

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS
First Regular Session



HOUSE BILL No. 7312

Introduced by REP. RAMIL L. HERNANDEZ

**AN ACT REGULATING THE PRACTICE OF THE MICROBIOLOGY PROFESSION IN THE
PHILIPPINES, CREATING THE PROFESSIONAL REGULATORY BOARD OF
MICROBIOLOGY, AND APPROPRIATING FUNDS THEREOF**

EXPLANATORY NOTE

The current Philippine regulatory landscape for the sciences contains a significant gap regarding the practice of microbiology. While related fields are strictly regulated by the Professional Regulation Commission (PRC), microbiology remains a "gray area" of professional accountability, meaning that while the science is critical, the professional title and its corresponding legal responsibilities are not yet codified into law.

The Regulatory Gap: A Comparison

To understand the necessity of this bill, one must look at how the law treats neighboring professions:

- **Chemistry Profession Act (RA 10657):** Explicitly mandates that only licensed Chemists can certify chemical analyses. This ensures that the person accountable for chemical safety is verified by the State.
- **Philippine Medical Technology Act (RA 5527):** Strictly defines the scope of clinical laboratory work, ensuring that human diagnostic tests are performed only by licensed MedTechs.

In contrast, Microbiology currently lacks a dedicated Professional Regulatory Board. This results in a situation where microbiological safety – crucial for our food exports, public health surveillance, and water quality – is often performed without a legally recognized "Signatory Authority." This bill seeks to provide microbiologists with the same **professional recognition and legal mandate** afforded to chemists and medical technologists.

Practical and Industry-Responsive Provisions

This bill is designed to be more than a theoretical framework; it is a practical response to industry needs:

1. **Mandatory Compliance:** It mandates that high-risk food manufacturers and water utilities engage licensed microbiologists, directly supporting the Food Safety Act of 2013 (RA 10611).
2. **Expanded Industry Scope:** It covers emerging sectors where microbiology is incidental yet essential, such as biofuels, biotechnology, and bioremediation.

Addressing the "Grandfather Rule"

Recognizing that professionalization should not come at the cost of existing expertise, this bill introduces a robust **Equivalency Program**. Unlike previous professionalization laws that inadvertently displaced senior experts, this bill protects our "Brain Trust" by:

- **Honoring Experience:** Granting registration without examination to senior practitioners with over ten (10) years of experience.
- **Protecting the Academe:** Allowing senior faculty who have taught microbiology for at least ten (10) years to be registered based on their tenure and advanced degrees.
- **Leveraging Existing Standards:** Integrating the existing certification standards of the **Philippine Academy of Microbiology (PAM)**.

By valuing **experience alongside examination**, we ensure that our nation's most seasoned scientific minds remain at the forefront of research and education. Further, by formalizing the profession, we ensure that the "invisible shield" of microbiology –the experts protecting our food, water, and health – is finally given the legal standing and state recognition it deserves.

Professionalizing microbiology is no longer just an academic goal; it is a matter of national security and public health. It is in this view that the immediate passage of this bill is earnestly sought.

Approved,

RAMIL L. HERNANDEZ
2nd District, Laguna

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*Be it enacted by the Senate and House of Representatives of the Philippines in Congress
assembled.*

ARTICLE I: TITLE AND STATEMENT OF POLICY

Section 1. *Short Title.* – This Act shall be known as the "**Philippine Microbiology Professionalization Act.**"

Section 2. *Statement of Policy.* – The State recognizes the vital role of microbiologists in national advancement, specifically in ensuring national biosecurity, food safety, and public health. It is the policy of the State to professionalize the practice of microbiology to protect the public from food-borne illnesses, infectious diseases, and environmental hazards. This Act aims to foster competent, globally competitive professionals who shall observe the highest standards of excellence.

