Vol 5 / Issue 2

LGMD News

Uniting the Limb-Girdle Muscular Dystrophy Community

A CALL FOR CARE

Speaking Up for More At-Home Resources for Our Community

ML BIO SOLUTIONS

From Life to Lab: The Journey of Drug Development

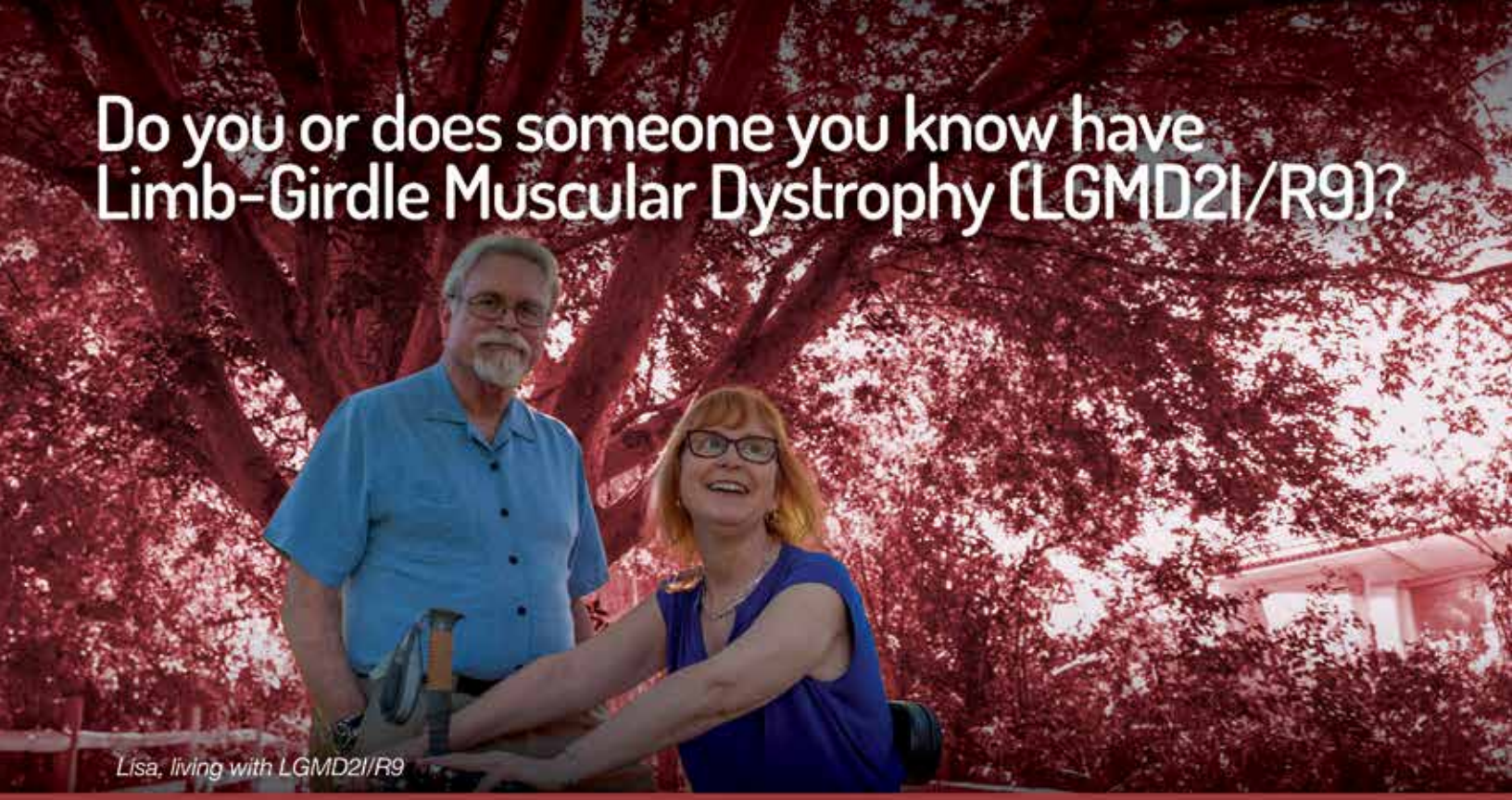
A PARTNERSHIP-BUILDING VISIT TO INDIA

Dysferlinopathy and the LGMDs

Mission to Cure

Part 1: Inspiring Stories about Starting LGMD 2I/R9 Family Foundations

Do you or does someone you know have Limb-Girdle Muscular Dystrophy (LGMD2I/R9)?



Lisa, living with LGMD2I/R9

AskBio is actively recruiting clinical study[1] participants with a confirmed genetic diagnosis of LGMD2I/R9 for an investigational[2] gene therapy treatment.

Find out if you qualify today

- This study is designed to evaluate the safety and tolerability of investigational gene therapy AB-1003 to treat LGMD2I/R9.
- Participants will receive a one-time intravenous infusion (injected directly into your vein) of the investigational gene therapy called AB-1003. AB-1003 is designed to produce fukutin-related protein (FKRP) in the body, primarily in muscle, heart, and diaphragm (the muscle that helps you inhale and exhale).
- There are two cohorts in the study. Cohort 1 is complete. We are currently recruiting for cohort 2.
- Some visits will take place at the study site, while others may occur at home. Study visit support including transportation, lodging and meals may be available.

We invite you to learn more

Email us
askfirst@askbio.com
Visit us online
Askbio.com
Clinicaltrials.gov
clinicaltrials.gov/study/NCT05230459
Scan QR code

We celebrate LGMD patients and advocacy groups for their tireless efforts and dedication to the community!

AskBio
A Bayer Cell & Gene Therapy Platform Company

[1]Clinical Study: A clinical study is a research study for which people volunteer to help scientists find answers to certain health questions
[2]Investigational Treatment: An investigational treatment is a treatment being studied to see if your disease or medical condition improves while taking it. It has not yet been approved by regulatory authorities, such as the U.S. Food and Drug Administration (FDA).

LGMD News

Vol 5 / Issue 2

How To Donate

Visit **TheSpeakFoundation.com** and select "Donate" to support our mission and programs. The Speak Foundation is a 501(c)(3) nonprofit charity. All donations are secure and tax deductible.

Thank you for your support!

The Speak Foundation
Uniting the entire LGMD community to make a difference together in future treatments for this rare disease.

The origin of The Speak Foundation's name comes from Proverbs 31:8. It is: "Speak up for those who have no voice." Living with a rare disease means many of us wait years to have a voice in areas that impact our daily lives personally. The Speak Foundation helps our voices to be heard.

Contents

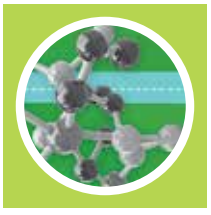
Departments

2 **Speak**
From the Editor
Momentum, Advocacy, International Collaboration

5 **Connect**
International Consortium of LGMD Organizations

7 **Question**
Ask the Expert
Lindsay Alfano, PT, DPT, DPCS
Nationwide Children's Hospital
The Ohio State University

12 **Spotlight**
John Walton Muscular Dystrophy Centre and the Jain Foundation
A Partnership-Building Visit to India on Dysferlinopathy and the LGMDs



16 Sponsored Content
From Lab to Life
The Journey of Drug Development by ML Bio Solutions

18 **Progress**
Increased Momentum for Clinical Trials in LGMD through the GRASP-LGMD Consortium

Feature Articles

21 **Mission to Cure: LGMD2I Family Foundations**
Three organizations share the inspiration behind starting their foundations

29 **A Call for Care**
Maintaining independence while securing adult care—especially in the home—remains a significant challenge, both locally and nationally

Connect with Us

Comments, Questions, or Suggestions?
ContactUs@TheSpeakFoundation.com

TheSpeakFoundation.com

Facebook.com/TheSpeakFoundation

Instagram.com/TheSpeakFoundation

Twitter.com/SpeakFoundation
Twitter.com/LGMDFoundation

Momentum, Advocacy, International Collaboration

Dear LGMD Community,

There is an incredible momentum building in the LGMD space. Two Phase 3 clinical trials are currently underway for different LGMD subtypes, and we are optimistic about the future with even more trials set to begin in 2025. We're closer than ever to seeing the first approved therapies for LGMD, and we owe it all to the researchers, clinicians, and especially the participants in natural history studies and clinical trials who have helped get us to this point. Thank you!

In this issue, we're excited to kick off a series of articles on family foundations focused on different LGMD subtypes. We start with three foundations dedicated to finding cures for LGMD R9/2I, and you can look forward to future issues highlighting other subtypes.

We know that LGMDs occur worldwide, and through international cooperation, we can best expedite diagnosis, improve clinical care, and make treatments and cures widely available as they are developed. You will read in this issue about a networking program organized by the Jain Foundation and the University of Newcastle that involves longstanding collaborative efforts — including a recent in-person visit — with clinicians in India focused on LGMD R2/2B.

What can you do to advance the causes that matter to our community? Advocacy plays a crucial role in raising the visibility of our community to lawmakers, regulators, drug developers, and other key stakeholders. Events like LGMD Day on the Hill, the International LGMD Conference, and LGMD Awareness Day are vital for spreading awareness and supporting progress. We encourage you to get involved and make your voice heard.

Let's continue to work together and stay hopeful as we move closer to finding cures. ▪

Kat Bryant Knudson

Kathryn Bryant Knudson
Editor In Chief
Founder & CEO, The Speak Foundation

Get involved and make your voice heard.

Connect with Us

ContactUs@TheSpeakFoundation.com

TheSpeakFoundation.com
InternationalLGMDConference.com

Our Mission

The Speak Foundation was based on the principle of "Speak up for those who have no voice." *Speak up for those who cannot speak for themselves.* — Proverbs 31:8

LGMD News is a program of the Speak Foundation. In order to help individuals and families living with limb-girdle muscular dystrophy receive critical and life-saving information, the Speak Foundation began publishing this resource in 2021.

SPONSORED CONTENT

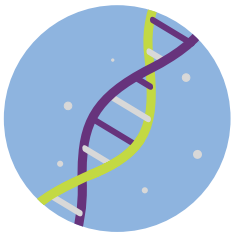
WE WELCOME INDIVIDUALS WITH LGMD2A/R1 (CALPAINOPATHY) TO JOIN OUR JOURNEY

JOURNEY

JOURNEY is a clinical outcomes assessment study, also referred to as a natural history study. The study does not involve the use of an investigational study drug, but instead studies the natural progression of LGMD subtypes over a period of time. The data collected from JOURNEY will help Sarepta learn more about the condition and how muscle strength, breathing, and heart function change over time.

