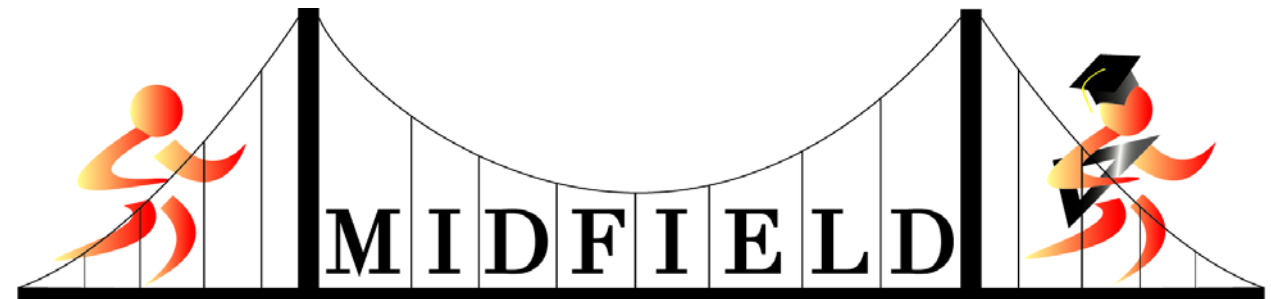# Accessing MIDFIELD:
A Workshop for R beginners

FIE 2019

Wednesday October 16, 2019 5 – 8 pm

Multiple-Institution Database For Investigating Engineering Longitudinal Development

Workshop Agenda

Min	Topic
10	Introductions and Objectives
5	The data structures in MIDFIELD and midfieldr
30	Finding stories in the data
35	Starting with R (tutorial)
15	— break —
20	Elements of effective graphs
5	Introduce midfieldr
50	Starting with midfieldr (tutorial)
10	Next steps

Facilitators

Matthew Ohland, MIDFIELD Director/PI

   Associate Head and Professor of Engineering Education, Purdue

Russell Long, MIDFIELD Managing Director

Richard Layton, MIDFIELD Data Display Specialist

   Professor of ME, Rose-Hulman

Marisa Orr, MIDFIELD Associate Director

   Assistant Professor of Mechanical Engr/ Engr & Science Ed, Clemson

Susan Lord, MIDFIELD Institute Director

   Professor and Chair of Integrated Engineering, University of San Diego

Facilitators

Hasan Al Yagoub, Graduate Research Assistant, Engineering Education, Purdue

Hossein Ebrahiminejad, Graduate Research Assistant, Engineering Education, Purdue

Workshop Objectives

By the end of this workshop, participants should be able to

- Describe key variables in the MIDFIELD data

- Select academic programs and populations to study

- Use **midfieldr**, an R package specifically designed for use with MIDFIELD, to compute persistence metrics

- Explore and tell a story from MIDFIELD data Explain key features of effective data displays