ARTICLE II: DEFINITION OF TERMS AND SCOPE OF PRACTICE

Section 3. *Definition of Terms.* – As used in this Act:

- (a) **Microbiology** shall refer to a multi-disciplinary study of the structure, form, and function of microorganisms such as bacteria, archaea, fungi, algae, protozoa, and acellular infectious agents.
- (b) **Registered Microbiologist** shall refer to a person who has been issued a Certificate of Registration and Professional Identification Card by the Board and the Commission.

(c) **PAM** refers to the Philippine Academy of Microbiology, the existing certifying body of the Philippine Society for Microbiology (PSM).

Section 4. *Fields of Microbiology.* –

- 1) **Bacteriology:** Deals with the study of bacteria, including those of medical and industrial significance.
- 2) **Virology:** Deals with viruses and subviral particles that cause disease in animals, plants, and humans.
- 3) **Mycology:** Studies yeasts, molds, and mushrooms (fungi) and their medical and industrial applications.
- 4) **Public Health Microbiology:** Deals with the detection of pathogens as they impact public health, including surveillance for the prevention of infectious diseases.
- 5) **Environmental Microbiology:** Studies microorganisms in land, water, and air systems and their interactions with pollutants.
- 6) **Medical Microbiology:** Deals with the characteristics of pathogens and mechanisms of infection, excluding clinical microbiology which is governed by medical technology laws.

Section 5. *Scope of Practice.* – The practice of microbiology involves the application of scientific principles to study, utilize, or control microorganisms. It includes professional services where microbiological expertise is essential, necessary, or incidental to the operation of an industry or the protection of public health. This includes:

- 1) **Food & Quality Assurance:** Monitoring, testing, and certifying the microbial safety of food products, raw materials, and processing environments in compliance with Food Safety Act of 2013.
- 2) **Public Health Microbiology:** Conducting diagnostic and surveillance activities for infectious diseases and monitoring antimicrobial resistance (AMR) in community or environmental settings.
- 3) **Industrial and Environmental:** Managing the microbial quality of water utilities, pharmaceuticals, and cosmetics; and the use of microbes in waste management.
- 4) **Agricultural Microbiology:** Developing and testing bio-fertilizers and managing plant/animal pathogens.
- 5) **Expert Consultation:** Providing technical advice for environmental impact assessments and disease prevention programs.

- 6) **Technical Leadership:** Signing and certifying microbiological laboratory reports and serving as Food Safety Compliance Officers (FSCO) in large-scale food businesses.
- 7) **Research & Development:** Conduct of studies in various branches of microbiology, including medical, agricultural, and industrial fields.
- 8) **Education:** Teaching microbiology subjects and heading relevant degree programs in higher education institutions (HEIs).
- 9) **Incidental Industries:** Any industry utilizing microbial processes, such as biotechnology, bioremediation, and forensic microbiology.

ARTICLE III: PROFESSIONAL REGULATORY BOARD OF MICROBIOLOGY

Section 6. *Creation and Composition.* – There is hereby created a Professional Regulatory Board for Microbiology under the administrative supervision of the Professional Regulation Commission (PRC). The Board shall be composed of a Chairperson and two (2) Members.

Section 7. *Qualifications of Board Members.* – At the time of their appointment, the Chairperson and Members of the Board must:

- (a) Be a citizen and resident of the Philippines;
- (b) Be of good moral character;
- (c) Be a holder of at least a Master of Science or a Doctorate degree in Microbiology (or a related field with a major in microbiology) from a CHED-recognized institution or a reputable foreign university recognized by its own government and validated by CHED;
- (d) Be a Registered Microbiologist under this Act; *Provided*, That for the first appointees to the Board, they shall be deemed registered as microbiologists upon their appointment, *Provided*, they meet any of the criteria for Registration Without Examination under Section 20 of this Act;
- (e) Have at least ten (10) years of active practice, at least five (5) years of which must be in a senior or supervisory capacity; *Provided*, that this experience is in addition to the academic requirements specified in Section 7(c).
- (f) Must not have any business interest or financial connection, directly or indirectly, in any HEI conferring an academic degree in microbiology, or in any review center conducting licensure exam preparations;
- (g) Must not be a member of the faculty or administration of such HEIs or review centers at the time of appointment, and must have resigned from such positions at least one (1) year prior to the date of appointment.

