CJD Foundation
Research Grant Program

CREUTZFELDT-JAKOB DISEASE
FOUNDATION, INC.

Supporting Families Affected by Prion Disease

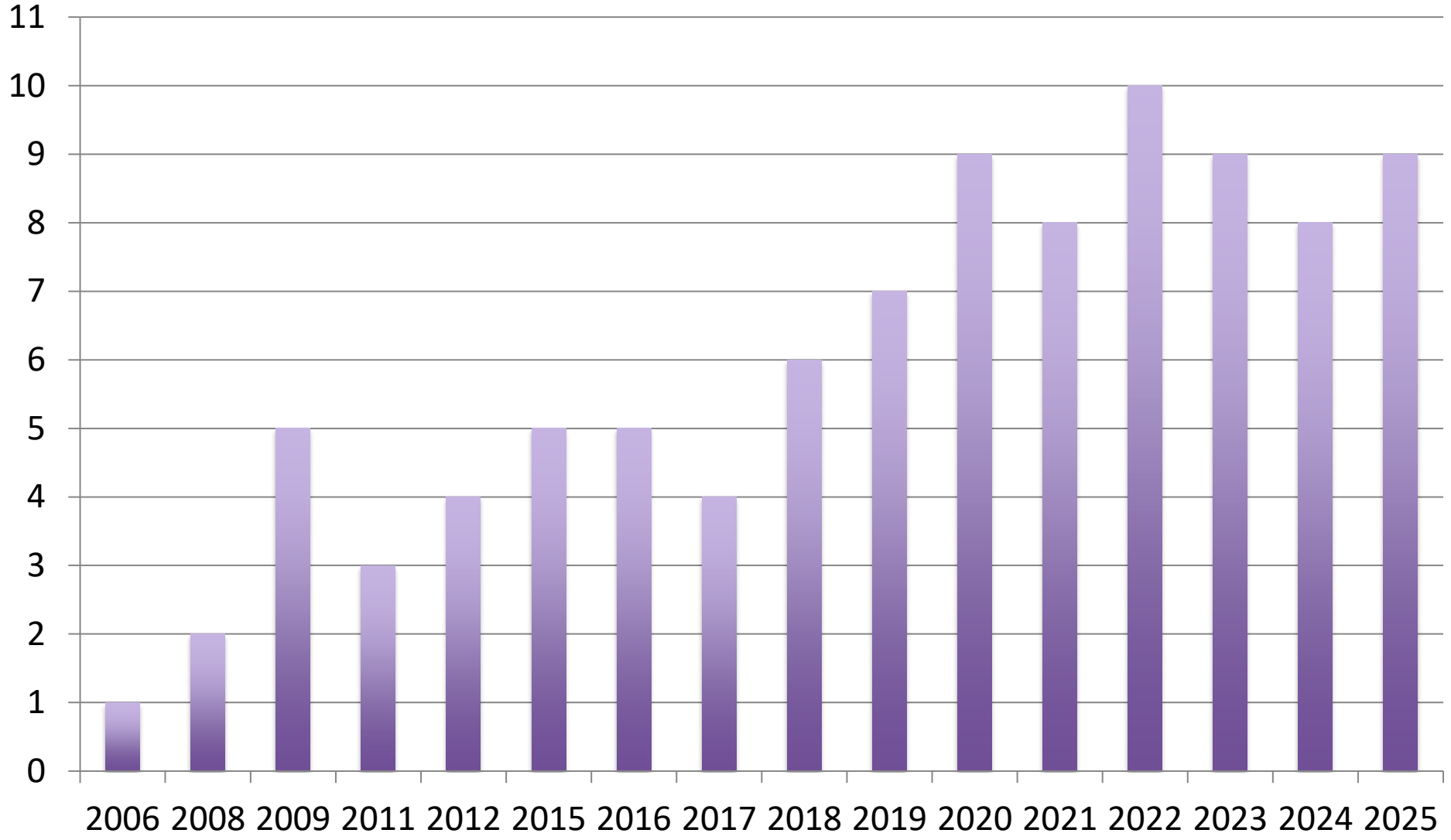
Research Grant Program

- Grants awarded each January to international recipients
- Topics include pathophysiology, molecular mechanisms, cell and animal disease models, diagnostics, clinical and translational research, studies identifying treatment targets or biomarkers, genetics, bioinformatics, or other areas related to human prion diseases
- Recipients present at CJDF Annual Family Conference 18 months after receiving award
- Grants can be 1 Year (up to $50K) or 2 year (up to $100K) and fellowships are now available