Why is JOURNEY important?

Information collected from natural history studies plays an important role in drug development; for example, it can help inform how a clinical trial is designed. Natural history studies can also serve as a comparison in a potential treatment trial to help determine how an investigational study drug has made a difference in disease progression.



Who may be eligible

1. Male or Female age 4 years and older
2. Genetic diagnosis of LGMD2A/R1. Enrollment for LGMD2E/R4, LGMD2D/R3, LGMD2C/R5 is full at this time. If you do not have a genetic diagnosis, visit **LimbGirdle.com/Genetic-Testing** to learn more about genetic testing options

***Other inclusion/exclusion may apply and will be discussed with a study doctor at screening. Your participation in JOURNEY will not hinder your ability to participate in future interventional clinical studies.**

JOURNEY participation

Study participants will have access to highly experienced physicians and undergo medical and functional procedures during the screening visit, and at scheduled study visits throughout the lifetime of the study. Visits will include a combination of on-site visits (with the study doctor and research team) and phone call check-ins.

To learn more about the study and how you can join the journey, go to **JourneyLGMD.com**. You can also find more information about this study and participating locations, by visiting **ClinicalTrials.gov** and searching NCT04475926.

SAREPTA THERAPEUTICS

Together We Are Stronger!

Mark your calendar for the 11th Annual LGMD Awareness Day

LGMD
Awareness Day
September 30th

Elevate Awareness with the LGMD Awareness Day Toolkit!

Scan here to access informational flyers, social media posts, media kits, merchandise, and more!

↓

Join LGMD Awareness Foundation in our mission to elevate global awareness for limb-girdle muscular dystrophy.

Together we advocate for better access to diagnosis, care, and treatment for those affected.

lgmd-info.org

LGMD
AWARENESS FOUNDATION

International Consortium of LGMD Organizations

United States

The Speak Foundation
Uniting the entire LGMD community
TheSpeakFoundation.com

Beyond Labels & Limitations
Funding research for LGMD R1/2A and educating on its disease course
BeyondLabelsLimitations.com

Breathe with MD
Educating and raising awareness about breathing muscle weakness in neuromuscular disease
BreatheWithMD.org

CamronsCure
Funding research for LGMD R18/2S
Facebook.com/LGMDCC

Coalition to Cure Calpain 3
Funding research for LGMD R1/2A
CureCalpain3.org

CureLGMD2i
Funding research for LGMD R9/2I
CureLGMD2i.org

Kurt + Peter Foundation
Funding research for LGMD R5/2C
KurtPeterFoundation.org

LGMD Awareness Foundation
Raising awareness of and advocating for the LGMD community
LGMD-Info.org

LGMD-1D DNAJB6 Foundation
Representing LGMD D1/1D and DNAJB6 subgroup
LGMD1D.org

LGMD2D Foundation
Funding research for LGMD R3/2D and educating patients and physicians
LGMD2D.org

LGMD2i Research Fund
Funding research for LGMD R9/2I and educating the patient community
LGMD2iFund.org

LGMD2L Foundation
Representing the LGMD R12/2L Anoctamin5-related community
LGMD2L-Foundation.org

Team Titin
Strengthening the titin community: LGMD R10/2J
TitinMyopathy.com

The Jain Foundation
Funding research for LGMD R2/2B and educating the patient community
Jain-Foundation.org

Argentina

ADM Argentina Muscular Dystrophy LGMD Group
Funding research for neuromuscular diseases
ADM.org.ar

Australia

Daniel Ferguson LGMD2A Foundation
Funding research for LGMD R1/2A and educating the patient community
DFFoundation.com.au

France

"GI LGMD"/LGMD Patient Group of AFM-Telethon
Focusing on all subtypes of LGMD, supporting research and educating the patient community
LGMD.AFM-Telethon.fr

Italy

Conquistando Escalones Association
Funding research for LGMD D2/1F
ConquistandoEscalones.org

"GFB ONLUS"/ Family Group of Beta-Sarcoglycanopathy
Representing the LGMD R5/2C Gamma Sarcoglycan-related, LGMD R3/2D Alpha Sarcoglycan-related, LGMD R4/2E Bèta-Sarcoglycan-related, and LGMD R6/2F Delta-Sarcoglycan-related communities
Beta-Sarcoglicanopathy.org

Gruppo Cingoli of UILDM – Unione Italiana Lotta alla Distrofia Muscolare
Focusing on all subtypes of LGMD, raising awareness and providing support for the entire Italian community
UILDM.org

Italian Association Calpain 3
Funding research for the LGMD R1/2A Calpain 3-related community
AICA3.org

Japan

Patients' Association for Dysferlinopathy Japan
Representing the Japanese and International LGMD R2/2B Dysferlin-related and Miyoshi Muscular Dystrophy 1 (MMD) communities
PADJ.jp/index.html

Netherlands

Stichting Spierkracht
Raising awareness and supporting the LGMD R3/2D Alpha Sarcoglycan-related community
StichtingSpierkracht.com

South Korea

Korean Dysferlinopathy Patients Association
Providing patients with LGMD R2/2B information and research updates
Cafe.Naver.com/UniteDsyferlinopathy

Spain

Conquistando Escalones Association
Funding research for LGMD D2/1F
ConquistandoEscalones.org

Proyecto Alpha
Funding research for LGMD R5/2C Gamma Sarcoglycan-related, LGMD R3/2D Alpha Sarcoglycan-related, LGMD R4/2E Bèta-Sarcoglycan-related, and LGMD R6/2F Delta-Sarcoglycan-related
ProyectoAlpha.org

For additional information about the International Consortium of LGMD Organizations: **ContactUs@TheSpeakFoundation.com**

July 18-21, 2025

2025 INTERNATIONAL LIMB GIRDLE MUSCULAR DYSTROPHY CONFERENCE

Orlando, Florida

ORLANDO, FL

International LIMB GIRDLE MUSCULAR DYSTROPHY Conference

FEATURED PRESENTATIONS BY THE FOLLOWING SPEAKERS:

Dr. Lindsay Alfano
Nationwide Children's Hospital

Dr. Barry Byrne
University of Florida

Dr. Kevin Campbell
University of Iowa

Dr. Joanne Donovan
Edgewise Therapeutics

Dr. Sharon Hesterlee
Muscular Dystrophy Association

Dr. Peter Kang
University of Minnesota

Annie Kennedy
EveryLife Foundation

Dr. Monkol Lek
Yale University

Dr. Meghan Lowery
University of Florida

Dr. Sophie Olivier
Atamyo Therapeutics

Dr. Chris Passalacqua
AskBio

Dr. Louise R. Rodino-Klapac
Sarepta Therapeutics

Dr. Douglas Sproule
ML Bio Solutions

Dr. Simone Spuler
Max Delbrück Center, Berlin

Dr. Volker Straub
University of Newcastle, UK

Dr. Conrad (Chris) Weihl
Washington University School of Medicine

Dr. Matthew Wicklund
University of Texas in San Antonio

Dr. Bjarne Udd
Tampere University Hospital

Dr. Carla Zingariello
University of Florida

REGISTER TODAY!

PRESENTED BY THE SPEAK FOUNDATION

www.InternationalLGMDConference.com

Additional speakers may be announced forthcoming.

Lindsay Alfano, PT, DPT, PCS

Nationwide Children's Hospital
The Ohio State University

Q

I am a Mexican female living with LGMD R1/2A. How can someone who lives outside of the United States gain access to clinical trials?

A

The National Institutes of Health (NIH) in the United States manages a database of all clinical trials and is accessible via this web portal (**Clinicaltrials.gov**). This is a wonderful resource which allows anyone to search for clinical trials by diagnosis, treatment, location, or other key words. You can find contact information for active sites and summaries of clinical trials, including enrollment criteria and safety or efficacy objectives.

EDITOR'S NOTE: There is a listing of all trials and studies conducted by the GRASP-LGMD consortium in every issue of this magazine.

Q

Why are some muscles significantly weaker while others remain much stronger in patients with LGMD? For example, why are the biceps brachii very weak while the triceps brachii remain much stronger, despite the loss of the same protein in all muscle cells?

A

We don't always know why, and we are still learning. Natural history and clinical trial readiness studies help us identify these patterns, which are sometimes unique for different subtypes of LGMD and other neuromuscular diseases. We use various methods like strength testing, functional scales, and imaging techniques (like MRI) to help us identify different patterns of muscle involvement. In some cases, it may be that muscles that are frequently used (or overused) are those that seem to get weaker more quickly.

Q

Is there any statistically significant data around diet intake or vitamins and supplements for muscle maintenance for LGMDs (for example, creatine to slow the progression of muscle disease/atrophy)?

A

There is no current evidence to support that specialized diets, vitamins, or supplements impact progression of muscle weakness. While vitamins and supplements may be marketed to do many things, this industry is not well regulated, and the claims are not typically supported by evidence. These compounds don't typically help, and it's important to remember they can be harmful in some circumstances. You should talk to your local care team about specific questions you may have about your diet, vitamins or supplements, and your body.

Meet the Expert

Lindsay Alfano, PT, DPT, PCS is a researcher specializing in the care and evaluation of patients with neuromuscular disorders. She is a principal investigator in the Center for Biobehavioral Health and an assistant professor of Pediatrics at The Ohio State University. Dr. Alfano serves an integral role in planning and designing clinical trials and contributes to protocol development, outcome measure selection, statistical analysis, and interpretation for ongoing clinical trials within the Jerry R. Mendell Center for Gene Therapy and throughout the wider research community. Dr. Alfano serves on an international consortium of neuromuscular physical therapy experts that provide industry-standard training and reliability for multisite international trials. Her research goals focus on standardizing training in rare disease, as well as developing and promoting optimal assessment tools to measure change in movement abilities while minimizing the burden of testing. She has co-developed novel outcomes including the ACTIVE WSV & ACTIVE-mini systems, 100-meter timed test, and the Neuromuscular Gross Motor Outcome (GRO). In response to the COVID-19 pandemic, Dr. Alfano and the neuromuscular physical therapy team at Nationwide Children's Hospital have led initiatives to understand and validate remote testing for patients with neuromuscular diseases for clinical and research purposes.

