



Your Research Toolbox: How to talk with ease about Down Syndrome Research

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Agenda



Introduction & Overview

Small group activity: How to talk about research

PART 1: Understanding the Basics of Down Syndrome research,
Down syndrome research advancements, and current challenges

- Alzheimer's disease
- Sleep apnea & cognition
- Independence

PART 2: Why these conversations and your leadership are critical to future of research

PART 3: Examining the Down Syndrome Research Toolkit

- Materials, tools specifically for Affiliate Leaders
- Materials and resources for your community

Q&A

Who We Are



We envision a world where every person with Down syndrome thrives with improved health, independence, and opportunities to reach their fullest potential.

- To realize our vision, we...
 - **accelerate research** to increase availability of therapeutic, diagnostic, and medical care options
 - **provide resources and support** to a vibrant online community of individuals with Down syndrome and their caregivers
 - **connect the Down syndrome and research communities** with an agile team of 16 people



Our History



- 2004: Earliest incarnation, **Down Syndrome Research and Treatment Foundation (DSRTF)**, is founded by two families seeking better futures for their children after the decoding of the human genome opened the door to biomedical research for people with Down syndrome.
- 2015: DSRTF merges with the **Research Down Syndrome (RDS) Foundation**, becoming **LuMind RDS Foundation**.
- 2019: LuMind RDS merges with the **International Down Syndrome Community (IDSC)**, creating our current organization, **LuMind IDSC Foundation**.

Working with Partners to Accelerate Community Impact



PHARMA INDUSTRY

DOWN SYNDROME ORGANIZATIONS

RESEARCH ORGANIZATIONS





**Please break into
small groups of 3-4
people, complete your
worksheet and share
your answers...**

Three key elements for speaking effectively about research:



You don't have to be a subject matter expert in order to be a research advocate and amplifier!

- Rely on or adapt existing resources – you aren't expected to be an expert on everything.
- Use metaphors and simple language. Don't over-complicate the message.
- Identify meaningful calls to action and ways to get involved.



Down Syndrome Research Toolbox



Part 1: Understanding the basics

- **Overview of Advances & Momentum in DS research**
- **Alzheimer's Disease**
- **Sleep Apnea**
- **Independence**

Why Accelerate Research Now?



Life expectancy for people with Down syndrome has increased dramatically.

1960s



Life expectancy was 10 years.

1980s



Life expectancy was 25 years.

2020s



Life expectancy is 65+ years.

Why We Accelerate Research



95%

risk of Down syndrome-associated Alzheimer's disease at age 65. It is the leading cause of death for adults with Down syndrome.

100%

of adults experience obstructive sleep apnea. 60% of children experience abnormal sleep by age 4.

97%

of families report lack of independence as a critical concern for their loved one.

99%

almost all children and adults with Down syndrome have speech and cognitive delays.



How We Accelerate Research



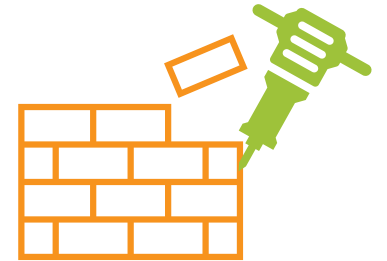
We invest in **translational research**



We build **awareness** of Down syndrome research & the importance of **participating** in it



We remove **barriers** to clinical trials



Growing Down Syndrome Research Momentum



- Human Trisome Project <700>

- DS-CTN network with 15 sites
- DS Cognition Project cohort ~300
- LIFE-DSR cohort <270>

- NIH Include Project ~\$77M
- NIH DS Connect Registry >4,500
- NIH ABC-DS Biomarker >450
- NIH ACTC-DS Emerging network

- LonDowns cohort <452>
- Horizon21 network
11 sites

- DABNI cohort <485>

In 2019, 429 Researchers from 36 countries attended Trisomy21 Research Society Meeting in Barcelona, Spain.

What Are Clinical Trials?



- **Clinical research** that is performed on humans.
- **Double-blind placebo-controlled trials** are the gold standard for determining the safety and efficacy of a new treatment. **Be skeptical of results from other types of trials!**
- The **drug development process** is long, expensive and risky but still the best way to find new treatments.
- Typically **3 phases in clinical trials** in the drug development process.

Best Practices for Clinical Trials



- Independent oversight of trials ensures high **ethical standards**.
- **Informed consent** is used to protect the rights of people participating in clinical trials.
- Clinical trial **results should be published** in a timely manner.





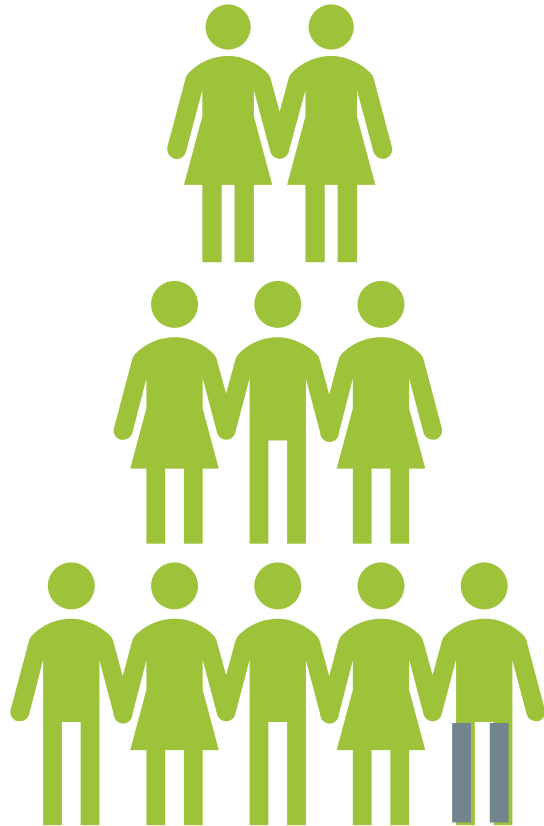
What Do We Know About Alzheimer's and Down Syndrome?

Prevalence of Alzheimer's disease



95%

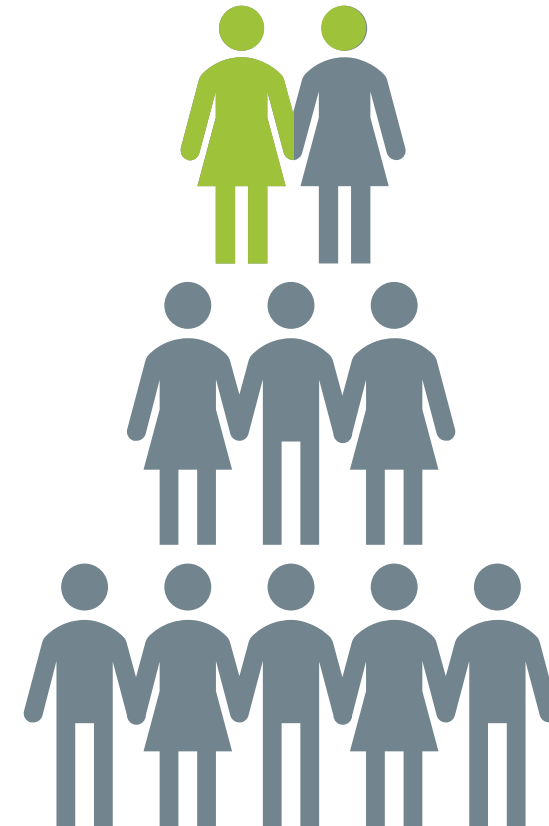
of people with Down syndrome
develop Alzheimer's disease
by age 65+



McCarron, et. al. J Intellect Disabil Res. 2017;61(9):843-52.

