



**Orla Hardiman**

**Contact**

Orla Hardiman  
Ireland

## Publications (23)

Van Daele S, Moisse M, Farei-Campagna J, Zwamborn R, van der Spek R, van Rheenen W, van Eijk K, Kenna K, Corcia P, Vourc'h P, Couratier P, Hardiman O, McLaughlin R, Gotkine M, Drory V, Ticozzi N, Silani V, Ratti A, de Carvalho M, Mora J, Povedano M, Andersen P, Weber M, Başak N, Shaw C, Openshaw P, Morrison K, Landers J, Glass J, van Es M, van den Berg L, Al-Chalabi A, Veldink J, Van Damme P. Genetic variability in sporadic amyotrophic lateral sclerosis. *Brain* 2023; 146:3760-3769.

Adey B, Cooper-Knock J, Al Khleifat A, Fogh I, Van Damme P, Corcia P, Couratier P, Hardiman O, McLaughlin R, Gotkine M, Drory V, Silani V, Ticozzi N, Veldink J, van den Berg L, de Carvalho M, Pinto S, Mora J, Povedano Panades M, Andersen P, Weber M, Başak N, Shaw C, Openshaw P, Morrison K, Landers J, Glass J, Vourc'h P, Dobson R, Breen G, Al-Chalabi A, Jones A, Iacoangeli A. Large-scale analyses of CAV1 and CAV2 suggest their expression is higher in post-mortem ALS brain tissue and affects survival. *Front Cell Neurosci* 2023; 17:1112405.

Mehta P, Iacoangeli A, Opie-Martin S, Farei-Campagna J, Al Khleifat A, Bredin A, Ossher L, Andersen P, Hardiman O, Mehta A, Fratta P, Talbot K, PROJECT MINE ALS SEQUENCING CONSORTIUM, Al-Chalabi A. The impact of age on genetic testing decisions in amyotrophic lateral sclerosis. *Brain* 2022; 145:4440-4447.

Al Khleifat A, Iacoangeli A, Jones A, Van Vugt J, Moisse M, Shatunov A, Zwamborn R, van der Spek R, Cooper-Knock J, Topp S, van Rheenen W, Kenna B, van Eijk K, Kenna K, Byrne R, López V, Opie-Martin S, Vural A, Campos Y, Weber M, Smith B, Fogh I, Silani V, Morrison K, Dobson R, van Es M, McLaughlin R, Vourc'h P, Chio A, Corcia P, de Carvalho M, Gotkine M, Panades M, Mora J, Shaw P, Landers J, Glass J, Shaw C, Başak N, Hardiman O, Robberecht W, Van Damme P, van den Berg L, Veldink J, Al-Chalabi A. Telomere length analysis in amyotrophic lateral sclerosis using large-scale whole genome sequence data. *Front Cell Neurosci* 2022; 16:1050596.

Tazelaar G, Hop P, Seelen M, Van Vugt J, van Rheenen W, Kool L, van Eijk K, Gijzen M, Dooijes D, Moisse M, Calvo A, Moglia C, Brunetti M, Canosa A, Nordin A, Pardina J, Ravits J, Al-Chalabi A, Chio A, McLaughlin R, Hardiman O, Van Damme P, de Carvalho M, Neuwirth C, Weber M, Andersen P, van den Berg L, Veldink J, van Es M. Whole genome sequencing analysis reveals post-zygotic mutation variability in monozygotic twins discordant for amyotrophic lateral sclerosis. *Neurobiol Aging* 2022; 122:76-87.

