

# HOLISTIC STEM FACULTY DEVELOPMENT: COLLABORATORY & RESEARCH AGENDA



High, Lee, and Linder recently established a *STEM Faculty Development Collaboratory (SFDC)* housed at Clemson University. The SFDC engages personnel from research, educational, government, industry, foundations and other areas in the work of STEM faculty development across the country and internationally. Members of the collaboratory participate in a variety of activities such as research projects, delivery of faculty development, engagement in collaborative work at universities, and a number of other projects. Most recently, the SFDC delivered an NSF CAREER proposal workshop for STEM graduate students and faculty.

If you are *interested in contributing to the SFDC* or getting more information, please email our team at:

STEMFACDEV@clemson.edu



## RESEARCH AGENDA AND WORKSHOP

Expectations for faculty members in the 21<sup>st</sup> century are high. Early career STEM faculty are expected to establish a sustainable research trajectory, a teaching practice, and a leadership role all while pursuing tenure success. Many colleges and universities have established faculty development programs, but there remains a deficiency in *holistic professional support* (for *teaching, research, leadership, service*) that integrates these disparate professional activities and aligns them with desired individual and institutional goals, especially for faculty in STEM. The research agenda work is designed to bring together multiple stakeholders to begin to establish a research agenda for holistic STEM faculty development. *See back for research agenda.*

If you are *interested in contributing to the research agenda development*, please email our team.

### Upcoming presentations and conferences

*ASEE Poster and Paper*: Lee, D.M., Stefl, S.K., Linder, S.M., Lee, C.M., Jamil, F.M., High, K.A. (2017). How Many Hats Do You Wear: Building Research Capacity for STEM Faculty Development Workshop. *Poster Monday from 9:45 to 11:15 in the Exhibit Hall*

*FIE Special Session and Paper*: Stefl, S.K., Martin, J.P., Linder, S.M., Lee, C.M., High, K.A. (2017). Special Session: STEM Faculty Development Research Agenda. *Let us know if you are attending and interested in collaborating.*

*POD NETWORK CONFERENCE*: We will be there for informal discussions and connection. *Let us know if you are attending and interested in collaborating.*

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# Preliminary Research Agenda

**THREAD ONE - INPUTS**

The thread of holistic faculty development inputs focuses on topics related to the characteristics of faculty members and institutions that serve as barriers or supports to the adoption and implementation of holistic STEM faculty development programs.

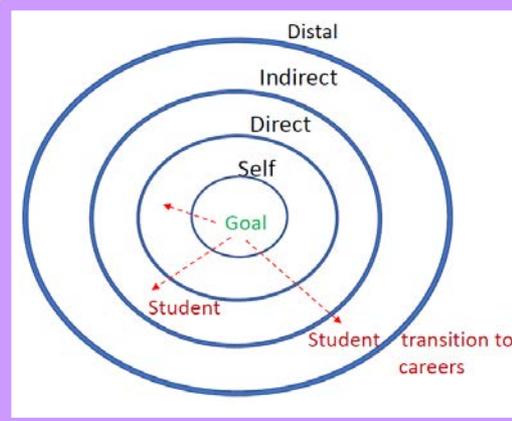
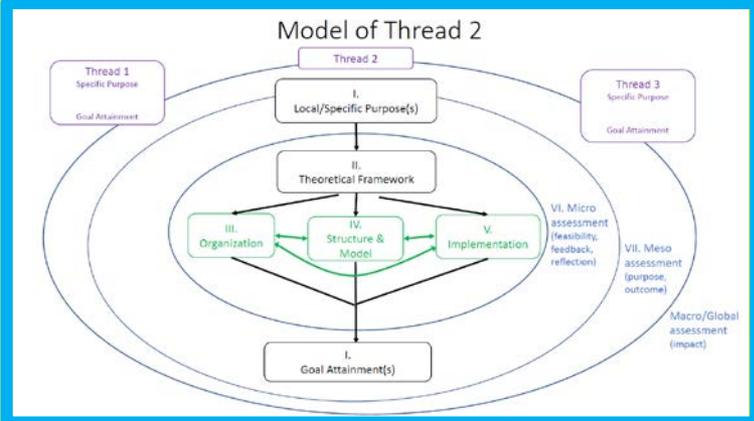
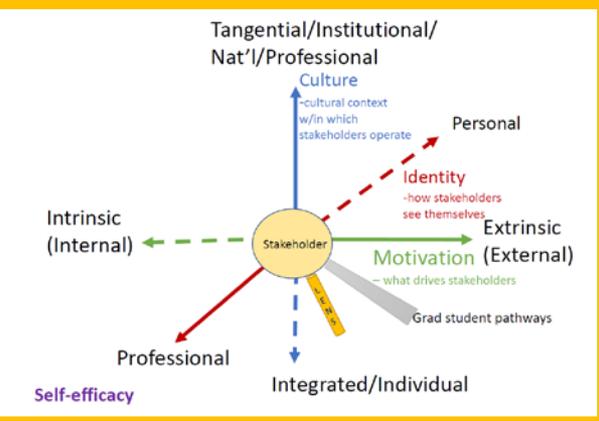
**THREAD TWO - MECHANISMS**

The mechanisms/processes thread focuses on topics related to the actual implementation of STEM faculty development and we consider the potential models or structures of STEM faculty development that are currently in place or conceptualized in theory.

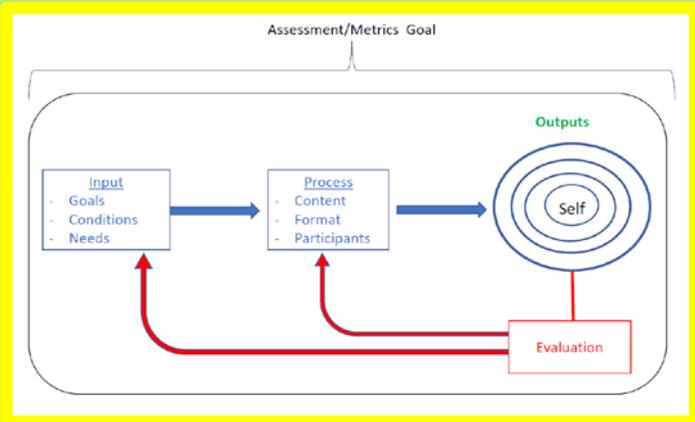
**THREAD THREE - OUTPUTS**

The thread of outputs focuses on how to best understand the influence of STEM faculty development on identity in relation to faculty development, and how faculty development influences overall faculty wellbeing, career satisfaction, work-life balance, etc.

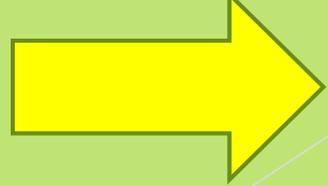
Participant visualization of threads



Participant visualization of how threads fit together



Next steps and need for collaborators



National Research Agenda Draft