Question

Movement is what matters. Stretching and massage can help to temporarily reduce pain or discomfort, but don't typically have long term impacts on contractures. Any activity that a person enjoys that gets their body moving is helpful.

Q

What ongoing maintenance exercises or therapies do you recommend for someone who has contractures? I live with LGMD R4/2E and have tried stretching, massage, and shockwave for contractures in the glutes and quads. My symptoms worsen when I am sedentary, even for very short periods of time, such as sitting for 20 minutes. I cannot find recommendations online and none of the physiotherapists I see specialize in neuromuscular diseases (NMDs).

A

Movement is what matters. Stretching and massage can help to temporarily reduce pain or discomfort, but don't typically have long term impacts on contractures. Any activity that a person enjoys that gets their body moving is helpful. Some patients enjoy yoga classes, swimming, or walks through their community. For others, playing active video games with family and friends that get their arms and trunk moving are enjoyable. There are adaptive sport options as well, like wheelchair soccer, hockey, or skiing.

Neuromuscular conditions, such as LGMD, are rare. Finding a local physiotherapist that specializes in LGMD is unlikely. However, it may be possible to find a great physiotherapist locally to team up with who can identify the best individualized exercise program for you. You are the expert in your body and your LGMD; the physiotherapist is the expert in finding safe ways for you to move and exercise. Work together to explore and identify safe, motivating, and enjoyable activities for you. You could also have the physiotherapist contact your NMD team for input, if they need advice. Always check with your local medical team first to learn about any activity restrictions or recommendations they may have before starting a new program.

Q

My loved one was diagnosed with dysferlinopathy 11 years ago and is currently 64 years of age. Can you speak to what the prognosis may be in terms of when she may have to start using walking aids? She currently climbs stairs alternating with a hand on the railing and a straightened leg, then the other. Her progression has not been rapid. She is active, but with limitations on how far she can ambulate. She has to walk cautiously due to occasional falls.

A

Our natural history and clinical trial readiness studies help us learn many things about how LGMD impacts groups of patients. However, the best predictor of an individual patient's future function or prognosis is their past trajectory. Timing of use of walking aids or mobility equipment is very individualized, but typically these are recommended if patients are finding they have to limit their day-to-day activities or participate less than usual in things they enjoy. Think of these devices as 'tools in the toolbox.' They are there to be helpful if needed but may not be necessary every day or all the time.

Question

Q

I'm seeing more studies on the benefits of exercise for people with NMDs. Do you have any tips on finding the "sweet spot" to manage fatigue and weakness while still engaging in a beneficial level of exercise? For those who struggle to realize they've "overdone" it with activity or exercise before it's too late, what indicators should they watch for to know when it's time to stop?

A

There is no one-size-fits-all "sweet spot," and it will differ greatly between people with LGMD. However, the best recommendation is to be patient with yourself and start slowly. If you're just getting started, ease into the activity. You can gradually add minutes or intensity as you go. Those that jump in quickly and too intensely are at much higher risk of overdoing it, and typically have difficulty keeping up the motivation to continue over the long term. Similarly, if you have upcoming plans for a long day(s) of fun, take time to plan ways to conserve energy. This could be simply planning time for breaks during the day or maybe bringing along a device that supports you getting from point A to point B, so you have the energy to have fun once you get there!

Listen to your body during activity. Anything out of the ordinary may be your body telling you to take a break. Muscle twinges, cramping, or burning are ways your body communicates that it is working hard. Tripping or losing your balance can also be an early sign of muscle fatigue.

Q

How does having LGMD impact recovery from a fracture, such as a broken leg? I've noticed loss of function seems to speed up post-fracture. Does it take longer for us to heal versus those who are unaffected? Why do some who were previously walking suddenly lose the ability to walk due to breaking their leg? Lastly, what would you recommend for management post-fracture?

A

Fractures in patients with LGMD heal similarly to those without LGMD. The concern with fractures is the casting or surgery required to support them while they heal. This usually results in some period of immobility or decreased movement, which can contribute to more muscle weakness due to disuse. It may be possible for some patients to regain some strength or function after a fracture, but often fractures, and immobility during the healing phase, negatively impact a person's overall strength and function. That being said, it is important to talk with your local team to identify strategies to reduce falls and injuries to prevent fractures when possible. Energy conservation techniques, use of assistive devices or braces, and/or mobility devices can be very helpful in reducing risk and frequency of falls.

Management post-fracture should be individualized to the specific injury, treatment, and person with LGMD. The overall goal is to reduce periods of immobility and support return to functional activities and movement as quickly and safely as possible to reduce muscle atrophy due to disuse.

Listen to your body during activity. Anything out of the ordinary may be your body telling you to take a break. Muscle twinges, cramping, or burning are ways your body communicates that it is working hard. Tripping or losing your balance can also be an early sign of muscle fatigue.

SAREPTA THERAPEUTICS

Natural history studies are critically important for gaining a better understanding of limb-girdle muscular dystrophies and helping to progress LGMD research and development

Sarepta is grateful to the participants in our LGMD natural history study, JOURNEY, which includes individuals diagnosed with LGMD Type 2E (LGMD2E/R4), Type 2D (LGMD2D/R3), Type 2C (LGMD2C/R5), and Type 2A (LGMD2A/R1). We appreciate your time and commitment.

If you wish to learn more about natural history studies and how they can help contribute to scientific research for the LGMD community, we invite you to:

Stay connected to receive Sarepta updates and community resources*

If you wish to speak directly to a member of the Sarepta Patient Affairs team, we encourage you to email **Advocacy@Sarepta.com**.

*LimbGirdle.com is a resource intended for US patients and families. If you are living outside the US and wish to connect to Sarepta to learn more about our work, please email Advocacy@Sarepta.com

Q

I was recently diagnosed with LGMD D1/1D DNAJB6 related. Are there any therapies or trials on the horizon for autosomal dominant LGMD?

A

Researchers are actively working to better understand dominantly-inherited muscle disorders to develop effective therapeutic approaches. While there are no current clinical trials for patients with dominantly-inherited LGMDs including LGMD D1 DNAJB6-related, the field is learning more about the underlying causes of these diseases every day. ▪

EDITOR'S NOTE: There will be a session devoted to dominant LGMD subtypes at the upcoming 2025 International Limb Girdle Muscular Dystrophy Conference in July.

Have a Question for Our Experts?

Send Questions To:
ContactUs@TheSpeakFoundation.com

Connect with Us

TheSpeakFoundation.com

A Partnership-Building Visit to India

on Dysferlinopathy and the LGMDs

India is a very prominent location in the international LGMD community, with large groups of highly motivated and capable individuals living with different subtypes of LGMD.

Members of the John Walton Muscular Dystrophy Research Centre (JWMDRC) in Newcastle, UK, and the Jain Foundation participated in several events in India during January 2025, in collaboration with Indian clinicians, patients, and researchers. Events included training sessions at the Bombay Hospital in Mumbai and at All-India Institute of Medical Sciences (AIIMS) in New Delhi, as well as a meeting for dysferlinopathy patients in Mumbai.

India is a very prominent location in the international LGMD community, with large groups of highly motivated and capable individuals living with different subtypes of LGMD. Professor Dr. Satish Khadilkar, neurologist at the Bombay Hospital, delivered a presentation at the 2021 International Virtual LGMD Conference in which he stated that LGMD R1/2A (calpain-related) and LGMD R2/2B (dysferlin-related) are the most common subtypes of LGMD in India.

Knowing this, the Jain Foundation has invested in Indian collaborations for the past 14 years, which has contributed to India having the second largest number of patients of any country represented in the Dysferlin Registry. Central to this level of engagement is a collaborative project with Dr. Rashna Dastur and Dr. Pradnya Gaitonde of the Centre for Advanced Medical Diagnoses for Neuromuscular Diseases (CAMDND). It has been through this long-standing partnership that Indian patients have repeatedly participated in diagnostic research, received access to genetic testing, and are able to communicate regularly with the organizations.

The Jain Foundation also worked with former Newcastle researcher, Dr. Rita Barresi, and CAMDND to optimize and validate new technologies to detect dysferlin protein expression as a complement to genetic sequencing to aid diagnosis.

Above: Attendees at the Dysferlinopathy Patient Meeting in Mumbai

Three team members from Newcastle participated in the 2025 events in India: Professor Dr. Volker Straub, MD, PhD; Heather Hilsden (Project Manager for the Dysferlinopathy Natural History Study); and physiotherapist Meredith James, PhD. The Jain Foundation was represented by Sarah Emmons, Vice President of Patient Affairs, and Kanan Lathia, Associate Director of Research.

This trip was funded by International Science Partnership Funds allocated to Newcastle University by UK Research and Innovation (UKRI), with additional funding from the Jain Foundation. Professor Dr. Straub was able to dedicate time for this visit due to support from the Newcastle National Institute for Health and Care Research Biomedical Research Centre (NIHR-BRC) for cohort and network development for rare diseases in the neuromuscular field. The overall purpose of the trip was summarized by Sarah Emmons: "Elevating clinical knowledge of how to assess people with LGMDs and facilitating connection between individuals with LGMDs would not be possible without investing in relationships between advocacy organizations and clinical researchers across borders."

Outreach to Patients

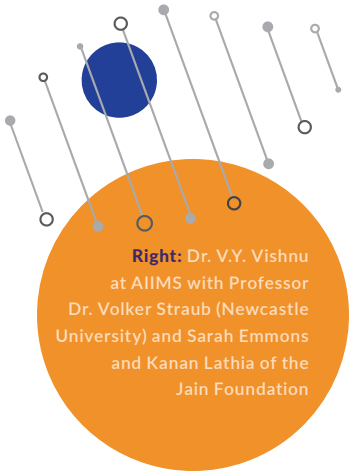
A highlight of the trip was an in-person meeting for dysferlinopathy patients in India. The Jain Foundation had previously hosted a patient meeting in India in November 2019, and both the organizers and the attendees welcomed another meeting after such a long interval. Many in attendance were new to the Dysferlin Registry and unfamiliar with the mission of the Jain Foundation or other activities occurring in the LGMD space.

The meeting featured presentations from both the local and international clinicians, as well as from the Jain Foundation team. There was a Question-and-Answer session, covering a wide variety of topics. Many questions about diagnosis, progression, and effects of lifestyle (exercise, diet, supplementation) mirrored those frequently addressed in the "Ask the Expert" columns in *LGMD News*. Others, however, covered topics more specific to India, including accessibility issues, especially as they relate to travel, and availability/funding for obtaining accessibility devices. One patient attending the meeting described it in the following way: "My experience at the JF Registry Meet was inspiring and eye-opening. There was a real sense of community amongst the members, and I felt like I belonged."