van Rheenen W, van der Spek R, Bakker M, Van Vugt J, Hop P, Zwamborn R, de Klein N, Westra H, Bakker O, Deelen P, Shireby G, Hannon E, Moisse M, Baird D, Restuadi R, Dolzhenko E, Dekker A, Gawor K, Westeneng H, Tazelaar G, van Eijk K, Kooyman M, Byrne R, Doherty M, Heverin M, Al Khleifat A, Iacoangeli A, Shatunov A, Ticozzi N, Cooper-Knock J, Smith B, Gromicho M, Chandran S, Pal S, Morrison K, Shaw P, Hardy J, Orrell R, Sendtner M, Meyer T, Başak N, van der Kooij A, Ratti A, Fogh I, Gellera C, Lauria G, Corti S, Cereda C, Sproviero D, D'Alfonso S, Sorarù G, Siciliano G, Filosto M, Padovani A, Chio A, Calvo A, Moglia C, Brunetti M, Canosa A, Grassano M, Beghi E, Pupillo E, Logroscino G, Nefussy B, Osmanovic A, Nordin A, Lerner Y, Zabari M, Gotkine M, Baloh R, Bell S, Vourc'h P, Corcia P, Couratier P, Millecamps S, Meininger V, Salachas F, Mora Pardina J, Assialioui A, Rojas-García R, Dion P, Ross J, Ludolph A, Weishaupt J, Brenner D, Freischmidt A, Bensimon G, Brice A, Dürr A, Payan C, Saker-Delye S, Wood N, Topp S, Rademakers R, Tittmann L, Lieb W, Franke A, Ripke S, Braun A, Kraft J, Whiteman D, Olsen C, Uitterlinden A, Hofman A, Rietschel M, Cichon S, Nöthen M, Amouyel P, SLALOM Consortium, PARALS Consortium, SLAGEN Consortium, SLAP Consortium, Traynor B, Singleton A, Mitne Neto M, Cauchi R, Ophoff R, Wiedau-Pazos M, Lomen-Hoerth C, Van Deerlin V, Grosskreutz J, Roediger A, Gaur N, Jörk A, Barthel T, Theele E, Ilse B, Stubendorff B, Witte O, Steinbach R, Hübner C, Graff C, Brylev L, Fominykh V, Demeshonok V, Ataulina A, Rogelj B, Koritnik B, Zidar J, Ravnik-Glavač M, Glavač D, Stević Z, Drory V, Povedano M, Blair I, Kiernan M, Benyamin B, Henderson R, Furlong S, Mathers S, McCombe P, Needham M, Ngo S, Nicholson G, Pamphlett R, Rowe D, Steyn F, Williams K, Mather K, Sachdev P, Henders A, Wallace L, de Carvalho M, Pinto S, Petri S, Weber M, Rouleau G, Silani V, Curtis C, Breen G, Glass J, Brown R, Landers J, Shaw C, Andersen P, Groen E, van Es M, Pasterkamp R, Fan D, Garton F, McRae A, Davey Smith G, Gaunt T, Eberle M, Mill J, McLaughlin R, Hardiman O, Kenna K, Wray N, Tsai E, Runz H, Franke L, Al-Chalabi A, Van Damme P, van den Berg L, Veldink J. Author Correction: Common and rare variant association analyses in amyotrophic lateral sclerosis identify 15 risk loci with distinct genetic architectures and neuron-specific biology. *Nat Genet* 2022; 54:361.

Hop P, Zwamborn R, Hannon E, Shireby G, Nabais M, Walker E, van Rheenen W, Van Vugt J, Dekker A, Westeneng H, Tazelaar G, van Eijk K, Moisse M, Baird D, Al Khleifat A, Iacoangeli A, Ticozzi N, Ratti A, Cooper-Knock J, Morrison K, Shaw P, Basak A, Chio A, Calvo A, Moglia C, Canosa A, Brunetti M, Grassano M, Gotkine M, Lerner Y, Zabari M, Vourc'h P, Corcia P, Couratier P, Mora Pardina J, Salas T, Dion P, Ross J, Henderson R, Mathers S, McCombe P, Needham M, Nicholson G, Rowe D, Pamphlett R, Mather K, Sachdev P, Furlong S, Garton F, Henders A, Lin T, Ngo S, Steyn F, Wallace L, Williams K, Neto M, Cauchi R, Blair I, Kiernan M, Drory V, Povedano M, de Carvalho M, Pinto S, Weber M, Rouleau G, Silani V, Landers J, Shaw C, Andersen P, McRae A, van Es M, Pasterkamp R, Wray N, McLaughlin R, Hardiman O, Kenna K, Tsai E, Runz H, Al-Chalabi A, van den Berg L, Van Damme P, Mill J, Veldink J. Genome-wide study of DNA methylation shows alterations in metabolic, inflammatory, and cholesterol pathways in ALS. *Sci Transl Med* 2022; 14:eabj0264.

