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**R. Sean Bowman\*** ([sbowman@math.utexas.edu](mailto:sbowman@math.utexas.edu)). *Knots in handlebodies with handlebody surgeries.*

Let  $K$  be a knot in a handlebody  $H$  of genus  $g$ . It is a natural question to ask when  $K$  has a nontrivial Dehn surgery yielding a handlebody. We say that  $K$  is 1-bridge in  $H$  if  $K$  is isotopic to  $\alpha \cup \beta$ , where  $\alpha \subseteq \partial H$  is an arc,  $\beta$  is properly embedded in  $H$ , and there is an arc  $\beta' \subseteq \partial H$  such that  $\beta \cup \beta'$  bounds a disk. When  $g = 1$ , so that  $H$  is a solid torus, Gabai noted that in order to have a nontrivial surgery yielding a solid torus,  $K$  must be 1-bridge. Wu conjectured that this should be true when  $g > 1$  as well. In this talk we give examples of knots in genus 2 handlebodies which have nontrivial handlebody surgeries but which are not 1-bridge. (Received September 21, 2011)