

Physician Scientist Research Pathway Leading to Certification by the American Board of Pathology

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Abstract

In 2014, the American Board of Pathology, in response to the pathology community, approved a physician scientist research pathway. This brief report summarizes the history of and objectives for creating the physician scientist research pathway and the requirements of the American Board of Pathology for the certification of physician scientist research pathway trainees.

Keywords

American Board of Pathology, board certification, physician scientists, research pathway, residents

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In the fall of 2013, the American Board of Pathology (ABP) received a proposal sponsored by several organizations (note 1) requesting that ABP offers a research pathway leading to board certification. The culmination of much discussion, this proposal reflected a growing concern that pathology, long steeped in a rich tradition of research, had become less attractive as a discipline, particularly to physician scientists. The implementation of a physician scientist research pathway (PSRP), it was argued, could ameliorate this situation and offer added benefits to pathology departments. Arguments in support of such a pathway can be summarized as follows:

- The number of physician scientists applying to pathology programs has decreased over the past several years, whereas it has increased for programs in internal medicine, pediatrics, radiation oncology, and dermatology. Data compiled from the Association of American Medical Colleges Graduation Questionnaire indicate that between 2000 and 2006, only 7.9% of MD/PhD graduates from medical science training programs (MSTP) selected a residency in pathology compared to 20.9% and 10.3% in internal medicine and pediatrics, respectively.¹ This represents an unfavorable downturn, as earlier data drawn from the Duke MSTP experience from 1970 to 1990 reflected that internal medicine and

pathology drew nearly equally from their pool of MSTP graduates (30.5% vs 27.8%, respectively).²

- If one accepts the premise that physician scientists are more likely to choose a discipline in which a formal research track is offered, the existence of such a track arguably would induce more medical students to enter pathology programs. Ultimately, it was hoped this would improve the growing shortage of physician scientists.
- A PSRP, offering a blend of research and clinical training, would improve the success of trainees who remain in academic pathology. The American Board of Internal Medicine, which has long sponsored such a program, reports that 72% of graduates from their physician scientists training pathway held academic positions, over

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THE AMERICAN BOARD OF PATHOLOGY PHYSICIAN-SCIENTIST RESEARCH PATHWAY

OBJECTIVES

- To increase the number physician-scientists in pathology
- To attract exceptional and committed young physician-scientists to pathology
- To prepare trainees for careers in academic medicine centered on basic science or clinical research
- To provide flexibility in training pathways, while assuring the clinical competency of trainees that select this pathway

GENERAL REQUIREMENTS

The ABP Physician-Scientist Research Pathway is intended for those physicians who are committed to contributing to new scientific knowledge in basic science, and clinical or translational medicine through a career that will involve funded research. Residents may enter the Physician-Scientist Research Pathway while training in AP, CP, AP/CP, or AP/NP. In some instances a trainee may enter this program following completion of a subspecialty fellowship. A trainee may transfer into or out of the pathway at any time without ABP approval. Training programs do not need ABP approval or notification to offer this pathway; however, a program will be asked to provide information regarding candidates completing this program for purposes of tracking and outcomes assessment.

Current ABP graduate medical education (GME) training requirements allow for up to six months of research during core training.

Trainees in the Physician-Scientist Research Pathway must complete at least one additional year of research. Research is defined as scholarly activities expected to develop and contribute to generalizable knowledge, typically involving grants supporting the activities, and may include basic science, clinical, or translational research. Trainees may complete additional years of research, depending on their institution, and are encouraged to do so, especially if they wish to seriously pursue a career in basic science or clinical research. ACGME Program Requirements must be followed during the six months of research that is part of the required core GME training; however the additional research time is not subject to ACGME Program Requirements. All additional research time must occur in blocks of at least six months and should be protected by not being commingled with substantial clinical training. Trainees are encouraged to complete their core training prior to their research year(s) and to become ABP certified as soon as they are eligible.

The GME training requirements to apply for board certification are the same as for trainees that are not in this pathway (See section III in the Booklet of Information). Trainees should apply to take the certification examination as soon as GME training requirements are completed. Trainees must become certified within five years of completion of GME requirements. The ABP certification examination and ABP certificates are the same for all candidates, whether they are in the research pathway or standard pathology training. A research year, like a fellowship year, will meet the Maintenance of Certification Part II and Part IV requirements (except for peer evaluations) for that period of the MOC cycle.

SUPERVISION

The Program Director is responsible for the core GME training and must approve the six months of research completed as part of the core. Supervision of the trainee's additional year(s) of research should be the responsibility of a faculty research mentor. An ideal research mentor is a successful investigator with an active research program and peer-reviewed research funding. Establishment of a research review committee that meets at least every six months to provide advice and feedback to the trainee is strongly encouraged. Research may be done at more than one institution, but the experience should have oversight and coordination by a single mentor.

The ABP will not oversee the research training. An applicant for ABP certification must indicate on their application form that they are in the Physician-Scientist Research Pathway, what their research topic is, and the name of their research mentor. The Program Director must verify this information. The Program Director should notify the ABP if a candidate/diplomate does not complete the Research Pathway.

85% had extramural funding, and over 60% had National Institutes of Health funding.³

- Although not founded on data, there was some optimism that a formal PSRP would serve as an inducement for increased institutional support, facilitate the recruitment of research faculty to a department, and increase the amount of extramural funding.

While acknowledging the importance of research, the first priority of the ABP, as embodied in its new mission statement, is to “promote the field of pathology and the continuing competence of practicing pathologists.” Any modifications in certification standards must necessarily be congruent with this mission and not erode these standards. At the same time, the ABP recognizes that pathology is uniquely poised to contribute

new knowledge and innovative technologies to the field of medicine and that we should aspire to do so. The ABP is also mindful that exposure to research should be a serious, meaningful, and longitudinal experience and not a series of fragmented rotations.

Because of its importance, the ABP devoted its entire 2014 summer retreat to this topic. With the added participation of Drs Daniel Remick and David Louis from the Association of Pathology Chairs and Dr George Lister from American Board of Pediatrics, the topic was discussed and debated over a 2-day period. At the conclusion of the meeting, the proposal for a PSRP was approved in principle and formally adopted in January 2015. The ABP believes this proposal retains the rigors of clinical training while offering additional research training to a talented cadre of physician scientists. Its structure is also

designed to give departments latitude in deciding who should enter the pathway and how the research year(s) should be constructed and monitored. However, the ABP intends to ask programs for information regarding candidates completing the program so that it can track and assess outcomes. Finally, the ABP acknowledges with gratitude the organizations and individuals that initiated the dialogue of this pressing issue and assisted the board of trustees in their deliberations.

Declaration of Conflicting Interests

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Note

1. Academy of Clinical Laboratory Physicians and Scientists, American Society for Clinical Pathology, American Society of Cytology, Association for Molecular Pathology, Association for Pathology Informatics, Association of Pathology Chairs, and the College of American Pathologists.

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