

Request for Applications

Exploring the perspectives of children participating in DTTC treatment for CAS

Letters of Interest due **April 17th, 2023**

Background

The Once Upon a Time Foundation is a Fort Worth-based private foundation with \$250 million in assets, with donations and active pledges totaling over \$110 million. OUAT is currently funding over \$2 million in research investigating the effects of Dynamic Temporal and Tactile Cueing (DTTC; Strand, 2020) treatment for children aged 2;6 – 7;11 with moderate to severe childhood apraxia of speech (CAS). DTTC is an evidence-based motor speech treatment method developed by Dr. Edythe Strand and recommended for treatment of moderate to severe CAS (Murray, et. al., 2014).

Project Overview

The Once Upon a Time Foundation seeks to engage a researcher, small research team or independent consultant to design and implement a qualitative investigation to better understand the experiences of children after participating in these DTTC treatment studies. Please see Appendix A on Page 6 for details on each study.

Participants:

The potential participant pool consists of children with CAS who are participants in an OUAT-funded DTTC study in 2023 and 2024. At present, up to 108 children across the United States, Canada, and Australia are planned to participate in these studies. Of these, 60 will participate in an RCT comparing twice-weekly with four-times weekly therapy delivered by community clinicians throughout the USA and Canada, with participants commencing treatment in April 2023; 40 will participate in a parent-delivered treatment study at university clinics at NYU and Hofstra University with participants anticipated to commence treatment in June 2023; and 8 will participate in SCED studies investigating 3-hr sessions and 3 x 1-hr sessions with community clinicians in the USA and Australia with participants anticipated to start treatment in July 2023. Although the children in the treatment studies range from 2;6 – 7;11, the applicant may recommend inviting a subgroup of the children to participate in this study.

Project Goals

Primary area of interest:

What was the child's experience of participating in DTTC therapy sessions?

Additional areas of interest:

What is the child's experience of having CAS?

What is fun in speech therapy sessions?

What does the child like most/least about speech therapy?

Other areas of interests that may be appropriate depending on the applicant's study design:

Did the child think their speech improved? Did they have fun? Was the therapy harder than previous therapy? If it was too hard, would they still elect to continue with this type of therapy, especially if they improved? Did it change their feelings about their speech?

Data collection:

Minimal to no data should be collected by the speech-language pathologists providing treatment to the children. Rather, we are seeking designs that collect data via children interacting with trained interviewers from the applicant's research team, or the child's parents, and/or research staff who are yet to be identified.

Design:

The applicant is encouraged to design a study that best suits the research questions. This may include using semi-structured interviews (possibly via Zoom), child-friendly questionnaires, child-friendly rating scales, and/or other data collection methods. The ideal study design will enable the research team to differentiate between children's experiences in their research DTTC treatment and previous speech therapy experiences.

Researcher application type

(a) Application as an independent researcher/small research team:

- Applicant would seek ethical approval for the study through their own institution. The applicant would lead all aspects of the study (design, data collection, analysis, interpretation and dissemination). Although the research team would be expected to meet other OUAT-funded researchers and discuss the research with them, the child qualitative research study would be the sole responsibility of the applicant/applicant's team.

(b) Application as Principal Investigator collaborating with one or more SLPs currently completing OUAT-funded CAS research (Donna Thomas, Jenya Iuzzini-Seigel, Julie Case, Maria Grigos, Elizabeth Murray, Shelley Velleman):

- Applicant would liaise with the SLPs regarding the institution that should provide ethical approval of the study. The study would be sponsored by one of the existing institutions with modifications of the existing IRB/ethical approvals. The applicant's team and any named researchers (i.e., DT, JIS, JC, MG, EM, and / or SV) would manage the study (design, data collection, analysis, interpretation and dissemination).

(c) Application as a Consultant:

- Applicant would provide advice to OUAT regarding (1) study design, data collection, analysis, interpretation, dissemination, (2) recruitment and training of personnel to assist with all phases of the study. The existing OUAT-funded SLP researchers would apply for IRB modification for the study.

Our preference is for (a) or (b) above but if that is not possible, we will consider (c).

The selected researcher or consultant will be responsible for:

- 1) Developing a qualitative study design to be conducted with children participating in OUAT sponsored studies outlined in Appendix A,
- 2) Handling the data collection themselves or training and equipping data collection/interview team with necessary tools to conduct interviews & collect data, and,
- 3) Analyzing the qualitative data collected to further inform treatment outcomes.