The Commission, upon recommendation of the relevant professional stakeholders, shall ensure that the initial appointees to the Board represent the highest standards of the profession and satisfy the most rigorous equivalency criteria set forth in this Act.

Section 8. Powers and Functions. – The Board shall exercise executive, administrative, and rule-making powers to ensure the highest technical and ethical standards in the practice of microbiology. Specifically, the Board shall:

- (a) Regulatory Oversight:** Promulgate, administer, and enforce the rules, regulations, and the Code of Ethics necessary to carry out the provisions of this Act;
- (b) Licensure Standards:** Determine and prescribe the scope of the licensure examination, including the syllabi and Table of Specifications (TOS) for each subject, and maintain the authority to update these as the science and industry demands;
- (c) Professional Certification:** Administer oaths and issue Certificates of Registration and Professional Identification Cards to those who pass the examination or qualify under the Equivalency Program;
- (d) Compliance Monitoring:** Conduct regular monitoring and inspection of laboratories, manufacturing plants, and research institutions to verify that the practice of microbiology is performed by licensed professionals as defined in this Act;
- (e) Administrative Adjudication:** Investigate violations of this Act or the Code of Ethics and, after due process, suspend or revoke the license of any erring practitioner or issue such penalties as may be provided by law;
- (f) Developmental Leadership:** Prescribe guidelines for Continuing Professional Development (CPD) and recommend measures to the Commission and the Government for the growth and advancement of microbiology in the Philippines; and
- (g) Special Permits:** Issue temporary or special permits to foreign microbiologists for specific, time-bound technical or academic missions.

Section 9. Administrative Supervision of the Board. – The Board shall be under the administrative supervision and control of the Commission. All policies, resolutions, rules, and regulations issued by the Board shall be subject to the review and approval of the Commission.

The decisions, resolutions, or orders rendered by the Board shall be governed by the PRC Modernization Act of 2000 (RA 8981) and the PRC Rules of Procedure. The Rules of Court shall apply in a suppletory character.

Section 10. *Term of Office of the Board.* – The Chairperson and Members of the Board shall hold office for a term of three (3) years from the date of appointment or until their successors shall have been qualified and appointed. They may be reappointed for a second term. They shall take the proper oath of office prior to assumption of office before a duly authorized officer.

Section 11. *Compensation and Allowance of the Chairperson and Members of the Board.* – The chairperson and members of the Board shall receive compensation and allowances comparable to those received by the chairpersons and members of the other PRC Professional Regulatory Boards as provided in the annual General Appropriations Act.

Section 12. *Meetings of the Board.* – The Board shall hold such meetings as may be necessary for the performance of its functions and the discharge of its duties, in accordance with the rules and regulations it may prescribe, subject to the approval of the Commission.

Section 13. *Removal of Board Members.* – The Chairperson or any Member of the Board may be suspended or removed by the President of the Philippines, upon recommendation by the PRC and subject to due process, for neglect of duty, incompetence, tolerance of irregularities in any examination given by the Board, unprofessional or unethical conduct.

Section 14. *Custodian of Records, Secretariat, and Support Services.* – The PRC shall keep all records of the Board, including applications for examination, papers and results, minutes of deliberations, and administrative and other investigative cases involving registered microbiologists.

The PRC shall designate the Secretary of the Board and other support services to implement the provisions of this Act.

ARTICLE IV: LICENSURE, REGISTRATION, AND THE EQUIVALENCY PROGRAM

Section 15. *Licensure Examination.* – Except as otherwise provided in this Act, every applicant seeking to be registered as a microbiologist shall take and pass a written licensure examination to be given by the Board at least once a year in such places and dates as the Commission may designate.

