# What can you do with a degree in neuroscience?

## Research and Education

- Research/Teaching: overall options to consider
  - Basic/Clinical
  - Academic/Biotech/Pharma (private sector) / NIH (public sector)
  - Levels of analysis: molecular through cognitive
  - System: theory and modeling, experimental animal, clinical, social
  - Focus: development, function, disease
- Professor, Research lab head (principal investigator), running a lab of scientist, post-docs, technicians and students (teach at undergraduate/graduate level); Medical school faculty (less teaching, more fundraising)
- Other research positions: research scientist, technician, lab manager, etc. [Note: research may be purely clinical working with patients, etc]
- Instructor, lecturer, or guest lecturer (may also have a research position)
- Dean (may also teach and do research)
- Run an academic program (advisor, coordinator, etc)
- High school, junior high, elementary science teacher
- Run a (neuro)science program at a youth education center (city-wide program for public schools, create a program for private schools, summer programs, etc)
- Teach Neuroscience to medical students
- Teach public about Neuroscience (non-profit organization, Allen Brain Institute, etc)
- Teach Neuroscience to adults (continuing education programs, run seminars for companies who want employees to understand brain/health better, train hospital employees about the brain)
- Work to improve funding for science education
- Teach Neuroscience abroad (developing nation or other)

## **Health-Related Careers**

- Clinical psychologist (e.g., specialize in behavioral neuroscience)
- Physician (MD or DO)-neurology, neurosurgery, psychiatry, optometry...
- MD-PhD (clinical practice and research)
- Nurse (for example, in neuro ward, neuro-oncology, pediatric neurology, etc);
  Nurse practitioner or physician's assistant
- Speech & language therapist (especially important for neurological patients with damage to left hemisphere, or children with neurodevelopmental disorders)
- Occupational therapist for adults (especially important following stroke, loss of basic function to take care of ones self, etc)
- Physical therapist for children (teach how to compensate/alleviate developmental disorders, e.g SPD, autism, ADD, motor disorders, etc)
- Audiologist (assess hearing function in children, babies, adults)
- Nutritionist (a neuro background give you a unique perspective on how nutrient and metabolism affect the nervous system)
- Social worker (a neuro background would help you to understand the specific issues affecting neurological patients upon re-entering their environment following hospitalizations)
- Clinical research- could work at a number of levels, from technician to research scientist
- Pharmacist (specialize in how drugs mimic neurotransmitter in the brain)
- MRI technician, histopathologist, public health, biostatistician, epidemiologist, medical forensics, develop neuroprosthetics
- Technician for other neurological procedures e.g. deep brain stimulation; genetic counseling
- Radiation physicist (calculates precisely how radiation should be used to target tumors)
- Administrator or coordinator (neurology ward or team or neurology residents)
- Run a public service project in an underserved area with limited medical care
- Veterinarian

#### Global Health

- Run a clinical research project in another country (or work for one)
- Run a public service project in a developing nation (or work for one)
- Work for the Centers for Disease Control (CDC)- specialize in neurological disease
- Global health reporting and/or data collection- focus on neurological health
- Careers at UN, NGOs, MSF, OXFAM, USAID, World Bank

## **Business & Law**

- Neuroeconomist or economics consultant
- Chief-Scientific Officer (CSO), Executive Director or other high-level at private company, non-profit foundation, government institution, or academic program
- Marketing or advertising consultant (What is going on in the brain during decision making?)
- Equity consultant, analyst or broker for an equity firm, venture capitalist or hedge fund (Is a biotech or pharmaceutical company a good investment?)
- Spokesperson for a neuro-company; education public on research going on within the company
- Patent lawyer (e.g., draft a patent application to secure intellectual property rights for a neurobiological technique or product developed at Princeton)
- Lawyer (specialize in neurodegenerative disease cases, child development, etc)
- Consultant

## Government & Policy

- Work for a governmental office (CDC, NIH, FDA, etc) that oversees public policy toward neurological disease, the aging brain, etc
- Capitol Hill Staffer (work in congressional office, science/health-related initiatives)

- Congressional advisor (advise on policy for the care of children with neurodevelopmental disease, intellectual disabilities, autism, epilepsy, etc)
- · Advise on policy for the care of persons with psychiatric problems, etc
- Grants administrator and/or reviewer (Program manager- NSF, NIH)
- Global Health Organizations

## Writing & Publishing

- Scientific journal editor (Neuron, Cell, Nature, Science, Nature Neuroscience, etc)
- Scientific journalist (correspondent or columnist)
- Science book publishing (writing, editing, recruitment of writers)
- Creative writing about the brain for children or adults
- Write biographies of famous neuroscientists
- Web design and writing for the NIH or other neuroscience organizations
- Science education blogger
- Produce science education material web/print (Scholastic, Nature Education, etc)

## Consulting (advising with a neuro background)

- Management consulting (specialize in biotech, pharma or healthcare companies); private consulting firm
- Lobbyist (for foundations, biotech, etc)
- Library (medical or other)

# Non-profit Research or Foundations

- Grants specialist –evaluate research portfolio, set funding priorities
- Patient outreach

 Discovery specialist for a research foundation (coordinate academic and biotech research to cure a specific disease)

### **Creative Sector**

- Graphic designer for any company/ organization on this list
- Design web-based scientific education material (NIH, Scitable, University Science Centers, Startup companies)
- Science consultant for the media (TV, movies, books, etc)
- Artist specializing in how the brain perceives things
- Architect who specializes in how the brain perceives spaces, color, texture, emotion, etc
- Toy designer- use knowledge to make brain developing toys
- Musician/instructor (understanding hearing and the brain and its role in composition, performance)
- Write neurosci-fi screenplays
- Web design, art, and/or writing for any neuroscience organization

### Quant fields

- Investing, real estate, etc,
- Big data (e.g., Google, Calico)
- Artificial intelligence, brain-machine interfaces

---With thanks to Boston University's Neuroscience's "Life after College" page for many of these ideas--