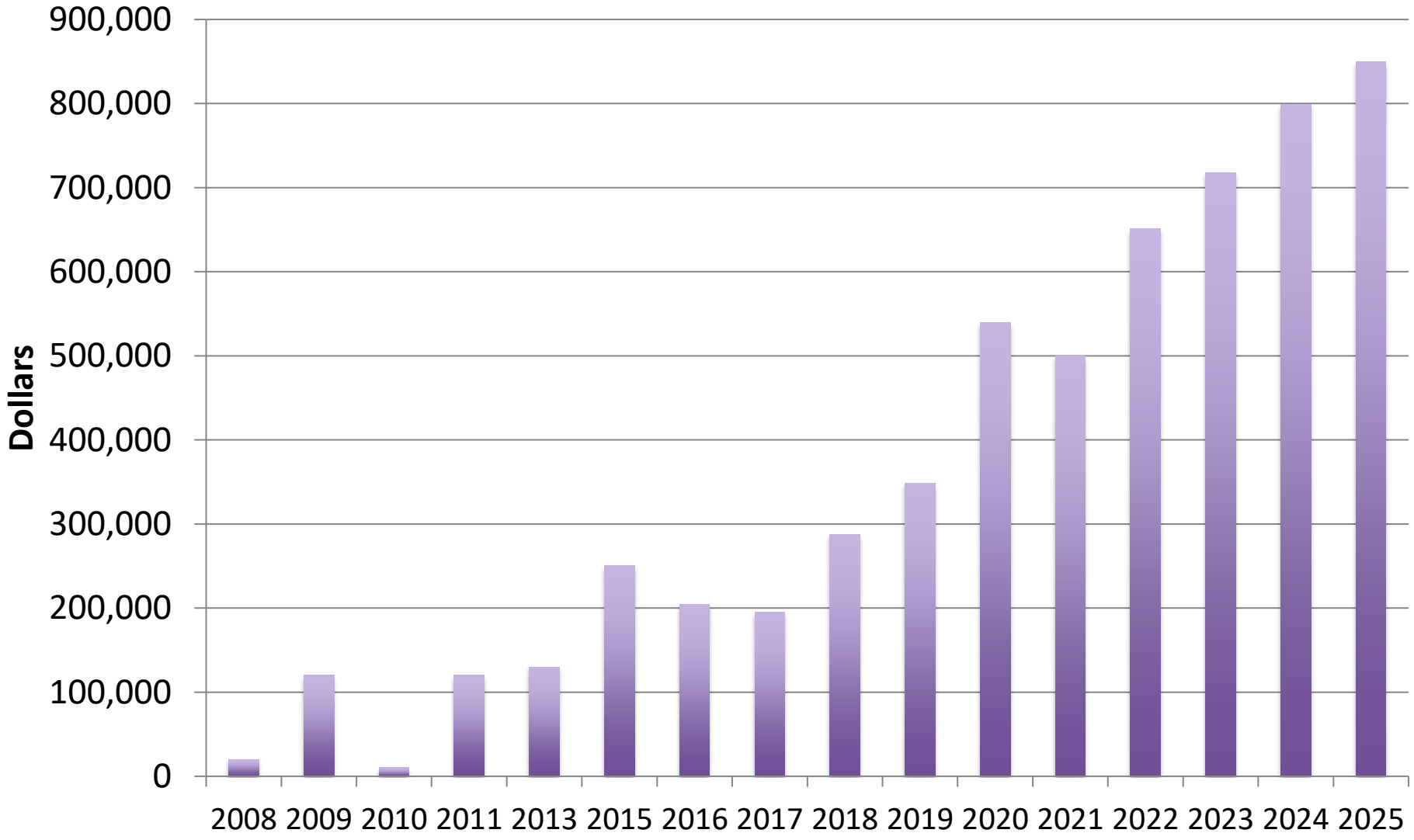
2024 Research Grants

- Awarded 7 grants and 2 fellowships in 2025 for a total of total 95 grants
- **2024** awardees presented reports in July 2025
- **2025** awardees will present reports in July 2026
- Funding for **2025/26** grants looks strong, thanks to Family Memorial Grants, donations to the CJD Foundation, and Strides for CJD events

