

## Leadership Spotlight: Dr. Michael Gustafson, Ph.D.

Dr. Michael Gustafson, Ph.D.  
Laboratory Director, Nyberg Human Cellular Therapy Laboratory  
Associate Professor of Laboratory Medicine and Pathology  
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1. How long have you been an ISCT member?

*I have been a member since 2012.*

2. What is your educational history?

*I earned my Ph.D. in Biomedical Sciences—Biochemistry/Molecular Biology at the Mayo Clinic Graduate School of Biomedical Sciences in the lab of Ed Leof, Ph.D., and completed my post-doctoral fellowship at the Fred Hutchinson Cancer Research Center in the area of cancer signaling/cell cycles in Dr. Bruce Clurman's laboratory.*

3. What was your first job in cell & gene therapy?

*In 2006, I joined the Mayo Clinic Human Cellular Therapy Laboratory (now the Immune, Progenitor, and Cell Therapeutics Lab) as a development technologist under the leadership of Drs. Dennis Gastineau and Allan Dietz.*

4. Are there any career transitions that were challenging and/or exciting for you looking back?

*Challenging, absolutely. I made the difficult decision to transition from my post-doctoral fellowship to the development technologist position in the more clinical Cell Therapy Lab. As a Ph.D., there are expectations that you move on to your own independent research lab, and so I had to come to terms with my own perceived "failures" for not staying on that path. However, I was able to learn cell manufacturing, quality, regulatory, and other aspects of cell therapy. The time I spent in the IMPACT lab really prepared me well for my current position leading the Cell Therapy Lab at the Mayo Clinic Arizona campus.*

5. What would you say have been your favorite projects to work on?

*I really enjoy working in the lab. The hands-on manufacturing that I was doing for our patients enrolled in clinical trials was very rewarding for me personally. Essentially, I was making their drug—I mean, how cool is that? I also am passionate about understanding our cell therapy drug*

*products and how the patient's immune system influences the response to the cell therapy. We are currently expanding our methodologies to address these aspects of cell therapy. Finally, I am not in the lab as much as I was before, but I do really enjoy teaching and mentoring our great team and passing along my experience to those now currently working in the lab.*

6. What are your thoughts on formal versus informal education in the cell & gene therapy field?

*I never really had a formal education in cell & gene therapy other than attending meetings, workshops, and seminars. Most of what I have learned has come through on-the-job training. So, for me, experience has been the best teacher. That being said, I think there should be more opportunities for students in graduate and/or medical school to add quality and regulatory training to their education. There is certainly a need in the field for people trained in cell and gene therapy.*

7. Any advice you would give to an early stage professional now?

*Never give up an opportunity to network or connect with someone. I know this can be hard to do, and I struggle with it too. But I have found expanding my network to be very helpful, whether it be connecting with someone with similar interests, potentially a new mentor, or a new job. These efforts do pay off. For those who are passionate about cell and gene therapy, the field is growing exponentially. This is a great time for you..... so get involved!*

8. How have you been involved in ISCT over the years?

*Aside from attending and presenting poster abstracts at the annual and regional meetings, I have been involved with the Immuno and Gene Therapy Committee since 2019. I have really enjoyed serving on this committee and interacting with the other members as we advocate and strategize how to move the field forward. I also had the opportunity to chair a plenary session at this year's virtual Annual Meeting.*

9. What would you say are the benefits you have seen from ISCT membership?

*Where do I start? There are many benefits of ISCT membership. I would suggest that networking and opportunities to serve on committees to advance ISCT related issues are the most significant benefits. I have learned quite a lot from colleagues outside of my institution on how they approach things from their different perspectives. I also have taken advantage of the excellent webinars that the ISCT provides as additional training material for me and our staff. Overall, I am very happy with my involvement in ISCT.*