THE PREDICTION REVOLUTION

Science is in the midst of an underrecognized revolution. For centuries, prediction in science went hand in hand with understanding: knowledge of *what* advanced in tandem with knowledge of *how* and *why*. But in recent years AI tools have enabled scientists to make predictions that previously would have been impossible, even if they don't understand why those predictions hold true. Already, scientists have used these AI "oracles" to design new drug candidates and help paralyzed people regain the ability to speak. These are consequential achievements. But they also raise a difficult question: If science can improve lives with prediction alone, should we still seek to understand the universe? In *The Prediction Revolution*, Grace Huckins, a trained neuroscientist and award-winning journalist, explores how AI is reshaping the relationship between prediction and understanding – and challenges us to consider what science is really for. This title is also available as open access on Cambridge Core.

GRACE HUCKINS is an AI reporter at *MIT Technology Review* and a former lecturer at Stanford University. They hold a PhD in neuroscience and philosophy from Stanford and master's degrees from the University of Oxford. Huckins is a recipient of National Academies Eric and Wendy Schmidt Awards for Excellence in Science Communications. Their work appears extensively in numerous popular science publications including *WIRED* and *Scientific American*.

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AI and the Future of Science



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