Number of CJDF Research Grants



Funds Awarded



Sources of Research Grant Funding

- Donations to the CJD Foundation
- Strides for CJD fundraising
- Memorial Grants
- Grant Builders / families who host fundraisers

Research Grant Cycle

- Call for Applications from researchers: May 2025
- Applications reviewed by Scientific Advisory Committee: Summer/Fall 2025
- Donor signs grant agreement/raises funds: by September 2025
- CJDF awards grants to researchers: January 2026
- Researcher presents update at CJD Foundation Conference: July 2027

Awarded 7 Research Grants and 2 Fellowships in 2025

Alyssa Block, PhD

Grant Title: Refined

Ignazio Cali, PhD

Grant Title: Investigating

Jose Andres Alepuz Guillen, PhD

Dr. Pei Ying Lee

Grant Title: Assessing

Szymon W. Manka, PhD

Nina Oberbeck, PhD, Vice President of Translational Sciences

Jakub Soukup, PhD

Grant Title: Higher-resolution visualization of prion fibrils in neurons and

Joel Watts, PhD

Grant Title: Engineered biosensors for improved prion detection

Location: Tanz Centre for

Gianluigi Zanusso, MD, PhD

Grant Title: Multi-center assessment of olfactory swab procedure performed

Thank You to All Who Support the Grants Program

- Donors to CJD Foundation and Strides for CJD
- Family Memorial Grant Funders
- Researchers
- Scientific Advisory Committee

Selected Highlights of Previously-Awarded CJD Foundation Research Grants

Joel Watts, PhD

Associate Professor

Canada Research Chair in Protein Misfolding Disorders

Tanz Centre for Research in Neurodegenerative Diseases

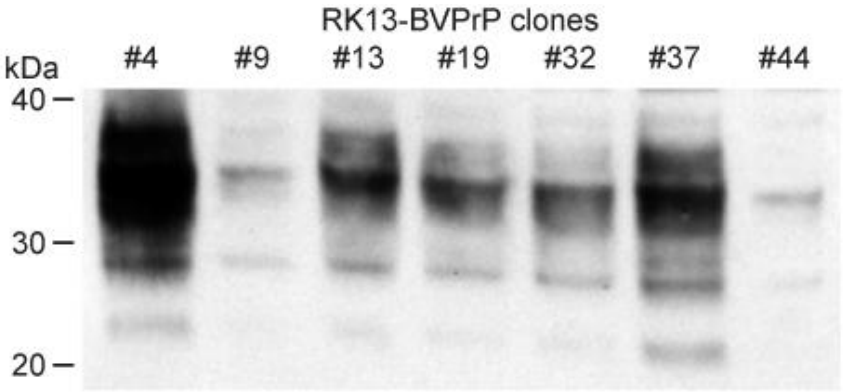
Department of Biochemistry, University of Toronto

