

## **Going the distance: A basinwide, high-frequency allostratigraphic framework for the Upper Cretaceous Colorado Group, Western Canada Foreland Basin**

**Jessica A. Flynn<sup>1</sup> and Burns A. Cheadle<sup>1</sup>**

<sup>1</sup>*Western University, London, Ontario*

### **Abstract**

The Upper Cretaceous Colorado Group is a mudstone-dominated sequence in the Western Canada Foreland Basin. A high-resolution allostratigraphic framework analysis of the succession showed allomembers present in the foredeep condensing toward the forebulge region. Several of the major allostratigraphic surfaces are discontinuous and do not extend into the backbulge. The foredeep and forebulge successions are mudstone-dominated. Backbulge successions become carbonate-rich and bentonite beds increase in frequency relative to the foredeep. The lithologic differences and discontinuous nature of allostratigraphic surfaces observed between the WCFB segments suggests forebulge dynamism played a significant role in stratigraphic preservation and depositional differentiation of the Colorado Group.