BIOGRAPHICAL SKETCH

NAME:	**Bryan J. Traynor**
eRA COMMONS USER NAME:	**TRAYNORB_IAR**
POSITION TITLE:	**Senior Investigator**

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	START DATE	END DATE	FIELD OF STUDY
University College Dublin, Ireland	MB, BCh, BAO		07/1993	Medicine
Royal College of Physicians of Ireland	MRCPI		06/1996	Medicine
University College Dublin	MD		06/2000	Epidemiology and genetics
MIT / Harvard University	MS		06/2004	Drug discovery and clinical trial design
University College Dublin, Ireland	PhD		06/2012	Genetics

A. Personal Statement

Dr. Bryan Traynor, M.D., Ph.D., is a neurologist and Senior Investigator at the National Institute on Aging, and adjunct faculty at Johns Hopkins University. Dr. Traynor is best known for his work aimed at understanding the genetic etiology of ALS. He led the international consortium that identified pathogenic repeat expansions in C9ORF72 as a common cause of ALS and FTD. He has over 180 publications in professional journals, and has received numerous awards for his work including the NIH Director's award, the Derek Denny-Brown award, the Sheila Essey award for ALS Research, and the Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases.

B. Positions and Honors

Positions and Employment

1993 - 1996	Intern and Resident, Internal Medicine, St Vincent's University Hospital, Dublin
1996 - 1997	Senior House Office, National Neuroscience Centre of Ireland, Beaumont Hospital, Dublin
1997 - 1999	Research Fellow, National Neuroscience Center of Ireland, Beaumont Hospital, Dublin
1999 - 2002	Resident, Massachusetts General Hospital and Brigham and Woman's Hospital, Neurology Department, Boston, MA
2002 - 2004	Research Fellow, Massachusetts General Hospital, Neurology Department, Boston, MA
2004 - 2005	Instructor, Harvard Medical School, Boston, MA
2004 - 2005	Staff Neurologist, Massachusetts General Hospital, Neurology Department, Boston, MA
2005 - 2009	Clinical Associate, NIH, Laboratory of Neurogenetics, Bethesda, MD
2006 -	Adjunct Faculty, Johns Hopkins Hospital, Neurology Department, Baltimore, MD
2009 - 2011	Assistant Clinical Investigator, NIH, Laboratory of Neurogenetics, Bethesda, MD
2011 - 2014	Investigator, NIH, Laboratory of Neurogenetics, Bethesda, MD
2014 -	Senior Investigator, NIH, Laboratory of Neurogenetics, Bethesda, MD

Other Experience and Professional Memberships

1996 -	Member, Royal College of Physicians of Ireland (MRCPI)
2012 -	Fellow, American Neurology Association
2012 -	Member and Chair (2015), Integration Panel for the Congressionally Mandated Department of Defense Amyotrophic Lateral Sclerosis Research Program
2013 -	Member, editorial board of the *Journal of Neurology, Neurosurgery and Psychiatry*
2015 -	Member, Genetics of Health and Disease NIH Study Section
2015 -	Member, editorial board of *Neurobiology of Aging*

Honors

1993	Graduated from medical school with honors and ranked second in class
2011	NIA Director's Award, NIA
2012	NIH Director's Award, NIH
2012	Derek Denny-Brown Award, American Neurological Association
2013	Diamond Award for ALS Research, Muscular Dystrophy Association
2013	Sheila Essay Award for ALS Research, American Academy of Neurology
2016	Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases, American Academy of Neurology