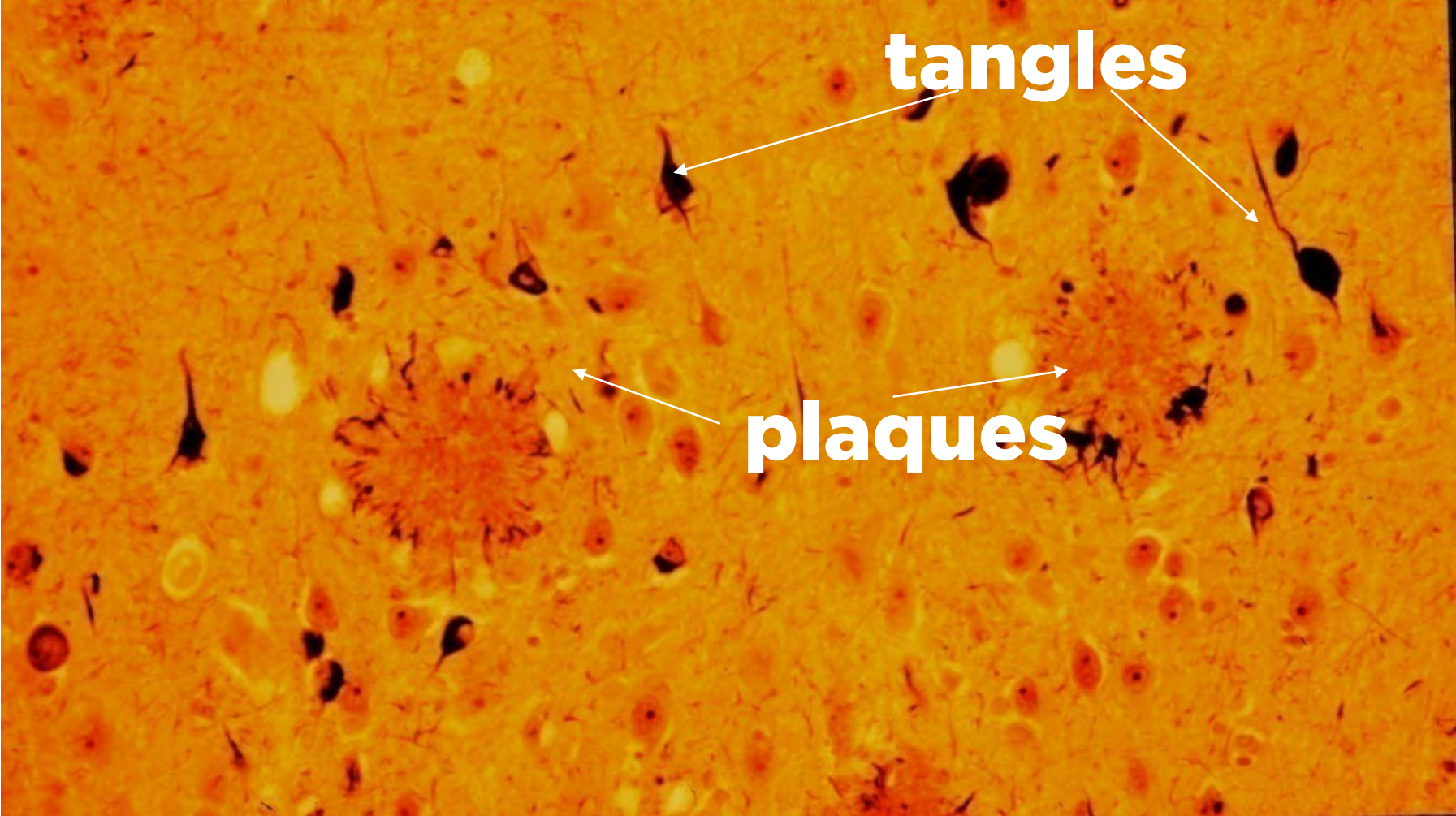
12%

of the general population
of people age 65+ have AD



Alzheimer's Association Facts & Figures 2019.

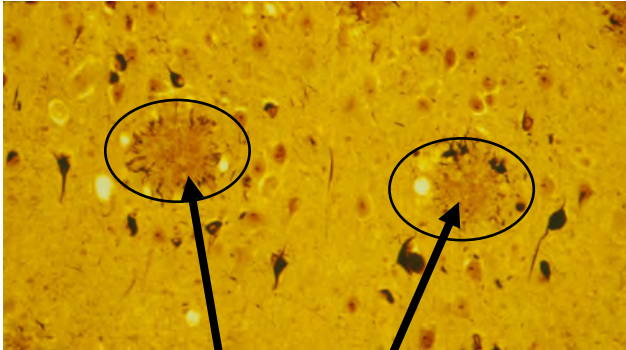
History of Alzheimer's Disease



Down Syndrome & Alzheimer's Genetics

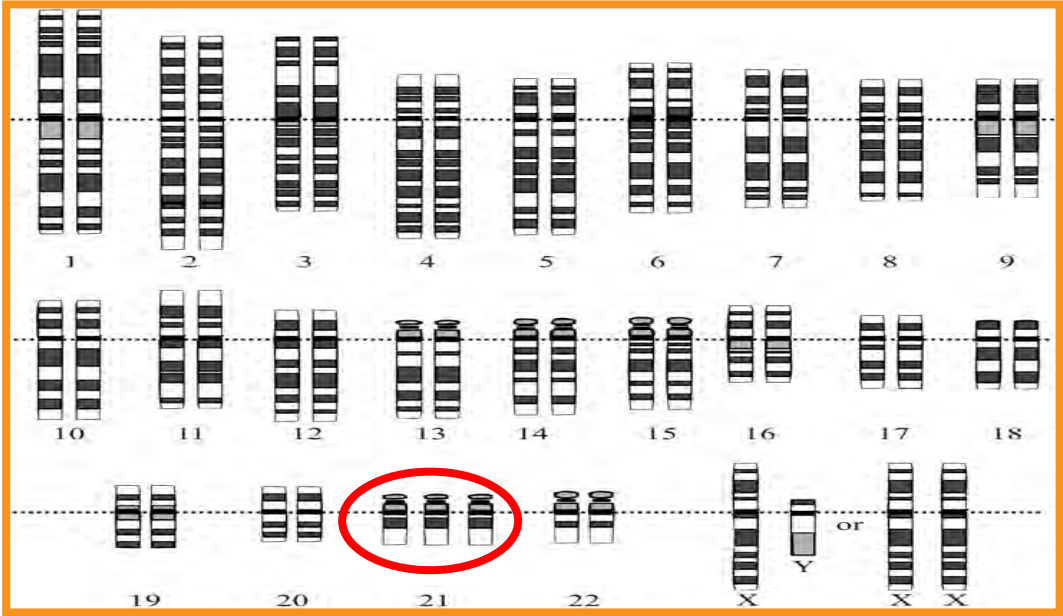


Toxic Amyloid Plaques



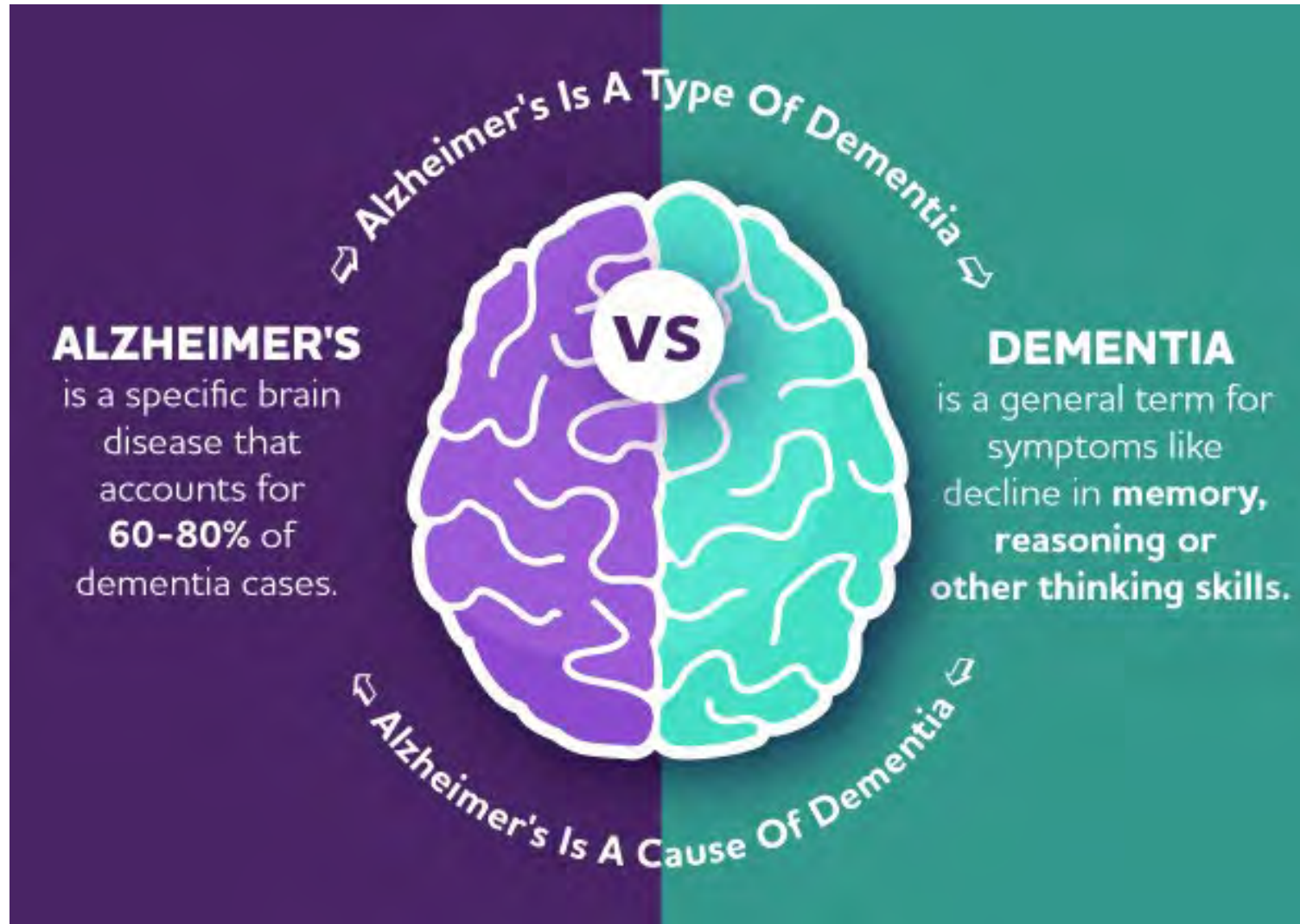
Amyloid Protein

APP gene



The amyloid precursor protein gene (APP) is located on chromosome 21

Alzheimer's vs. Dementia



Progression Over Time



- Alzheimer's is a disease of progressive decline
 - Rate of decline varies from person-to-person and over time
 - Plateaus, sudden drops, etc.
- Possible causes of sudden changes
 - Stroke
 - Infection
 - Depression
 - New onset or change in metabolic condition (e.g., diabetes)

Alzheimer's or Regression?