CJD Foundation Family Conference

July 13th, 2025

Propagation of CJD Prions in Cultured Cells Expressing Bank Vole PrP

- Grant recipient: Dr. Joel Watts
- Year: 2012

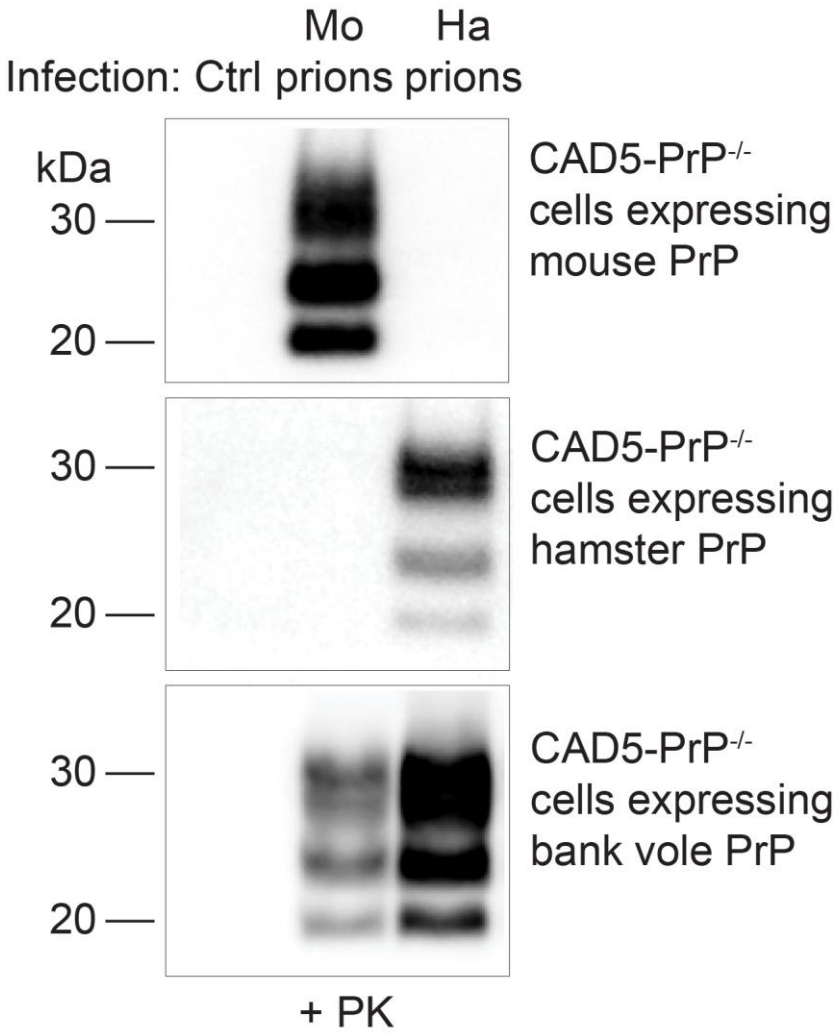


Attempts to infect RK13-BVPrP clones with different prion strains.

Inoculum	Clone #4		Clone #37	
	Passage 5	Passage 10	Passage 5	Passage 10
BV-adapted RML	×	×	×	×
BV-adapted Sc237	×	×	nt	nt
BV-adapted BSE	nt	nt	×	×
BV-adapted sCJD MM1 (case i)	×	×	×	×
BV-adapted sCJD MM1 (case ii)	nt	nt	×	×
BV-adapted sCJD VV2	nt	nt	×	×
BV-adapted vCJD	nt	nt	×	×

×, no PK-resistant PrP observed; nt, not tested

Propagation of CJD Prions in Cultured Cells Expressing Bank Vole PrP



Arshad *et al*., *J Neurochemistry*, 2023

RESEARCH ARTICLE

The molecular determinants of a universal prion acceptor

Arshad *et al*., *PLoS Pathogens*, 2024

Joel Watts, PhD

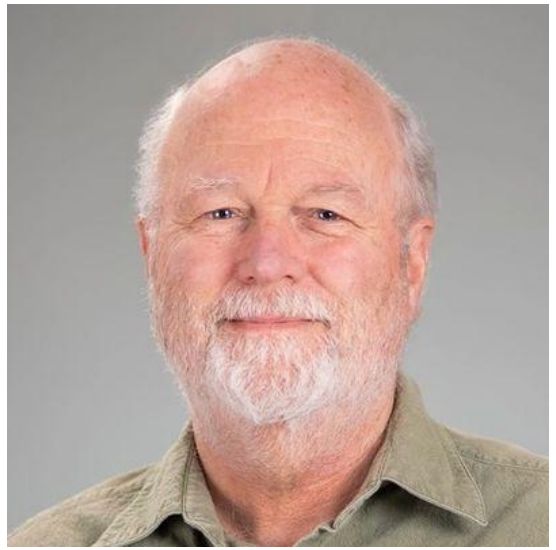
Grant Title: Engineered biosensors for improved prion detection