Above: Professor Dr. Volker Straub explains the genetics and inheritance pattern of dysferlinopathy at the patient meeting

Above: Lighting the lamp to open the event and symbolize the collaboration in the aptly named Jain Auditorium at Bombay Hospital

I hope we can build on this meeting to move the global LGMD community forward in terms of trial readiness, exchanging expertise to improve physio-led NMD care together.



Right: Dr. V.Y. Vishnu at AIIMS with Professor Dr. Volker Straub (Newcastle University) and Sarah Emmons and Kanan Lathia of the Jain Foundation

Outreach to Clinicians: Standardizing MRI Collection and Evaluation of Outcome Measures

A challenge in conducting natural history studies and clinical trials internationally in multiple locations is making sure that data are collected consistently across sites, in order to avoid fragmentation in the field and make sure that conclusions apply worldwide. For India, in particular, standardizing assessment and collection methodology will permit Indian colleagues to collect data from their extensive patient cohorts and directly compare that data to data collected elsewhere, which will multiply the statistical power of current data sets. The trip's activities included initiatives to accomplish this in both MRI and outcome measure assessments.

Heather Hilsden and Meredith James underwent "control" MRIs at the All-India Institute of Medical Sciences in New Delhi (AIIMS). This is an important check to ensure comparable results between MRI images recorded in different facilities. One needs to record MRIs of the same person in both locations to make sure that the images are sufficiently similar. Professor Dr. Ajay Garg, lead for Neuroimaging at AIIMS, supervises a PhD fellowship investigating MRI in neuromuscular disease and is keen to build on this shared research interest and collaborate to ensure comparable data quality.

Dr. Meredith James provided training on two clinical outcome measure assessments often used in LGMD clinical trials and natural history studies: the North Star Assessment for LGMDs (NSAD) and the Performance of Upper Limb (PUL). Training sessions were conducted in both Mumbai and Delhi, attended by a total of 54 physiotherapists and neurologists, including Dr. Selva Ganapathy and Mr. Naveen Ventakesh, leading neuromuscular physiotherapists from Professor Dr. Atchayaram Nalini's specialist neuromuscular service at NIMHANS in Bangalore.

Dr. James said, "The enthusiasm, astute questions, and skill level of the Indian neurophysiotherapists is impressive, as were the number of PhD qualified physiotherapists in the centres represented. I hope we can build on this meeting to move the global LGMD community forward in terms of trial readiness, exchanging expertise to improve physio-led NMD care together. We can learn a lot from the skilled Indian physiotherapists due to the differences in our health care systems."

Fostering Collaboration and New Initiatives

The teams spent a day at Bombay Hospital, Mumbai, hosted by Professor Dr. Satish Khadilkar, and a day in Delhi at the AIIMS hosted by Dr. V. Y. Vishnu, who leads the AIIMS Comprehensive Neuromuscular Disorders Clinic (AIIMS-CNMD). Dr. Vishnu gave the visitors an overview of his work and summarized the logistical capabilities at AIIMS,

which is an enormous public medical facility that often sees over 10,000 patients a day across medical specialties.

Dr. Vishnu, who is the current convenor of the Neuromuscular Chapter of the Indian Academy of Neurology, discussed opportunities to form multiregional Indian clinical collaborations. Dr. Vishnu, Professor Dr. Nalini, and Professor Dr. Straub already collaborate via the International Centre for Genomic Medicine in Neuromuscular Disease (ICGNMD), in which Professor Dr. Straub is the lead for LGMDs.

Professor Dr. Straub then provided a lecture to the AIIMS clinicians about LGMDs and the genetics behind them, covering enormous territory and including information about the activities of LGMD patient groups. Sarah summarized the visit: "We gained a sense of the epic scale of AIIMS, the tremendous volume of patients who journey there for care, and we got a glimpse of the grace and tenacity of the clinicians at AIIMS."

Outcomes and Take-Aways

Following the events, the participants had a number of take-aways. Professor Dr. Straub assessed the impact of the meetings: "The opportunity to meet patients, see their willingness to participate in research, and discuss future ideas for collaborations with colleagues such as Professor Dr. Khadilkar and Dr. Vishnu in the same trip was fantastic. India has a huge proportion of the global cohort for the LGMDs. There are so many opportunities to learn from each other for the benefit of LGMD patients globally!"

Sarah Emmons from the Jain Foundation was delighted by both the success of the meetings and the enthusiasm from all stakeholders: "I was thrilled to see Professor Dr. Straub and Dr. James share what was learned from our funded studies and to see the obvious enthusiasm from the Indian colleagues and patients. I feel fully inspired to elevate our work in India in partnership!"

Dr. Vishnu thanked the Newcastle and Jain Foundation teams for their visit: "I am really confident that it will result in a fruitful collaboration together, building on the work initiated through the International Centre for Genomic Medicine in Neuromuscular Disease. I look forward to working more closely with the teams in Bangalore and Mumbai."

Heather Hilsden, Newcastle project manager of the Jain Foundation-funded International Clinical Outcome Study, added, "We hope that, with the enthusiasm from the expert centres, patient groups, and the Jain Foundation, we'll be able to assess any differences in phenotype between the LGMDs in India and the cohorts studied in other countries. We also identified shared research interests between our centres; for instance, Professor Dr. Nalini's group (NIMHANS Bangalore) has already published on assessments of gait in neuromuscular diseases. We hope to learn from their centre as we move our gait studies in dysferlinopathy forward." ■

Written by

Heather Hilsden, *Newcastle project manager of the Jain Foundation-funded International Clinical Outcome Study*

Sarah Shira Emmons, *Vice President of Patient Affairs, Jain Foundation*

Brad Williams, PhD, *Senior Editor,* LGMD News

Above (Left to Right): Professor Dr. Volker Straub, Dr. Meredith James, Kanan Lathia, Sarah Emmons, Dr. Rashna Dastur, Dr. Pradnya Gaitonde, and Professor Dr. Satish Khadilkar

Below: Physio training with Dr. Meredith James and Heather Hilsden

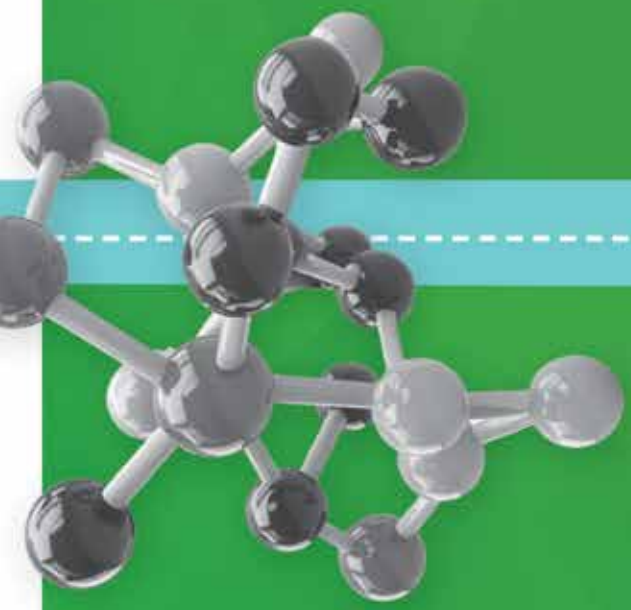
Connect with Us

Jain-Foundation.org
BombayHospital.com/neurology.php
Nimhans.ac.in/patient-care
Aiims.edu

From Lab to Life

The Journey of Drug Development

Developing a new therapy is a long and complex process, often taking many years and involving significant investment and effort from researchers, drug developers, patient advocacy and the patient community.



Target Identification

Scientists identify a specific biological target (like a protein or gene) involved in a disease.

Discovery & Preclinical Research

Drug Candidate Development

Researchers design and synthesize potential drug molecules that can interact with the target.

Preclinical Testing

These therapies are rigorously tested in laboratory settings (in vitro) and animal models (in vivo) to assess their safety, efficacy, and how they are processed by the body. A lot of drug candidates do not make it past this stage.

Efficacy means how well a particular drug product, device or diagnostic tool produces the expected results under carefully controlled scientific testing conditions.

ML Bio Solutions

Clinical Trials

This phase involves testing the investigational product in humans and is divided into several stages.

Investigational products are drugs, devices, vaccines, or diagnostic tools undergoing rigorous testing in a clinical trial setting.

Why include a placebo arm?

The placebo group helps to minimize the "placebo effect," where patients experience an improvement in symptoms simply because they believe they are receiving treatment.

By comparing the treatment group to the placebo group, researchers can accurately determine if the drug's benefits are truly due to its pharmacological action and not just a psychological effect.

Phase 1

Typically involving a small group of healthy volunteers. The primary focus is on assessing the investigational product's safety and how it is metabolized by the human body.

Phase 2

Involves a small group of individuals with the target condition or disease. The main goals are to determine the product's safety effectiveness and identify the optimal dosage and administration route.

Phase 3

This crucial phase is designed to determine if the product is safe and effective in a larger group of individuals with the target condition or disease. Phase 3 often randomly divides participants into either the treatment group (receiving the investigational product in development) or a placebo group (receiving a non-therapeutic product which tastes or looks the same as the investigational product).

Open Label Extension Program (OLE)

OLE programs gather longterm safety and tolerability data. There is no placebo group in an OLE program, rather all participants involved have access to the investigational product.

Phase 4

This phase gathers information on the new product's use in different populations and continues after a product is approved to study long-term safety and effectiveness in real-world settings.

Clinical trials that study rare diseases often involve small patient populations, making it critical that each participant remain in the clinical trial and adhere to the study protocol (e.g., taking the investigational product as instructed and attending all clinical visits as scheduled). When rare disease clinical trials are small, each study participant's data is an essential component of the collective data researchers rely on to draw meaningful conclusions from the trial. By ensuring complete and reliable data, participants help reduce the likelihood of the trial being prematurely terminated and increase researcher and regulator's ability to evaluate the investigational product accurately. Clinical trials help to determine the safety and efficacy of a potential new therapy, they provide study participants with early access to potentially beneficial therapies, and they are an integral part of advancing medical science.

Increased Momentum for Clinical Trials in LGMD through the GRASP-LGMD Consortium

Clinical trial preparedness is key for successful future clinical trials in the LGMD population.

