# Neekta Hamidi | 901 6<sup>th</sup> St. SW #808a | Washington, D.C. 20024 | 480-686-6454 | Neekta.h@gmail.com |

### **QUALIFICATION SUMMARY**

Biomedical engineer interested in research, development, and policy to promote positive health outcomes for the benefit of public health. Strong academic background, exceptional communication skills, and experience in consulting, non-profit work, policy analysis, and technical writing.

#### **EDUCATION**

M.S.T.P Science and Technology Policy, Sustainability Focus Arizona State University, Consortium for Science, Policy, and Outcomes Present

**June 2014** 

### M.H.S. Public Health & Environmental Health Sciences

The Johns Hopkins University, Bloomberg School of Public Health Sustainability and Global Environmental Health Track

Baltimore, MD Student Assembly | Member-at-Large

Thesis: Climate Change as a Cause of Severe Weather Conditions, and its Specific Implications on Population Displacement

- Key coursework: Biostatistics, research/numerical methods, Epidemiology, Risk Analysis, Toxicology
- Policy research: Health implications of U.S. carbon tax, hydraulic fracking and human health

## **B.S.E Biomedical Engineering**

June 2013 Tempe, AZ

Arizona State University, Barrett Honors College, Cum Laude

- Coursework in data analysis, research methods, FDA/governmental role in engineering
- Thesis: Visualizing the Embryo: Establishing Procedures for Digital Image Production with the Embryo Project
- Gathered/analyzed bioethics publications and standards to establish specific guidelines, resulting in 80-page protocol for image development to supplement EP Encyclopedia articles.

The Embryo Project | Writer, Visual Development Specialist

• Published images/articles based on literature reviews that analyze the "bigger picture" of cryopreservation.

## PROFESSIONAL EXPERIENCE

## US Globe Change Research Project, Climate Change and Human Health group | Team Member

- Managed Climate Change and Human Health Big Data Initiative: performing big data analysis to address key gaps in understanding of human health impacts of global change, predict models of health outcomes
- Worked to promote, protect Nation's public health by leading and coordinating Federal scientific activities related to climate change and human health

## Office of Science and Technology Policy | Director's Office Intern

2014-Present

Executive Office of the President, White House

Washington, DC

- Prepared briefings, reports, congressional hearings, and policy analyses for President's science advisor on climate change, Ebola, antibiotic resistance, STEM development, and other topics.
- Served on Task Force to strategize approaches to combat Ebola in US and abroad.
- Managed events for National Medals of Science, President's Council of Advisors on Science and Technology.

## **Hayes, Inc.** | Medical Analyst

2014

- Performed evidence-based safety/efficacy assessments of emerging health technologies and analysis of healthcare quality, utilization, cost, FDA regulations, and medical coverage for devices.
- Authored health technology assessments, provided in-depth research/consultation to improve health outcomes.
- Interacted with clients including government contractors and hospital administrators.

### **ARC Environmental** | Consulting Intern

2013-2014

• Promoted environmental planning, engineering and remediation by mediating between consultants and clients. Mastered knowledge of industrial hygiene assessments, lead law education, EPA regulated air quality monitoring.

#### Capstone Design Project | Project Manager

2012-2013

Hand Operated Mobility Device for Traveling to Market in Kenya

- Designed and constructed sustainable, innovative, and personalized device for paraplegic polio patients in Kenya.
- Submitted 1,000 page project binder of technical writing:

- o Authored FDA premarket application (device master record, design control, manufacturing information, control activities, literature/patent review), became familiarized with FDA Quality Systems Regulations.
- o Performed device assessment: Risk/design assessment, product liability/intellectual property research, customer needs survey, product functions/device summary, and financial/cost analysis.
- Supervised project management activities: house of quality task distribution, Gantt chart recordkeeping, in-depth time documentation, design history file, and quality system/device history record.

## Molecular & Nanoscale Bioengineering Lab | Research Assistant

2010-2012

Depolarizing Mitochondria to Bypass Cellular Resistance to Traditional Therapies

- Conducted research on apoptotic regulators of pancreatic, breast, and prostate cancer cells.
- Trained in western blots, MTT/Luciferase assays, JC-1 dye experiments, 3-d collagen cell culture plating.

## **ENERGY/SUSTAINIBILTY QUALIFICATIONS**

• Bloomberg key coursework: Global Health, Global Sustainability, Environmental Health, Food Systems/Production, Energy & the Environment, Environmental Policy. Additional Oxfam GROW training.

## Oxfam America | CHANGE Leader, Chapter Founder/President

2009-Present

- Organized Extractive Industry/GROW campaigns (health policy focus), developing sustainable solutions to health concerns derived from socio economic issues.
- Represented Oxfam's visions, developed long-term strategic plans, communicated with a diverse national network.

### **TECHNICAL PROJECTS**

### Polymer-coated Nitinol Intracranial Stent model

2012

- Designed a prototype using an occluder implantation method for safe, affordable aneurysm treatment.
- Utilized softwares: SolidWorks (3d CAD), ANSYS (simulation), Mimics (medical image processing).

## **Wireless Heart Rate Monitor (Microcontroller Design)**

2011

• Designed low power arrhythmia detecting microcontroller (developed C code, analyzed Fourier transforms).

## **Type II Renal Tubular Acidosis Case Study**

2011

- Utilized MATLAB/MathCAD skills to analyze RTA diagnosis and treatment.
- Analyzed bicarbonate required for blood pH adjustment, glomerular filtration rates.

#### TECHNICAL SKILLS

- Working knowledge of Microsoft Office, basic computer coding, 3-D printing, welding/device construction.
- Trained in Blue Ocean Strategy (systemic approach to market analysis), 5S methodology, six sigma techniques.
- Fluent in Spanish, Urdu, and Hindi.

#### **VOLUNTEER EXPERIENCE**

Maryland Hunger Solutions | SNAP Application Consultant

Orphanage Outreach Health Corps | International Volunteer: environmental hygiene, wastewater management Cultural Cup Food Bank & Clinic | Food Distribution/Volunteer Coordinator

Maricopa Integrated Health Services/Chandler Regional Hospital | Medical Observer, Student Volunteer Chandler Service Club | Event Organizer, World Peace Foundation of Harvard Kennedy School Darfur Initiative Association of Physicians of Pakistani Descent of North America | International Volunteer, Program Coordinator