Kliest T, van Eijk R, Al-Chalabi A, Albanese A, Andersen P, Amador M, Bråthen G, Brunaud-Danel V, Brylev L, Camu W, de Carvalho M, Cereda C, Cetin H, Chaverri D, Chio A, Corcia P, Couratier P, De Marchi F, Desnuelle C, van Es M, Esteban J, Filosto M, García Redondo A, Grosskreutz J, Hanemann C, Holmøy T, Høyer H, Ingre C, Koritnik B, Kuzma-Kozakiewicz M, Lambert T, Leigh P, Lunetta C, Mandrioli J, McDermott C, Meyer T, Mora J, Petri S, Povedano M, Reviers E, Riva N, Roes K, Rubio M, Salachas F, Sarafov S, Sorarù G, Stević Z, Svenstrup K, Møller A, Turner M, Van Damme P, Van Leeuwen L, Varona L, Vázquez Costa J, Weber M, Hardiman O, van den Berg L. Clinical trials in pediatric ALS: a TRICALS feasibility study. *Amyotroph Lateral Scler Frontotemporal Degener* 2022; 23:481-488.

Al Khleifat A, Iacoangeli A, Van Vugt J, Bowles H, Moisse M, Zwamborn R, van der Spek R, Shatunov A, Cooper-Knock J, Topp S, Byrne R, Gellera C, López V, Jones A, Opie-Martin S, Vural A, Campos Y, van Rheenen W, Kenna B, van Eijk K, Kenna K, Weber M, Smith B, Fogh I, Silani V, Morrison K, Dobson R, van Es M, McLaughlin R, Vourc'h P, Chio A, Corcia P, de Carvalho M, Gotkine M, Panadés M, Mora J, Shaw P, Landers J, Glass J, Shaw C, Başak N, Hardiman O, Robberecht W, Van Damme P, van den Berg L, Veldink J, Al-Chalabi A. Structural variation analysis of 6,500 whole genome sequences in amyotrophic lateral sclerosis. *NPJ Genom Med* 2022; 7:8.

van Rheenen W, van der Spek R, Bakker M, Farei-Campagna J, Hop P, Zwamborn R, de Klein N, Westra H, Bakker O, Deelen P, Shireby G, Hannon E, Moisse M, Baird D, Restuadi R, Dolzhenko E, Dekker A, Gawor K, Westeneng H, Tazelaar G, van Eijk K, Kooyman M, Byrne R, Doherty M, Heverin M, Al Khleifat A, Iacoangeli A, Shatunov A, Ticozzi N, Cooper-Knock J, Smith B, Gromicho M, Chandran S, Pal S, Morrison K, Openshaw P, Hardy J, Orrell R, Sendtner M, Meyer T, Başak N, van der Kooi A, Ratti A, Fogh I, Gellera C, Lauria G, Corti S, Cereda C, Sproviero D, D'Alfonso S, Sorarù G, Siciliano G, Filosto M, Padovani A, Chio A, Calvo A, Moglia C, Brunetti M, Canosa A, Grassano M, Beghi E, Pupillo E, Logroscino G, Nefussy B, Osmanovic A, Nordin A, Lerner Y, Zabari M, Gotkine M, Baloh R, Bell S, Vourc'h P, Corcia P, Couratier P, Millecamps S, Meininger V, Salachas F, Mora J, Assialioui A, Rojas-García R, Dion P, Ross J, Ludolph A, Weishaupt J, Brenner D, Freischmidt A, Bensimon G, Brice A, Dürr A, Payan C, Saker-Delye S, Wood N, Topp S, Rademakers R, Tittmann L, Lieb W, Klein-Franke A, Ripke S, Braun A, Kraft J, Whiteman D, Olsen C, Uitterlinden A, Hofman A, Rietschel M, Cichon S, Nöthen M, Amouyel P, SLALOM Consortium, PARALS Consortium, SLAGEN Consortium, SLAP Consortium, Traynor B, Singleton A, Mitne Neto M, Cauchi R, Ophoff R, Wiedau-Pazos M, Lomen-Hoerth C, Van Deerlin V, Grosskreutz J, Roediger A, Gaur N, Jörk A, Barthel T, Theele E, Ilse B, Stubendorff B, Witte O, Steinbach R, Hübner C, Graff C, Brylev L, Fominykh V, Demeshonok V, Ataulina A, Rogelj B, Koritnik B, Zidar J, Ravnik-Glavač M, Glavač D, Stević Z, Drory V, Povedano M, Blair I, Kiernan M, Benjamin B, Henderson R, Furlong S, Mathers S, McCombe P, Needham M, Ngo S, Nicholson G, Pamphlett R, Rowe D, Steyn F, Williams K, Mather K, Sachdev P, Henders A, Wallace L, de Carvalho M, Pinto S, Petri S, Weber M, Rouleau G, Silani V, Curtis C, Breen G, Glass J, Brown R, Landers J, Shaw C, Andersen P, Groen E, van Es M, Pasterkamp R, Fan D, Garton F, McRae A, Davey Smith G, Gaunt T, Eberle M, Mill J, McLaughlin R, Hardiman O, Kenna K, Wray N, Tsai E, Runz H, Franke L, Al-Chalabi A, Van Damme P, van den Berg L, Veldink J. Common and rare variant association analyses in amyotrophic lateral sclerosis identify 15 risk loci with distinct genetic architectures and neuron-specific biology. *Nat Genet* 2021; 53:1636-1648.