C. Contribution to Science

1. Discovery of the pathogenic hexanucleotide repeat expansion in C9orf72

   a. Renton AE, Majounie E, Waite A, Simón-Sánchez J, Rollinson S, Gibbs JR, Schymick JC, Laaksovirta H, van Swieten JC, Myllykangas L, Kalimo H, Paetau A, Abramzon Y, Remes AM, Kaganovich A, Scholz SW, Duckworth J, Ding J, Harmer DW, Hernandez DG, Johnson JO, Mok K, Ryten M, Trabzuni D, Guerreiro RJ, Orrell RW, Neal J, Murray A, Pearson J, Jansen IE, Sondervan D, Seelaar H, Blake D, Young K, Halliwell N, Callister JB, Toulson G, Richardson A, Gerhard A, Snowden J, Mann D, Neary D, Nalls MA, Peuralinna T, Jansson L, Isoviita VM, Kaivorinne AL, Hölttä-Vuori M, Ikonen E, Sulkava R, Benatar M, Wuu J, Chiò A, Restagno G, Borghero G, Sabatelli M, Heckerman D, Rogaeva E, Zinman L, Rothstein JD, Sendtner M, Drepper C, Eichler EE, Alkan C, Abdullaev Z, Pack SD, Dutra A, Pak E, Hardy J, Singleton A, Williams NM, Heutink P, Pickering-Brown S, Morris HR, Tienari PJ, **Traynor BJ**. A hexanucleotide repeat expansion in C9ORF72 is the cause of chromosome 9p21-linked ALS-FTD. *Neuron*. 2011 Oct 20;72(2):257-68. PubMed PMID: 21944779; PubMed Central PMCID: PMC3200438.

   b. Majounie E, Renton AE, Mok K, Dopper EG, Waite A, Rollinson S, Chiò A, Restagno G, Nicolaou N, Simon-Sanchez J, van Swieten JC, Abramzon Y, Johnson JO, Sendtner M, Pamphlett R, Orrell RW, Mead S, Sidle KC, Houlden H, Rohrer JD, Morrison KE, Pall H, Talbot K, Ansorge O, Hernandez DG, Arepalli S, Sabatelli M, Mora G, Corbo M, Giannini F, Calvo A, Englund E, Borghero G, Floris GL, Remes AM, Laaksovirta H, McCluskey L, Trojanowski JQ, Van Deerlin VM, Schellenberg GD, Nalls MA, Drory VE, Lu CS, Yeh TH, Ishiura H, Takahashi Y, Tsuji S, Le Ber I, Brice A, Drepper C, Williams N, Kirby J, Shaw P, Hardy J, Tienari PJ, Heutink P, Morris HR, Pickering-Brown S, **Traynor BJ**. Frequency of the C9orf72 hexanucleotide repeat expansion in patients with amyotrophic lateral sclerosis and frontotemporal dementia: a cross-sectional study. *Lancet Neurol*. 2012 Apr;11(4):323-30. PubMed PMID: 22406228; PubMed Central PMCID: PMC3322422.

   c. Majounie E, Abramzon Y, Renton AE, Perry R, Bassett SS, Pletnikova O, Troncoso JC, Hardy J, Singleton AB, **Traynor BJ**. Repeat expansion in C9ORF72 in Alzheimer's disease. *N Engl J Med*. 2012 Jan 19;366(3):283-4. PubMed PMID: 22216764; PubMed Central PMCID: PMC3513272.

2. Genetic studies of familial amyotrophic lateral sclerosis

   a. Johnson JO, Glynn SM, Gibbs JR, Nalls MA, Sabatelli M, Restagno G, Drory VE, Chiò A, Rogaeva E, **Traynor BJ**. Mutations in the CHCHD10 gene are a common cause of familial amyotrophic lateral sclerosis. *Brain*. 2014 Dec;137(Pt 12):e311. PubMed PMID: 25261972; PubMed Central PMCID: PMC4240285.

   b. Johnson JO, Pioro EP, Boehringer A, Chia R, Feit H, Renton AE, Pliner HA, Abramzon Y, Marangi G, Winborn BJ, Gibbs JR, Nalls MA, Morgan S, Shoai M, Hardy J, Pittman A, Orrell RW, Malaspina A, Sidle KC, Fratta P, Harms MB, Baloh RH, Pestronk A, Weihl CC, Rogaeva E, Zinman L, Drory VE, Borghero G, Mora G, Calvo A, Rothstein JD, Drepper C, Sendtner M, Singleton AB, Taylor JP, Cookson MR, Restagno G, Sabatelli M, Bowser R, Chiò A, **Traynor BJ**. Mutations in the Matrin 3 gene cause familial amyotrophic lateral sclerosis. *Nat Neurosci.* 2014 May;17(5):664-6. PubMed PMID: 24686783; PubMed Central PMCID: PMC4000579.