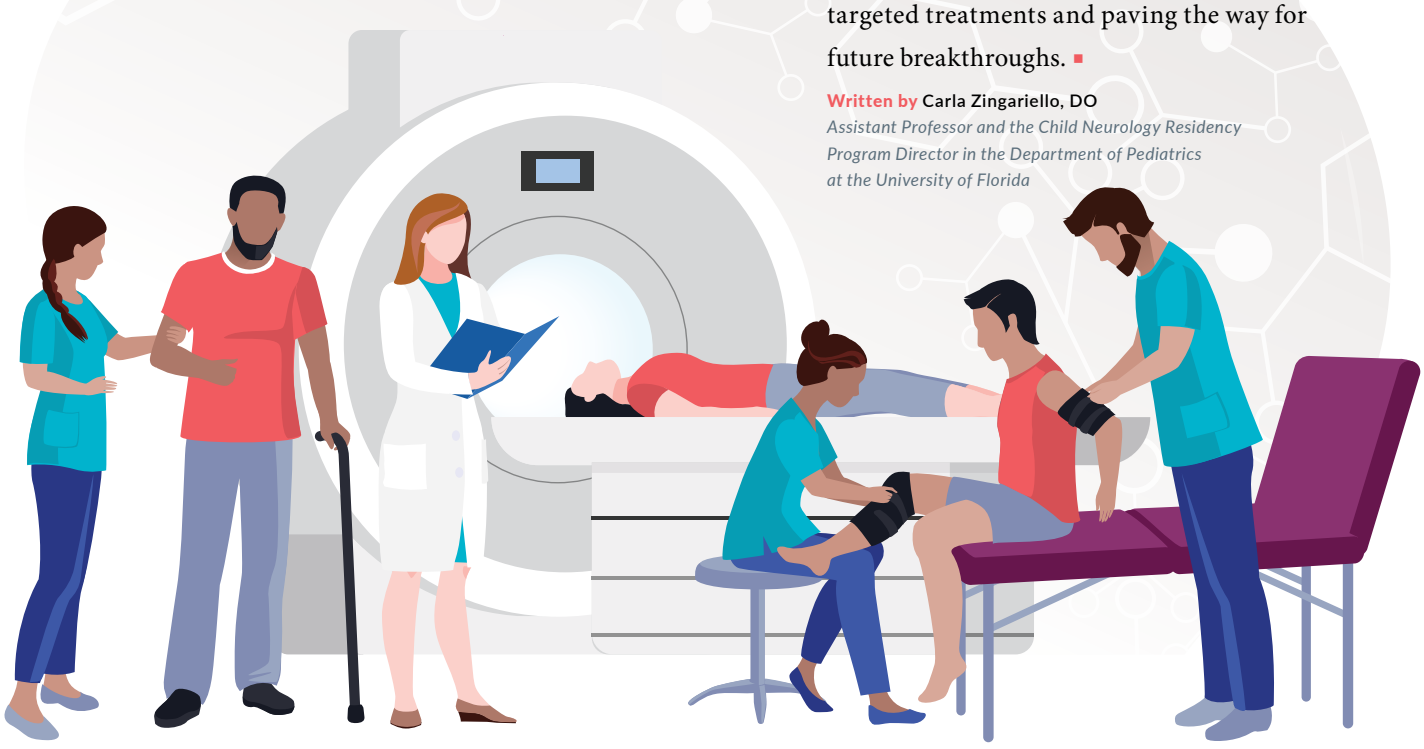
Dr. Carla Zingariello is thrilled to lead a site at the University of Florida for the GRASP-LGMD consortium. This particular site serves a diverse population located throughout the southeastern United States and beyond. This allows for the opportunity to study important scientific and medical questions for patients living with LGMDs through all phases of clinical research studies.

Previously, Dr. Zingariello led the Florida site's participation in a GRASP-LGMD study exploring the natural history of LGMD R9/2I in children and adults. This study assessed muscle biomarkers over time, offering insights into disease progression and potential treatment targets.

Now, Dr. Zingariello is eager to begin enrollment for a new GRASP-LGMD study: Trial Readiness and Endpoint Assessment in LGMD R1/2A. This study will enroll 100 patients across GRASP-LGMD sites, including children as young as 12 years of age. As part of the study, a subset of patients will also undergo muscle MRI imaging to further enhance understanding of the disease. There will be four study visits over a period of two years.

Clinical trial preparedness is key for successful future clinical trials in the LGMD population. LGMD patients are encouraged by the many advances in gene transfer therapy, small molecule drugs, and HDAC inhibition for Duchenne Muscular Dystrophy that have set the stage for developing targeted therapies for LGMDs. The GRASP-LGMD consortium is leading this effort, laying the groundwork for approval and commercial production of targeted treatments and paving the way for future breakthroughs. ■

Written by Carla Zingariello, DO
Assistant Professor and the Child Neurology Residency Program Director in the Department of Pediatrics at the University of Florida



UPDATED: APRIL 1, 2025

Active GRASP-LGMD Natural History Study

Recruiting:

Trial Readiness and Endpoint Assessment in LGMD R1/2A (GRASP-01-003)

Inclusion Criteria

- Age between 12 – 50 at enrollment
- Clinically affected (defined as weakness on bedside evaluation in a pattern consistent with LGMDR1)
- Genetic confirmation of LGMDR1 (presence of homozygous or compound heterozygous pathogenic mutations in CAPN3)
- Must be able to provide written informed consent and be willing and able to comply with all study requirements

Exclusion Criteria

- Have contraindications to MRI or MRS (e.g., non-MR compatible implanted medical devices or severe claustrophobia)
- Non-ambulatory, defined as unable to safely walk 10 meters without assistive devices (ankle foot orthotics allowed)
- Positive pregnancy test at any timepoint during trial
- Have dominantly inherited CAPN3 mutations (i.e. LGMD D4)
- Any other illness that would interfere with the ability to undergo safe testing or would interfere with interpretation of the results in the opinion of the site investigator

Ruby Langeslay
Network Coordinator, Grasp-LGMD Consortium
(804) 828-8481 | *Ruby.Langeslay@vcuhealth.org*

Jennifer Raymond
Network Coordinator, Grasp-LGMD Consortium
(804) 828-6318 | *Jennifer.Raymond@vcuhealth.org*

GRASP-LGMD Consortium Members

Lindsay Alfano, PT, DPT, PCS | Nationwide Children's Hospital
Zineb Ammous, MD, FACMG | The Community Health Clinic
Urvi Desai, MD | Atrium Health Carolinas Medical Center
Jordi Diaz-Manera, MD, PhD | Newcastle University
Stacy Dixon, MD, PhD | University of Colorado
Nicholas Johnson, MD, MSci, FAAN | Virginia Commonwealth University
Peter Kang, MD | University of Minnesota
Doris Leung, MD, PhD | Kennedy Krieger Institute
Katherine Mathews, MD | University of Iowa
Tahseen Mozaffar, MD, FAAN | University of California, Irvine
Erik Niks, MD | Leiden University
Richard Roxburgh, Mb ChB, FRACP, PhD | University of Auckland
Valeria Sansone, MD, PhD | Centro Clinico NeMO
Jeffrey M. Statland, MD | University of Kansas Medical Center Research Institute, Inc.
John Vissing, MD | University of Copenhagen
Conrad "Chris" Weihl, MD, PhD | Washington University in St. Louis
Matthew Wicklund, MD | UT Health San Antonio
Carla Zingariello, DO | University of Florida

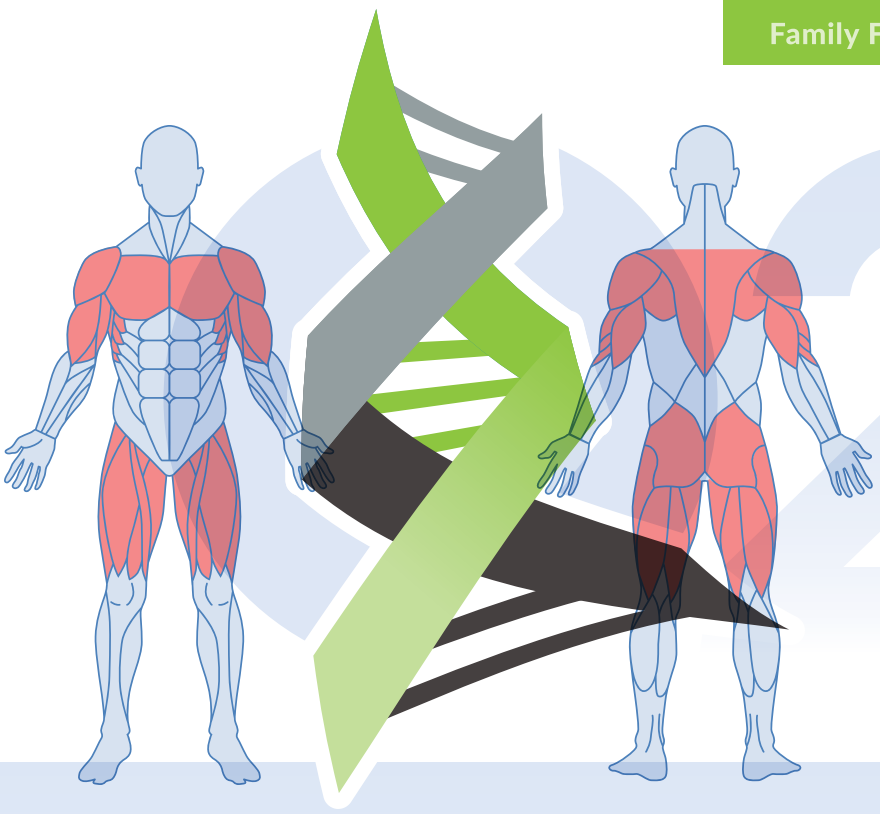
Spotlight:
Dr. Carla Zingariello
University of Florida

Dr. Carla Zingariello is an Assistant Professor and the Child Neurology Residency Program Director in the Department of Pediatrics at the University of Florida, where she also leads a site for the GRASP-LGMD network. She is a board-certified pediatric neuromuscular neurologist and has treated LGMD patients for seven years. She has been the site principal investigator (PI) for several multi-center clinical research studies on muscular dystrophy, including the Muscular Dystrophy Surveillance, Tracking, and Research Network (MD STARnet).