Section 16. *Qualifications for Examination.* – Any person applying for admission to the licensure examination must, at the time of filing, establish to the satisfaction of the Board that they are:

- (a) A citizen and resident of the Philippines, or a citizen of a foreign country subject to the requirement of reciprocity;

(b) A person of good moral character; and

(c) A holder of a Baccalaureate degree in Microbiology, or Biology major in Microbiology, or a graduate degree in Microbiology, or any related field with at least twenty-four (24) units of microbiology.

Section 17. *Scope of Examination.* – The licensure examination shall cover subjects including, but not limited to: General Microbiology, Microbial Physiology, Microbial Ecology, Medical Microbiology, and Applied Microbiology (Food and Industrial). The Board, subject to the approval of the Commission, may revise the scope to conform with technological advances and industry developments.

Section 18. *Rating in Examination.* – To pass, an examinee must obtain a general average of at least seventy-five percent (75%) with no rating lower than fifty percent (50%) in any subject.

In case of failure, the following rules for retakes shall apply:

- **Conditional Status:** An examinee who obtains a general average of 75% but fails (below 50%) in not more than two (2) subjects shall be considered "Conditioned." They shall be allowed to retake only the failed subjects.
- **Removal of Condition:** If the examinee passes the retake subjects, they shall be deemed to have passed the entire licensure examination. If they fail the retake subjects twice, they must retake the entire examination.
- **Full Retake:** An examinee who obtains a general average below 75%, regardless of individual subject ratings, must retake the entire examination.
- **No Limit on Retakes:** There shall be no limit to the number of times an examinee may retake the examination. No "cool-off" or waiting period shall be required between attempts.
- **Streamlined Application:** The Board shall prescribe a simplified and expedited application process for repeat examinees, focusing on fee settlement and updated identification, rather than the resubmission of permanent academic records.

Section 19. *Oath, Certificate of Registration, and Professional Identification Card.* –

(a) Entering the Profession: All successful examinees and those qualified for registration without examination shall be required to take a professional oath before the Board or any government official authorized by the Commission to administer oaths, prior to entering the practice of microbiology.

(b) Issuance of Credentials: A Certificate of Registration shall be issued to those who have complied with all the requirements for registration. It shall remain in full force and effect until withdrawn, suspended, or revoked in accordance with this Act.

(c) Professional ID: A Professional Identification Card shall likewise be issued, renewable every three (3) years upon compliance with requirements, including Continuing Professional Development (CPD).

(d) Electronic Credentials: The Board may authorize the issuance of digital or electronic versions of these credentials in accordance with the policies of the Commission and the E-Commerce Act.

Section 20. Registration Without Examination (The Equivalency Program). – In pursuit of the State’s objective to bring all practitioners under a unified regulatory framework and to recognize the diverse paths of expertise in the field, a Certificate of Registration shall be issued without examination to any applicant who, within three (3) years from the effectivity of this Act, elects to apply under any of the following tracks that best corresponds to their professional credentials:

- 1) Track A (Specialist Path):** Holders of a Master’s or Doctoral Degree in Microbiology (or related fields) with at least five (5) years of active practice.
- 2) Track B (Academic Tenure Path):** Faculty members of CHED-recognized Higher Education Institutions (HEIs) who have taught microbiology or its specialized branches for at least ten (10) years, and who hold a relevant post-graduate degree.
- 3) Track C (Leadership Path):** Holders of a Baccalaureate degree who have served in a senior or supervisory capacity (such as a Laboratory Head, Quality Assurance Manager, or Technical Director) for at least ten (10) years in a microbiology-related industry, including but not limited to food and beverage manufacturing, pharmaceuticals, cosmetics, water treatment, agriculture, or public health diagnostics.
- 4) Track D (Experience Path):** Holders of a Baccalaureate degree in Microbiology (or related fields with at least 24 units of microbiology) who have been in active technical practice for at least ten (10) years in laboratories, research institutions, or industrial facilities.
- 5) Track E (Certification Path):** Current holders of a valid Registered or Specialist Microbiologist (RMicro/SMicro) certification from the Philippine Academy of Microbiology (PAM) or other reputable professional organizations recognized by the Board.