   c. Johnson JO, Mandrioli J, Benatar M, Abramzon Y, Van Deerlin VM, Trojanowski JQ, Gibbs JR, Brunetti M, Gronka S, Wuu J, Ding J, McCluskey L, Martinez-Lage M, Falcone D, Hernandez DG, Arepalli S,

Chong S, Schymick JC, Rothstein J, Landi F, Wang YD, Calvo A, Mora G, Sabatelli M, Monsurrò MR, Battistini S, Salvi F, Spataro R, Sola P, Borghero G, Galassi G, Scholz SW, Taylor JP, Restagno G, Chiò A, **Traynor BJ**. Exome sequencing reveals VCP mutations as a cause of familial ALS. *Neuron*. 2010 Dec 9;68(5):857-64. PubMed PMID: 21145000; PubMed Central PMCID: PMC3032425.

3. Genome-wide association studies of amyotrophic lateral sclerosis

   a. Ahmeti KB, Ajroud-Driss S, Al-Chalabi A, Andersen PM, Armstrong J, Birve A, Blauw HM, Brown RH, Bruijn L, Chen W, Chio A, Comeau MC, Cronin S, Diekstra FP, Soraya Gkazi A, Glass JD, Grab JD, Groen EJ, Haines JL, Hardiman O, Heller S, Huang J, Hung WY, Jaworski JM, Jones A, Khan H, Landers JE, Langefeld CD, Leigh PN, Marion MC, McLaughlin RL, Meininger V, Melki J, Miller JW, Mora G, Pericak-Vance MA, Rampersaud E, Robberecht W, Russell LP, Salachas F, Saris CG, Shatunov A, Shaw CE, Siddique N, Siddique T, Smith BN, Sufit R, Topp S, **Traynor BJ**, Vance C, van Damme P, van den Berg LH, van Es MA, van Vught PW, Veldink JH, Yang Y, Zheng JG. Age of onset of amyotrophic lateral sclerosis is modulated by a locus on 1p34.1. *Neurobiol Aging.* 2013 Jan;34(1):357.e7-19. PubMed PMID: 22959728; PubMed Central PMCID: PMC3839234.

   b. Laaksovirta H, Peuralinna T, Schymick JC, Scholz SW, Lai SL, Myllykangas L, Sulkava R, Jansson L, Hernandez DG, Gibbs JR, Nalls MA, Heckerman D, Tienari PJ, **Traynor BJ**. Chromosome 9p21 in amyotrophic lateral sclerosis in Finland: a genome-wide association study. *Lancet Neurol.* 2010 Oct;9(10):978-85. PubMed PMID: 20801718; PubMed Central PMCID: PMC2965392.

   c. **Traynor BJ**, Nalls M, Lai SL, Gibbs RJ, Schymick JC, Arepalli S, Hernandez D, van der Brug MP, Johnson JO, Dillman A, Cookson M, Moglia C, Calvo A, Restagno G, Mora G, Chiò A. Kinesin-associated protein 3 (KIFAP3) has no effect on survival in a population-based cohort of ALS patients. *Proc Natl Acad Sci U S A*. 2010 Jul 6;107(27):12335-8. PubMed PMID: 20566859; PubMed Central PMCID: PMC2901467.

   d. Schymick JC, Scholz SW, Fung HC, Britton A, Arepalli S, Gibbs JR, Lombardo F, Matarin M, Kasperaviciute D, Hernandez DG, Crews C, Bruijn L, Rothstein J, Mora G, Restagno G, Chiò A, Singleton A, Hardy J, **Traynor BJ**. Genome-wide genotyping in amyotrophic lateral sclerosis and neurologically normal controls: first stage analysis and public release of data. *Lancet Neurol.* 2007 Apr;6(4):322-8. PubMed PMID: 17362836.

Complete List of Published Work in My Bibliography: https://scholar.google.com/citations?user=-t7Y3hAAAAAJ&hl=en

Number of publications:	180
Number of citations:	20,277
H-index:	65
I10-index:	141