

JANINA M. JEFF, PhD, MS
Population Geneticist at Illumina (remote-NY)

* A complete CV is available upon request

SUMMARY: Inherently an educator and STEAMinist but formally a population geneticist and currently a Senior Bioinformatics Scientist at Illumina.

EDUCATION

Vanderbilt University, Nashville, TN **6/2007-5/2012**
Degrees: Doctor of Philosophy in Human Genetics, Masters in Applied Statistics
Spelman College, Atlanta, Georgia **8/2003-5/2007**
Degree: Bachelor of Science in Biology (Spanish minor)

EXPERIENCE

Illumina, Senior Bioinformatics Scientist **3/2018-Present**

Relevant Accomplishments and Responsibilities

- **Bioinformatics and Population Genetics Education-** *host trainings with customers and internal teams for population genomics, bioinformatics, and translational medicine applications of Illumina technology*
- **Population and Medical Genomics Content Scientist** - *led content development efforts for screening arrays resulting in >20 million units sold (including 23 and Me) in 2016 alone*
- **Illumina Ambassador**
Illumina sponsored the back cover of “The Network Journal” Winter Edition which I was the cover feature highlighting my work in diversifying STEM.
- **Leadership** *Led content development, meetings with consortia members, and sales activities for GSA and ASA consortiums*
- **Bioinformatics Liaison for Sales** *Supporting the sales team and leading technical discussions with customers’ contributions resulting in the highest revenue for genotyping arrays in Illumina’s history.*
- **Marketing** *Restructured marketing material to include more scientific content for competitive advantage*

Illumina, Global Bioinformatics Liaison **5/2015-3/2018**

Relevant Accomplishments

- **Developed, sold, and supported two products that resulted in largest array business history** - Scientific lead the content selection for the Global Screening Array and the Asian Screening Array
 - 22 million units sold (including 23&Me)
 - 2 invited presentations from relevant scientific meetings globally
- **Evolved Bioinformatics Array Support**
 - Developed the first “Bioinformatic Array” disk space on the Illumina compute cluster
 - Developed several pipelines and support tools that expedite sales globally
 - Developed annotation files for array portfolio to current evolving applications of arrays
 - Developed relationship with internal informatics teams for scientific feedback on current products
- **2016 Illumina Values Award Recipient** – *Awarded within six months of hire for collaborative work for the Global Screening Array.*
- **Promoted to Sr. Global Bioinformatics Scientist after two years**

Icahn School of Medicine at Mount Sinai School, Postdoctoral Fellow (Population Genetics) **1/2013- 11/2015**

Mentors: Erwin Bottinger, M.D. and Eimear Kenny, PhD

Relevant Projects and Milestones:

- **Mining thousands of ICD-9 codes to generate ancestry specific hypotheses** -*Work awarded and selected for ASHG 2015 poster award (top 1%) and ASHG 2016 platform presentation*
- **Use of surgical databases for pharmacogenomics** -*Work resulted in an invited oral presentation at the largest human genetics conference, ASHG (2014), a manuscript is currently in preparation.*
- **Various EMR-driven research via large consortia** -*Collaborations have resulted in 4 publications*

Vanderbilt Center for Human Genetics Research, Graduate Research Fellow 5/2008-1/2013

Mentor: Dana C. Crawford, PhD

Relevant Projects and Milestones:

- **The Genetics of Quantitative Traits Associated with Cardiovascular Disease-** *Dissertation work resulted in six first author publications and received several accolades.*
- **Pharmacogenomic Impact of ADRB2 Variation in Post-Operative Atrial Fibrillation** -*Work resulted in a first author publication and was featured in institution newsletter*

Spelman College RISE Program, Undergraduate Research Fellow 6/2005-5/2007

- **Bioinformatics: Epigenetic gene regulation in the bovine genome** - *Presented 3 poster presentations and one co-author publication*

ENGAGEMENT WITH THE GENOMICS COMMUNITY (20 of 35, links to relevant media)

