Attachment 7: Mapping Data Sources to Hallmarks of Success

KEY:

- TFS= HERI- The Freshman Survey
- CSS = HERI- College Senior Survey
- FAC = HERI- Faculty Survey
- FAC-STEM = HERI- Faculty Survey STEM Module

- FAC-MENTOR = HERI- Faculty Survey Mentoring Module
- D-SAFS = DPC Student Annual Follow-up Survey
- D-FAFS = DPC Faculty Annual Follow-up Survey
- NRMN FUP = NRMN Annual Follow-up Survey

Domain	Elements	Hallmarks	Data Source / Measure
Student	High academic self-efficacy	STU-1	• TFS • CSS • D-SAFS
	High self-efficacy as a researcher	STU-2	• TFS • CSS • D-SAFS • NRMN FUP
	High science identity	STU-3	• TFS • CSS • D-SAFS • NRMN FUP
	Satisfaction with quality of mentorship	STU-4	• CSS • D-SAFS • NRMN FUP
	Perceived sense of belonging within the university	STU-5	• CSS • D-SAFS
	Perceived sense of belonging within the research community	STU-6	• TFS • CSS • D-SAFS • NRMN FUP
	Intent to pursue a career in biomedical research	STU-7	• TFS • CSS • D-SAFS • NRMN FUP
	Entry into an undergraduate biomedical degree program	STU- 8	• TFS • CSS
	Persistence in biomedical degree or other formal research training program	STU-9	• CSS • D-SAFS • NRMN FUP

Domain	Elements	Hallmarks	Data Source / Measure
Student	Frequent receipt of mentoring to enhance success in the biomedical pathway*	STU-10	• CSS • D-SAFS • NRMN FUP
	Participation in mentored or supervise biomedical research	STU - 11	• CSS • D-SAFS • NRMN FUP
	Evidence of competitiveness for transitioning into the next phase in the biomedical career pathway	STU-12	• TFS • CSS • D-SAFS
	Participation in academic or professional organizations related to biomedical disciplines	STU-13	• CSS • B–SAFS • NRMN FUP
	Evidence of excelling in biomedical research and scholarship (*submit applications & receipt of awards, poster/ paper presentations, peer-reviewed publications*)	STU-14	• D-SAFS • NRMN FUP
	Strong academic and professional networks	STU-15	• CSS • D-SAFS • NRMN-FUP
	Completion of biomedical degree or other formal training program	STU-16	• CSS • D-SAFS • NRMN FUP
	Application and acceptance to a subsequent research training program in a biomedical discipline	STU-17	• CSS • D-SAFS • NRMN FUP
	Entrance into a subsequent research training program in a biomedical discipline	STU-18	• CSS • D-SAFS • NRMN FUP
Faculty	High self-efficacy as an instructor in a biomedical field	FAC-1	• FAC • FAC-STEM • D-FAFS
	High self-efficacy as an instructor to a diverse group of biomedical students	FAC-2	• FAC • FAC-STEM
	High self-efficacy as a mentor to biomedical research trainees	FAC-3	• FAC • FAC-MENTOR • D-FAFS

Domain	Elements	Hallmarks	Data Source / Measure
Faculty			• NRMN FUP
	High self-efficacy as a mentor to diverse group of biomedical research trainees	FAC-4	• FAC • FAC-MENTOR • D-FAFS • NRMN FUP
	Frequently mentors students, post-docs, and/or more junior faculty on biomedical related issues	FAC-5	• FAC • FAC-MENTOR • D-FAFS • NRMN FUP
	High self-efficacy as an independent biomedical researcher	FAC-6	• D-FAFS • NRMN FUP
	High self-efficacy in the ability to secure external funding	FAC-7	• D-FAFS
	Engaged in activities to secure research or research training funding	FAC-8	• FAC • D-FAFS • NRMN FUP
	Securing research or research training funding	FAC-9	• D-FAFS • FAC
	Evidence of scholarly productivity	FAC-10	• FAC • D-FAFS • NRMN FUP
	Evidence of professional recognition and service	FAC-11	• FAC • D-FAFS • NRMN FUP
	Strong academic and professional networks	FAC-12	• FAC • D-FAFS • NRMN
	Advancement to next career stage	FAC-13	• FAC • D-FAFS
	Advancement to leadership positions in biomedical research and research training	FAC-14	• FAC • D-FAFS
	Evidence of receiving training in areas to foster inclusive research training environments	FAC-15	• FAC
	Strong self-efficacy to act as a change agent to enhance diversity in biomedical research and research training environments	FAC-16	• FAC

Domain	Elements	Hallmarks	Data Source / Measure
	Uses evidence-based practices in teaching and mentoring	FAC-17	• FAC • FAC-STEM
Institution	Commitment to efforts that create, enhance, and/or maintain diversity and inclusion at all levels of the institution	INST-1	• FAC
	Evidence of creating, enhancing, and/or maintaining diverse, inclusive, and culturally appropriate research and research training environments	INST- 2	• FAC • BUILD Case Study
	Demonstrated institutional commitment to creating, enhancing, and/or maintaining the diversity of biomedical faculty on campus by recruiting a diverse pool of potential applicants	INST-3	FAC
	Implementation of sustainable institutionally supported intra-institutional activities to achieve positive outcomes related to biomedical research capacity building and faculty development	INST-4	• FAC
	Enhanced inter-institutional collaborations to achieve positive outcomes related to biomedical research, research training, and faculty development	INST-5	• FAC
	Implementation of sustainable institutionally supported activities to achieve positive outcomes related to biomedical research training	INST- 6	• FAC
	Enhancing or maintaining the diversity of students, e.g. those from nationally underrepresented groups to pursue degrees in biomedical fields	INST-7	• Case Study Questions • IR Data • IPEDS
	Demonstrated institutional commitment to efforts that sustain the interest of trainees from all backgrounds pursuing degrees in biomedical fields that increase persistence	INST-8	• FAC
	Employs evidence-based approaches to establish and attain goals for graduation rates, time-to-degree, and the ability to transition to biomedical graduate and professional degree programs for students from all backgrounds	INST-9	• IR Data • IPEDs
	Demonstrated institutional commitment to implementing and sustaining mentoring practices that promote the development of research- oriented students from all backgrounds	INST-10	• Case Study

Domain	Elements	Hallmarks	Data Source / Measure
	Institutional infrastructure to track regular reporting of student demographics and outcomes with respect to biomedical fields.	INST-11	• Case Study