



Hello Dear Friends,

It hasn't been an easy year, has it?!! I'm so glad to have heard that most of you did well, and have remained healthy. The year challenged our spirits, our reserve, and our patience, but, hopefully, we are on our way back to a healthy and energetic nation.

I'm very proud of our lab for what they have accomplished this year. With everyone's help, we managed to switch to online testing so that our visits with you could continue. We all worked from home, some with family and even small children around, but we made it work. We wrote articles for our scientific journals, attended virtual conferences, and gave lectures to worldwide audiences. We worked to improve the resources we could offer you, and we thank all of you for your patience while we transitioned to a more online world.

In this newsletter, we include updates on each member of the lab. We also include a list of aphasia apps compiled by Anjelica Vance.

We hope everyone continues to take good care of themselves, and hope to see you in person soon!

Nina

UPDATES FROM THE LAB



Professor Nina Dronkers

In this newsletter, we thought we'd add some more personal notes from each of our lab members. Everyone is working on a different project, with individual goals and ambitions, and we wanted to share those with you. We hope you enjoy getting to know us better! As for me, my work has always been centered around aphasia. Each person with aphasia has their own story and their own unique struggles with speech and language. These stories tell us more about how the language system can be affected, but also how it recovers. MRI scans show us the individual brain areas that were injured, so we can link each of these to the different parts of the language process.

This is how we learn how the brain processes language, and how we might use healthy parts of the brain to aid in recovery. Most of my work was done at the VA Northern California Health Care System in Martinez. There, I was Chief of the Audiology and Speech Pathology Service and a Research Career Scientist. For 35 years, I worked with people who had strokes and had become aphasic. I loved working with veterans and with the staff who helped to care for them. We created a Center for Aphasia and Related Disorders and several programs that helped people with brain injuries. Three years ago, I retired from the VA and came to UC Berkeley as an Adjunct Professor to pursue research on aphasia full time. I am fortunate to be able to spend one-on-one time with people who have aphasia, to learn from them and, hopefully, to share what we know.

This year, that work was interrupted because of the pandemic, but at least, we were able to see folks via Zoom. Meanwhile, I also spent my time supervising and consulting on projects, mentoring students at UC Berkeley and other universities around the world, and writing reports and papers. I continued my work with colleagues at UCSF, where the group works with people with primary progressive aphasia. Most of you suddenly lost your language skills after a stroke, but others lose their language gradually because of degenerative neurological disease. The goal of this work is also to understand more about how language is processed in the brain, and how to help people who suffer from language loss. Needless to say, none of this could be accomplished without the wonderful team of people in our lab, and especially all of you who make our work possible. Again, we thank you so much for letting us be a tiny part of your lives.

Dr. Maria V. Ivanova



Hello everyone! It certainly has been a very different and at times a very challenging year, one that we will never forget. Who could have imagined that when we said goodbye last March that it would be almost a year before we would see each other in person again?! I'm deeply grateful to my dearest colleague Nina Dronkers and all the amazing enthusiastic students in our lab that kept the research going and sustained my optimism through this roller coaster as I tried to juggle research work and homeschooling my elder daughter. The pandemic isolation has certainly highlighted the value of these irreplaceable personal connections. Within our Aphasia Recovery Lab we have stayed connected through lively virtual weekly lab meetings centered on different ongoing projects and case presentations, regular journal club discussions where we debate recently published papers and tractography hours, where students learn about different types of neuroimaging techniques.

Research-wise I have tried my best to make the most use of this solitary time. Over the course of the year, I have been able to wrap up several large projects and publish a number of scientific papers. In one of the studies, we looked at the role of white matter tracts (pathways that connect different brain areas) in language deficits post-stroke. Our findings clearly showed the importance of these connections for better language outcomes in aphasia. Another paper I was able to finish presented the Russian Aphasia Test, a comprehensive language battery in Russian. The paper summarized almost a decade of work focused on developing and standardizing this assessment tool. Currently, I'm analyzing a new set of perfusion data, brain scans showing the amount of blood delivered to different regions in the brain, and trying to link these measurements to behavioral outcomes. I'm very much looking forward to the fall when things will hopefully be fully back to normal, and we can enjoy more in-person interactions again!

