A newsletter distributed by The Dominantly Inherited Alzheimer Network Expanded Registry (DIAN EXR), Washington University School of Medicine, Department of Neurology



DIAN EXR Newsletter

Hello friends,

CONTACT US

If you have an idea for a story or have questions about the information in this newsletter, please contact the editors.

Jennifer Petranek j.petranek@wustl.edu

Ellen Ziegemeier eziegem@wustl.edu I hope that everyone is healthy. With this most recent edition of the EXR Newsletter, it's my pleasure to touch base with you all and provide you with some important updates. It's hard to believe we are approaching the end of 2020, a year like few others in recent memory. However, I think you will see that this has not slowed any of us down, and we all remain as committed as ever. Although we cannot predict what 2021 will be like outside of DIAN, I hope it is clear with this newsletter that there remains plenty to be optimistic about within our network. Stay well, and stay tuned.



Regards,

Eric McDade

Site Coordinator Perspective

My DIAN Peeps,

You have shared your stories, your lives, fears and hopes. The journey never short or painless, either the telling of the history or the living of the future.

My first participant was a tall, wide shouldered cowboy who shared his family's story and how sad it made him to lose his dad so young. We had to fly you back for a missed PET scan, a one day turnaround.

Another participant called me with a poor connection as you were at the pool with your children. You told me you just found out you were positive. I felt how surreal it must have been looking at your children, innocents playing in the pool.



I dreamt of you at night knowing at the time there was nothing to offer but intense observation. You volunteered for a 36 hour study that took CSF through a catheter. It would lead to a scientifically significant paper, does that help you?

The movie stars came, two couples

beautiful and young and taking pictures. I marveled at such energy facing this terrible disease. Did they realize? Oh yes- the expression the "Best and Worst Vacation" was coined.

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Our "Lab Rat"; he had it stitched on the back of his jacket and wore it proudly. The first LP he said to Dr Bateman "I'm doing pretty good with my Alzheimer's disease". I looked at him and thought so young and strong-how can this be happening?

Finally in 2012 the DIAN TU trial started and now Gantenerumab is a potential treatment. To have our people back and receiving drug is wonderful! Thank you for the years of sharing, persevering, time away from your families, travel, time off work, all of it! You are the "X-Men" and you made it happen. Thank you will never be enough. As all DIAN Coordinators, Tamara and I welcome you back during COVID with our masks on and hands washed! We protect you with a sneeze guard and sanitizer. Every door you walk in you will have your temperature taken. We will miss our hugs but we will keep you safe!



Exploratory Open Label Extension (OLE)

As reported in our last <u>newsletter</u>, secondary results of DIAN-TU-001 trial supported the launch of an exploratory Open Label Extension (OLE) for gantenerumab. Despite delays related to the COVID-19 pandemic, the DIAN-TU is happy to report that most US sites are now open and have begun to enroll, schedule and complete OLE visits. Sites in Canada, Europe and Australia are gearing up to enroll and schedule participants over the next several months. As a reminder, individuals originally enrolled in either the gantenerumab or solanezumab arms for any period of time are eligible to be assessed for potential enrollment in OLE. Since everyone in OLE will receive active drug, each participant will have to know their genetic status and provide a genetic report to site coordinators in order to be enrolled. A process has been established to provide participants with genetic counseling and disclosure through the trial, which can be initiated by contacting site coordinators. Please visit the DIAN website to read the DIAN-TU's official <u>statement</u> on the exploratory OLE and to see an updated <u>list</u> of Frequently Asked Questions. Enrollment into the gantenerumab exploratory OLE will be offered for a limited time, so please contact your site coordinator to express interest if you have not already done so.

Participant Survey!

If you were enrolled in either the solanezumab or gantenerumab drug arms, you should have received an invitation from your site to participate in a feedback survey about your experience in the trial. If you have not received an invitation or have not yet completed an end-of-trial participant satisfaction survey, please contact your site coordinator to request the link to the online questionnaire. Your feedback is crucial to the design and implementation of DIAN-TU trials, and we greatly appreciate your input!

Cognitive Run-In for Primary and Secondary Prevention

As sites implement COVID-19 protocols, Cognitive Run-In (CRI) enrollment and study visits have slowly been resuming. While CRI does not offer drug treatment, this stage of the trial collects valuable information from participants in preparation for the introduction of a new drug, which can help speed up the time needed to determine if the drug is effective. Currently, the DIAN-TU is working with pharma partners to finalize drug selection for future trial arms, with plans to launch in 2021. If you have previously contacted the DIAN Expanded Registry (EXR) and are waiting for a referral, please note that we will be reaching out individually to you as your intended site opens for new referrals. If you have not yet expressed interest in CRI and would like more information, please email the DIAN EXR at <u>dianexr@wustl.edu</u> or join the Registry <u>here</u>.

