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**In Referees We Trust? Controversies over Grant Peer Review in the Late Twentieth Century**

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While many accounts of external refereeing assume that it has been a consistent part of science since the seventeenth century, the practice developed far more slowly and haphazardly than many observers realize, and it was not until after the Second World War that "peer review" became considered an essential part of scientific publishing or grant-making. This talk will explore refereeing procedures at American grant-giving organizations in the twentieth century, focusing especially on the National Science Foundation and the National Institutes of Health. The creators of the NSF and the NIH put refereeing systems in place at their foundation. However, the form and function of these systems differed from modern "peer review" in several important ways. At the NSF the initial purpose of the referee process was to advise the NSF program directors, not to dictate funding decisions. At the NIH, small "study sections" devoted to particular subjects made recommendations to the NIH leadership, which rendered final judgments. However, beginning in the 1960s a series of controversies about NIH and NSF grants placed refereeing procedures at these organizations under more intense scrutiny. These debates culminated in six days of Special Oversight Hearings into the NSF's peer review process in the summer of 1975. Following the hearings, both the NSF and NIH reformed their review processes to place more emphasis on referees' opinions about grant proposals, making peer review increasingly responsible for decision-making. These controversies illustrate that refereeing continued to undergo significant changes in form and purpose throughout the twentieth century, and further suggest that both the scientific community and the public placed increased emphasis on the role of the referee during the late twentieth century.