 2024 (in progress), and the availability of other notices by UFPE or the funding agencies CNPq and FACEPE.

Strategic planning (2025-2028 and 2029-2032)

The UFPE Institutional Postgraduate Plan (PIPG) (https://www.ufpe.br/documents/39790/2780004/Plano+Institucional/a95bb10c-ef8a-480f-9fe 3-9f4a23fcb885) has six objectives: 1) Expand and consolidate Undergraduate and Postgraduate courses Graduation and Basic Education; 2) Consolidate and expand internalization; 3) Expand and consolidate internationalization; 4) Promote a Sustainability and Social Responsibility policy; 5) Expand Open and Digital Education; 6) Promote actions that promote propositional policies for Research and Postgraduate Studies. When relevant, and in line with these objectives, six objectives and several targets were also established for the PPGBF to be monitored annually in the four-year periods 2025-2028 and 2029-2032, preferably by the commissions established for the Self-Assessment

1. Invest in the teaching and student quality of PPGBF

We always seek to improve our teaching and student qualification indicators, which is one of the most important questions in CAPES' quadrennial evaluations. In this regard, the distribution of guidelines, the production of articles and the H index of professors are observed. We also understand that many of these indicators reflect updates in centers of excellence and international collaborations. Therefore, for this cycle and the next, we expect:

- a) the training of at least two professors per cycle, through training, post-doctoral internships and/or training licenses in centers of excellence in Brazil and abroad;
- b) the expansion of the current NP, with the accreditation of 2-3 new professors per cycle;
- c) checking and controlling the number of vacancies in the two cycles and, consequently, guidance, so that there is no imbalance between NP and NC and between professors from each nucleus, ideally no more than 10% of total guidance by NC;
- d) increasing the quality of the Program's scientific production, especially in relation to production with students/graduates, which is considered one of the program's weaknesses. For the 2025-2028 cycle, it is expected that all permanent professors will have at least two articles in strata A1-A2 and 75% of the NP with at least two articles in stratum A1 and effectively increase qualified production with students [B3+ (1.74) and A4+ (1.18)]. For the next cycle, it is expected to maintain the target of 100% of NP with 2 articles A1-A2 and increase to 80% of NP with at least 2 articles in stratum A1, in addition to increasing student production (B3+ and A4+) by 30% (1.88 and

1.27). It is also intended to reduce B4 and C articles produced in the Program in this cycle and the next to 5%, and that at least 90% of dissertations and theses generate scientific articles in journals qualified in these evaluation cycles;

- e) the continuous improvement of the H index in these cycles, with all course professors with an H index above 11 and at least 90% of the NP with an H index above 15;
- f) evaluation of the opinion of students and professors about the course, through the application of an annual questionnaire;
- g) continuous improvement of infrastructure, using resources to readapt research laboratories and classrooms, equipment maintenance, research and publication expenses;
- h) strengthening the articulation between undergraduate and postgraduate studies, with a 20% increase in production with undergraduate students in this cycle and 30% in the next.

We also highlight that 3 new professors (2 NP and 1 NC) were selected and will reinforce the lines of research in Fungi of Agricultural and Medical Interest and Diversity, Conservation and Molecular Biology of Fungi. All of them have an H index above 14 and two are CNPq Research Productivity fellows.

2. Strengthen the visibility of PPGBF

For the two four-year cycles in question, it is recommended that extension projects and events coordinated by PPGBF professors be maintained and regular, as well as the participation of professors and students in new events that may arise. For the 2025-2028 cycle, we expect a 10% increase in the participation of students and professors in such projects and, for 2029-2032, a 20% increase.

We also intend to strengthen the attractiveness of the PPGBF by intensifying the publicity of the Program and the laboratories associated with the PG on social networks through regular posts on the networks already created and the participation of professors and students in at least two conferences in the area, in each cycle.

3. Encourage internationalization

With the aim of increasing internationalization at PPGBF, it is intended to encourage the celebration of partnerships between foreign researchers and PPG professors (mainly through scientific publications), as well as the carrying out of research by professors and students abroad. Due to the pandemic, the goals established for the last cycle could not be met, but we hope to:

- a) send at least 14 students abroad in this cycle and increase the number of doctoral students with a sandwich scholarship by up to 20% in the following cycle;
- b) encourage at least 1 student to obtain co-tutorship with established agreements or new agreements, in each cycle;

- c) attract at least 50% more foreign students in relation to the previous cycle from the resumption of public notices such as the PAEC OEA-GCUB and PEC-PG, among others, and the wide dissemination of the selection notice for new students on social networks;
- d) continue offering at least 1 course in English or Spanish per year, in this cycle and the next;
- e) promote at least 8 co-supervisions of students by foreigners in this cycle and 10 in the next;
- f) promote at least 10 stalls with the participation of foreigners in this cycle and 15 in the next.

4. Strengthen the theme "Sustainability" in research lines

Given the demands in the Sustainability area and the approaching deadlines established by the UN 2030 Agenda, we hope to maintain the number of professors working in Biotechnology in the next cycle and increase the number of professors working in Biotechnology, with an emphasis on Sustainability, by up to 10% in the following cycle.

We also understand the importance of evaluating how the results arising from the dissertation and thesis, in fact, can contribute to achieving the SDGs. In this sense, we will seek to introduce the practice of asking postgraduate students for a brief summary of the goals achieved with research in relation to the SDGs as part of the requirements for the defense. Such results can contribute to the consolidation of themes in the PPGBF that result in the proposition of public policies.

5. Improve the curriculum and the scope of courses and defenses

Although the curriculum has been updated in the previous four years, it is intended to maintain continuous evaluation and monitoring of the courses and curricular activities offered. For this quadrennium and the next, we expect:

- a) invite, annually, at least two external professors/researchers, including foreigners, to offer courses;
- b) continue with the application of a semi-annual questionnaire to students and professors on the content and methodology of the courses;
- c) Invite, annually, at least one professional who works in the field of mycology, in private companies operating in biotechnology, agriculture and health to give lectures or short courses at events organized over the next four years, in person or remotely;
- d) offer, every two years, at least two courses that address entrepreneurship.

6. Submit proposals for hiring visiting professors

With the end of the pandemic, the resumption of international mobility and the opening of specific calls for proposals, including international cooperation, we intend, in the

next cycle, to send at least one proposal or receive at least one visiting professor and, for the following cycle, to send at least two proposals or receive at least two visiting professors.