What is similar?

- Both involve decline in skills
- Both are (probably) neurological conditions that often have psychological symptoms
- Both are challenging for the individual and families
- Both need more research, including ways to support the individual and family

What is different?

- Alzheimer's disease
 - Age of onset = > 40
 - Not reversible
- Regression syndrome
 - Age of onset = teens, early 20s
 - Sometimes reversible
- Not all decline in skills in those age ranges is either Alzheimer's disease or regression

Alzheimer's Treatments

FDA Approved Drugs

- Cholinesterase inhibitors (e.g., donepezil / Aricept)
- NMDA receptor antagonist (memantine / Namenda)
- Anti-Amyloid Monoclonal Antibody: Aduhelm (aducanumab)

Non-Drug Strategies

- Create schedules and routines
- Promote lifestyle changes:
 - Sleep
 - Healthy eating
 - Physical activity
 - Encourage safe social interactions

Aducanumab (Aduhelm)

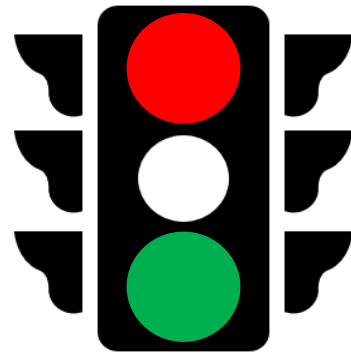


Early
AD

PET(+)
Brain
Imaging

↓ beta-amyloid (PET)
↑ cognition (CDRsb & MMSE)

Apr 2019
Futility Analysis



Oct 2019
Data Shows Efficacy

FDA Review

FDA granted accelerated approval in June

Not one participant with Down syndrome. Will treatments work in people with Down syndrome if they are not part of trials?

Aducanumab and Down Syndrome?



EFFICACY

- Aducanumab is a human monoclonal antibody reduces amyloid in the brain.
- If Aducanumab slows progression of sporadic AD, it may also slow AD in Down syndrome.

SAFETY

- ARIA (Amyloid Related Imaging Abnormalities) is a known side effect. ARIA-E is edema (brain swelling) and ARIA-H is microhemorrhage (bleeding in the brain).
- The incidence of ARIA is high.
- 25% of participants in the 6 mg/kg dose group and 33% of those receiving 10 mg/kg developed ARIA-E, compared with 10% in the placebo group.
- 17% of people on drug developed ARIA-H microhemorrhages, compared with 6% in the placebo group.
- Microhemorrhages are more common in older adults with Down syndrome than the general population. **Will aducanumab increase this risk?**



Research on Down syndrome- associated Alzheimer's disease

Vision to Tackle Alzheimer's



Down Syndrome Clinical Trial Network

LuMind IDSC
Research Consortium

**RESEARCH
CONSORTIUM**



Longitudinal Investigation for
Enhanced Down Syndrome
Research (LIFE-DSR)

Advance effective treatments for people with DS

- Infrastructure to support trials
- Natural history study (LIFE-DSR)
- Develop assessment scales

Significantly and tangibly improve the care of those with DS

- Support families in studies and trials
- Connect to best medical health resources

Attract more public and pharmaceutical industry sponsors to clinical trials for DS

- Collaborate with NIH
- Engage with pharmaceutical industry

Down syndrome Clinical Trial Network



DS-CTN is built to conduct large-scale, multi-site trials under the supervision of experienced clinicians who are experts at providing medical care for individuals with Down syndrome.



Down Syndrome Clinic and Research Center at Kennedy Krieger Institute



UC San Diego SCHOOL OF MEDICINE



Our Research Initiatives: LIFE-DSR



What is LIFE-DSR?

- A multi-year, coordinated natural history study by medical and academic professionals
- Will track and analyze medical & physical data of 270 adults with Down syndrome; **no drug or therapy trials**
- Participants complete 3+ visits to their DS-CTN site over two years

Why is LIFE-DSR important?

- Will help researchers understand link between DS and Alzheimer's
- Understanding physiology of people with DS may help solve other health/ Quality of Life challenges
- Increased understanding of biomarkers (reliable predictors and indicators of disease) in DS-AD can be used as bridge to AD biomarkers in general population to better understand disease progression and drug effects





What Do We Know About Sleep Apnea?

◆ Sleep and Cognition in Down Syndrome



Sleep correlates with:

Behavior and attention in development,

particularly in symptoms of ADHD and executive control

Brain structure and Alzheimer's disease pathology in DS

Memory consolidation:

studies in young infants and typical children show that they retain more over longer time if they nap after learning.

How do we measure sleep?

1. Polysomnography ◆

- In clinic, overnight sleep lab
- Gold standard – Wealth of information
- Challenging in people with sensory difficulties
- Testing availability (long wait times, poor availability in rural areas)

2. Actigraphy

- Measures movement, not necessarily sleep

3. Caregiver report / diary



"OK, Mrs. Tully. We want you to relax, get a good night's sleep, and we'll evaluate any sleep issues that you have."

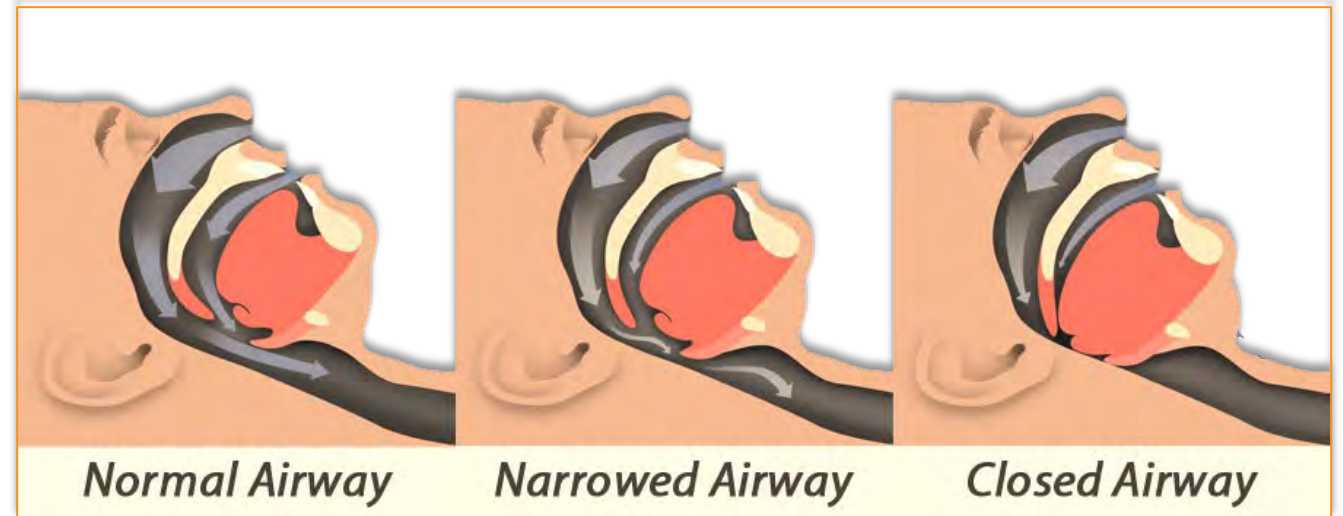
Types of Sleep Apnea ◆

Obstructive Sleep Apnea

- Snoring, choking, gasping
- Associated with adverse cognitive, quality of life and cardiovascular effects
- Only ~2-5% of children overall

Central Sleep Apnea

- Silent pauses
- Uncommon in children
 - Typically associated with neurologic or neuromuscular conditions
 - May be seen in infants
- Not clear how common this is in Down syndrome



Prevalence of OSA in Down Syndrome



31%



of infants with Down syndrome experience OSA

>50%

of children with Down syndrome experience OSA

among those children, 50% of cases are severe



>82%



of adults with Down syndrome experience OSA

Complications of diagnosing OSA among children with Down syndrome



- Many parents of children with DS don't report symptoms of OSA such as snoring
- Screening of all children with DS recommended by age 4
- One study showed only 25% of children with DS had Polysomnography by age 4

◆ OSA Treatment in Down Syndrome



Standard/Traditional Approaches

- Adenotonsillectomy
- Continuous Positive Airway Pressure therapy (CPAP)

Alternative/Emerging Approaches

- Weight loss (easier said than done)
- Dental approaches
 - Palate expansion
 - Mandibular advancement device
- Myofunctional therapy (speech therapy)
- Anti-inflammatory medications
- Small improvements seen with Singulair® or intranasal steroid treatments
- Hypoglossal Nerve stimulation

Standard OSA Treatments in DS



Adenotonsillectomy

- 1st Line approach for most children
- Unlikely to resolve OSA in children with DS
 - 65-73% have some OSA after adenotonsillectomy
(Shete, et.al. 2010, Thottam, et.al. 2013, da Rocha, et.al. 2017)

CPAP



- Pressurized air delivered through a mask and hose
- Very efficacious, but...
- Limited adherence
 - 46% adherence in children with DS (Trucco, et.al. 2018)
 - 2 hours per night in one trial (Konstantinopoulou, et.al. 2016)

