

Training the Regenerative Medicine Workforce for the Future: A Workshop

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Questions for the Panel, Members, and Audience

- At a national level, how are we going to coordinate all of these exciting initiatives? What actions can we take as the Forum on Regenerative Medicine?
- Are there any closing comments from the speakers in either session about the future of the regenerative medicine workforce?
- What will you do differently as a consequence of this discussion today?

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Recap of Key Themes Throughout the Workshop

- Need for certification (but not micro-certification)
- Need for a diverse workforce (all types of diversity - age, race, gender, location, etc)
 - Emphasis on engaging students by relating regenerative medicine to their everyday lives
- Importance of mentorship

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Recap of Key Themes Throughout the Workshop – Certification

- Key role for industry in shaping certification
- Need standardization with a unified curriculum, validated by industry
- Could help retain skilled technical workers in the field
- Could be an opportunity for an organization to take a leadership role to avoid certification efforts from becoming fragmented

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Recap of Key Themes Throughout the Workshop – Diversity

- Eliminating entrance requirements in community colleges opens up opportunities for certificates, degrees, and other training for all, notably older students and veterans
- Building awareness of regenerative medicine with the public and teachers, administrators, mentors
- Importance of recruiting earlier in the field, including high school students
 - Students can be engaged by doing something real, hands-on, and meaningful
 - Especially true for younger students/workforce who aren't familiar with the field

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Recap of Key Themes Throughout the Workshop – Mentorship

- Need to uncouple trainees from federal grants that require productivity and provide incentives to mentors. Protected effort?
- Helpful to provide training for potential mentors on how to provide high quality mentorship to students and trainees
 - T32 training program as an example
- Mentors in various stages and places - workplace, societies
- Encourage mentorship beyond your direct supervisor. It's not just science but also career mentorship. Check ins. Need for an advocate
- Emphasis that mentorship is a two way street - mentors need to be willing to engage and mentor while students/trainees play a role in their success and seek mentors
- Environment also matters

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Key Takeaways from Session II: Early Career Perspectives

- Experiencing personally or knowing someone who experienced injury and needed regenerative medicine treatment/therapy was a common reason for inspiring a career path in this field
- **Challenges** that need attention
 - finding the right fit to support learning and career growth
 - transitioning from academic to industry (understanding corporate decision-making)
 - access to diverse mentors, perspectives, resources
 - mentors to coach, guide, identify opportunities, deconstruct the “hidden curriculum” beyond the technical science of the field
 - academic- and industry- specific toolkits for professional development

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Key Takeaways from Session II: Early Career Perspectives

- Potential **solutions** to help support students and other early-career individuals
 - Decoupling support for students from traditional research grants to enable students to have more diverse training and professional development opportunities
 - Incentives from institutions or organizations that fund grants could help encourage investigators to invest in mentoring
 - A shift in culture and expectations for PIs could help support this change as well
 - Using informational interviews with professionals working in the field to understand their roles, career paths, and work culture
 - Solution to burnout is not resilience but rather balance

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Highlights from Session II: Early Career Perspectives

- Key role for individual mentorship
 - Need training for people who will be in a mentoring role
- What early career individuals can do
 - Social media as a way to find inspiration and connections
 - Important to take initiative in making connections
 - Attending conferences with a purpose; preparing ahead of time
 - Having specific asks or goals for reach-outs to potential mentors

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What's Next

- Videos and slides from today will be posted to the workshop website in a couple of weeks
- A proceedings-in-brief will be published by the National Academies in 2023
- Potential for follow up discussions/workshops that dig deeper into key initiatives
- Please provide your feedback by completing the post-workshop survey (QR code below or check your email for the link)

Thank you for participating with the Forum on Regenerative Medicine!



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