Yanping Ma* (yma@lmu.edu), CA. The attitudes of students in calculus for life science toward Mathematics in their careers and some calculus applications in real life. Preliminary report.

We developed an instrument to help identify the degree to which Life Science students' value mathematics and calculus skills in their prospective careers. There are five aspects measured, including positive attitude towards the importance and relevance of mathematics/calculus towards their future career, as well their level of confidence, anxiety, and enjoyment about mathematics/calculus. This type of tool would support the quantitative tracking of attitudinal changes on students in Life Science over time and attitudinal comparisons across various subpopulations, including effects based on modifications of pedagogy. The instrument has been validated, and we started to incorporate individual worksheets with real medical/health/chemistry related applications in the course. We will report some preliminary results collected by our instrument, and examples about our special worksheets in the meeting. (Received September 21, 2016)