

Underrepresentation of Orthopaedic Surgeon Reviewers on NIH-NIAMS Study Sections

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INTRODUCTION: The National Institutes of Health (NIH) is one of the largest funders of medical research in the U.S. with an annual budget of \$45 billion in 2022. The NIH plays a pivotal role in funding orthopedic research via the National Institute of Arthritis and Musculoskeletal Skin Diseases (NIAMS), which in 2022 received a total of \$655 million. These funds are used to fund the vast majority of musculoskeletal and skin diseases research in rheumatology, orthopedic surgery, dentistry, physical therapy, and dermatology. Despite orthopedic surgeons treating many musculoskeletal conditions with some of the highest health and economic burdens, they may be underrepresented in the NIAMS study sections. If true, this underrepresentation could potentially affect the allocation of research funds towards investigations of clinically relevant orthopaedic and musculoskeletal problems. Thus, the purpose of this study was to quantify the representation of orthopaedic surgeons on NIAMS study section rosters over the past decade.

METHODS: This study was a retrospective review of publicly available NIAMS study section rosters from 2013 to 2022. Each year consisted of three cycles, with one roster per cycle. Data on year, reviewer, reviewer degree(s), and reviewer department(s) were collected. Additionally, information on whether orthopaedic surgeons were clinically practicing (or whether they were full-time researchers) was searched. The percentage of orthopedic surgeon reviewers per year was then calculated and recorded.

RESULTS: Results are summarized in Figure 1. From 2013 to 2022, there was an average of 76.2 reviewers per year with a range of 57 to 95. During that time, there was an average of 9.6 orthopedic surgeon reviewers per year (range, 6 to 13). There was an average of 8.3 active clinically practicing orthopedic surgeons per year in the NIAMS study sections (range, 6 to 10). Orthopedic surgeons comprised an average of 12.6% of all reviewers per year.

DISCUSSION: Over the past decade, orthopedic surgeons have comprised just 12.6% of the reviewers on NIAMS study sections. This statistic underscores their notable underrepresentation of orthopaedic surgeon reviewers in the research grant awarding process, potentially influencing the allocation of research funding towards investigation of clinically relevant musculoskeletal conditions and treatment solutions.

SIGNIFICANCE/CLINICAL RELEVANCE: This study identified an underrepresentation of orthopedic surgeon reviewers in the NIAMS grant funding process. These results call for more orthopedic surgeons to participate on NIAMS study sections to ensure a balanced and diverse pool of expertise and to mitigate the possibility of biases affecting funding decisions on orthopaedic research.

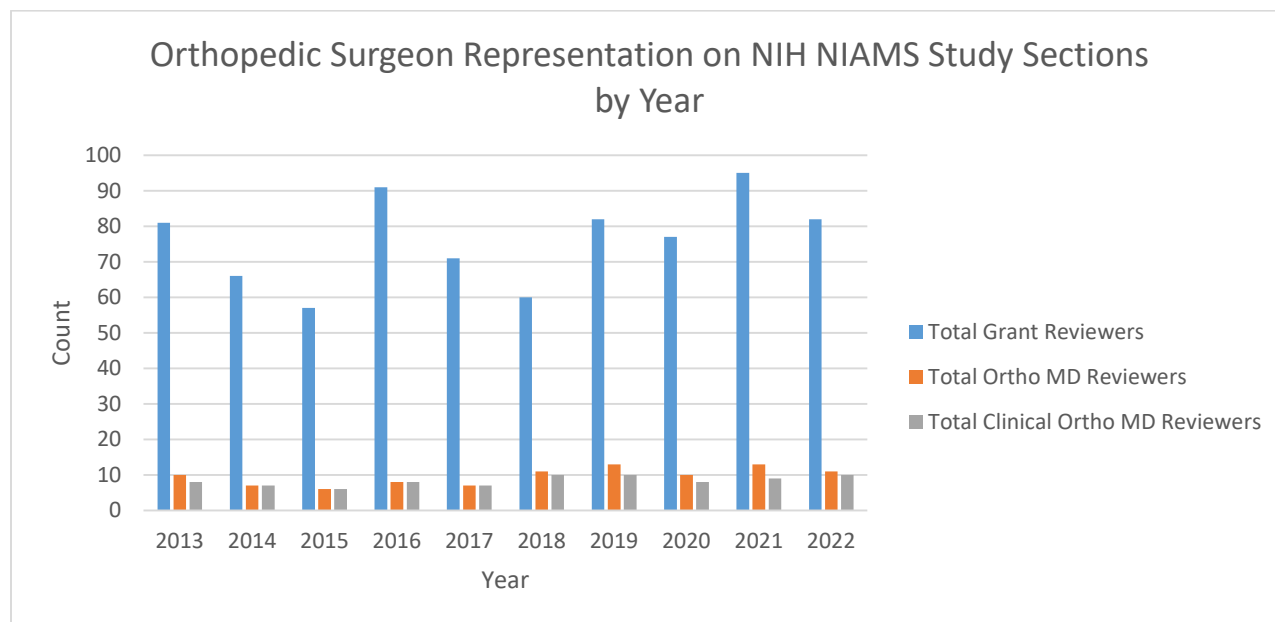


Figure 1: Total number of NIH-NIAMS study section grant reviewers per year compared to the total number of study section orthopedic reviewers and clinically practicing orthopedic surgeon reviewers per year.