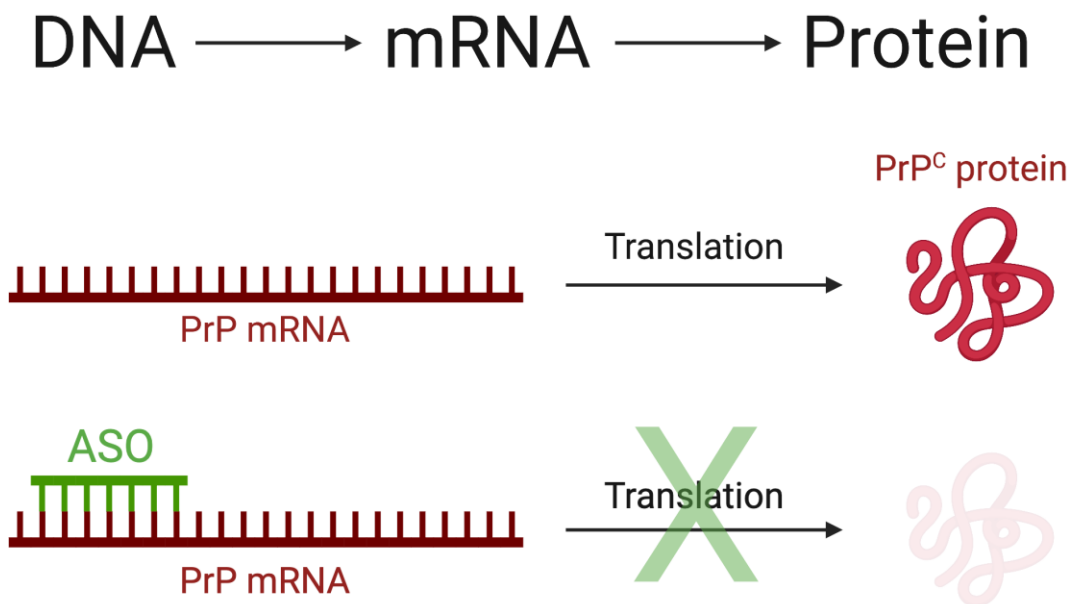
Location: Tanz Centre for Research in Neurodegenerative Diseases and Department of Biochemistry, University of Toronto