LuMind Caregiver Survey: Sleep Apnea Diagnosis and Treatment



[724] | 96% Parents

12 yrs	Median age of person with Down syndrome (Age range 0-67 yrs)
84%	Diagnosed with sleep apnea (half were asymptomatic)
59%	Caregivers who were aware of the AAP guidelines
82%	Prescribed adenotonsillectomy
62%	Prescribed CPAP
16%	Aware of hypoglossal stimulation
16%	Repeated the sleep study to monitor OSA with aging
30%	Waited more than 4 years between sleep studies



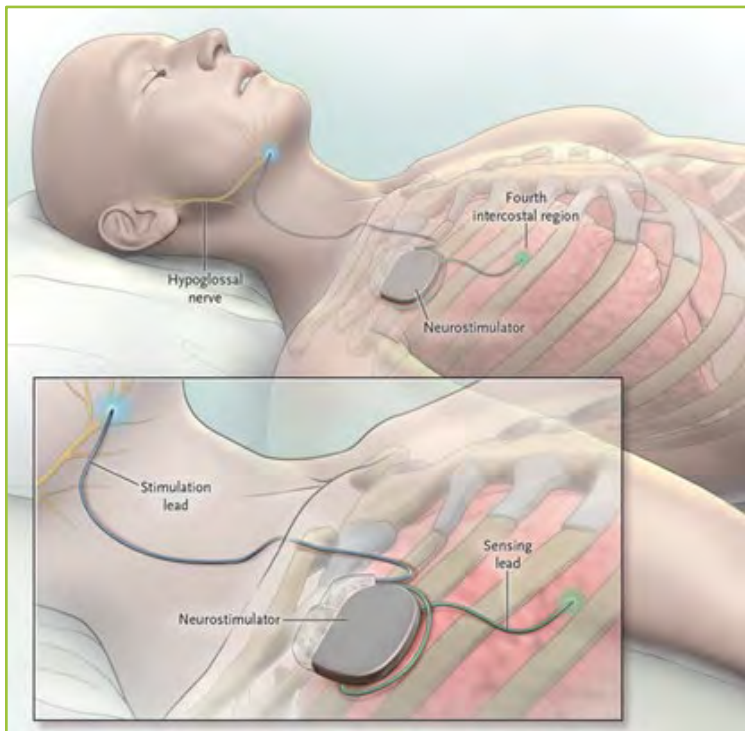
Research & Clinical Trials in Sleep Apnea and Cognition



Hypoglossal Stimulation for Sleep Apnea in DS ◆



- Implant a device to stimulate the tongue to open airway at night
- **FDA approved for adults 18 years and above**
- Ongoing 50 participant trial at sites across the US



Exciting interim results (data on 21 patients):

- 84% reduction in sleep apnea index
- 7.9 hour/night compliance (compared to ~3 hours for CPAP alternative)

LuMind IDSC working with principal investigator Dr. Chris Hartnick (Mass Eye & Ear) to accelerate availability of this approach for children.

- Data collection
- NIH application
- Interaction with study sponsor
- Recruitment

Anecdotal reports of improvement of speech/cognition with Hypoglossal stimulation



- *“The smoothness of conversation has gained since the surgery but the most gain has been with articulation. Everything has improved!”*
- *“He will be a senior in high school next year, he never ever would have made it without hypoglossal stimulation and sleep, his speech has improved enough he can be understood in school.”*
- *“The IEP showed increase fluency in speech, more organized in thoughts and organization. He showed an ability to self monitor speech and to regulate his speech. He was able to pay attention and focus in class. He showed an increase from previous evaluation.”*

**LuMind IDSC funds the collection of speech/cognition data in
6 or more participants in ongoing clinical trial**

Hypoglossal stimulation recruitment



Researchers are looking for children with DS, ages 10-21, who have had an adenoidectomy and tonsillectomy but who still have severe sleep apnea and who cannot tolerate CPAP therapy.

Current Research Site Locations

- Massachusetts Eye and Ear (Boston, MA)
- Henrietta Eggleston Hospital for Children (Atlanta, GA)
- Cincinnati Children's Hospital (Cincinnati, OH)
- Children's Hospital of the King's Daughters (Norfolk, VA)
- University of Texas Southwestern Medical Center (Dallas, TX)
- Children's Hospital of Philadelphia (Philadelphia, PA)

Questions about the study should be sent to
Dr. Chris Hartnick of Massachusetts Eye and Ear
(Christopher_Hartnick@meei.harvard.edu)



Research on Medications for OSA Treatment



Testing a combination of two drugs, atomoxetine and oxybutynin

- Appears effective in adults without DS with a 76% improvement in apnea-hypopnea index (AHI)
- Increases airway muscle tone during sleep

Dr. Daniel Combs and Dr. Jamie Edgin, U. of Arizona, have a NIH grant to study this treatment in 27 children with DS (ages 6-17).

- **LuMind IDSC funded a small grant to add speech and cognition testing to the study.**
- The study started recruiting this year but has been paused by COVID-19.



Practice Healthy Sleep Habits ◆



Regular Sleep Schedule: Maintain a consistent sleep pattern, getting up at the same time every day

Relaxing Bedtime Routine: Spend time before bed relaxing: read a book, have a shower or bath.

Avoid Stimulants: Don't drink caffeine, sugary or energy drinks in the evening.

Good Sleep Environment: Keep your bedroom aired, cool and comfortable with a quality mattress and bedding.

Block Out Noise and Light: Make sure the bedroom is dark and quiet or use white noise, a fan or music to mask external noise.

Only Sleep and Intimacy: Avoid watching TV or using other devices, such as cell phones, in bed.

Exercise and Daylight: Try to do regular exercise, but not too intense before bedtime. Spend time outside in the daytime. Even a short walk during the day can improve sleep.

Eat Well: Try to eat a balanced, healthy diet. Avoid heavy, fatty, fried, or spicy food late in the evening if you get indigestion. Bananas, yogurt or healthy cereal are good bedtime snacks.





Understanding & Prioritizing Independence for people with Down Syndrome

Independence for People with Down Syndrome



Survey respondents: 400 caregivers from across the U.S.

80% of caregivers were 35-64 years;

92% of the persons with DS were 0 – 35 years (36% 13-22 years)

96% of caregivers surveyed said Independence was important to their family

>89% of respondents indicated they want their loved one with Down syndrome to be “As independent as possible”

9% indicated they wanted to see “some independence”