The Board shall adopt a liberal interpretation of these requirements during the initial registration period to facilitate the transition of existing practitioners into the regulated framework.

Section 21. Refusal to Issue a Certificate of Registration. – The Board shall not register any successful examinee who has been convicted by a final judgment of a

court of competent jurisdiction of any offense involving moral turpitude, or has been found guilty of immoral or dishonorable conduct.

Provided, however, that the Board may, in its discretion and upon the applicant's showing of a clear track record of rehabilitation and good mental health, allow the registration of said applicant. In case of refusal, the Board shall provide the applicant a written statement setting forth the reasons for such action.

Section 22. *Revocation or Suspension of the Certificate of Registration.* – The Board shall have the power, after due notice and hearing, to revoke or suspend the Certificate of Registration of a microbiologist or to reprimand a registrant for any of the following grounds:

- (a) Conviction of a crime involving moral turpitude or any crime that impacts professional integrity;
- (b) Any act of fraud, deceit, or misrepresentation in obtaining a Certificate of Registration;
- (c) Gross negligence, incompetence, or unprofessionalism in the practice of microbiology;
- (d) Chronic inebriety or habitual use of drugs or substances that impair the ability to practice with safety; and
- (e) Violation of any provision of this Act, its Implementing Rules and Regulations, or the Code of Ethics for Microbiologists.

Section 23. *Reinstatement and Replacement of the Certificate of Registration.* – The Board may, for reasons it deems sufficient and upon proper application, exempt a person from the waiting period and reinstate a revoked Certificate of Registration. A new Certificate of Registration to replace any certificate lost, destroyed, or mutilated may be issued subject to the rules of the Board and the Commission.

ARTICLE V: PRACTICE OF MICROBIOLOGY

Section 24. *Practice of Microbiology in Other Regulated Professions.* – In the spirit of professional synergy, other professionals regulated by the Commission whose practice includes microbiology as an essential component, specifically Doctors of Medicine, Doctors of Veterinary Medicine, Medical Technologists, Agriculturists, Pharmacists, and Food Technologists, shall continue to practice microbiology within their respective scopes of practice without the need for registration under this Act.

Section 25. *Prohibitions and Limitations.* – No person shall represent themselves as a microbiologist, or use titles and signs tending to convey that impression, without a valid Certificate of Registration and Professional Identification Card issued under this Act.

Persons currently employed in positions requiring microbiology expertise who are not yet registered shall be allowed to continue their practice for three (3) years from the

effectivity of this Act. Within this period, they must qualify for registration under the Equivalency Program or pass the licensure examination to continue their practice.

Section 26. Code of Ethics and Technical Standards. – The Board, in consultation with the Accredited Integrated Professional Organization (AIPO), shall formulate and adopt a Code of Ethics and a Code of Technical Standards for the practice of microbiology. All registered microbiologists shall strictly adhere to these codes in the performance of their professional duties.

Section 27. Issuance of Special Temporary Permits to Foreigners. – Without prejudice to existing laws on foreign practice, the Board may issue a Special Temporary Permit to foreign microbiologists or recognized experts for technical consultation or academic missions under the following conditions:

- a. **Technical Consultation:** Foreign experts called in by the government or private institutions for specific, time-bound technical or academic missions; or
- b. **Academic Exchange:** Foreign microbiologists of distinguished standing hired as visiting professors or lecturers in Philippine HEIs.

The permit shall be limited to the specific work commissioned and shall be valid for a maximum of one (1) year, subject to renewal at the discretion of the Board.

No permit shall be issued unless the foreign country provides reciprocity to Filipino microbiologists.