Moisse M, Zwamborn R, Van Vugt J, van der Spek R, van Rheenen W, Kenna B, van Eijk K, Kenna K, Corcia P, Couratier P, Vourc'h P, Hardiman O, McLaughlin R, Gotkine M, Drory V, Ticozzi N, Silani V, de Carvalho M, Mora J, Povedano M, Andersen P, Weber M, Başak N, Chen X, Eberle M, Al-Chalabi A, Shaw C, Openshaw P, Morrison K, Landers J, Glass J, Robberecht W, van Es M, Van den Berg L, Veldink J, Van Damme P, Project MinE Sequencing Consortium. The Effect of SMN Gene Dosage on ALS Risk and Disease Severity. *Ann Neurol* 2021; 89:686-697.

van Eijk R, Hardiman O, Al-Chalabi A, van Es M, Reviers E, Povedano M, Corcia P, Ingre C, Weber M, Chio A, Van Damme P, Roes K, McDermott C, Kliest T, van den Berg L. TRICALS: creating a highway toward a cure. *Amyotroph Lateral Scler Frontotemporal Degener* 2020; 21:496-501.

Tazelaar G, Boeynaems S, De Decker M, Farei-Campagna J, Kool L, Goedee H, McLaughlin R, Sproviero W, Iacoangeli A, Moisse M, Jacquemyn M, Daelemans D, Dekker A, Van Der Spek R, Westeneng H, Kenna K, Assialioui A, Da Silva N, PROJECT MINE ALS SEQUENCING CONSORTIUM, Povedano M, Mora J, Hardiman O, Salachas F, Millecamps S, Vourc'h P, Corcia P, Couratier P, Morrison K, Openshaw P, Shaw C, Pasterkamp R, Landers J, Van Den Bosch L, Robberecht W, Al-Chalabi A, van den Berg L, Van Damme P, Veldink J, van Es M. repeat expansions confer risk for amyotrophic lateral sclerosis and contribute to TDP-43 mislocalization. *Brain Commun* 2020; 2:fcaa064.

van den Berg L, Grosskreutz J, Weber M, Couratier P, Corcia P, van Es M, Bredenoord A, Shaw C, Gunkel A, Rödiger A, Ludolph A, Petri S, de Carvalho M, Veldink J, Moons K, Hardiman O, Chio A, Al-Chalabi A, Shaw P, Turner M, Talbot K, Van Damme P, Ringer T, Körner S, Gromicho M, Pinto S, Thompson A, McDermott C, Martin S, Calvo A, Rooney J, van Eijk R, Visser A, Debray T, Kobeleva X, Rosenbohm A, Stubendorff B, Hollinger H, Kazoka M, Heverin M, Vajda A, van Rheenen W, Van Vugt J, Dekker A, Middelkoop B, Sommer H, Westeneng H. Prognosis for patients with amyotrophic lateral sclerosis: development and validation of a personalised prediction model. *Lancet Neurol* 2018; 17:423-433.

