

Module 3 – Addressing Historical Challenges in SCI Research

Review of Key Points

This concludes Module 3: Addressing Historical Challenges in SCI Research. Before you take the quiz, let's review some key points:

- Challenges that make it difficult to translate basic research into successful clinical trials and treatments include:
 - The differences in animal models that are used to study biology and those used to test treatments.
 - The differences between the ways that physical and sensory function are tested in animals and people.
 - Unanswered translational questions about how to predict or calculate the effects we might see in humans based on what we observe in animal studies.
 - Understanding the real-world aspects of living with SCI that are needed to answer translational questions and fill in other gaps between animal studies and studies in people
- Clinical trials in SCI face challenges with finding enough participants for several reasons:
 - SCI is relatively rare compared with other health conditions.
 - The wide variation in the effects SCI has on different people, even when their level of injury is the same, can make it necessary to run bigger trials with more participants so that individual differences don't sway the study results.
 - Acute trials have additional challenges, including difficulty obtaining informed consent, the feasibility of treating someone within a short period of time after injury, and difficulty discerning whether improvements in function are spontaneous or the result of a treatment.
 - Chronic SCI trials often have trouble recruiting and retaining participants because the logistical, time, and financial burdens of participation are high.
- Research advocates and researchers can work together to design studies that have fewer barriers to participation, including:
 - Helping to evaluate the risk and benefits of the intervention.
 - Considering the trial design to maximize adherence and reduce the burden of participation.

- o Reviewing the design from a SCI lived experience perspective.
- o Improving communications with candidates and participants.
- o Understanding and applying the SCI Community preferences.