

AMY VAN DEUSEN, Ph.D.

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📍 Charlottesville, VA, USA

in avandeus

EDUCATION

PH.D. NEUROSCIENCE June 2016 – May 2024
University of Virginia | Charlottesville, VA, USA

M.S. BIOLOGICAL SCIENCES September 2007 – December 2008
University of California | Irvine, CA, USA

B.S. BIOCHEMISTRY August 2001 – May 2005
University of Virginia | Charlottesville, VA, USA

PROFESSIONAL EXPERIENCE

FREELANCE SCIENTIFIC EDITOR June 2015 – Present
Edanz Group | Fukuoka, Japan

- Execute substantive editing, copyediting, and proofreading of manuscripts for non-native English-speaking researchers specializing in molecular and cell biology, neurology, pharmacology, immunology, cancer, cardiology, nephrology, developmental biology, reproductive sciences, and advanced biomaterials
- Compose abstracts, research summaries, and cover letters to support author communications with peer-reviewed journals, grant-awarding bodies, and the media
- Assist authors with journal selection, identifying reviewers, and responses to peer review critiques
- Liaise with authors and fellow editors to ensure consistent application of relevant quality and ethical guidelines (e.g., Committee on Publication Ethics and International Committee of Medical Journal Editors)

DOCTORAL RESEARCHER June 2016 – May 2024
University of Virginia | Charlottesville, VA, USA

- Pioneered the use of mass cytometry to quantify high-dimensional protein expression in individual neural cells, including planning, conducting, and analyzing experiments to validate this novel approach
- Published two first-author manuscripts in *Nature Neuroscience*, the highest-impact journal in its field
- Supervised and trained more than a dozen graduate students, undergraduate students, and staff in mass cytometry and related molecular/cellular biology techniques
- Presented research at the Society for Neuroscience Annual Meeting (2018), UVA Brain Institute Symposia (2019–2020), UVA Neuroscience Graduate Program Retreat (2019–2022), and numerous other events
- Wrote R and Python scripts utilizing state-of-the-art algorithms to analyze single-cell transcriptomic and proteomic data for various neural and non-neural cell types

RESEARCH ASSOCIATE November 2013 – November 2014
University of Edinburgh | Edinburgh, UK

- Produced human embryonic stem cell (hESC)-derived midbrain dopaminergic neurons to support the development of a cell therapy product for Parkinson's disease at the Scottish Centre for Regenerative Medicine
- Co-authored a manuscript describing the genetic suitability of UK Stem Cell Bank hESC lines for the production of cell-based therapies
- Authored textbook chapter evaluating the compatibility of Good Manufacturing Practice (GMP) and Good Laboratory Practice with existing quality standards for advanced therapy medicinal products
- Wrote protocols compliant with GMP (21 CFR 210/211 and EudraLex Volume 4) for manufacturing stem cell-derived transplantation products from UK Stem Cell Bank hESC lines

BIOMEDICAL TECHNOLOGY CONSULTANT July 2012 – November 2013
Regenerative Medicine Strategy Group | Los Angeles, CA, USA

RESEARCH ASSOCIATE October 2010 – July 2012
California Stem Cell. Inc. (Aivita Biomedical) | Irvine, CA, USA

RESEARCH TECHNICIAN March 2009 – October 2010
University of North Carolina | Chapel Hill, NC, USA

LABORATORY SPECIALIST II October 2005 – August 2007
University of Virginia | Charlottesville, VA, USA

AWARDS

UVA BRAIN INSTITUTE PRESIDENTIAL FELLOWSHIP August 2018 – July 2020
University of Virginia | Charlottesville, VA, USA

NATIONAL SCIENCE FOUNDATION RESEARCH FELLOWSHIP September 2007 – December 2008
University of California | Irvine, CA, USA

SELECTED PUBLICATIONS

Van Deusen A, Goggin S, Williams C, Keeler A, Fread K, Gadani I, Deppmann C, and Zunder E. A developmental atlas of the mouse brain by single-cell mass cytometry. *Nature Neuroscience* [In press].

Keeler A*, Van Deusen A*, Cheng I, Williams C, Goggin S, Hirt A, Vradenburgh S, Fread K, Puleo E, Jin L, Calhan Y, Deppmann C and Zunder E. A developmental atlas of somatosensory diversification and maturation in dorsal root ganglia by mass cytometry. *Nature Neuroscience*. 2022;25(11):1543–1558.

Van Deusen A and McGary M. Overview of chemistry, manufacturing and controls (CMC) for pluripotent stem cell therapies. In: Childers M, ed. *Regenerative Medicine for Degenerative Muscle Diseases*. New York, NY: Springer. 2015:157–203.

Canham M, Van Deusen A, Brison D, De Sousa P, Downie J, Devito L, Hewitt Z, Dusko I, Kimber S, Murray H and Kunath T. The molecular karyotype of 25 clinical-grade human embryonic stem cell lines. *Nature Scientific Reports*. 26 Nov 2015;(5)17258.

Palau R and Van Deusen A. Compatibility of GxP with existing cell therapy quality standards. In: Vives J and Carmona G, ed. *Guide to Cell Therapy GxP: Quality Standards in the Development of Cell-Based Medicines in Non-Pharmaceutical Environments*. Waltham, MA: Elsevier. 2015:231–251.

Van Deusen A and Nasis O. Commercial opportunities for induced pluripotent stem cells. In: Sell S, ed. *Stem Cells Handbook*, Second Edition. New York, NY: Springer. 2013:177–199.

CORE SKILLS

- Biochemistry, Molecular Biology & Cellular Biology
- Neuroscience
- Pharmacology & Drug Discovery
- Immunology & Cancer Biology
- Computational Biology
- Stem Cell Technology & Regenerative Medicine
- Advanced Biomaterials
- Data Analysis & Visualization
- Scientific Communications
- Substantive Editing, Copyediting & Proofreading
- Biomedical Publishing Ethics
- APA, AMA, IEEE, Chicago Citation Styles
- Adobe InDesign, Illustrator & Acrobat
- Microsoft Office & Publisher
- LaTeX & Open Office
- R & Python