Spotify - “ <i>In Those Genes</i> ”- a podcast using genetics and science as a vessel to dissect societal, cultural, and medical issues that impact the black community- selected as a winner for Spotify Podcast Bootcamp (3 of 18,000)	6/2018-Present
UPenn Keynote Speaker - “ <i>Human Screening Arrays: An Economic Solution for the Future of Precision Medicine and Powering Genomic Discoveries Across the World</i> ” -Philadelphia, PA	5/2018
Shero Summit-Keynote Speaker - “ <i>The Doctor Is In</i> ”-Chicago, IL	4/2018
University of Pittsburg Keynote Speaker -“ <i>The Unconventional Central Dogma: Tailoring Your Career Path to Your DNA</i> ”-Pittsburg, PA	4/2018
Global Kids Women’s Month Keynote Speaker -“ <i>The World Is Yours</i> ”-Brooklyn, NY	
The Network Journal Cover Feature - “ <i>Making the Case for STEM</i> ”-New York, NY	12/ 2017
Vanderbilt University Medical Center -“ <i>Beyond the Lab</i> ”-Nashville, TN	10/2017
American Society of Human Genetics (ASHG)-President’s Diversity Luncheon - “ <i>My Central Dogma</i> ”-Orlando, FL	10/2017
Nextgen Genomics, Biology, Bioinformatics and Technologies Conference -“ <i>Empowering Genomic Discoveries Across the World</i> ”- Bubaneshwar, India	9/2017
Spelman College Messenger - “ <i>Global Studies + Research + Leadership + Sisterhood = The Unique Formula to a Spelman Education</i> ”- Atlanta, GA	8/2017
She Geeks Out Podcast -“ <i>Mentorship and genetic research with Janina Jeff</i> ”-New York, NY	6/2017
Spelman College Convocation Keynote Speaker (elected by alumna) -“ <i>The Evolution of Sisterhood</i> ”- Atlanta, GA	5/ 2017
She Geeks Out in NYC , – “ <i>She Geeks Out on the Human Genome</i> ”- New York, NY	11/2016
Mount Sinai School of Medicine Youth Education Summer Program -“ <i>Being a Leader in Science: Your journey to leadership begins today</i> ”- New York, NY	6/2015, 6/2014, 6/2013,
Pennsylvania State University - “ <i>Disease Mapping Approaches in Recently Admixed Populations</i> ”-State College, PA	4/2014
ASHG - Invited Platform Presentation-“ <i>Real-time Pharmacogenetics: Genetic Factors Impacting Phenylephrine Response During Surgery</i> ”- San Diego, CA	10/2014
St. Bernard Academy -Guest lecturer –“ <i>Cracking the Genetic Code</i> ”- Nashville, TN	4/2012
African Society of Human Genetics -“ <i>Using EMRs for genome-wide association studies and admixture mapping to identify associations in African Americans</i> ”-Capetown, S. Africa	3/2011
Mount Sinai School of Medicine, Growing up Healthy Teens New York -“ <i>What is Genomics and How Does It Effect Me?</i> ”- New York, NY	11/2013
Spelman College RISE Retreat - “ <i>From Spelman to Vanderbilt: Forming the Pathway to Graduate School</i> ” – Atlanta, GA	7/2009
Initiating a Circle of Education (ICE) – Founder -Non-profit program aimed at helping the youth of New Orleans Public School students with standardized exams.	2001-2003

LEADERSHIP SKILLS

Illumina – Bioinformatics Specialist-	11/2016-Present
<ul style="list-style-type: none">➤ Led the ASA and GSA consortium (supported content development, meetings with consortia members, and sales activities)➤ Supervised contract data scientist to expedite content development,➤ Established relationship with sequencing software developers for integration of array applications in current software suite➤ Trained internal technical support team as well as other bioinformaticians that currently support the array portfolio	
ASHG- Mentor 2017- Appointed by ASHG president to speak and mentor two PhD students	10/2017
Mount Sinai School of Medicine-Sr. Post Doc- Lead on several scientific projects	
<ul style="list-style-type: none">➤ Lead CHD/ECG trait working group for the PAGE consortium➤ Mentored three PhD students➤ Lead the development of multiple analytic pipelines	
Alliance for Cultural Diversity in Research (ACDR) President	10/2010-10/2012
Spelman College RISE mentor	4/2009
Women of Excellence Leadership Fellow -Selected as a leadership trainee (only 30 out of 3,500 are selected each year)	8/2006
Initiating a Circle of Education (ICE) Creator	2001-2003

TEACHING EXPERIENCE

Grand Canyon University- Adjunct Professor College of Arts and Sciences-	10/2013-Present
Spelman College- Guest Lecturer (3 classes)- Population Genomics	11/1-11/30/2015
Meharry College of Medicine HCOP- Pre-Baccalaureate Biology Instructor – MCAT and DAT Biology Prep courses	6/2008- 6/2012
Scientist Classroom Partnership “Scientist in the Classroom”-1st grade scientist-	5/2011- 5/2012

PROFESSIONAL AWARDS

Illumina Values Award	6/2016
ASHG- FASEB MARC travel award	10/2008-10/2015
ASHG- 2015 poster award (top 1%) and ASHG 2016 platform presentation	2015-2016
National Library of Medicine/National Institutes of Health PSB 2015 travel award	2014
St. Jude National Graduate Symposium Attendee (selected one of 42 out of 1,400)	3/2012
Levi Watkins Award for Commitment to Diversity at Vanderbilt Medical School	10/2011
Scientist in the Classroom Teaching Fellowship	5/2011-5/2012
Vanderbilt University Graduate School Dissertation Enhancement Grant	3/2011
National Human Genome Research Institute Genome Scholar	8/2006

PROFESSIONAL ORGANIZATIONS

American Society of Human Genetics (ASHG)	6/2008- Present
European Society of Human Genetics (ESHG)	3/2018-Present
Black Women in Science and Engineering (BWISE)	6/2017-Present
ColorComm Network	10/2016-Present
African Society of Human Genetics (AFSHG)	3/2011-3/2012
Howard Hughes at Spelman College Mentor Network	1/2009- 2011

PUBLICATIONS

[9 \(of 25\) first author peer-reviewed publications including Nature Genetics](#)