Thank You

Thank you to the McColl and Lockwood families, the LGMD2i Research Fund, the CureLGMD2i Foundation and all the LGMD family foundations dedicated to the LGMD community and committed to advancing research and the development of potential therapies.

ML BioSolutions
a bridgebio company



Mission to Cure:

LGMD2I Family Foundations

Limb-Girdle Muscular Dystrophy Type 2I/R9 is caused by pathogenic variants in the FKRP gene. This gene provides instructions for making a protein crucial for proper muscle function.

LGMD 2I/R9 is an autosomal recessive condition, meaning that to have the disease, both copies of the FKRP gene (one inherited from each parent) must be mutated (changed or altered). If both parents are carriers of FKRP mutations, there's a 25% chance that each of their children will have LGMD 2I/R9. LGMD 2I/R9 causes muscle weakness around the shoulders and hips typical of the LGMDs, and also commonly affects cardiac and respiratory muscles.

The most common pathogenic (disease-causing) mutation in FKRP is the c.826C>A (p.L276I) variant, also known as the "Viking" mutation, as it is thought to have originated in Scandinavia. The majority of people with LGMD 2I/R9 in Europe and North America have two copies of the L276I variant and are referred to as "L276I homozygous." However, other mutations can also occur in the FKRP gene. People who carry different variants on each copy of the FKRP gene are referred to as "compound heterozygous."

People who are L276I homozygous typically have a later onset of symptoms and slower disease progression. Conversely, people who are compound heterozygous typically have symptoms in childhood and a faster decline in muscle strength. It's important to note that the genetic mechanisms of LGMD 2I/R9 are complex, and the relationship between genotype (genetic makeup) and phenotype (observable characteristics) can vary.

Consulting with a genetics professional is crucial if you have any concerns about LGMD 2I/R9 or your family history. They can provide accurate and personalized information based on your specific circumstances.

The LGMD 2I/R9 patient community has seen remarkable advancements in the scientific understanding and development of potential approved therapies due to three family foundations who have supported the progress over the past 15+ years. Follow along to learn more about these three organizations who share the inspiration behind starting these foundations.

Written By Kelly Brazzo
Co-Founder/CEO, CureLGMD2i Foundation

CureLGMD2i Foundation

In 2008, my husband Keith and I welcomed

Samantha (Sammy) Brazzo into the world. She was the most beautiful baby. Our older daughter, Marina, was thrilled to have a little sister that she could play dress-up and have sleepovers with each night. It was such a joy to watch Marina dote on her baby sister. Singing and dancing in princess dresses became the norm. Sammy started walking shortly after she turned a year old, and soon after, Keith and I noticed she began having significant struggles with everyday tasks. She would frequently stumble and fall, and she made a grunting sound while trying to get up from the floor, which was clearly difficult for her. We started Sammy in physical therapy in an attempt to build her strength and promote her development. After a few months, the physical therapist encouraged us to obtain a diagnosis, which would hopefully explain Sammy's physical challenges. This led us down a road of many visits to specialists, eventually to discover that Sammy has a compound heterozygous form of limb-girdle muscular dystrophy (LGMD) type 2I, now referred to as LGMD 2I/R9. The team at the National Institutes of Health (NIH) explained to us that this is a very rare and progressive condition, which would eventually lead to loss of ambulation, along with possible respiratory and cardiac complications, likely to occur in early adolescence.

CureLGMD2i's Executive Board (Left to Right): Kristen Olsen, Dan Pope, Kelly Brazzo, John Spencer, and Kaitlyn Neroladakis

Sammy was diagnosed with LGMD 2I/R9 by Dr. Carsten Bonnemann at the NIH at the age of two

I quickly asked the team what we could do for Sammy. With no approved treatments for this disease and limited funding for research into LGMDs, they encouraged us to start a foundation. That suggestion was exactly what we needed to hear; it inspired the creation of the Samantha J. Brazzo Foundation, which we established in 2011. I remember sitting up late into the night, building the first website and planning our first casino night fundraiser. As stressful as it was, while working full time and raising two little girls, it became the distraction I needed, helping me focus on something positive instead of the overwhelming grief about Sammy's uncertain future.

Although the foundation was initially inspired by Sammy, it wasn't long before we met many other families affected by LGMD 2I/R9, particularly through the University of Iowa Dystroglycanopathy Patient and Family Conference. It became clear that the foundation's mission extended far beyond Sammy—it was meant to benefit all families impacted by this condition. As a result, in 2016, we officially changed the name to ***CureLGMD2i Foundation***.

It became clear that the foundation's mission extended far beyond Sammy—it was meant to benefit all families impacted by this condition.

The CureLGMD2i Foundation has come a long way since our humble beginnings. We now have an executive board and advisory board comprised of 15 patients and caregivers affected by LGMD 2I/R9 who are dedicated to supporting the mission and vision of CureLGMD2i. Over the past 14 years, thanks to the wonderful generosity of many friends, family, and corporate sponsors, CureLGMD2i has provided over $1.3 million in programs to build awareness, strengthen advocacy, and fund programs to expand the scientific understanding of LGMD 2I/R9. In collaboration with the LGMD2i Research Fund, CureLGMD2i is dedicated to supporting the Global FKRP Registry and patient conferences for LGMD2I. Together, we have also co-funded over 20 scientific research grants, which have contributed to the development of multiple clinical trials that are currently underway. CureLGMD2i has also invested in four biotech companies focused on novel drug development for this form of LGMD.

I will never forget the heartbreak of receiving that initial diagnosis, which seemed like an impossible sentence for my two-year-old little girl. But that desperation quickly turned into determination to create a path for a hopeful future for Sammy and for so many others who are battling this disease. I distinctly recall my first conversation with my dear friend, Lacey Woods, who created the first website and Facebook page for LGMD 2I/R9. Lacey said five words that have stayed with me ever since: *"It's going to be okay."* To see that we now have three clinical trials in development for LGMD 2I/R9 is amazing, and I know that Lacey was right—we are going to be okay. I am now confident that there is a bright future ahead for our beloved LGMD 2I/R9 family.

I am grateful for the collaboration of efforts with the McColl-Lockwood family, the LGMD2i Research Fund, the SPEAK Foundation, and the entire LGMD Coalition with whom we have partnered for many years to spread awareness, advocate, and support the development of an approved treatment for so many who are living with LGMD 2I. Our team at the CureLGMD2i Foundation will continue our mission until effective treatments are available for our entire LGMD 2I/R9 patient community.

CureLGMD2i.org

Written By Jane McColl Lockwood

McColl-Lockwood Laboratory for Muscular Dystrophy Research

"There is no cure."

This is all I hear over the din of noise emanating from my three young children in this doctor's tiny treatment room. What is he talking about? He must have confused the medical charts. Muscular dystrophy, no cure? He keeps talking about 'elevated CK levels' like I understand what any of this means. I'm not even sure I know what muscular dystrophy is, much less what to do next. I leave in a fog of confusion, disbelief, and fear.

(Above): Jane B. Lockwood and her dog Bader

(From L to R): Jane M Lockwood, Thomas Lockwood, Hugh McColl, Luke Lockwood, Jane B Lockwood, Luther Lockwood, Jane McColl

I call my husband, I call my parents, I call my in-laws. How in the world could our baby girl have this disease? No one from either of our families has ever been diagnosed with muscular dystrophy. What does it even mean? How long will she be able to walk? When will she be wheelchair bound? How long will she survive? So many questions and no answers.

In 2001, the internet was still relatively new, and the disease was so rare that nothing appeared when you Googled "limb-girdle muscular dystrophy." So, we did our own research, called our doctor friends, and tried to figure out what needed to be done in order to "fix" our daughter. As it turns out, we are still trying in 2025. That's the thing about a rare disease—it takes a long time to find a cure. But over the past two decades, we have made incredible progress, and we won't stop until we can say, "Your child has LGMD. Here is how we can cure it."

After researching the top neurologist to help us, we fortunately found the best one in our hometown of Charlotte, North Carolina. Dr. Jeffrey Rosenfeld was the lead doctor at Carolinas Medical Center's ALS Clinic (now Atrium Health). Dr. Rosenfeld was not only her beloved physician, but he was also instrumental in helping us get Jane properly diagnosed (LGMD 2I/R9), with the assistance of Dr. Kevin Campbell of the University of Iowa.

That's the thing about a rare disease—it takes a long time to find a cure. But over the past two decades, we have made incredible progress, and we won't stop until we can say, "Your child has LGMD. Here is how we can cure it."

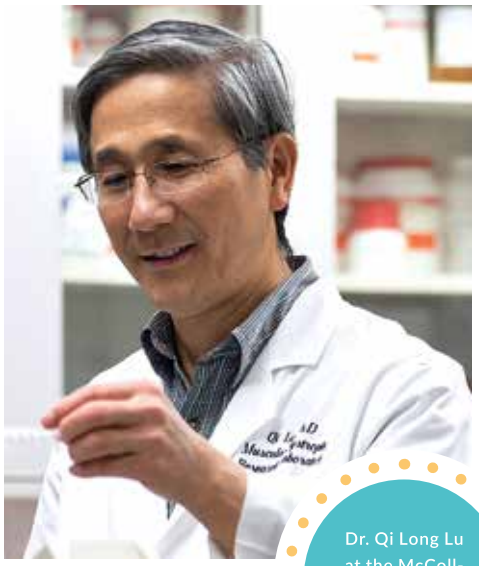
Because "no cure" was not an answer any of us were willing to accept, our family and my parents, Jane and Hugh McColl, founded the McColl-Lockwood Laboratory for Muscular Dystrophy Research at Atrium Health. Dr. Rosenfeld led a search for the scientific director for our new research lab. Our vision was a research lab dedicated to discovering a cure for this progressive muscle-wasting disease. In 2003, we began recruiting PhD's and scientific researchers with a focus on muscular dystrophy. We wanted the researchers to be focused on finding a cure and treatments, not on writing grants, which we believe takes away from their research time. It is a different kind of model than most researchers are used to, where grant writing is typically a requirement. Through an initial gift and biennial fundraisers, the Lab has an endowment sufficient to fund day-to-day operations.

In 2004, Dr. Qi Long Lu, MD, PhD, moved his family from London to Charlotte to be our lead scientific director; twenty years later, he is still leading the charge every day to find a cure. Though not the primary focus, under Dr. Lu's direction, the Lab has secured over $23 million in funding to advance therapies for LGMD. Dr. Lu and his team are world leaders in the field and have made many significant findings since 2004.