Eligibility Requirements

A team with at least one of the below:

- Psychologist or Social Worker with a PhD, specialty in pediatrics and track record demonstrating experience with qualitative research or investigating children's perspectives.
- SLP with PhD and track record demonstrating experience with qualitative research and/or investigating children's perspectives.

Submissions

Letter of Interest (LOI) Stage:

Letters of Interest will be **due by April 17th, 2023**, and should be submitted to Bethany Cale (bcale@onceuponatime.org).

LOIs should include the researcher application type (i.e., independent researcher/research team, researcher collaborating with one or more of the SLPs conducting other OUAT-funded CAS research, consultant), an outline of the intended approach to the project, including any rationale and background helpful to inform the review team, as well as an estimated budget and timeline. LOIs should not exceed one page in length. Please include an attached bio sketch and/or CV (not included in one-page limit).

Full Application Stage:

Select applicants invited to submit full proposals will be **notified by April 22, 2023**, and asked to submit a full application **by May 22, 2023**. Full grant applications should be submitted to (bcale@onceuponatime.org) and include the following:

1. Project Description (5 pages or less)
2. Detailed Budget
3. Budget Narrative
4. Project Timeline

Project Description

The description of the project should not exceed 5 pages, which should include:

- The specific aims, background, preliminary data, and detailed outline of intended approach.
- The names and institutional or organizational affiliations of the principal investigator and any collaborators, along with their proposed roles and brief biographical summaries including current professional titles, affiliations, education backgrounds, and qualifications to perform the scope of work.
- Description of experience conducting qualitative research with children. Examples of

relevant past projects, presentations, and/or publications detailing similar past clinical studies working with children.

Detailed Budget & Budget Narrative

A detailed budget must be submitted with all proposals, including a narrative justification of all requested expenses. The Foundation limits indirect costs to 10%.

Project Timeline

All projects must have objective milestones and anticipated timeline needed to meet each objective milestone.

Evaluation of Applications

Final Applications will be evaluated on the following criteria:

- Fit with the intent of the RFA, including minimizing the commitment from families during the DTTC treatment period.
- Applicant's demonstrated competence and capability to execute the proposed work, including experience with young children with CAS.
- Reasonableness of budget and timeline proposal.
- Specificity of the study plans.

Participation in Quarterly Meetings

Selected applicants will be expected to attend quarterly, one-day investigator meetings alongside the other research teams. Meetings will take place in the DFW area at the Foundation's expense. The next scheduled Quarterly Meeting will take place Wednesday, July 5, in Fort Worth, Texas.

Application and Estimated Project Timeline

Letters of Intent: Due April 17, 2023

Invitations for Full Applications: by April 22, 2023

Full Applications: Due May 22, 2023

Notice of Award: by June 5, 2023

Funding

If applying as a Principal Investigator: 50% upon confirmation of IRB approval, remaining 50% when study manuscript has been submitted for publication.

If applying as an independent consultant: Will pay Hourly Rate

Key Personnel and Contact Information

For more information about proposal procedures, eligibility, deadlines, resources, or any related questions, please contact us at:

Bethany Cale
Once Upon a Time Foundation
301 Commerce Street, Suite 3200
Fort Worth, TX 76102
817-332-9500

bcale@onceuponatime.org

Bethany is OUAT's Senior Program Director responsible for the oversight of grant logistics and facilitation of collaboration across research institutions. She manages the Foundation team's administrative and strategic responsibilities related to the expansion of CAS programming and other medical and education partnerships.

Kathy Thomas, M.S., CCC-SLP

kthomas@onceuponatime.org

Kathy Thomas is an OUAT staff speech-language pathologist with 35 years of experience treating children and adults with neurogenic communication disorders, including CAS. In collaboration with Dr. Strand, she is the co-creator of most of the CAS content and curriculum supported by the Foundation and is responsible for CAS partnerships across the nation, creation of content for the CAS website (childapraxiatreatment.org) and recruiting additional CAS experts to further the reach of the Foundation's CAS projects.

About the Once Upon a Time Foundation

For more information on OUAT's speech therapy initiatives, including expert partners and training programs, please visit our website childapraxiatreatment.org.

For more information on OUAT as a whole, please visit onceuponatime.org.

Appendix A – Current Studies

Childhood apraxia of speech (CAS) is a pediatric motor-based speech sound disorder that requires a specialized approach to intervention. The extant literature on the treatment of CAS commonly recommends intensive treatment using a motor-based approach, with some of the best evidence supporting the use of Dynamic Temporal and Tactile Cueing (DTTC). Current research efforts supported by Once Upon a Time... test the efficacy and effectiveness of DTTC treatment in children with CAS when different treatment delivery parameters are varied. Treatment is provided by ASHA-certified speech-language pathologists either in community settings or university clinics.