Top Ten “Independence” Goals Identified by Caregivers

ACHIEVED

- Able to be left with babysitter
- Bolting/Eloping
- Water Safety

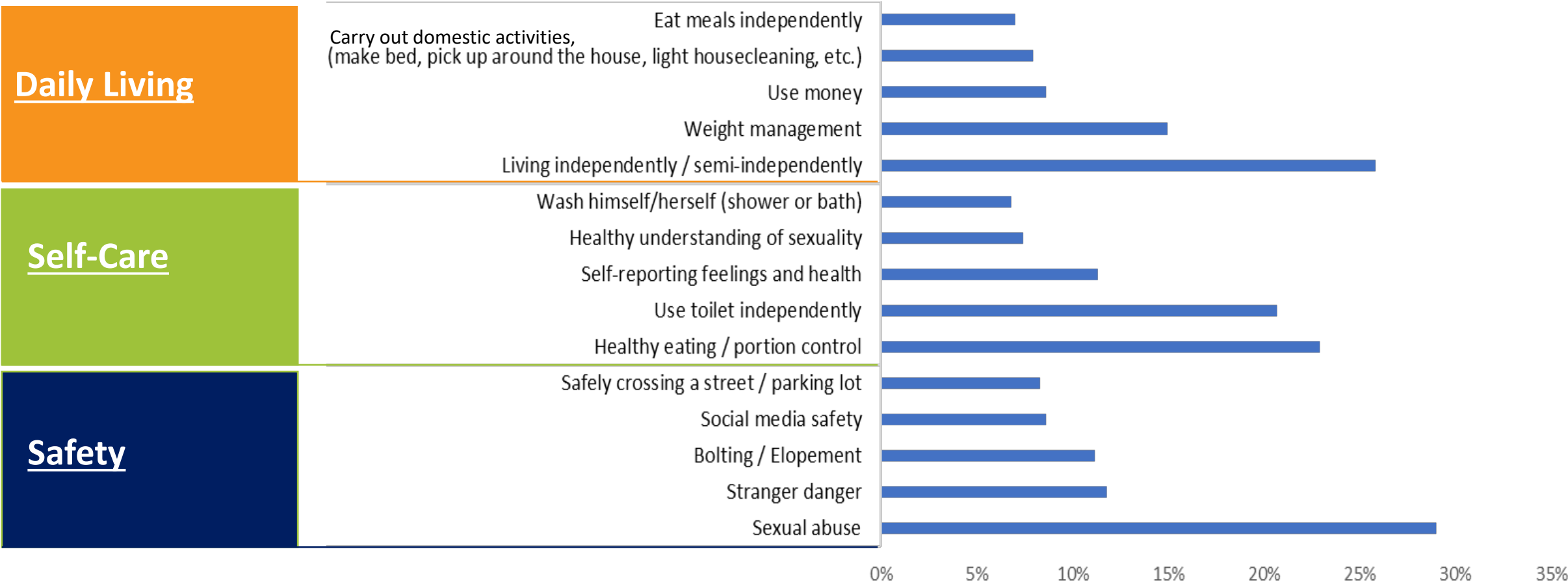
MIXED LEVELS OF ACHIEVEMENT

- Traffic Safety
- Home alone for 2+ hours,
- Verbal Abuse/Bullying

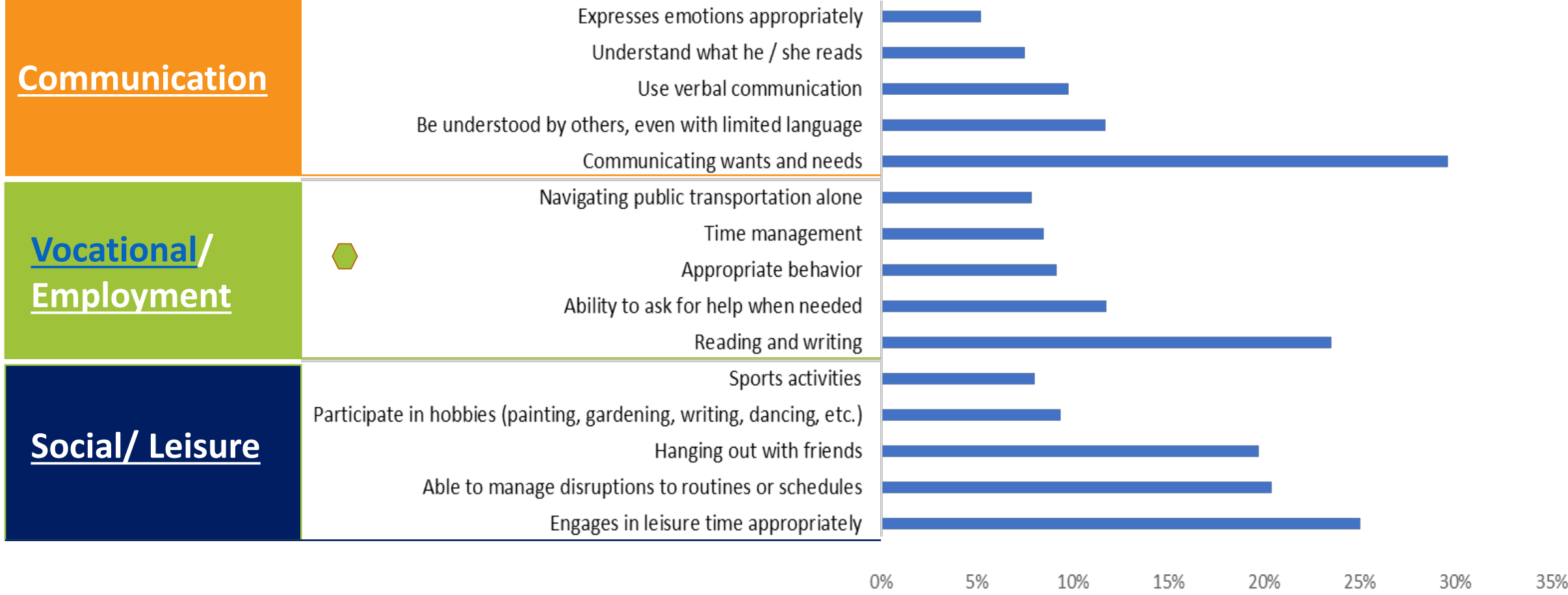
NOT YET ACHIEVED

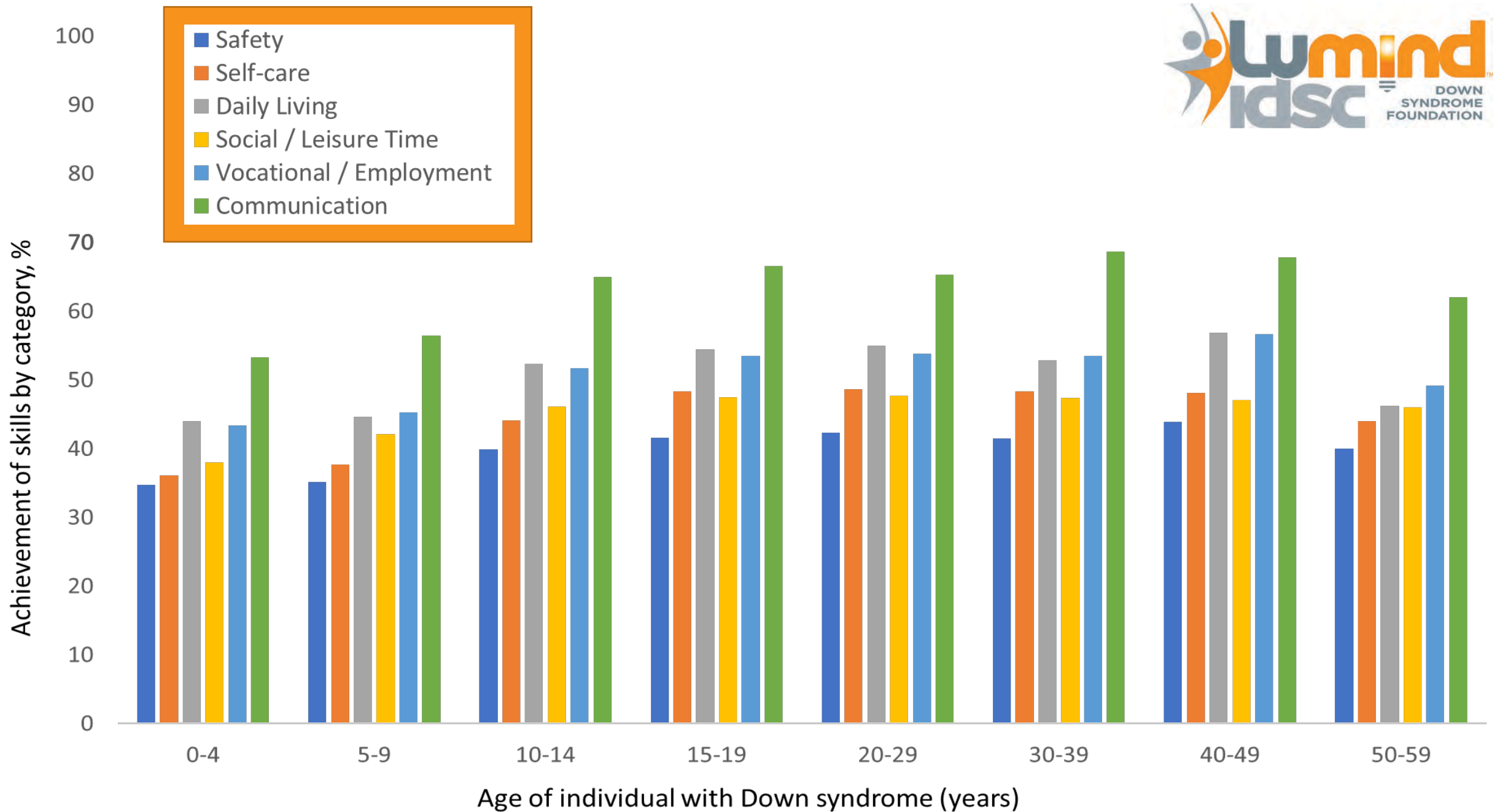
- Stranger Danger
- Kitchen Safety
- Sexual Abuse

Survey respondents' top five "First Choice" priorities for Independence



Survey respondents' top five "First Choice" priorities for Independence





Additional diagnoses that could impact Independence



Percent of individuals with an additional diagnosis	
Sleep Apnea	32%
Obesity	12%
ADHD	9%
Other (i.e., Apraxia/Speech, hearing loss, Hypothyroidism, heart issues)	36%

Down Syndrome Research Toolbox



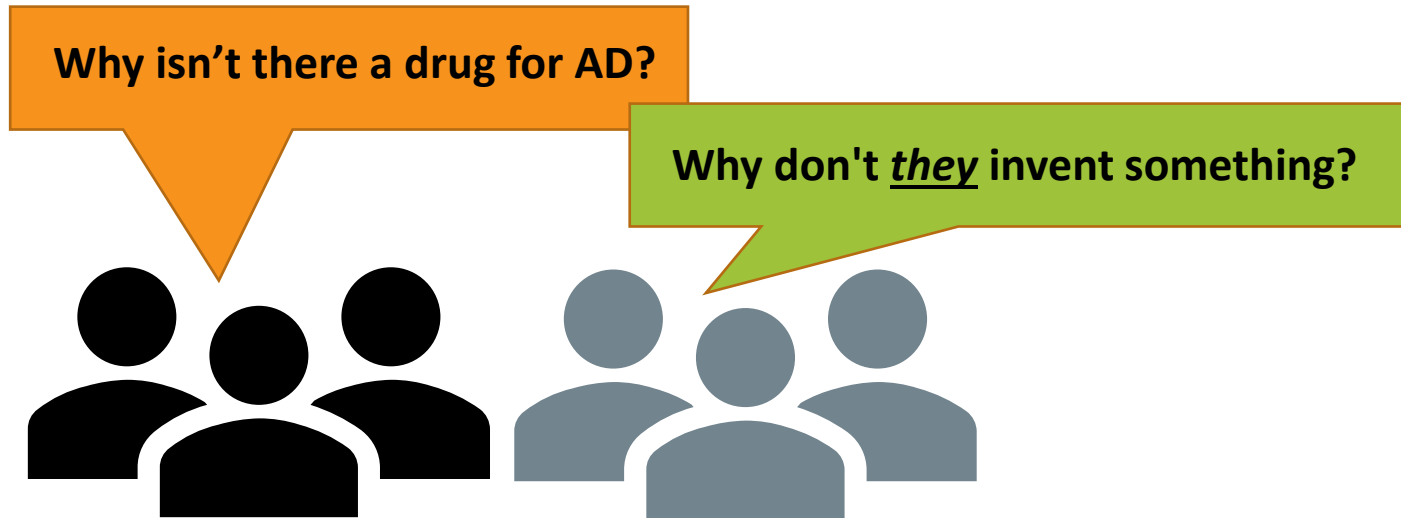
Part 2: Preparing for Research Readiness

- **The importance of conversations**
- **The transition from Research awareness to participation is a big leap we're taking together as a community**

Big Picture: Why Talk About Research?