A few highlights of the Lab's major breakthroughs include:

- Created the first mouse model with 2I/R9 (a strain of lab mice with the same genetic defect). This has allowed the Lab and other labs to study various treatments.
- Developed a gene therapy for 2I/R9. The technology was developed jointly with University of North Carolina Hospital System and the School of Pharmacy. The patents were eventually licensed to AskBio. This gene therapy is currently in a Phase I/II clinal trial with the FDA.
- Developed a small-molecule drug therapy (BBP-418, Ribitol) for 2I/R9. My husband, Luther Lockwood, founded ML Bio Solutions, licensed the necessary patents from the McColl-Lockwood Lab and hired Dr. George McLendon to lead the company. BridgeBio is the majority owner of ML Bio Solutions and is currently conducting a Phase III clinical trial with the FDA.

The McColl-Lockwood Lab hosts a biennial International Scientific Conference and Workshop for Glycosylation Defects in Muscular Dystrophies. Researchers from around the world meet in Charlotte to share their most significant findings in the field in an effort to facilitate collaboration and speed up the development of new therapies and progress clinical trials. There is discussion on advances in clinical trials, clinical management, and the development of endpoint biomarkers, which is essential for progressing current and future clinical trials. The 8th International Conference will be held in May 2025.



©Piper Warlick Photography

Dr. Qi Long Lu at the McColl-Lockwood Laboratory

A rare disease with no cure will teach you patience! We jokingly say we are a twenty-year overnight success. The advances we have seen are exciting and encouraging, but we know our work is not finished. Our hope, and the goal of the McColl-Lockwood Lab, is to see approved drug protocols to improve the daily lives of those living with a muscle-wasting disease, as well as gene therapies that will eventually cure all forms of muscular dystrophy.

McColl-Lockwood Laboratory for Muscular Dystrophy Research

Atriumhealth.org/research-clinical-trials/mccoll-lockwood-laboratory-for-muscular-dystrophy-research

Written By Bruce McCaw
Founder, LGMD2i Research Fund

LGMD2i Research Fund

My name is Bruce McCaw, and I live with LGMD 2I/R9. I was first diagnosed with an unknown type of slowly progressive muscular dystrophy in the early 1990s. It wasn't until I was 60 years old that genetic sequencing finally revealed the diagnosis of LGMD2I caused by L276I homozygous mutations in the FKRP gene.

Kelly Brazzo honoring Bruce McCaw with the CureLGMD2i Pioneer in LGMD2I/R9 Award

Looking back, I realize that muscular dystrophy (MD) affected me much earlier than I initially recognized. Fortunately, I have been able to lead a fairly active lifestyle for a long time. Over time, however, simple tasks like climbing stairs began to become more difficult. Getting up from a seated position became harder too. While these challenges are certainly greater now, I'm grateful for the many new innovations and adaptive products that make daily living easier for me.

In my search for answers, I began trying to find organizations that were knowledgeable about MD. As early as the late 1990s, I started funding new research programs. Knowing that I had some form of MD, I had hopes to accelerate the development of therapies by investing my own capital in selective research. At the time, most of the funding was directed to helping the development of gene therapies and the use of stem cells in treating MDs.

In the early 2000s, following the completion of the human genome project, LGMDs began to be more specifically characterized by the particular genes affected. The FKRP gene was found to be the target of mutations causing LGMD2I, which permitted my final diagnosis. The more we learned about LGMDs and how they differ from other forms of MD, such as Duchenne, the more we came to appreciate that future treatments will have to be specific to each subtype of LGMD. However, before this discovery, our funding in gene and cell therapies had been applied to Duchenne research efforts only. For these therapies to be applied to LGMD2I, we realized that a large amount of foundational work was necessary related to: disease

knowledge, research tools, appropriate animal models, biomarkers, and specific therapy development. We also realized that patient identification and engagement were central to this endeavor. Furthermore, we needed to incentivize researchers to focus on LGMD2I. Lastly, our funding strategy needed to be precise and efficient, something I felt was not possible to do by just distributing money to universities and other large institutions. For all these reasons, we created the LGMD2i Research Fund with the mission of gaining critical disease knowledge and facilitating the development of curative treatments.

Fighting a "neglected" disease alone is a heavy burden and far from ideal. When I created the LGMD2i Research Fund, I was hoping to promote collaboration, openness, and creativity. I was happy to see that others in the LGMD2I community had also decided to take up the mantle. I believe that our three family organizations—the 2i Research Fund, CureLGMD2i, and the McColl-Lockwood Laboratory—have approached research funding in different but complementary ways. This is evident when we consider the several ongoing clinical trials for LGMD2I alone. While the funding strategies between the three organizations differ, we do find common ground, and I am happy to say that we increasingly fund research projects in partnership with at least one other family organization. Being part of a larger community definitely helps to increase our reach and impact.

When I formed the LGMD2i Research Fund, its mission—along with that of the other LGMD2I foundations—felt overwhelming. The only ongoing research was on the clinical description of the disease, case studies, and the existence of new mutations. Knowledge of the disease, its mechanism, the molecular role of FKRP and its partners, and the toolbox for clinical trial readiness was non-existent. And so, I am proud of what the fund helped create. Without organizations like our three family organizations, it's likely that very little, if any, research would have been done on LGMD2I in the last 15 years. Organizations like ours are the reason LGMD2I drug development is now in the clinical stage.

Without organizations like our three family organizations, it's likely that very little, if any, research would have been done on LGMD2I in the last 15 years. Organizations like ours are the reason LGMD2I drug development is now in the clinical stage.

To be more specific, the projects that I think have been the most impactful are the Global FKRP Registry with our first investment in July 2012, the Iowa Wellstone Dystroglycanopathies Patient and Family Conference with our first investment in May 2012, the initiation of the gene therapy program at Généthon in January 2015, and the making of a freely shareable mouse model in May 2018. These programs have efficiently moved forward different facets of drug development: patient readiness and engagement, therapy development, and research tools for preclinical studies. We have learned the importance of avoiding information silos and instead, fostering a culture of open sharing, which accelerates progress.

We have come a long way since the cause of the disease was first understood. Some of my hopes are focused on the short term. Hopefully, current clinical trials will prove successful and bring relief to patients. When I started to invest in research about 30 years ago, I did not realize that the curative potential of gene therapy would take so long to attain. Today, we have an ongoing clinical trial in gene therapy, and while the current gene therapy program looks very good, it is not curative. There's still plenty of work to be done. Improving upon the current programs to get closer to a cure, as well as finding new therapeutic solutions, are also among my hopes. And for that, we need to increase our understanding of the molecular mechanism of the disease, develop new technologies and new research tools, enhance collaboration between researchers, and make sure that patients are at the center of our efforts. My hopes for the future lie in our ability to work together and think outside the box to find solutions as soon as possible. This disease does not relent, and neither will we.

LGMD2iFund
Limb Girdle Muscular Dystrophy 2I Research Fund

LGMD2iFund.org

RECRUITING NOW!

The online research database for LGMD R9 (2i)

GLOBAL FKRP REGISTRY

SCAN ME

The Global FKRP Registry is an international registry that collects genetic and clinical data about individuals with conditions caused by changes in the FKRP gene (Fukutin Related Protein). This includes Limb Girdle Muscular Dystrophy type 2I/R9.

www.fkrp-registry.org

Aims

- Accelerate research into FKRP-related conditions
- Support recruitment to clinical research
- Understand the natural history and prevalence of LGMD R9

fkrp-registry@newcastle.ac.uk

The Global FKRP Registry is coordinated by The John Walton Muscular Dystrophy Research Centre, Newcastle University, UK.

Funders:

LGMD2i Fund · CURELGMD2i · ML BioSolutions

THE John Walton MUSCULAR DYSTROPHY RESEARCH CENTRE

Written By Patrick Moeschen

A CALL FOR CARE

I have lived with muscular dystrophy for 40 years. For the first 25, I was misdiagnosed with Becker muscular dystrophy (BMD), which involves the same gene but progresses more slowly than Duchenne muscular dystrophy (DMD). In 2012, I discovered I have LGMD R4/2E and began to learn how my body, skeletal muscles, heart, and lungs are affected by having LGMD, rather than Becker.

The muscular dystrophy community is connected not only by shared symptoms and the undeniable reality that our condition will progress but also by the belief that we can and should be working together more often to amplify our voices as one.

I want to focus on a critical issue that affects all of us living with any type of muscular dystrophy: accessing quality care in our living spaces as we age. As discussed in the Winter issue of *LGMD News*, maintaining independence while securing adult care—especially in the home—remains a significant challenge, both locally and nationally.

Patrick Moeschen

Thanks to advances in medical care, individuals with muscular dystrophy are living longer, which is wonderful. However, as we age, our quality of life—something that can only be measured on an individual basis—must keep pace. It's important to address this on a daily basis in order to minimize worry about living safely and comfortably at home. The problem is, as muscular dystrophy progresses, the need for assistance increases. While solutions to this situation differ between us, by working together, we can find solutions that benefit everyone.

As I write this, I am 52 years old and have used a power chair for 15 years. Before that, I relied on a manual chair for 10 years. Over time, I've had to adjust my living circumstances, transitioning from spaces with bathtubs, high cabinets, stairs, and other features we take for granted when we are ambulatory. Home modifications are costly, and while grants are sometimes available, they are difficult to obtain. Additionally, hiring help for essential activities like meal preparation, toileting, dressing, transportation, and other daily tasks to support our independence is also very expensive.

Adults living with MD often carry the constant worry and burden of trying to live at home with a condition that is progressing over time. This typically involves home modifications, changes in transportation options, employment challenges, and navigating very confusing assistance programs that vary widely from state to state across the US. Living as an adult with MD here feels like being on a field that is not level, trying to play a game where the goalposts are constantly being moved, and the rules are ever-changing.

However, on a brighter note, we are problem-solvers! We tackle challenges—big and small—every day, finding creative, non-traditional ways to coexist with our bodies and find happiness and contentment in a world not designed with wheelchair users in mind. While this skill allows us to adapt to changing conditions, it doesn't come without emotional and financial costs, both to us and to our loved ones.

On the following pages, you will meet people who are uniting our entire international community, helping to level the playing field for everyone.

