Candidate: Regional Secretary, North America (2023-2026)

Nisha Durand, PhD
Process Development Manager
Mayo Clinic Florida
United States

Summary of academic and professional background:

I am currently the Process Development Manager at the Center for Regenerative Biotherapeutics at Mayo Clinic Florida. In this role, I am responsible for translating research processes into the cGMP environment, developing processes and techniques in support of all phases of cellular therapy product development and assembling relevant sections of the IND Application packet such as the CMC. I am involved in the generation of pre-clinical safety and efficacy data for various biotherapeutics and work closely with clinician-investigators to deliver novel therapies to various patient populations.

Prior to joining the Center of Regenerative Biotherapeutics, I completed a PhD in Biochemistry and Molecular Biology from Mayo Clinic Graduate School of Biomedical Sciences in 2017. For my doctoral thesis, I examined the role of protein and lipid kinases in focal adhesion signaling and cell migration in the context of cancer metastasis.

My research interest includes mechanisms of MSC potentiation and the elucidation of the body's immune response following MSC treatment.

Affiliated professional and commercial associations and any perceived or potential conflict of interests:

N/A

List of top notable contributions to the field (e.g. publications, patents, reports, products advanced to clinical trial or regulatory approval, asset development, mergers, acquisitions, etc.) from the last 10 years:

1. Molina SA, Davies SJ, Sethi D, Oh S, Durand N, Scott M, Davies LC, Wormuth K, Clarke D. Particulates are everywhere, but are they harmful in cell and gene therapies? Cytotherapy. 2022 Dec;24(12)
2. Erasmus DB, Durand N, Alvarez FA, Narula T, Hodge DO, Zubair AC. Feasibility and Safety of Low-Dose Mesenchymal Stem Cell Infusion in Lung Transplant Recipients. Stem Cells Transl Med. 2022 Jul
3. Durand N, Zubair AC. Autologous versus allogeneic mesenchymal stem cell therapy: The pros and cons. Surgery. 2021 Dec 1:S0039-6060(21)01097-
4. Durand, N., Mallea, J. & Zubair, A.C. Insights into the use of mesenchymal stem cells in COVID-19 mediated acute respiratory failure. npj Regen Med 5, 17 (2020).
5. Huang, P., Russell, A. L., Lefavor, R., Durand, N. C., James, E., Harvey, L., Zhang, C., Countryman, S., Stodieck, L., & Zubair, A. C. Feasibility, potency, and safety of growing

human mesenchymal stem cells in space for clinical application. NPJ microgravity, 2020 Jun 1. 6, (16).
6. Durand N, Russell A, Zubair AC. Effect of Comedications and Endotoxins on Mesenchymal Stem Cell Secretomes, Migratory and Immunomodulatory Capacity. J Clin Med. 2019 Apr 11;8(4).

Summary of involvement with ISCT in the past five years:

I have been in the Cell and Gene Therapy (C&GT) field for about five years, and I've been an ISCT member for most of that time. Since my affiliation with ISCT, I have participated in every annual meeting, and have been a member of the ESP committee for almost four years. Since August of 2022, I have served as co-chair of the ESP committee's Mentoring Working Group, where I coordinate the execution of the annual mentoring program which brings together ESPs with ISCT leaders.

As an ESP committee member, I assist with the planning of ESP-focused initiatives at annual meetings, and most recently contributed to the ESP Proceedings Manuscript from the 2022 ISCT annual meeting. At the last annual meeting in San Francisco, I also had the distinct honor of serving as the ESP co-chair for the Presidential Plenary. For the past two years, I served as an ESP representative on ISCT's Process Development and Manufacturing committee. In this committee, I contributed to an opinion piece about the nature of particulates in G&GT and assisted with the distribution of a related survey.

Summary of strategic vision for the Global Society:

If elected to a leadership role in ISCT, I will work diligently with other committee members in fulfillment of ISCT's mission "to drive the translation of all cellular therapies for the benefit of patients worldwide". The society's vision is in sync with my passion for translational and clinical research geared towards improved therapeutic outcomes in various patient populations.

As part of the N.A leadership committee, I would like to see an increase in the overall membership of this region, specifically of ESPs and underrepresented minorities. In addition to playing a more direct role in supporting the many ongoing initiatives of the committee, I hope to implement novel programming with a focus on education and training, mentorship, and community engagement ; all of which are critical for membership retention.

I am enthusiastic and eager to be of service to this organization in its quest for excellence and quality in the innovative and rapidly growing field of cell and gene therapy.