What do we hear from the community?



Big Picture: Why Talk About Research?



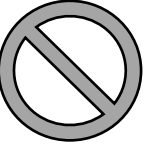


They can't do anything without research and trial participation, without YOU, without the greater US.

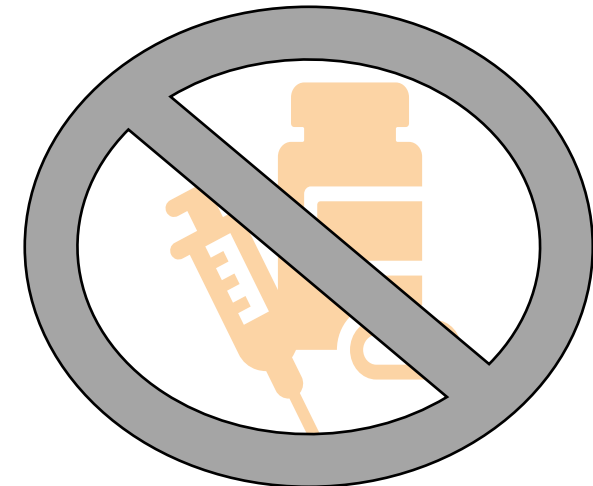
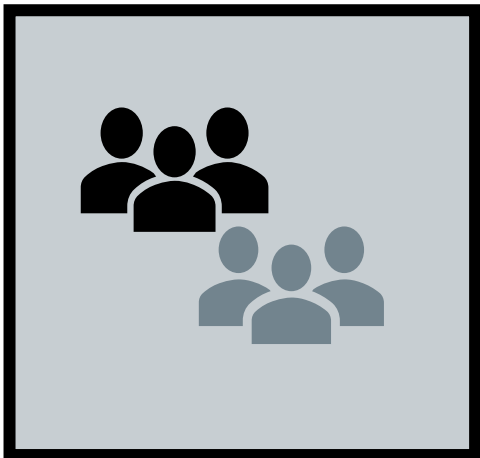


Big Picture: Why Talk About Research?



Without participation in clinical trials →

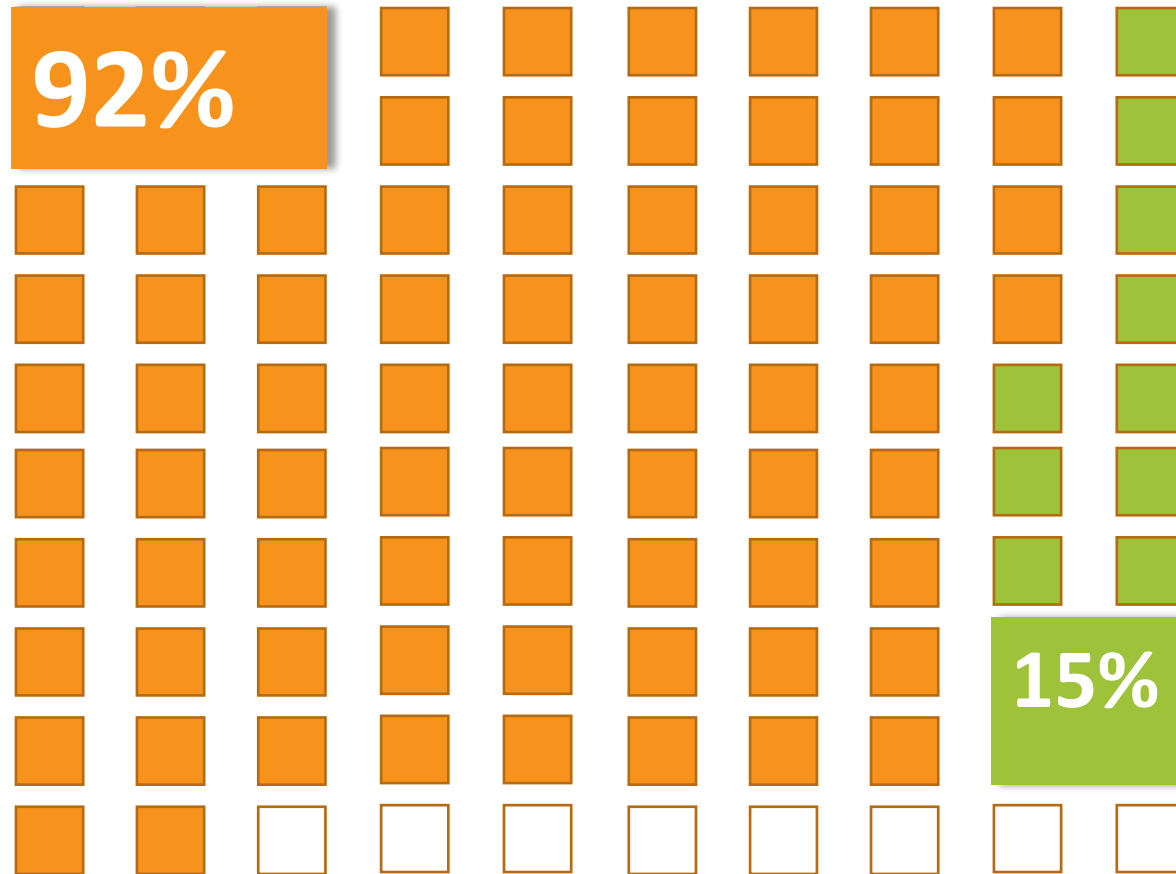
-  No drug is approved.
-  No new treatments get to market.
-  IF new treatments do get to market in DS, most get to market *without ever having been tested in DS.*



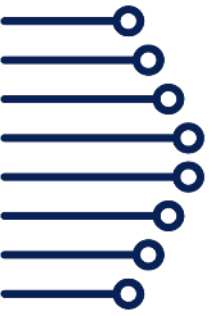
Research Participation Disparity



92% of families surveyed by LuMind IDSC indicated they wanted clinical trials to focus on the health care needs of people with Down syndrome.



Fewer than 15% of families said they had ever participated in a clinical trial or an observational study.



Research Participation Needed

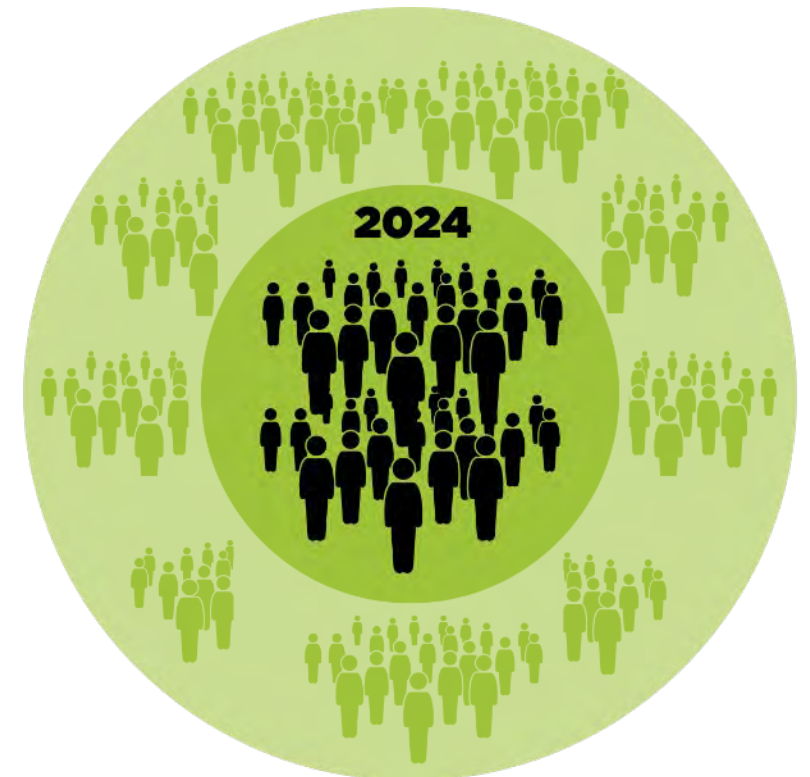
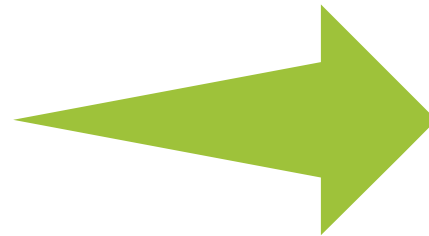


The number of clinical trials and observational studies in adults with Down syndrome grew from one trial in 2016 to four in 2021.

5-10 studies are expected by **2024**

2016

2021



Your mission, should you choose to accept it...



