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**Isabella Novik\*** ([novik@math.washington.edu](mailto:novik@math.washington.edu)), Department of Mathematics, University of Washington, Box 354350, Seattle, WA 98195-4350, and **Edward B Swartz** ([ebs22@cornell.edu](mailto:ebs22@cornell.edu)), Department of Mathematics, Cornell University, Ithaca, NY 14853-4201. *A variety of recent results concerning  $f$ -vectors of manifolds.*

We discuss several recent results on the face numbers of simplicial manifolds. For the class of manifolds with polytopal links these include the proof of (1) Kalai's manifold  $g$ -conjecture and (2) Kuhnel's upper bound conjecture on the Betti numbers of manifolds. (Received January 18, 2009)