Van Der Spek R, Hardiman O, Mora J, Morrison K, Mitne-Neto M, Robberecht W, Shaw P, Panadés M, Van Damme P, Silani V, Gotkine M, Weber M, van Es M, Landers J, Al-Chalabi A, van den Berg L, Veldink J, Glass J, Drory V, van Rheenen W, Pulit S, Kenna K, Ticozzi N, Kooyman M, McLaughlin R, Moisse M, van Eijk K, Van Vugt J, Andersen P, Nazli Basak A, Blair I, de Carvalho M, Chio A, Corcia P, Couratier P, PROJECT MINE ALS SEQUENCING CONSORTIUM. Reconsidering the causality of TIA1 mutations in ALS. *Amyotroph Lateral Scler Frontotemporal Degener* 2017:1-3.

van den Berg L, Silani V, Shaw P, Salachas F, Povedano Panades M, Petri S, Nygren I, Mora Pardina J, Mitre Ropero B, Staaf G, Svenstrup K, Hardiman O, Wolf J, Weydt P, Weber M, van der Kooi A, Van Damme P, Tysnes O, Talbot K, Meyer T, McDermott C, Ludolph A, Desnuelle C, de Carvalho M, Danielsson O, Couratier P, Corcia P, Chio A, Chandran S, Andersen P, Grehl T, Grosskreutz J, Laaksovirta H, KuzmaKozakiewicz M, Koritnik B, Koch J, Kleveland G, Karlsborg M, Ingre C, Holmøy T, Al-Chalabi A. July 2017 ENCALs statement on edaravone. *Amyotroph Lateral Scler Frontotemporal Degener* 2017; 18:471-474.

McLaughlin R, Project Mine GWAS Consortium, Veldink J, Hardiman O, Luyckx J, van den Berg L, Al-Chalabi A, Bradley D, Goris A, Ophoff R, Kahn R, O'Brien M, van Eijk K, van Rheenen W, Schijven D, Schizophrenia Working Group of the Psychiatric Genomics Consortium. Genetic correlation between amyotrophic lateral sclerosis and schizophrenia. *Nat Commun* 2017; 8:14774.

Zhang K, Arcuti S, Brunetti M, Moglia C, Calvo A, Ratti A, Tiloca C, Gellera C, Pensato V, Mazzini L, Capozzo R, Zecca C, Blair I, Stuit R, Muller B, Filosto M, Padovani A, Riva N, Penco S, Lunetta C, Sorarù G, Bertolin C, Blauw H, Curtis C, Hofman A, Estrada K, Rivadeneira F, Uitterlinden A, Dartigues J, Tzourio C, Amouyel P, van der Kooi A, de Visser M, D'Alfonso S, Comi G, Del Bo R, Cereda C, Pansarasa O, Smith B, Shaw C, Weber M, Goris A, Nöthen M, McCann E, Veldink J, Corcia P, Andersen P, Hardiman O, Landers J, Glass J, Brown R, Pers T, Franke L, Van Damme P, Vourc'h P, Silani V, van den Berg L, Al-Chalabi A, Breen G, Lewis C, Pasterkamp R, van Es M, de Bakker P, Visscher P, Wray N, Robberecht W, Weishaupt J, Stubendorff B, Prell T, Ringer T, Witte O, Grosskreutz J, Kiernan M, Pamphlett R, Rowe D, Nicholson G, Kurth I, Hübner C, Ludolph A, Powell J, Logroscino G, Tortelli R, Pupillo E, Beghi E, Chio A, Casale F, Leigh P, Fifita J, Chandran S, Koritnik B, Ravnik-Glavač M, Vrabec K, Rogelj B, Lin K, Ticozzi N, Vajda A, Menelaou A, Medic J, Zidar J, Leonardis L, Polak M, Rojas-García R, Mora J, Pinto S, de Carvalho M, Meininger V, Salachas F, Millecamps S, Grošelj L, Brands W, Schellevis R, Robinson M, de Jong S, Vösa U, van der Spek R, Pulit S, Diekstra F, McLaughlin R, Dekker A, Shatunov A, Yang J, Fogh I, Harschnitz O, van Eijk K, Kenna K, Jones A, Sproviero W, Blokhuis A, Koppers M, Tazelaar G, van Doormaal P, van Rheenen W, Colville S, Cichon S, Maurel C, Andres C, Radivojkov-Blagojevic M, Lichtner P, Meitinger T, Parman Y, Hamzeiy H, Tunca C, Basak A, Bensimon G, Landwehrmeyer B, Rietschel M, Franke A, Lieb W, Tittmann L, Wood N, Dürr A, Saker-Delye S, Payan C, Brice A, McCluskey L, Elman L, Topp S, Malaspina A, Fratta P, Sidle K, Pittman A, Orrell R, Hardy J, Shaw P, Morrison K, Petri S, Abdulla S, Trojanowski J, Van Deerlin V, Lomen-Hoerth C, Wiedau-Pazos M, Staats K, Ophoff R, Meyer T, Sendtner M, Drepper C, Swingle R. Genome-wide association analyses identify new risk variants and the genetic architecture of amyotrophic lateral sclerosis. *Nat Genet* 2016; 48:1043-8.