Alexis L. Pracar



Hello friends! I have just completed the first year of my PhD in Cognitive Neuroscience at UC Berkeley with Professor Nina Dronkers as my advisor. This year has been difficult with online schooling, online research, and trying to get through it all during a global pandemic. Fortunately, I have a wonderful and supportive community here at the Aphasia Recovery Lab. I am still able to learn so much from my classes and our participants. I have presented a case study on apraxia of speech at the Academy of Aphasia and I am continuing to write up the results for publication. I am also working on a project exploring the interrelatedness of music and language.

This summer, I am privileged to continue my training with Dr. Maria Ivanova on use of the MRI scanner at UC Berkeley. I am also learning a new methodology, EEG, which records electrical signals from the brain. Mastering both of these techniques will allow me to think more deeply about how the brain works to create the phenomenon of language. I also am still one of the leaders of the aphasia support group at the VA, which meets once a week online to play games, do language activities, catch up about life, and to read together. I am very grateful for all of the support I get from our lovely community. We are also slowly beginning to see participants in person again. What a joy! I look forward to more of this throughout the next year.

Sandhya Kannan



Hi guys! It's hard to believe that I've been a part of the Aphasia Recovery Lab for almost a year and a half now. I came in with scattered exposure to cognitive neuroscience, knowing only one thing for certain: language as it relates to the brain is an incredibly complicated but fascinating field. Since then, I have not only had the privilege to be trained in specific skill sets such as in understanding various aspects of aphasia, lesion reconstructions, tractography, and implementing IPA in speech transcriptions, but also the privilege of learning firsthand what it means to be a good scientist. I was given the opportunity to work on my own project looking into the implications of bilingualism on the performance of dyslexic children in linguistic and executive function tasks as well as a new project looking into sulcal patterning in lesioned brains. I have presented preliminary portions of my research, learned how to write a grant (and accept its potential failure), and learned how to understand and also question science literature. I also got to break out my art skills and design a cool lab logo to represent our awesome work!

Apart from lab business, I have successfully completed one year of my post-bacc at UC Berkeley, and will be preparing to apply to grad school in the fall. This summer along with lab and project work, I will be a teaching assistant reader for two summer psychology courses. I will also be perfecting my rowing and hiking skills as well as knocking off books in my ever expansive need-to-read list in my spare time. I am so excited to take on all these new endeavors, and I simply couldn't imagine a better group of people to pursue them with!

Vanessa Anderson



Hello all, I joined the Aphasia Recovery Lab this past October, and everyone in the lab has been extremely welcoming and more than willing to help! Before joining, I didn't know much about aphasia, but the past seven months have taught me so much about aphasia, speech and language, and neuroscience.

I have mainly been working on developing an online version of a test used to assess language comprehension abilities of patients with aphasia, but I've also learned how to do lesion reconstructions and even dabbled in tractography. I have also learned a lot in the field from our biweekly journal clubs. Outside of the lab, I survived my last semester of completely remote classes, which is an achievement in and of itself. I also declared a major in Molecular and Cell Biology and a minor in Bioengineering. This summer I'm planning on continuing my work on the online test as well as taking on some new and exciting projects!

Jessica Lawien



Hello friends! I've been in the Aphasia Recovery Lab for over a year now. I have since completed my time at UC-Berkeley, but can't seem to leave the lab. I enjoy the opportunity to continue to learn new things about the brain and aphasia. I assist the lab with tracking white matter changes in those participating in the lab's research study. On the side I am working on my first literature review that seeks to discover how we can use music and singing to help with aphasia recovery.

Over the summer I will be taking a new job as a trauma/ emergency room nurse now that Covid is mostly behind us, fingers crossed. My knowledge gained in this lab because of these brilliant women will definitely help me in caring for my patients. When not expanding my knowledge base, I enjoy volunteering with the Red Cross as a disaster responder, drinking good coffee, and dancing.

Anjelica Vance

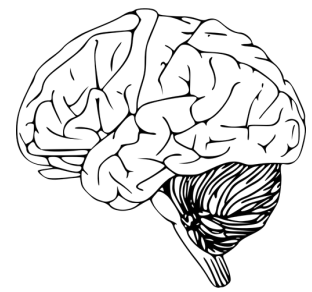


Hi all! I've been in the Aphasia Recovery Lab for over a year now and have loved every minute of mentorship and friendship that I have gained through this experience. I have had the privilege of working extremely closely in the past years with two family members with aphasia and have only learned that there is absolutely no limit to what you can achieve despite having a communication disorder! I fully intend to stay as an active member of the lab for the foreseeable future but am branching out to other acquired neurological disorders, namely epilepsy! I will also be working with the Baraban Epilepsy Lab at UCSF this summer.