Grant Year: 2025

Antisense Oligonucleotides to delay or prevent onset of prion disease in mice

- Grant recipient: Dr. Byron Caughey
- Year: 2016

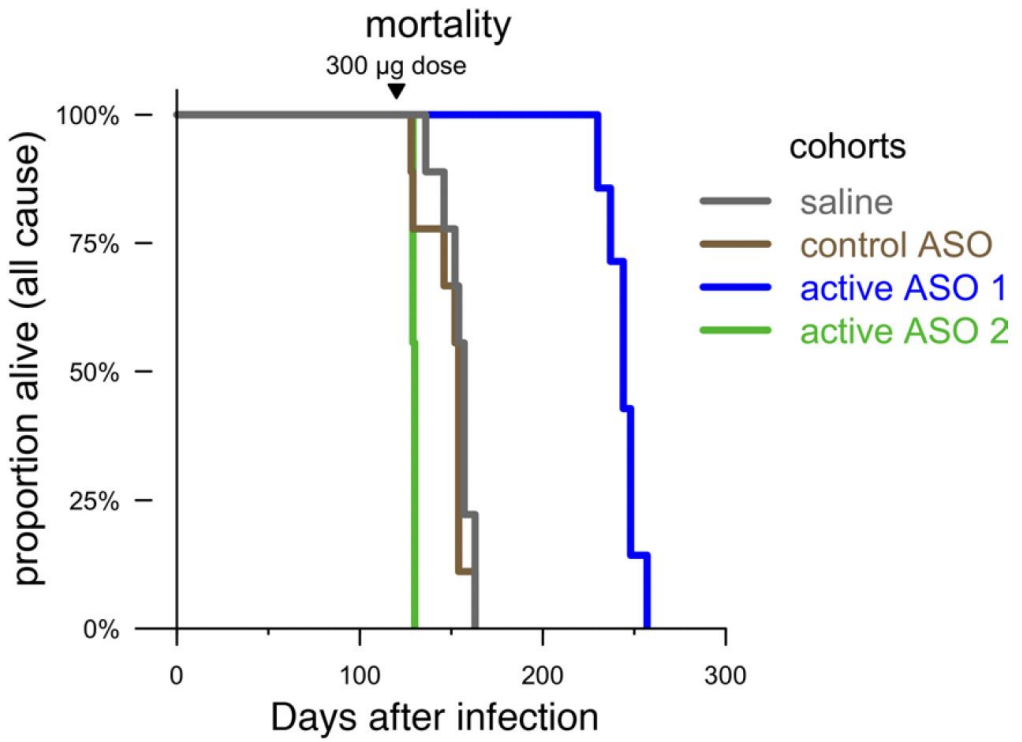




Antisense Oligonucleotides to delay or prevent onset of prion disease in mice

Antisense oligonucleotides extend survival of prion-infected mice

Gregory J. Raymond,[1] Hien Tran Zhao,[2] Brent Race,[1] Lynne D. Raymond,[1] Katie Williams,[1] Eric E. Swayze,[2] Samantha Graffam,[3] Jason Le,[3] Tyler Caron,[3] Jacquelyn Stathopoulos,[3] Rhonda O'Keefe,[3] Lori L. Lubke,[1] Andrew G. Reidenbach,[3] Allison Kraus,[1] Stuart L. Schreiber,[3] Curt Mazur,[2] Deborah E. Cabin,[4] Jeffrey B. Carroll,[5] Eric Vallabh Minikel,[1,3,6,7] Holly Kordasiewicz,[2] Byron Caughey,[1] and Sonia M. Vallabh[1,3,6,7]



Active, not recruiting

PrProfile: A Study to Assess the Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of ION717

ClinicalTrials.gov ID NCT06153966

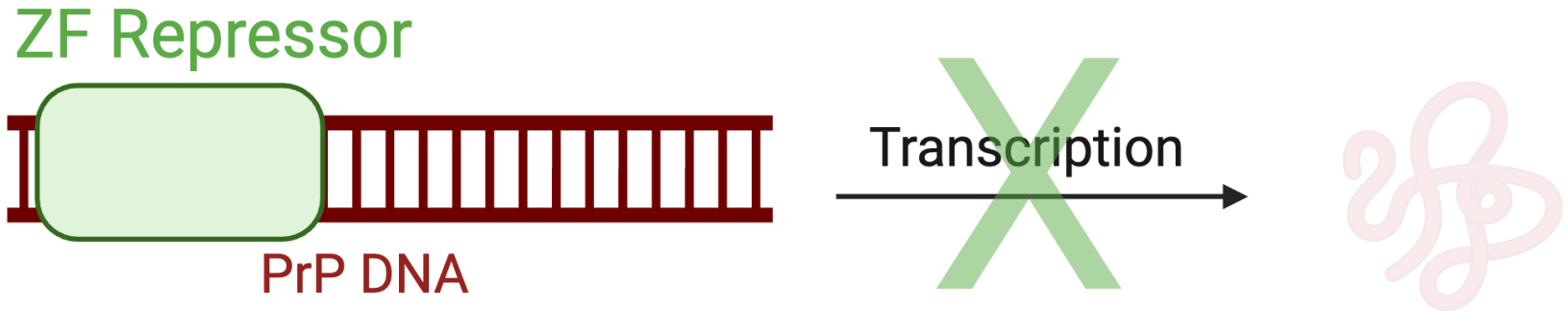
Sponsor Ionis Pharmaceuticals, Inc.

Information provided by Ionis Pharmaceuticals, Inc. (Responsible Party)