Abrahams S, Weber M, Mora Padina J, Hardiman O, Chio A, Silani V, Polletti B, Newton J, Van den Bergh L, Niven E, Lule D, Ludolph A, Bak T, Burkhardt C (2014). COGNITIVE PHENOTYPES IN EUROPE.

Diekstra F, Meininger V, Shatunov A, Shaw C, Leigh P, Shaw P, Morrison K, Fogh I, Chio A, Traynor B, Czell D, Weber M, Heutink P, de Bakker P, Silani V, Robberecht W, van den Berg L, Melki J, Van Damme P, Van Deerlin V, van Swieten J, Al-Chalabi A, Ludolph A, Weishaupt J, Hardiman O, Landers J, Brown R, van Es M, Pasterkamp R, Koppers M, Andersen P, Estrada K, Rivadeneira F, Hofman A, Uitterlinden A, Veldink J. C9orf72 and UNC13A are shared risk loci for amyotrophic lateral sclerosis and frontotemporal dementia: a genome-wide meta-analysis. *Ann Neurol* 2014; 76:120-33.

Abrahams S, Weber M, Lule D, Hardiman O, Ludolph A, Silani V, Van den Bergh L, Newton J, Niven E, Bak T, Burkhardt C (2014). Harmonisation of cognitive screening for ALS in Europe.

van Rheenen W, de Visser M, Weber M, Robberecht W, Hardiman O, Shaw P, Shaw C, Morrison K, Al-Chalabi A, Andersen P, Ludolph A, Veldink J, van der Kooi A, Schelhaas H, Waibel S, Diekstra F, van Doormaal P, Seelen M, Kenna K, McLaughlin R, Shatunov A, Czell D, van Es M, van Vught P, Van Damme P, Smith B, van den Berg L. H63D polymorphism in HFE is not associated with amyotrophic lateral sclerosis. *Neurobiol Aging* 2012; 34:1517.e5-7.

EFNS Task Force on Diagnosis and Management of Amyotrophic Lateral Sclerosis: Wasner M, Tomik B, Silani V, Pradat P, Petri S, Morrison K, Kollwe K, Hardiman O, Van Damme P, Chio A, de Carvalho M, Borasio G, Abrahams S, Andersen P, Weber M. EFNS guidelines on the clinical management of amyotrophic lateral sclerosis (MALS)--revised report of an EFNS task force. *Eur J Neurol* 2011; 19:360-75.

## Projects (0)

No results found.

---

Kantonsspital St.Gallen

Rorschacher Strasse 95

CH-9007 St.Gallen

T: +41 71 494 11 11

[support.forschung@kssg.ch](mailto:support.forschung@kssg.ch)