Sleep is Essential for Good Health

Sleep is essential for good health, and poor sleep may cause health problems. Many studies are showing that disturbed sleep may be a marker for very early Alzheimer disease. For instance, sleep disruption may be a marker for future cognitive impairment and it may be a marker for changes in the brain seen in Alzheimer's disease such as amyloid plaques. The vast majority of sleep and Alzheimer disease studies look at individuals with, or at-risk for, sporadic Alzheimer disease (not dominantly inherited Alzheimer disease). To better understand the timing of changes in sleep and changes in Alzheimer disease, Dr. Brendan Lucov at Wachington Lucys at Wachington Lu

Lucey at Washington University in St Louis is interested in studying sleep in individuals with dominantly inherited Alzheimer disease. This study is expected to begin soon and will be completed remotely at home. Interested individuals will be consented to participate via telephone or video call and sleep monitoring devices will be shipped to them. After completing the monitoring at home, the devices are shipped back for evaluation. If you have questions about the study or are interested in participating, please contact Dr. Lucey at <u>luceyb@wustl.edu</u>.



View From a Participant

Participating in Alzheimer's research is something that is literally life changing. My dad and various family members, including my brother, sister, cousins, aunts and uncles, have been participating in research ever since we found out our family carried this horrible genetic mutation. After my dad was diagnosed with familial Alzheimer's, he didn't waste any time and was ready to face it head on, even if that meant being a "guinea pig". He was ready to do whatever he could to help advance research. His goal is to be one of the key participants that helps find a cure for Alzheimer's, not only for everyone that has been diagnosed with this horrible disease but especially for my older brother Tyler, sister Lindsey, and me. He has watched two brothers and a sister succumb to this awful disease, and we are extremely blessed that we just got to celebrate my dad on his 58th birthday this past July. Had my dad not been participating in research or the drug trial that he has been in for the past 6 years, I'm not so sure that we would've been celebrating his birthday this year.

Being so young when my dad was diagnosed, I was uncertain of what "participating" in research and the DIAN-TU trials actually meant. As I grew older, I came to find out about what he has actually been enduring the past 7 years every time he goes for weeklong visits in Missouri. MRIs, PET scans, cognitive testing and lumbar punctures are just some of the tests he completes. Sounds scary, but I was ready to find out for myself what my dad has been doing all these years.

I wanted to start in research trials as soon as possible, but being a college volleyball player, I decided that it would have been difficult to be gone for a week every year due to off-season workouts, games, practices, etc. After I was done with volleyball, I was ready to start participating. After seeing my brother and sister being so brave and start in research as soon as they were able, I was so eager to begin as well. Being young and not knowing if your lifetime is going to be cut in half is VERY scary and is not something everyone has to deal with or think about on a daily basis. After watching my aunts and uncles go through this horrible disease and one day my dad, it's very unsettling to think that could be me and my siblings in the future if we don't find a cure soon.

I'm going to steal a quote from my brother, "If you can tell yourself that your life is going to be cut in half, you're going to want to try and accomplish everything you want to do." Our family wants to accomplish being a part of the reason that a cure for Alzheimer's is found. This is why we all chose to be a part of research. My deceased aunt and uncles that participated in research until their health declined and they were no longer able to go. We not only continue to participate in research for them, but for all of the other families in the world that are experiencing the same thing as our family. Participating in research is mentally, physically, and emotionally draining but well worth it.

I am currently in the DIAN Observational study. I don't plan on going into the primary prevention trial at this time, although I really want to, as I am getting married next summer and plan on having children as soon as possible. I don't know my genetic status and don't plan on finding out anytime soon, so I am very interested in IVF-PGD, which can test an embryo to see if they carry the genetic mutation or not. I have been in contact with Lindsay Hohsfield who directed me to Youngtimers (https://www.youngtimers.org/), which is an excellent resource and can provide information on options when considering the primary prevention trial, such as great insight on IVF-PGD. If it were possible to participate while in the process of starting a family, I wouldn't even think twice and would switch from the observational study to the primary prevention trial because I am willing to try ANYTHING that carries potential to slow down the wrath of plaques and tangles which is known to cause symptoms of Alzheimer's disease. It is very important that we have enough participants to take part in these drug trials because these studies are all we have right now to rely on and are essentially our only hope.

