## 1100-11-204Frank Garvan\* (fgarvan@ufl.edu), Department of Mathematics, University of Florida, PO<br/>BOX 118105, Gainesville, FL 32611-8105. Universal mock theta functions and two-variable<br/>Hecke-Rogers identities.

We obtain two-variable Hecke-Rogers identities for three universal mock theta functions. This implies that many of Ramanujan's mock theta functions, including all the third order functions, have a Hecke-Rogers-type double sum representation. We find new generating function identities for the Dyson rank function, the overpartition rank function, the M2-rank function and related spt-crank functions. Results are proved using the theory of basic hypergeometric functions. (Received February 08, 2014)