This summer I will be working on my Honors Thesis in Molecular and Cellular Neurobiology with the Aphasia Recovery Lab and will be helping prepare a piece for the Academy of Aphasia conference later this year! I intend to graduate this upcoming Spring 2022 with my double degree in Molecular and Cellular Neurobiology and Sociocultural Anthropology. I have completed my Child Development minor which will help me transition into my dream field of pediatric research or medical school! Outside of the lab and school I have been enjoying some quality time with my family and my dogs, Winston and Florence! I have two athletic goals this summer: learn how to surf and train for the Lake Tahoe Triathlon with my dad!

APHASIA RECOVERY LAB

APPS LIST



Dear Participants,

It has come to our attention that with the restrictions on opportunities for social interaction, there is a shift towards online learning and therapy. Outside of hospital walls it can be daunting to find an appropriate and regular speech therapist. During the current times of isolation and quarantine it can be especially difficult to achieve the practice necessary to combat and overcome aphasia. With the help of our team and our collaborators, we have put together a list of applications that can be downloaded onto phones or tablets that may provide some continuation of learning and therapy.

Best wishes to everyone!

Nina F. Dronkers, PhD

Maria V. Ivanova, PhD

Alexis L. Pracar

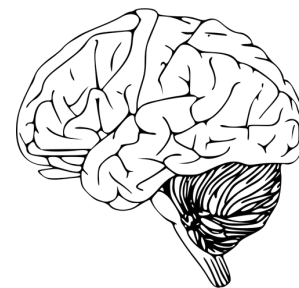
Anjelica B. Vance

Jessica L. Lawien

Sandhya A. Kannan

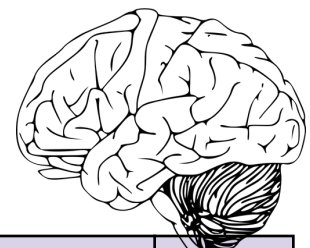
Vanessa R. Anderson

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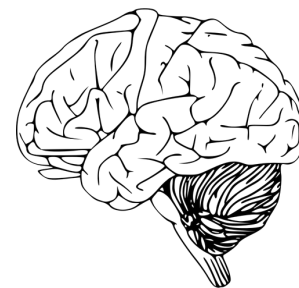
***See table below for details**

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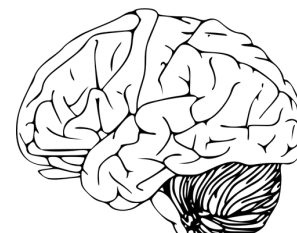
Type	Name	Purpose	Price
Language Production	SmallTalk Consonant Blends	Spoken language practice that focuses on: <ul style="list-style-type: none"> - different blends of consonants - difficult to pronounce features of speech 	Free
	Apraxia Therapy	Assistance with motor planning and other motor speech difficulties through: <ul style="list-style-type: none"> - Videos of proper pronunciation - Read-along sentences - Data and progress is recorded 	\$24.99
	Speech Pacesetter	Helps participants achieve more regular speech patterns by: <ul style="list-style-type: none"> - Working on timing phrases and speech through interesting poems and stories. - Helping users increase and regulate their rate of speech. 	\$14.99
Comprehensive Aphasia Therapies	Lingraphica	Assisting communication; include specific practice exercises (i.e. phonemes, colors, numbers, consonant blends, etc.)\	Free
	Tactus Therapy	Comprehension, naming, reading, and writing. Blanket company that includes a variety of both assistive technologies and specialized therapies.	\$74.99 for bundle
	Constant Therapy	Selection of various therapies that are designed similar to our lab's testing materials. Helps users discover weak spots and practice those areas.	\$300/yr *includes tablet
	Aphasia Therapy Online	4 categories of therapy: <ul style="list-style-type: none"> - Listening - Reading - Spelling - Naming 	Free