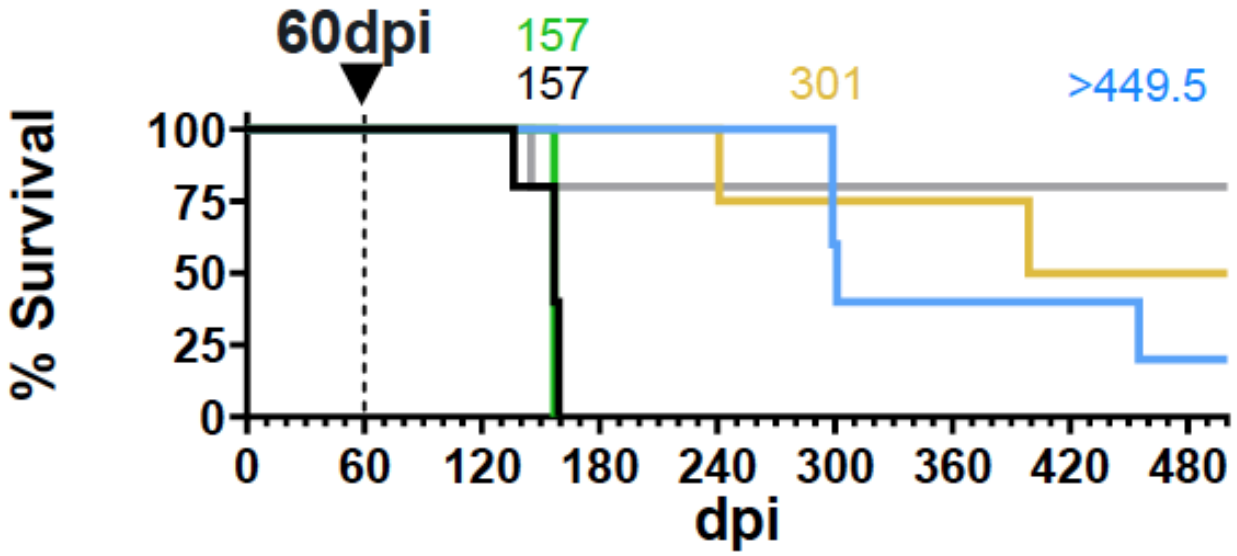
Last Update Posted 2024-12-27

Assessing efficacy of zinc-finger repressors of prion protein as a therapeutic for prion disease

- Grant recipient: Dr. Sonia Vallabh
- Year: 2020



Assessing efficacy of zinc-finger repressors of prion protein as a therapeutic for prion disease



Chou *et al*., *bioRxiv*, 2025 (pre-print)

Brainwide silencing of prion protein by AAV-mediated delivery of an engineered compact epigenetic editor

Edwin N. Neumann[1,2]†, Tessa M. Bertozzi[1,3]†, Elaine Wu[1], Fiona Serack[4], John W. Harvey[4], Pamela P. Brauer[4], Catherine P. Pirtle[4], Alissa Coffey[4], Michael Howard[5], Nikita Kamath[4], Kenney Lenz[5], Kenia Guzman[5], Michael H. Raymond[6,7], Ahmad S. Khalil[6,7,8], Benjamin E. Deverman[4], Eric Vallabh Minikel[4,9], Sonia M. Vallabh[4,9]*, Jonathan S. Weissman[1,3,10,11]*

Article

https://doi.org/10.1038/s41591-024-03466-w

In vivo base editing extends lifespan of a humanized mouse model of prion disease

Received: 20 August 2024

Accepted: 12 December 2024

Published online: 14 January 2025

Check for updates

Meirui An[1,2,3,10], Jessie R. Davis[1,2,3,10], Jonathan M. Levy[1,2,3], Fiona E. Serack[4], John W. Harvey[4], Pamela P. Brauer[4], Catherine P. Pirtle[4], Kiara N. Berrios[1,2,3], Gregory A. Newby[1,2,3], Wei-Hsi Yeh[1,2,3], Nikita Kamath[4], Meredith Mortberg[4], Yuan Lian[4], Michael Howard[5], Kendrick DeSouza-Lenz[5], Kenia Guzman[5], Aaron Thal[5], Samantha Graffam[5], Vanessa Laversenne[4], Alissa A. Coffey[4], Jeannine Frei[4], Sarah E. Pierce[1,2,3], Jiri G. Safar[6], Benjamin E. Deverman[4], Eric Vallabh Minikel[4,7,8,9] ✉, Sonia M. Vallabh[4,7,8,9] ✉ & David R. Liu[1,2,3] ✉

Take Home Messages

- Research funded through the CJD Foundation Research Grant program has led to advances in our understanding of human prion diseases and has revealed new treatment strategies

- Scientific ideas are always evolving
  - Research progress can require patience and persistence

- Continued funding of fundamental and applied prion research is imperative!
  - During periods of funding uncertainty, the availability of CJD Foundation Research Grants is especially important

The prion research community is extremely grateful to the CJD Foundation as well as friends and family of those affected by CJD for their philanthropic and fundraising efforts that enable these research grants