ARTICLE VI: MANDATORY ENGAGEMENT AND COMPLIANCE

Section 28. Mandatory Engagement of Registered Microbiologists. – To ensure the protection of public health and the safety of manufactured goods, the following entities are required to secure the services of at least one (1) Registered Microbiologist:

- a. **Government Sector:** National government agencies, local government units (LGUs), and government-owned and controlled corporations (GOCCs) involved in public health, food safety, and environmental regulation shall strive to establish and fill permanent positions for Registered Microbiologists.
- b. **Private Sector:** Establishments engaged in the large-scale manufacture of food, beverages, pharmaceuticals, cosmetics, and biological products may comply with this Act through full-time employment or the engagement of a consultant on a professional retainer basis.

Section 29. Transition and Civil Service Alignment. – To facilitate the institutionalization of the profession in the government:

- a. **CSC Qualification Standards:** Within one (1) year from the effectivity of this Act, the Commission, in coordination with the Board and the Civil Service

Commission (CSC), shall formulate the Qualification Standards (QS) for Microbiologist positions.

- b. **Interim Service Agreements:** Pending the creation of permanent items or the formalization of qualification standards, government agencies are authorized to engage Registered Microbiologists under **contractual or consultancy arrangements** as permitted by existing auditing and civil service rules, to ensure immediate compliance with safety regulations.

Section 30. Technical Accountability and Signatory Authority. – The Registered Microbiologist, whether an employee or an engaged consultant, shall function as the Technical Signatory for all microbiological concerns.

- a. **Private Sector Flexibility:** In the private sector, the engaged microbiologist provides the necessary technical certification and oversight but shall not be required to participate in the general administrative management of the firm unless specifically contracted to do so.
- b. **Validity of Reports:** All microbiological analysis, quality control reports, and safety certifications required by regulatory bodies (e.g., Food and Drug Administration, Department of Health) must be signed and sealed by a Registered Microbiologist.

ARTICLE VII: PENAL AND FINAL PROVISIONS

Section 31. Penal Provisions. – Any person who violates the provisions of this Act shall be subject to the following penalties:

- a. **For Unlicensed Practice or Non-Compliance:** Any person practicing microbiology without a valid certificate, or any manager/owner of an establishment who fails to engage a Registered Microbiologist as required by this Act, shall be sentenced to a fine of not less than **Twenty Thousand Pesos (₱20,000.00)** but not more than **Two Hundred Thousand Pesos (₱200,000.00)**, or imprisonment of not less than **one (1) month** but not more than **one (1) year**, at the discretion of the court.
- b. **For Violations Resulting in Injury or Damage:** If the violation results in documented injury to persons, damage to property, or a significant public health hazard, the maximum fine under this Section shall be imposed without prejudice to the filing of separate criminal or civil cases under the Revised Penal Code and other applicable laws.
- c. **Liability of Corporate Officers:** In case of a violation by a corporation or partnership, the officer responsible for the technical operations of the firm shall be liable. However, the penalty of imprisonment shall only be imposed if it is proven that the officer acted with gross negligence or willful intent to bypass safety regulations.

Section 32. *Funding Provision.* – The Chairperson of the PRC shall immediately include in the Commission's programs the implementation of this Act, the initial funding of which shall be charged against the current year's appropriations of the PRC. Thereafter, the amount necessary for the continued implementation of this Act shall be included in the annual General Appropriations Act (GAA).

Section 33. *Implementing Rules and Regulations (IRR).* – Within ninety (90) days from the effectivity of this Act, the Board, subject to the approval of the Commission, shall formulate and promulgate the necessary rules and regulations to carry out the provisions of this Act.

Section 34. *Separability Clause.* – If any clause, sentence, paragraph, or part of this Act shall be declared unconstitutional or invalid, such judgment shall not affect, invalidate, or impair the remainder of this Act.

Section 35. *Repealing Clause.* – All laws, decrees, executive orders, and rules and regulations, or parts thereof in conflict with the provisions of this Act are hereby repealed or modified accordingly. *Provided*, that nothing in this Act shall be construed as repealing or amending the laws regulating other professions under the PRC.

Section 36. *Effectivity.* – This Act shall take effect fifteen (15) days after its publication in the Official Gazette or in a newspaper of general circulation.

Approved,