

# Cambridge Elements

Elements in the Philosophy of Science  
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## SCIENTIFIC PROGRESS

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## Scientific Progress

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**Abstract:** What constitutes cognitive scientific progress? This Element begins with an extensive survey of the contemporary debate on how to answer this question. It provides a blow-by-blow critical summary of the key literature on the issue over the past fifteen years, covering the central positions and arguments therein. It also draws upon older literature, where appropriate, to inform the treatment.

The Element then enters novel territory by considering meta-normative issues concerning scientific progress. It focuses on how the standards involved in assessing progress arise. Does science have aims, which determine what counts as progress, as many authors assume? If so, what is it to be an aim of science? And how does one identify such things? If not, how do normative standards arise? After arguing that science does not have overarching aims, the Element proposes that the standards are ultimately subjective.

**Keywords:** scientific progress, scientific realism, meta-normativity, aim of science, scientific change

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