> *"We tackle challenges—big and small—every day, finding creative, non-traditional ways to coexist with our bodies and find happiness and contentment in a world not designed with wheelchair users in mind."*
>
> —Patrick Moeschen

Nevin Steiner

Nevin Steiner lives in Connecticut with his wife and two young children, and works full-time as a producer for the ESPN network. Nevin lives with BMD, a rare, X-linked recessive disorder that is caused by a mutation in the dystrophin gene and results in progressive muscle degeneration. While BMD is less common and less severe than DMD, its symptoms tend to appear later compared to DMD.

Nevin, can you share with us about living safely in your home?

Nevin: My condition progressed slowly until a few years ago. I lived in a condo with my wife and knew that the stairs were going to become a problem. We bought a ranch house in Connecticut and modified the outside stairs to Trex® decking, we widened doors, raised the toilet, and tried to prepare for the future. I am currently still walking, and we don't know how fast things will progress. We have involved the state in our modification process, and they have helped us financially, but every state is different. My wife and I have discussed the future, and we simply will have to figure things out as we go. We also have two young children, who know that they need to help and are growing up to learn that they also need to be independent.

How do you deal with the financial burden of your circumstances?

Nevin: Connecticut has a program called BRS (Bureau of Rehabilitation Services) that provides for home modifications as long as you are working. The state helped us with more than $30,000, but this was several years ago; I'm not sure what the level of assistance is now. It is helpful to do your own research at the state level to see what kind of assistance programs are available. If you are able to work, many states will want to keep you employed and, therefore, paying taxes.

Nevin Steiner

> *Building a network of people that share some of the same challenges as you is a game changer. I have become great friends with people who live with Becker, Duchenne, and LGMDs.*
>
> —Nevin Steiner

Q

Can you speak to your networking with other adults living with different forms of MD?

Nevin: Building a network of people that share some of the same challenges as you is a game changer. I have become great friends with people who live with Becker, Duchenne, and LGMDs. We often share stories and learn from each other about how we can improve our situation. The big takeaway for me is to prepare for the future and try to make modifications before you need them. I also think it is important for the entire MD community to work together to help all of us live as comfortably as we can and to network with organizations like The Speak Foundation, Parent Project Muscular Dystrophy (PPMD), and the Muscular Dystrophy Association (MDA), to name a few.

Dr. Ryan Russell

Dr. Ryan Russell

Ryan Russell grew up in Arizona and recently relocated to Missouri with his wife Angela, his stepdaughter, and his stepson who, like Ryan, lives with DMD. DMD is a condition that weakens both skeletal and heart muscles over time and is the most common form of MD. Ryan lost his ability to walk at the age of 10. Now, at 40, he states that his life is the best it has ever been. Ryan has a PhD in psychology and is a published author. He is the founder of Life On Positivity, a health and mindset coaching company, and a public speaker. Ryan is also a co-host for *The Duchenne Life* talk show and podcast.

Q

Ryan, please tell us about moving from one state to another.

Ryan: I used to live in Arizona, where I grew up. I outlived both of my parents and found myself living in a house with full-time hired help. It was becoming a dangerous situation at times if people did not come to help

> *Dealing with change can be hard, but we have to accept and adapt to change as our conditions progress.* — Dr. Ryan Russell

me or quit without notice. I had made a deal to have caregivers live on my property in their own space in a mobile home. As time went on, I noticed things missing from my home and found out the hard way that not all people have the best intentions. If I could go back to that time, I would have treated my hired caregiving staff more as employees. I tried to become friends and bond with many of them, and some people took advantage of me. It's something that people with disabilities should be aware of.

After meeting my wife, I left all of that behind and moved to Missouri, where I am having a difficult time with the benefit system. Arizona said switching to Missouri benefits would be simple and quick… they were wrong. I have been waiting nine months, and it has been delay after delay with paperwork and denials. Meanwhile, my medical bills are piling up, and I am simply waiting.

Q

What has been the biggest challenge of moving while living with DMD?

Ryan: I have found that adults living with MD sometimes have trouble adapting. Dealing with change can be hard, but we have to accept and adapt to change as our conditions progress. Often we lock things down and don't want anyone else to help us because we need or want to have things done a certain way. I think it's about control. As our bodies grow weaker, we tend to lose control of all kinds of things that we used to be able to do. ADLs like brushing teeth, showering, getting dressed, toileting, and things like that become impossible, so we lock down other things that we can control, like how we need things done. We need to get better at accepting help and adapting to changing living situations.

Lauren Stanford

Lauren Stanford

Lauren serves as the Senior Director of Advocacy for Parent Project Muscular Dystrophy (PPMD) and has been with the organization since August 2022. Within PPMD, Lauren helps support the advocacy priorities and operates as a lead advocate in advancing the organization's public policy and leadership goals in the United States. She regularly interacts with patients and families, industry representatives, patient groups, Congress, and federal agencies.

Q

Lauren, other speakers have discussed what it is like for them to try to live safely at home. Your role as an advocacy director helps shine a light on federal legislation that is geared toward helping adults living with MD. Can you speak about ways we can support federal legislation?

Lauren: The LGMD community can rally behind several key pieces of federal legislation aimed at improving the lives of those living with rare diseases. Policies such as the Accelerating Cures Act and the Orphan Drug Tax Credit seek to incentivize research and development of treatments for rare conditions, including LGMDs. Additionally, the

continued support of robust funding for the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), and the Department of Defense's Congressionally Directed Medical Research Programs (CDMRP) is vital to advancing research into LGMD therapies and care standards.

The community can also advocate for inclusion in newborn screening programs through federal initiatives like the Newborn Screening Saves Lives Act, ensuring earlier diagnosis and intervention. Supporting legislation that enhances home and community-based care funding, like the Better Care Better Jobs Act, also aligns with the LGMD community's priorities by improving access to critical services and resources for individuals and families.

I would advise everyone to research these bills, see how they are written, and contact your congressional representative as well as both senators from your state. The elected officials enjoy hearing from their constituents. Remember, they work for you.

Q

How can we reach our representatives?

Lauren: **Congress.gov**. This official website provides comprehensive and up-to-date information on bills, resolutions, and legislative activities in Congress.

If you are unsure who your elected officials are, you can find out how to contact them by using **Senate.gov** and **House.gov**. You can also learn when members are in their home districts if you would like to meet them or one of their policy staff in person. You don't have to be a professional speaker. You can make an appointment, tell your story, and share the challenges you face as an adult living with MD. They may share resources with you that you didn't know were available, and you are educating others about LGMD.

> *"The elected officials enjoy hearing from their constituents. Remember, they work for you."*
>
> — Lauren Stanford

Annie Kennedy

Annie Kennedy

A veteran leader in the rare disease patient-focused drug development (PFDD) movement, Annie joined the EveryLife Foundation in 2018, and has led numerous, community-driven evidence development efforts. Annie previously held leadership roles at PPMD and the MDA where she led landmark legislative, regulatory, newborn screening, transitions, and access policy efforts including the MD CARE Act, and the Patient Focused Impact Assessment Act (PFIA), which became the Patient Experience Data provision of the 21st Century Cures Act.

“Raise your voice. Together, we are stronger.” — Annie Kennedy

Q

Annie, you have worked in the rare disease space for over two decades. You have done a lot to help people with MD lead their best lives. Can you summarize how our readers can come together to best impact policy?

Annie: Throughout my career, I have had the privilege of serving in roles in several organizations across the rare disease and neuromuscular community and have focused much of my efforts on empowering young people to advocate for their desired levels of independence and autonomy. On many occasions, I invited my dear friend L. Vance Taylor to speak to young audiences. As a successful professional, a community leader, a homeowner, husband, and dad, Vance represented what many teens and young adults aspired to become. Vance is also an adult living with a pediatric-onset form of LGMD. At some point in each of his presentations, he would detail the expenses involved in his daily life. They included those typically incurred by professional adults with families (mortgage, utilities, car payment, groceries, clothing, various insurance costs, gas, etc.), but then he would go on to detail the additional expenses he and his family incurred as an adult professional with a physical disability (home modifications, vehicle modifications, personal care attendant expenses, out-of-pocket medical and therapy expenses, etc.). The point Vance was making to his young audiences was that their goals *were possible*, but they *were expensive*, and that to achieve them they would have to work harder than their peers.

Every time I listened to Vance speak, I became more fired up over the injustice he was describing. What Vance was detailing was essentially a tax on adults living with disabilities. And not just young people living with LGMD — or neuromuscular diseases — but all adults living with pediatric-onset rare diseases.

While Vance’s example is compelling, what I know for certain is that policymakers speak a language composed of data. So, to impact policy, we continue to translate what he (and many others) described into data that our community can then use to shape policy.

I invite you to get involved and learn more by taking part in Rare Disease Week 2025 or any of our many upcoming advocacy events. Join us at **RareAdvocates.org**.

In summary, we have had years to identify and speak about this problem, but it is clear that much more work remains. The individuals that I spoke with reflect a broader rare-disease community, and the key takeaway is clear: patients must be front and center in this effort. This is an integral part of living with MD as an adult — we must be actively involved. Raise your voice. Together, we are stronger. ▪

Would You Like To Become a Delegate for **LGMD Day on the Hill**?

LGMD Day on the Hill is an advocacy event, located in the USA, for delegates living with limb girdle to meet with their legislators on **September 9, 2025**.

Let Your Voice Be Heard. Selected delegates will need to travel to Washington, D.C., the day before to participate in mandatory advocacy training on September 8th in preparation for LGMD Day on the Hill. Limited travel stipends are available, provided by **The Speak Foundation**.

APPLY TO BECOME A DELEGATE TODAY!

The SPEAK Foundation
3551 Blairstone Road #105-62
Tallahassee FL 32301

July 18–21, 2025 • Orlando, Florida

WE WANT TO THANK OUR INCREDIBLE SPONSORS!

2025 INTERNATIONAL LIMB GIRDLE MUSCULAR DYSTROPHY CONFERENCE
ORLANDO, FL

International LIMB GIRDLE MUSCULAR DYSTROPHY Conference

Corporate Sponsors

ML BioSolutions
SAREPTA THERAPEUTICS

Platinum Sponsors

AskBio

Bronze Sponsor

Organization Sponsors

LGMD Awareness Foundation — Together We Are Stronger

Champion of LGMD

CURE LGMD2i

LGMD Ally

JAIN FOUNDATION

LGMD2D Foundation

Friend of LGMD

REGISTER TODAY!

PRESENTED BY THE SPEAK FOUNDATION

www.InternationalLGMDConference.com

Additional sponsors may be announced forthcoming.