Being a "guinea pig" is not for everybody, but when your life literally depends on this research, why not take a stand and be a part of the BIG CHANGE that I am confident is coming?

I can't wait to see the day that we have our very first Alzheimer's survivor and know that had we not donated our brains and time to research and instead sat back and did nothing, we might not have had the same outcome until way later. My favorite quote comes from my dad after he was diagnosed, "It's not what you're dealt with in life, it's how you deal with it". Our family deals with it the best way we know how: research, prayer and lots of laughs.

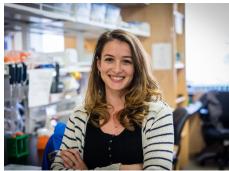
I am SO proud of all of my family for being a part of the change and facing this disease with strength, power, and courage and not backing down until we FIND A CURE.

XYoungtimers

Youngtimers: A patient-led voice, community and resource

Navigating major life changes and decisions can seem daunting on their own. For those facing DIAD or the risk of DIAD, whether they are patients, caregivers, or at-risk individuals, this disease adds further pressures and complexities as life and our relationship with the disease evolves, including our family, relationships, life experience, independence, career path, and financial plans (among many more). I believe that to face this disease is to be continually tested on your mental well-being, resiliency, and hope.

In 2016, I found out I was trial eligible. After years of waiting, and the clock ticking away as I became closer and closer to be the right number of years from my father's age of symptom onset, I finally hit that magical number. "Yes, let's get you started," the DIAN investigator said. "You'll need to hold off on family planning for four to six years though." My heart dropped. I was in my early 30s. I had spent the last decade researching Alzheimer's disease; I had needed to focus on my career if I wanted to



become an independent investigator. So these were my options now? A trial or a baby? Back and forth my mind would go. If I enrolled in the trial now, I would be 37 when the trial ended. What if I couldn't have children at that age? What about the amyloid that could already be in my brain? Do I turn down my only current hope preventing or delaying this disease for a biological child?* And bubbling underneath the surface of all this, should I get genetic testing done?

That same year I went to the DIAD Family Conference. There, I met other young men and women who were not only facing the reproductive dilemma I was facing, but other enormous life decisions. How do I know I'm ready to undergo genetic testing? How do I deal with a parent that I am losing to this disease? How do I financially prepare for this disease? How do I tell my friends and family about this disease? Coming together and discussing these issues drew parallels to my own individual experience and opened my eyes to what I now see as the collective DIAD experience. My pain, my worry, my grief, my hope were mirrored in others and brought about a closeness and kinship that is not quite describable even today.

In 2018, I founded Youngtimers with the hope of emulating that experience for others. Bringing together DIAD experts, veterans and newcomers, this patient-led nonprofit organization centers on providing meaningful support and resources for those affected by DIAD.

In 2020, we began monthly virtual support groups for at-risk DIAD individuals. With the launch of the exploratory gantenerumab open label extension trial (and the requirement to know your mutation status), we believed it was a critical time for patients to discuss their reservations and worries regarding genetic testing. These sessions not only brought together individuals who had already learned their status (and could provide their personal perspective), but also included discussions with a trained genetic counselor and psychologist specializing in autosomal dominant dementias. We hope to continue these types of resources by gathering both professional input as well as patient perspectives, piecing together the critical information needed for individuals facing the unique challenges of this disease.

COVID-19 and social isolation has undoubtedly impacted the emotional and mental well-being of our community, and we are committed to continually growing these support groups. We partnered with the DIAN-TU at Washington University in St. Louis and the Alzheimer's Association to create unique and diverse support sessions during the 2020 Virtual DIAD Family Conference. Due to the interest in these efforts, we are now working closely with the Alzheimer's Association to further develop and grow these support groups. These will include a new caregiver support group and a support group for spouses of at-risk individuals. Please visit our website <u>www.youngtimers.org</u> if you are interested in joining a support group or would like to see a support group created for your unique needs (i.e. young adults/teens, Spanish-speaking, etc.).

Our next projects involve developing patient-centered informational resources that address specific issues and needs of our community. These will include developing how-to guides, patient perspective pieces, and recorded webinars/informational workshops on genetic testing, clinical trial participation, reproductive and fertility options – including fertility preservation and in vitro fertilization with preimplantation genetic testing, and caregiving strategies. Please check our website as these new resources continue to roll out. If you are interested in sharing your story, would like to get involved with fundraising, or have a question that you would like one of our scientists to address, please feel free to contact us at: <u>youngtimersnonprofit@gmail.com</u>.