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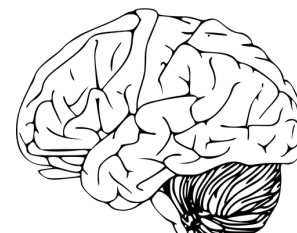
Type	Name	Purpose	Price
Auditory Comprehension	Comprehension Toolbox	Based on evidence-based comprehension therapy approaches that cover: <ul style="list-style-type: none"> - 3 representations of each target word - Over 2000 high-quality pictures of items - Choose the words you wish to include in the naming test and in practice - Add and delete new users - Keep track of user progress by reviewing past results in-app 	Free
	Comprehension Aphasia	Close to 2,000 pre-recorded auditory comprehension exercises with practice in the form of: <ul style="list-style-type: none"> - Yes-no questions with six levels of difficulty - Basic Directions with one and two elements with 12 levels of difficulty - Temporal Directions with 18 levels of difficulty 	\$19.99
	Comprehension Therapy	3 modes to assist in therapy: <ul style="list-style-type: none"> - "Listen": match an auditory stimulus (spoken word) to a picture - Read and match a written stimulus to a picture - Listen and read and match an auditory stimulus to a written word 	\$24.99

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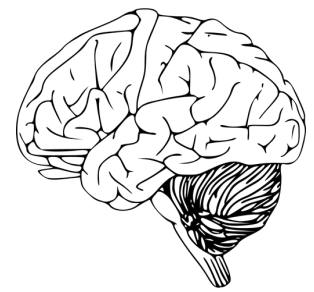
Type	Name	Purpose	Price
Assistive Technologies	ProLoQuo2Go	Augmentative and alternative communication app that offers: <ul style="list-style-type: none"> - Natural sounding voices - 10,000+ words that can be tailored to show just the most used words - Type-and-speak function 	\$249.99
	ClaroSpeak	Downloadable program that offers: <ul style="list-style-type: none"> - Word predictions - Highlight while reading functions - Customizable interface - Spellcheck 	Free 2 week Trial
	TalkPath News	Interactive and up-to-date news articles that are geared towards education and therapy! <ul style="list-style-type: none"> - Enjoy news articles that are read aloud and highlighted. - Access national, world,, education, entertainment, health, science and technology, and history articles. - Test reading comprehension with every article 	Free
Naming and Repetition	Spaced Retrieval Therapy	Personalized therapy plan that offers: <ul style="list-style-type: none"> - Three personalized targets with independent timers and data collection - Adjustable settings allow you to change the interval type, start, and end interval - Customizable interface - Records data and progress 	\$4.99
	Lexico Cognition	App offers 30 games and 360 questions in topics such as: <ul style="list-style-type: none"> - Pairs and relations - Activities - Descriptions - Positions - Opposites 	Free

Compiled by Anjelica Vance



Type	Name	Purpose	Price
Naming and Repetition	Advanced Naming Therapy	Therapy approach that includes: <ul style="list-style-type: none"> - Create sentences using action words based on the evidence-supported Verb Network Strengthening Treatment (VNeST) method for aphasia - Generate words in over 300 sound- and meaning-based categories - Describe 500+ photographs - Compare and contrast 200+ pairs of items 	\$24.99
	Aphasia Tutor 3: Story Reading	Helps you strengthen your reading abilities while enjoying classic literature! <ul style="list-style-type: none"> - Four different reading lengths - Therapeutic hints to help you reach the answers - Over 400 questions and 20 different classic stories 	Free
Reading and Writing	Advanced Writing Therapy	Four activities with built-in therapeutic support: <ul style="list-style-type: none"> - Generate a sentence or paragraph to a writing prompt in functional categories such as taking notes, writing personal information, and making lists - Practice typing common sentences from 1-8 words in length 	\$24.99
	Advanced Reading Therapy	Customizable with features like: <ul style="list-style-type: none"> - Text-to-speech available on touch - Adjust font size, spacing, and rate at any time - On-screen audio recording to listen to yourself reading aloud - Self-rating of comprehension encourages metacognitive awareness - Inference and prediction question encourage thinking outside the text - Huge variety of topics to appeal to mature readers 	\$24.99

Compiled by Anjelica Vance



Please note that the UC Berkeley Aphasia Recovery Lab is not funded or endorsed by any of the above applications. The apps listed above are suggestions based on our experience and communication with speech therapists. It is important to consult with your speech therapist on which applications may best aid in your recovery before choosing one from our list.

Additionally, please keep in mind that this is not an exhaustive list. Our lab team is looking to help people with aphasia in any way that we can during these unusual times. That being said, if you have any applications or websites that have aided in your personal recovery or a friend or family member's recovery please contact us at aphasialab@berkeley.edu!