- In order to meet the growing need for Down syndrome research, our community must prepare for more studies and clinical trials
- Raising awareness among families is a big job, but one we can accomplish together



Down Syndrome Research Toolbox



Part 3: Using all the tools in the toolbox

- **Resources for you as a leader**
- **Resources and materials for your community**
- **Ongoing support, information**

Resources for you: Affiliates Page



A portal focused on the needs of busy community leaders who need reliable materials that are:

- Curated and vetted from reputable sources
- Easy to use, share, send
- Multi-tied materials that can be aligned for different audiences, from caregivers to self-advocates to clinical support staff and volunteers

www.LuMindIDSC.org/affiliates 

A screenshot of the LuMind IDSC website. The top section is titled 'WEBINARS' and features three webinar cards. The first card is for 'Skin Conditions and Down Syndrome Part 1' presented by Jillian F. Rork, MD, on February 22, 2022. The second card is for 'Down Syndrome Adoption' dated November 4, 2021. The third card is for 'Down Syndrome and COVID-19: What You Need to Know' with speakers Dr. Brian Skotko and Dr. Ana Claudia Brandão, moderated by Claudia Moreira. Below the webinars is a section titled 'CONEXIÓN EN ESPAÑOL' with a breadcrumb trail 'HOME > NEWS > CONEXIÓN EN ESPAÑOL'. It contains three articles: 'Conoce Más Acerca de la Enfermedad de Alzheimer y Su Conexión Con el Síndrome de Down', 'Mi Familia Es Mi Orgullo' by Roberto Ojeda, and 'Señales de que su ser querido con síndrome de Down debería de visitar a un especialista de la enfermedad de Alzheimer'.

Resources for you: Awareness Page



- One central hub for community-facing turnkey materials, infographics, videos, social posts
- All available for co-branding
- Designed to build awareness and comfort around research.



myDSmoment

They Did. I Can. We Will.

www.LuMindIDSC.org/myDSmoment



#myDSmoment Testimonial #1
Featured in Video: Michelle Sullivan
YouTube Link: https://youtu.be/8XENJvN_yLo



#myDSmoment Testimonial #2
Featured in Video: The Cronin Family
YouTube Link: <https://youtu.be/D8hLKtBZLRk>



#myDSmoment Testimonial #3
Featured in Video: The Nothnagles
YouTube Link: <https://youtu.be/CH1E-8BajXY>



#myDSmoment Testimonial #4
Featured in Video: Alex & Kari Jones
YouTube Link: <https://youtu.be/Ez4APpZMnCQ>



#myDSmoment Testimonial #5
Featured in Video: David Egan
YouTube Link: <https://youtu.be/15hCHd58LsQ>



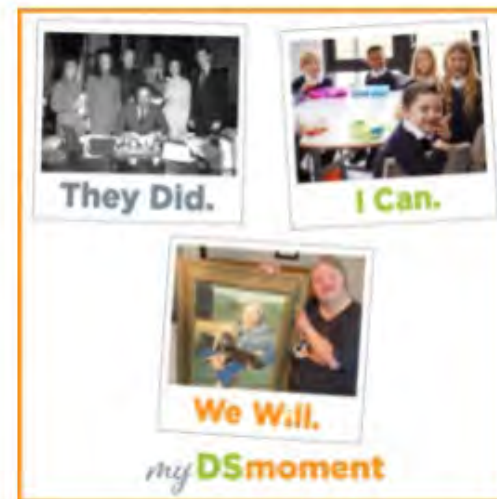
#myDSmoment Testimonial #6
Featured in Video: Jo Ann Simons
YouTube Link: <https://youtu.be/71ohkd7UarQ>

A Resource for Your Community



A free, online library of 700+ trusted resources and useful materials that can be personalized to each member's interests.

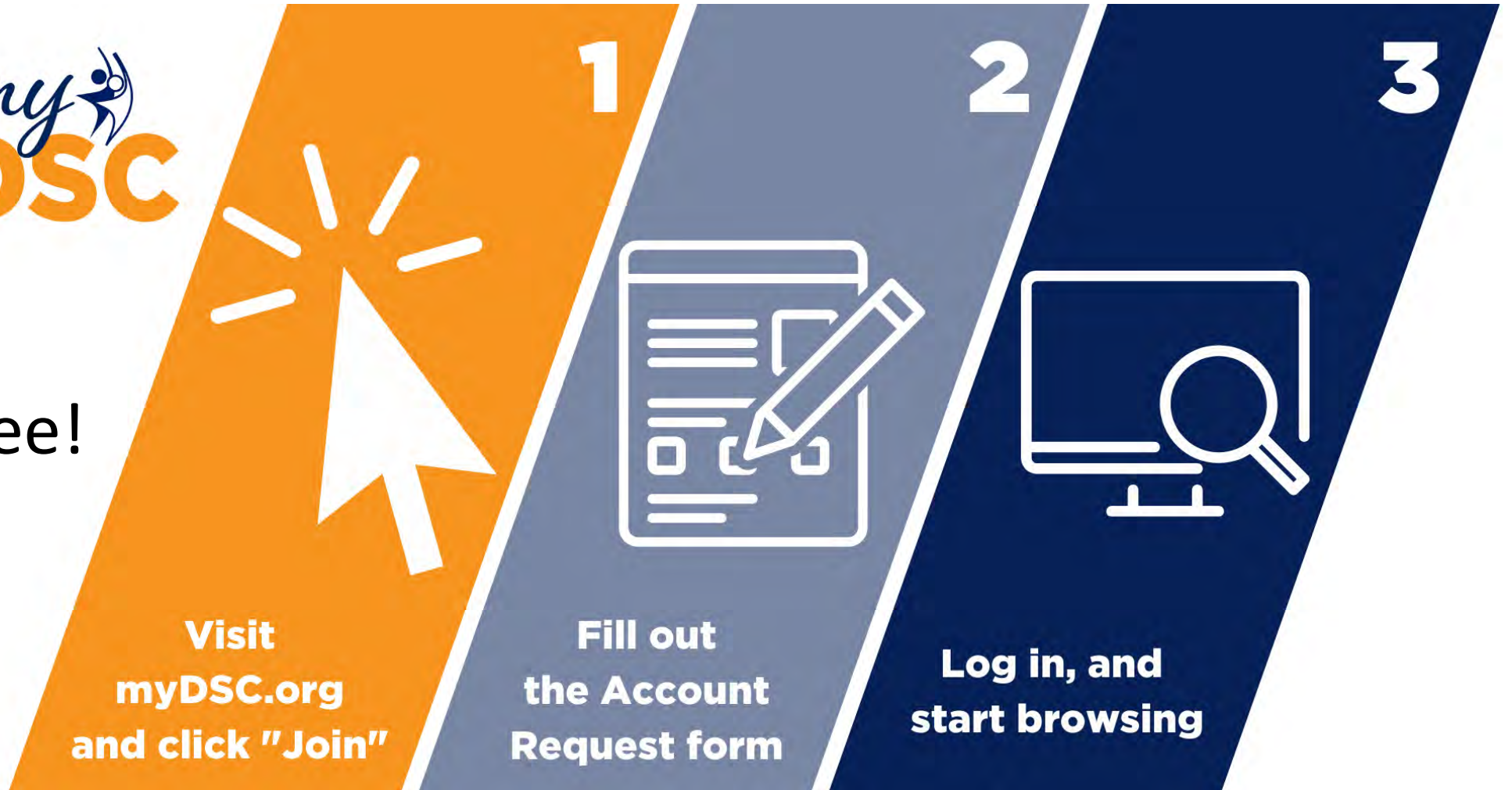
myDSC is a useful tool for: people with Down syndrome, their families, and the wider community that supports them. Free for all at: myDSC.org



Resources for the Community



Registering is
easy – and free!
myDSC.org



1
Visit
myDSC.org
and click "Join"

2
Fill out
the Account
Request form

3
Log in, and
start browsing

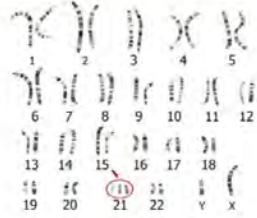
Resources for Your Community

DS-AD specific resources on LuMindIDSC.org


Guides, explainers, webinars, and more – in English and en Español




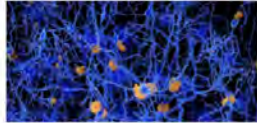
The Science Behind Down Syndrome and Alzheimer's Disease



Human chromosomes usually occur in pairs. Neuro-typical individuals are born with 23 pairs of chromosomes, while people with Down syndrome are born with three copies of Chromosome 21.



The Amyloid Precursor Protein gene (APP) that produces amyloid protein is located on Chromosome 21. In Alzheimer's disease, the amyloid protein is cleaved by enzymes into smaller pieces called peptides, the peptides clump together to form amyloid beta plaques that are toxic to brain neurons.



DS-AD: Steps From Knowledge to Action

What are some of the symptoms of Alzheimer's disease?
Some of the symptoms to be aware of in individuals ages 35 and older are: loss of interest in activities, short-term memory loss, withdrawal, depression, loss of sociability, increase in wandering, trouble learning new things or performing tasks that they used to do before such as making their bed, preparing their own food, or even brushing their teeth.

What can I do to help my loved one with Down syndrome prevent/prepare for Alzheimer's disease?
There are some things you can do now, regardless of the age of your loved one:

- Finding a healthcare professional with expertise in Down syndrome.
- If you are questioning a behavior or the loss of a skill, start tracking your concerns to your loved one's doctor.
- Read and learn more about DS-AD (myDSC.org) is one free resource.
- Researchers are still learning about lifestyle changes that can lower the risk of Alzheimer's disease. These include diet and exercise to maintain a healthy weight, engagement, education, and treating other health problems such as obstructive sleep apnea.
- Overall healthy lifestyles lead to a healthy brain and lowers the risk of Alzheimer's disease later in life.

