

Supplemental Digital Appendix 1

Four Social Science Theories That Underpin the Training of Career Coaches in the The Academy for Future Science Faculty Program

Theory ^{References}	Key themes
Identity formation ¹⁵⁻¹⁷	<p><i>Stereotype threat:</i> When concerns over confirming a negative stereotype cause anxiety and thus affect performance (e.g., test performance, working memory). This can play a role particularly for students in groups typically underrepresented in medicine and biomedical science (URM) and female scientists.</p> <p><i>Self-recognition:</i> When an individual needs to understand how his or her identity as a scientist may interact with his or her other identities, including gender and race/ethnicity.</p> <p><i>Cultural code-switching:</i> When individuals must reconcile potentially conflicting identities in different contexts and social settings in order to fit in.</p> <p><i>Recognition by others:</i> When an individual's self-recognition is affected by the extent to which others (e.g., mentors) see them as a scientist.</p>
Social Cognitive Career Theory ^{16,18}	<p><i>Self-efficacy:</i> The extent to which an individual believes in his or her ability to successfully perform career-relevant specific tasks and objectives.</p> <p><i>Vicarious learning:</i> When an individual learns from watching the positive or negative outcomes of the actions of others.</p> <p><i>Outcome expectations:</i> When an individual's decisions are informed by his or her understanding of the potential outcomes of that decision. Teachers and mentors are important resources in providing accurate information about potential outcomes.</p>

Cultural capital¹⁹⁻²¹

Cultural capital: Non-economic assets that create social hierarchies and enable social mobility. The three types of cultural capital are as follows: embodied (e.g., communication skills), objectified (e.g., academic/scientific books) and institutionalized (e.g., academic degrees)

Field: Any structure of social relations (e.g., an academic discipline or a scientific society) within which there is conflict and negotiation concerning what constitutes legitimate cultural capital.

Habitus: The sum of dispositions and behaviors that exemplify a particular social role or identity (e.g., the behaviors or dispositions of a physician or scientist).

Communities of Practice^{22,23}

Situated learning: When learning takes place in the same social context within which it is applied.

Domain: The shared interest or objective of the community, to which collaborative activities are oriented.

Legitimate peripheral participation: When newcomers start by taking on lower-risk projects or tasks but ones that contribute to the shared goals of the community.