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Robert Schneider* (robert.schneider@emory.edu), Dept. of Mathematics and Computer Science, Emory University, Atlanta, GA 30322. *Jacobi's triple product, mock theta functions, and the q -bracket of Bloch-Okounkov.*

In Ramanujan's final letter to Hardy, he wrote of a strange new class of infinite series he called "mock theta functions". It turns out all of Ramanujan's mock theta functions are essentially specializations of a so-called universal mock theta function $g_3(z, q)$ of Gordon–McIntosh. Here we show that g_3 arises naturally from the reciprocal of the classical Jacobi triple product—and is intimately tied to rank generating functions for unimodal sequences, which are connected to mock modular and quantum modular forms—through the action of an operator from partition theory, the q -bracket of Bloch–Okounkov, that has recently been studied by Zagier and other authors due to connections to quasimodular and p -adic modular phenomena. (Received September 12, 2016)