1067-57-1497   **Michael B. Henry*** (`mbhenry@math.utexas.edu`), Department of Mathematics, The University of Texas at Austin, 1 University Station, C1200, Austin, TX 78712. *Connections between Floer-type invariants and Morse-type invariants of Legendrian knots.*

We define an algebraic/combinatorial object on the front projection Σ of a Legendrian knot called a Morse complex sequence, abbreviated MCS. This object is motivated by the theory of generating families and provides new connections between generating families, normal rulings, and augmentations of the Chekanov-Eliashberg DGA. In particular, after placing an equivalence relation on the set of MCSs on Σ we describe a surjective map from the equivalence classes to the set of chain homotopy classes of augmentations of L_Σ, where L_Σ is the Ng resolution of Σ. In the case of Legendrian knot classes admitting representatives with two-bridge front projections, this map is bijective. We also exhibit two standard forms for MCSs and describe their usefulness. The definition of an MCS and the equivalence relation originate from unpublished work of Petya Pushkar. (Received September 21, 2010)