We recommend tracking and taking note of changes in behavior, and making an appointment to see your loved one's physician for a discussion.



Alzheimer's Disease is an urgent medical concern for the Down syndrome community. LuMind IDSC responds to this urgency by working with the DS research community, researchers, and industry to develop evidence-based therapies to combat the onset of Down syndrome-Alzheimer's disease. Learn more at: LumindIDSC.org.



The screenshot shows the LuMind IDSC Research Hub website. The header includes the LuMind IDSC logo and navigation links: MYDSC HOME, ABOUT US, OUR COMMUNITY, GET INVOLVED, CALENDAR, RESEARCH HUB, NEWS. The main content area features a 'RESEARCH HUB' section with a photo of a scientist in a lab coat and safety glasses. Below the photo are logos for 'RESEARCH CONSORTIUM', 'DS-CTN', 'LIFE-DSR', 'CLINICAL TRIALS FINDER', and 'myDSC'. A grid of icons at the bottom represents 'ALZHEIMER'S DISEASE', 'PUBLICATIONS', 'FOR FAMILIES', 'ENFERMEDAD DE ALZHEIMER', 'FOR RESEARCHERS', and 'DS-CTN'.

Concerned about Alzheimer's disease? Signs that your loved one with Down syndrome should have a healthcare evaluation



Potential Symptoms of Alzheimer's Disease

- Being socially withdrawn
- Delivered activities over and over
- Forgetting things through misplacing
- Forgetting events or the names of people
- Forgetting to brush teeth, making their bed, or inability to be able to

SYMPTOMS OF CONCERN, STEPS YOU CAN TAKE!

- Keep track of them.
- Information starting at the professional level.
- Identifying behaviors, with expert advice and tips to help you, family, friends, and support with disabilities.
- What the support is for IDSC's

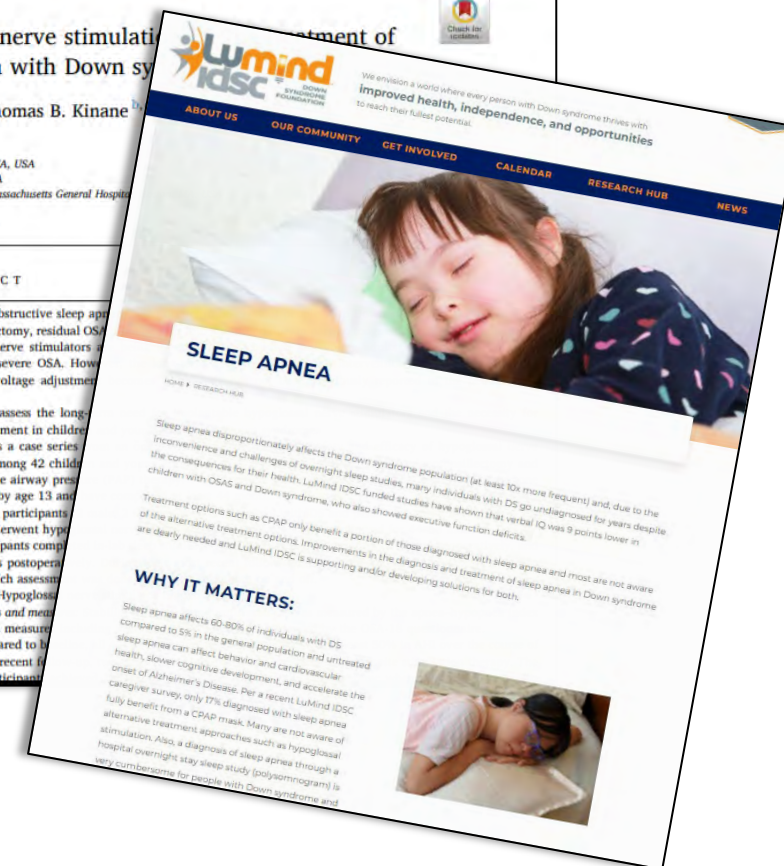
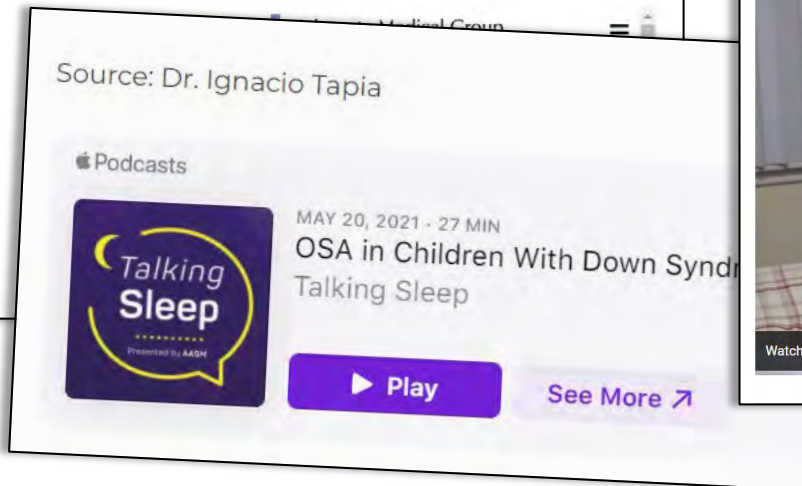
www.lumindidsc.org/alzheimersdisease

Resources for Your Community



Sleep Apnea in myDSC, and at:

www.LuMindIDSC.org/sleep 

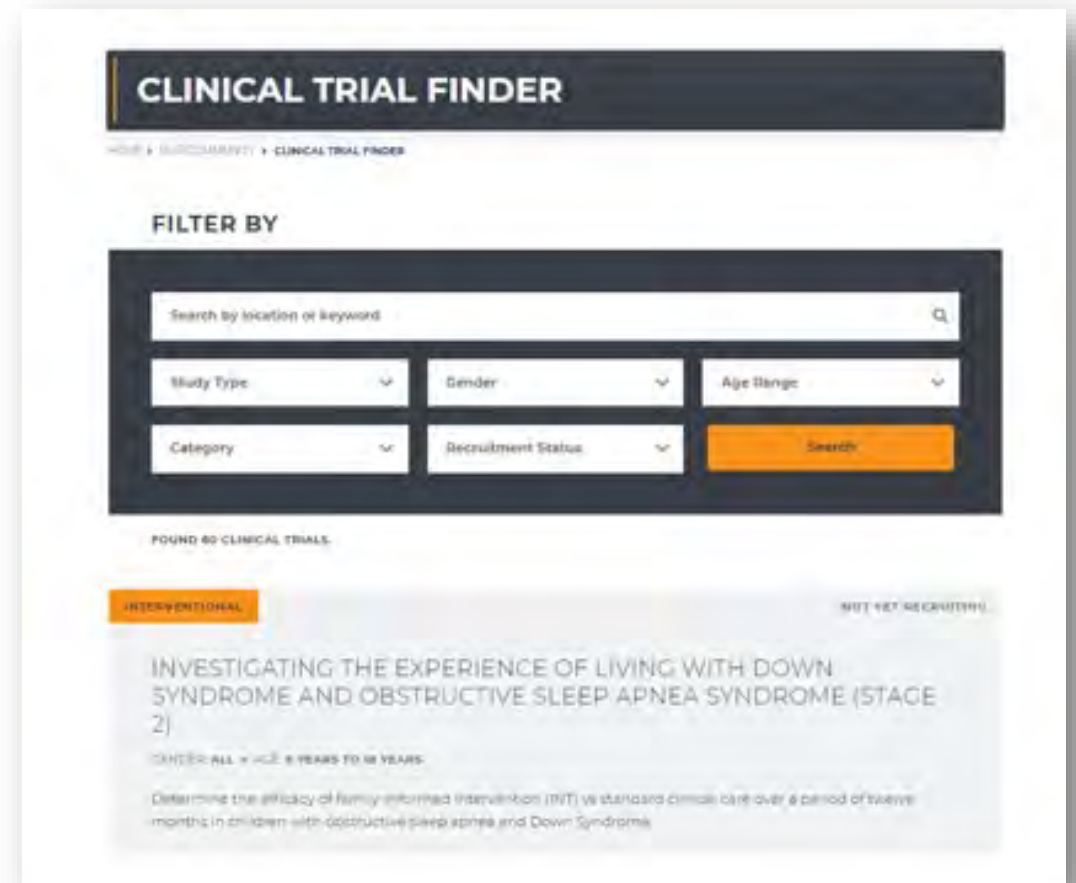


Clinical Trial Finder Online



🟢 LuMindIDSC.org/ClinicalTrialFinder


List of clinical trials that can be filtered by type, gender, age, category and recruitment status



LuMind IDSC COVID-19 Family Resources



1. COVID-19 Resources on our website
2. COVID-19 Q&A
 - **Co-led and disseminated with 7 DS organizations**
3. T21RS/Emory survey on DS COVID-19 cases & vax
 - **Co-funded and disseminated by 8 DS organizations**

All resources are available on LuMind IDSC's website in the COVID-19 Resources section (www.lumindidsc.org/covid19) 

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