Stimulus Questions

A. Core questions (relevant to all stage-model stages; all groups should address these):

1. What skills, knowledge, and attitudes are essential to becoming a successful clinical scientist at this stage of the intervention science model as well as across stages? [What conceptual and behavioral skills do clinical science students need to acquire before they can do meaningful research and before many of them can train others to implement or study clinical interventions?] What knowledge and skills associated with other Stages are helpful to clinical scientists concentrating at this stage?

2. What specific research and clinical training experiences (e.g., courses, practica, mentorship, community-based experiences) best prepare students to become successful clinical scientists at this stage as well as across stages? In what settings and at what phase(s) of training (doctoral, internship, post-doctoral) are particular training experiences most feasible and impactful?

3. What are some noteworthy exemplars of training methods in this arena?

4. How can we reliably evaluate short and longer-term outcomes of specific clinical science training activities?

5. What are the main impediments to implementing key clinical science training activities? What are some potential resolutions?

B. Supplemental stage-specific questions (optional for group discussion; many relevant to some stages more than others)

1. How much breadth, both within and beyond psychology, is appropriate for clinical scientists concentrating at a particular bandwidth of the stage-model spectrum? How does this vary by stage?

2. What is the place of clinical experience in preparing students to conduct research at this stage? What kind(s) of clinical experience is necessary (e.g., exposure to a particular target disorder or EBT) and how much? training in supervising others?)

3. What is an appropriate balance of didactic and experiential training in this stage? How does this vary by training phase?

4. What is the place of theory (regarding both problems and change) at this stage of the intervention science model? What should students learn about how theory guides not only the constructs we assess, but also the methods used to assess them and the interpretation of findings?

5. What methodological and statistical approaches are most relevant to research at this stage? How can we help students master the logic of research design (e.g., appropriate controls, threats to internal or external validity, measurement validity, adaptive and SMART designs) along with the increasingly sophisticated quantitative methods they encounter?

6. What is the place of idiographic (single case) and qualitative methods at this stage of the intervention science model? What should students know about these methods and their relationship to traditional quantitative methods?
7. What should students know about studying *mechanisms, mediators, and moderators* of psychological interventions? Is this more or less important at some stages than others? How relevant is the distinction between *common and model-specific change processes* at this stage?

8. What should students learn about *intervention fidelity* at this stage of the intervention science model? Is this more or less important at some stages than others?

9. What should students know about *cultural and ethical considerations* in research at this stage?

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**C. Supplemental questions that transcend stages (optional for group discussion)**

1. In the current era of team science, what is the place and importance of “*collaborative fluency*” (conversance with the discourse of non-psychological disciplines, ranging from genetics and molecular chemistry to organizational science and public health)? How can trainees acquire such fluency?

2. What experiences best prepare trainees to *think critically* about what they and others do in the realms of theory, research, and practice (assuming this is the sine qua non of good clinical science).

3. What should students know about the distal and recent *history of psychosocial and pharmacological treatments*?

4. What is the place of *DSM diagnosis and traditional psychological assessment* (e.g., testing) in intervention science training? How can we better connect assessment and intervention?

5. What is the *role of biology* in behavioral intervention development? How can biologically oriented research inform behavioral intervention – and conversely, how can behavioral research inform biomedical intervention? What examples best illustrate the relevance of biological or psychophysiological measurement to guiding intervention selection or documenting clinical change?

6. What considerations should guide the *balance between basic (e.g., psychopathology) and applied (e.g., intervention or prevention) research* in a model clinical science curriculum? Is it conceivable that a good program could emphasize one to the near exclusion of the other?

7. Does current clinical science training give sufficient attention to *implementation and dissemination* of evidence-based interventions to community settings? What priority should we give to studying the social contexts and processes relevant to both initial and sustained adoption of these interventions? Should dissemination efforts aim to install evidence-based technologies in community settings or adapt these to improve usual care?

8. What is the place of *technology* in intervention science training? How can we use technology to help students acquire relevant conceptual and behavioral skills? How can they learn to assess and optimize the role of technology in their own research programs?

9. What should constitute a quality “*clinical hour*” in clinical science doctoral and internship programs? Can or should we expand the definition beyond face-to-face client contact to include other applied clinical science activities (e.g., supervision and training of master’s level practitioners)?