1116-97-2499　　　　　**Katherine M. Kinnaird*** (`kkinnair@macalester.edu`), Macalester College, Department of Mathematics, Statistics, and Computer Science, Saint Paul, MN 55105. *TRAIn Method: A new lab model for training undergraduates in STEM fields.* Preliminary report.

Inspired by the transition that undergraduate students make from college to any kind of research position, such as being a graduate student, a member of an R&D department, or a new hire at a start-up, the ***TRAIn method*** seeks to train students to be excellent researchers in any field, by requiring students to (T)ry, (R)ead, (A)sk, and (In)corporate. As conceptualized, the TRAIn method seeks to provide a low risk environment for students to push at the boundaries of their knowledge and practice the skills they will need to conduct original research. The four parts of the TRAIn method can be applied to any field of expertise. This method is crafted for students who are enthusiastic and reflective learners, regardless of students' existing knowledge or skills in the field of choice.

In this talk, we present The Data Science TRAIn Lab (dsTRAIn) that is the first lab of this kind and seeks to expose undergraduate students to Data Science and Machine Learning using the TRAIn method. In just one term, dsTRAIn at Macalester College started six machine learning projects, led paper discussions with two machine learning researchers, and read seminal papers on topics from spectral clustering to topic modeling. (Received September 22, 2015)