Study 1 -- Comparing intensity of speech therapy for CAS – two times per week versus four times per week

Conducted by Jenya Iuzzini-Seigel, Ph.D., CCC-SLP (Marquette University), Elizabeth Murray, Ph.D., CPSP (University of Sydney, Remarkable Speech + Movement), Maria Grigos, PhD, CCC-SLP (New York University), Julie Case, PhD, CCC-SLP (Hofstra University), Shelley Velleman, Ph.D., CCC-SLP (University of Vermont) and Donna Thomas, Ph.D. CPSP, FHEO (University of Sydney).

Study 1 (PIs: Iuzzini-Seigel, Case, Grigos, Velleman) is an RCT to examine the efficacy of low versus high dose frequency on DTTC treatment outcomes in children with CAS. A target of 60 children, 2;6-7;11 years of age, will be recruited to participate in this study. Treatment will be provided in the community setting by speech-language pathologists who have completed specialized training administering DTTC in a research reliable manner. True randomization with concealed allocation will be used to assign children to either the low or high dose frequency group. Treatment will be administered in 1-hour sessions either 4 times per week over a 6-week period (high dose) or 2 times per week over a 12-week period (low dose). To measure treatment gains, probe data will be collected before treatment, during treatment, and 1 day, 1 week, 4 weeks, and 12 weeks post-treatment. Probe data will consist of customized treated words and a standard set of untreated words to assess generalization of treatment gains. The primary outcome variable will be whole word accuracy, encompassing segmental, phonotactic, and suprasegmental accuracy.

Associated Questionnaire Study: Questionnaire (PI: Thomas) exploring the experience of parents/caregivers with children who have CAS, looking at CAS diagnosis, service delivery, and their experience working with SLPs.

Study 2 -- The Effect of Parent/Caregiver Training on Treatment Outcomes in CAS

Conducted by Maria Grigos, PhD, CCC-SLP (New York University) and Julie Case, PhD, CCC-SLP (Hofstra University).

Study 2 is an RCT investigating the impact of parent/caregiver training on treatment outcomes following a period of DTTC intervention (PIs: Grigos & Case). A minimum of forty children with CAS, between the ages of 2.5 and 7 years of age, will be recruited for this study. All children will receive DTTC treatment at the frequency of standard care (2x/week) in a university clinic. Parent/caregivers will be involved in treatment and be required to practice at home with their children (3x/week) during the treatment phase. Following the treatment phase, home practice will continue though at a higher frequency (6x/week), to determine whether treatment gains are maintained. Treatment gains will be measured using probe data and outcome measures as described above in Study 1.

Qualitative component: Semi-structured caregiver interviews (PI: Thomas) will be conducted on a subset of participants to evaluate their experience participating in this study, in addition to their child's engagement during home sessions and their thoughts on DTTC treatment. analyzed with reflexive thematic analysis.

Study 3 -- Comparing the effectiveness of a single, longer block of therapy (3 hours) compared to standard treatment (3 times per week for 1 hour)

Conducted by Elizabeth Murray, Ph.D., CPSP (University of Sydney, Remarkable Speech + Movement) and Jenya Iuzzini-Seigel, Ph.D., CCC-SLP (Marquette University) with co-investigators Shelley Velleman, Ph.D., CCC-SLP (University of Vermont) and Donna Thomas, Ph.D. CPSP, FHEO (University of Sydney).

Study 3 compares the efficacy of DTTC when provided in three 1-hour sessions per week compared with one 3-hour long session per week (PIs: Murray & Iuzzini-Seigel). Children will undergo 8 weeks of treatment as part of this protocol. Because there are few speech pathologists who are considered experts in CAS, some families will travel a far distance so their child can participate in therapy with a skilled practitioner; consequently, treatment may occur less frequently than is considered optimal for children with CAS. This protocol will test whether there is an advantage if treatment is administered on a distributed (3x/week) or massed schedule (one longer session per week). This study will use a single case experimental design with 8 children from the US and Australia. Treatment will be provided by community clinicians and treatment gains will be measured before, during and following the treatment phase using probe data and outcome measures as described above in Study 1.

Qualitative component: Semi-structured interviews (PI: Thomas) with parents exploring responses to the length of sessions & responses to DTTC treatment, analyzed with reflexive thematic analysis.