Wishing you all a safe and healthy rest of the year.

Lindsay Hohsfield

* I realize there are other ways to have children. I would like to acknowledge that for other women, family planning decisions may look different than my own; whether that is pursuing adoption, surrogacy or deciding not to have children, I respect all of these choices.

For anyone interested in learning more about in vitro fertilization (IVF) with preimplantation genetic diagnosis (PGD) or egg freezing, Fertility IQ (<u>www.fertilityIQ.com</u>) has offered Youngtimers free access to their courses on these topics for individuals in the DIAD community. Please email Lindsay at <u>youngtimersnonprofit@gmail.com</u> for instructions and access.

2020 Virtual DIAD Family Conference

This year's DIAD Family Conference was unique, as we pivoted from our usual in-person experience to a virtual one. As we weighed options, family members on the planning committee stressed that the need for some sort of conference and the support it offered was more crucial this year than ever before, as families around the world were enduring long lock-downs to combat the Covid-19 pandemic. The decision was swiftly made to bring the conference to you in the comfort and safety of your own homes. Although we did not get to experience the hugs, tears and laughter in person, the virtual conference offered space for further learning, discussion and support.

Over 300 family members and professionals from 10 different countries participated in some aspect of the conference, which spanned nearly 2 weeks and offered pre-recorded scientific presentations, live panel question and answer sessions, a family presentation, practical information sessions and over 20 topical support sessions. The Alzheimer's Association International Conference (AAIC) offered free registration this year for their virtual platform, and suggestions for relevant presentations were provided daily to family conference registrants. While the experience of an in-person DIAD Family Conference was difficult to replicate virtually and there were definitely drawbacks, evaluations completed by attendees offered positive feedback on the educational and emotional support value of this year's conference. A key recommendation was that we consider offering a virtual component to future in-person conferences. Here are some additional points expressed by those who completed evaluations:

Alzheimer's Disease in the News

Older people with early, asymptomatic Alzheimer's at risk of falls

https://medicine.wustl.edu/news/older-people-with-early-asymptomatic-alzheimers-at-risk-of-falls/

Alzheimer's protein in blood indicates early brain changes

https://medicine.wustl.edu/news/alzheimers-protein-in-blood-indicates-early-brain-changes/

Recent DIAN Publications

Systematic validation of variants of unknown significance in APP, PSEN1 and PSEN2

https://www.sciencedirect.com/science/article/pii/S0969996120300929?via%3Dihub

Autosomal dominantly inherited alzheimer disease: Analysis of genetic subgroups by machine learning

https://www.sciencedirect.com/science/article/pii/S1566253519309959

The DIAN data are increasingly published in scientific reports to enable investigators worldwide to learn of our progress and to advance scientific understanding of Alzheimer's disease. Because of this, there is a small but possible risk that a DIAN participant reading or hearing of these scientific reports might guess, correctly or incorrectly, information about themselves. This includes guessing one's own or a family member's mutation status. We at DIAN take every step to minimize this risk, including ensuring that all DIAN data in journal articles, scientific meetings, press coverages, etc., lack identifying information for any participant, but it is possible than even such de-identified data may reveal a pattern of symptoms or a relationship with other medical disorders that could suggest that a particular person is mutation positive. You can avoid reading these scholarly articles or listening to presentations related to the DIAN study to decrease this risk.

The DIAN website is a great place to learn more about our research and find additional information. Please visit the "News" page at <u>https://dian.wustl.edu/news/</u> for articles related to DIAN and Alzheimer's disease. Family members share their stories on the "Family Voices" page at <u>https://dian.wustl.edu/for-families/family-voices/</u>. If you are interested in research opportunities please contact the DIAN Expanded Registry at <u>dianexr@wustl.edu</u>. If you are not part of the registry and would like to be, please visit <u>dian.wustl.edu</u> to register.

Pros

- Pausing and re-listening to prerecorded sessions enhanced understanding
- •Extended length of conference was less overwhelming than usual one day conference
- •Allowed participation for those who usually cannot attend in person

<u>Cons</u>

- •Keeping track of sessions and registration was difficult
- •All day zoom sessions were exhausting (on July 25)
- Missed the feeling of togetherness

If you did not participate in this year's conference, please consider visiting this <u>link</u> to complete a brief and anonymous survey to provide feedback. We highly value your suggestions as we strive to improve the family conference experience. You may also send any to us at dianexr@wustl.edu.

Thank you to all who participated in the virtual conference this year!



Pictured above: The Expanded Registry team, safely social distancing to bring you this years Virtual DIAD Family Conference.