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Physician Scientist

Overview

Physician scientists are allopathic or **osteopathic physicians** (<http://www.explorehealthcareers.com/en/Career.18.aspx>) or **dentists** (<http://www.explorehealthcareers.com/en/Career.1.aspx>) who pursue their research interests in the laboratory. Various training pathways and career opportunities exist for physician scientists: they can teach, treat patients, conduct basic science, and perform translational or clinical research. Physician scientists hold positions at academic research centers, pursue clinical careers in private or group practice, or do research for public or private institutions.

For more information, see:

American Physician Scientists Association (<http://www.physicianscientists.org/>)

American Society for Clinical Investigation (<http://www.asci-jci.org/>)

Association for Patient Oriented Research (<http://www.apor.org/>)

Association of American Physicians (<http://www.aap-online.org/>)

Working Conditions

With training in both research and clinical practice, physician scientists have good flexibility in selecting a career path. They traditionally hold faculty positions in medical or dental schools or academic research centers. Whatever they do, physician scientists must spend a significant portion of time doing both lab research and clinical work.

Due to the short supply of physician scientists (currently less than 5% of the physician workforce), the job market in this field is excellent. They are highly sought-after to become the future leaders of medicine and dentistry. Physician scientists hold leadership positions wherever they are: in academia, government, and private industry (including pharmaceutical, biotech, and venture capital companies).

For more information, visit the **American Physician Scientists Association** (<http://www.physicianscientists.org/index.html>) Website.

Academic Requirements

Applicants to physician scientist programs must hold a bachelor's degree from an accredited university or college and have a GPA of 3.5 or better. College coursework should include biology, chemistry, physics, and other basic elements of a pre-medical curriculum.

Applicants to dental physician scientist programs must take the **Dental Admissions Test** (<http://www.ada.org/prof/ed/testing/dat/index.asp>) (DAT). Those pursuing the medical physician scientist track generally must take the **Medical College Admissions Test** (<http://www.aamc.org/students/mcat/>) (MCAT); however, some graduates of premedical scholar programs (which are available at selected universities/colleges and lead to a combined bachelor's/medical degree) are not required to take the MCAT. In addition, the **Graduate Record Exam** (<http://www.ets.org/portal/site/ets/menuitem.435c0b5cc7bd0ae7015d9510c3921509?vgnnextoid=b195e3b5f64f4010VgnVCM10000022f95190RCRD>) (GRE) may be required for some dual degree programs. Devotion to the research enterprise also is a highly valued quality in candidates.

Physician scientists may pursue clinical degrees in medicine or dentistry alone, or they may earn **combined medical degrees** (<http://services.aamc.org/currdir/section3/start.cfm>) in education, public health, law, business administration, hospital administration, and a variety of other disciplines. In addition to programs at conventional universities, the National Institutes of Health (NIH) funds several combined degree programs, such as the Medical Scientist and the Dentist Scientist Training Programs.

For physician scientists who conduct research with a medical (M.D. or D.O.) or dental (D.D.S. or D.M.D.) degree alone, four years of clinical training are required, as well as one or more years of research training in a laboratory. Earning clinical and Ph.D. degrees separately may take over 10 years, whereas combined degree programs typically take 6 to 8 years.

Professional Associations

American Physician Scientists Association (<http://www.physicianscientists.org/index.html>)

American Federation for Medical Research (<http://www.afmr.org/>)

Funding Opportunities

Search for funding opportunities in this field (<http://www.explorehealthcareers.org>)

Enrichment Programs

Search for enrichment programs in this field (<http://www.explorehealthcareers.org>)

Source

www.physicianscientists.org

Learn more about this field:

Medicine (<http://www.explorehealthcareers.com/en/Field.5.aspx>)

Salary: \$80,000 - \$200,000

Years in school: 8 - 14 *

Job outlook: Excellent

* after high school graduation

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