1. **Sensory Tricks in Cervical Dystonia**
Neepa Patel MD and Joseph Jankovic MD (Baylor University, Houston)
The goal of this project is to explore the frequency and manifestations of different types of sensory tricks in cervical dystonia patients recruited by Dystonia Coalition investigators (approved 2012).
- Patel N, Hanfelt J, Marsh L, Jankovic J. Sensory tricks (corrective maneuvers) in cervical dystonia. 17th International Congress of Parkinson’s Disease and Movement Disorders, Sydney, Australia, 2013. [Abstract]

2. **Item response theory: An Individualized Approach to Evaluating a Comprehensive Cervical Dystonia Rating Scale**
Sheila Eichenseer MD, Cynthia Comella MD, and Glenn Stebbins PhD (Rush University, Chicago)
The goal of this project is to use item response theory to evaluate the validity and utility of various items in the revised TWSTRS developed in the Dystonia Coalition’s Project 2: Comprehensive Cervical Dystonia Rating Scale (approved 2012).

3. **The Contribution of Blinks and spasms to Blepharospasm Severity**
David Peterson PhD (University of California, San Diego)
The goal of this project is to explore the utility of automatic facial recognition software (CERT) for evaluating the diagnosis and severity of blepharospasm from video recordings collected by Dystonia Coalition investigators (approved 2012).
- Peterson DA, Zukas C, Littlewort GC, Yan L, Hicks M, Bartlett MS, Perlmutter JS. Automating objective, video-based evaluation of blepharospasm symptoms from multicenter clinical examinations. 3rd Conference on Clinical Research for Rare Diseases, Rockville, MD, 2012. [Abstract]

4. **Family Structures in Dystonia Coalition Cohorts**
HA Jinnah MD PhD and Ami Rosen MS CGC (Emory University, Atlanta)
The goal of this project is to describe the frequency and structures of family histories for the subjects recruited in the Dystonia Coalition (approved 2012).
- Rosen AR, Yan L, Perlmutter JS, Jinnah HA, for the Dystonia Coalition. Family history reported in subjects recruited by the Dystonia Coalition. 17th International Congress of Parkinson’s Disease and Movement Disorders, Sydney, Australia, 2013. [Abstract]
5. **How Often Do Tremor and Dystonia Co-exist?**
Ami Rosen MS CGC and HA Jinnah MD PhD (Emory University, Atlanta)
The goal of this project is to evaluate the frequency and manifestations of different types of tremor in different regions of the body among patients with different types of dystonia recruited by Dystonia Coalition investigators *(approved 2012).*

6. **Dystonia Genetics I**
Mark LeDoux MD PhD (University of Tennessee, Memphis)
The goal of this project is to explore the contributions of specific candidate genes (TOR1A, GNAL, THAP1, CIZ1, and ANO3) in the first 1,000 subjects recruited to the Dystonia Coalition Biorepository, where dystonia started in the neck *(approved 2013).*

7. **Dystonia Genetics II**
Mark LeDoux MD PhD (University of Tennessee, Memphis)
The goal of this project is to study fibroblasts and other cellular derivatives from selected patients found to harbor specific gene mutations in the Dystonia Coalition Biorepository *(approved 2013).*

8. **Patient Reported Outcomes of Depression, Anxiety, and Quality of Life in the Dystonia Coalition Cohort**
Deena Wahba and Ami Rosen MS CGC (Emory University, Atlanta)
The goal of this project is to determine how quality of life correlates severity and body distribution of dystonia, and with self-reported measures of depression or anxiety, among patients with dystonia recruited by Dystonia Coalition investigators *(approved 2013).*

9. **Delineating Patterns of Segmental Dystonia**
Teresa Douglas PhD (Emory University, Atlanta)
The goal of this project is to delineate common segmental patterns of dystonia and how they are diagnosed by different Dystonia Coalition investigators *(approved 2013).*

10. **Development of a Psychiatric Screening tool for CD; Psychiatric Aims of Project 2**
Mateusz Zurowski MD (University of Toronto, Canada)
The goal of this project is to create and validate a psychiatric screening tool for cervical dystonia to be used as a part of the revised TWSTRS validated in the Dystonia Coalition’s Project 2: Comprehensive Cervical Dystonia Rating Scale *(approved 2014).*

11. **Long Term Clinical Outcomes in DYT-1 Dystonia**
Harini Sarva MD and Susan Bressman MD (Beth Israel Medical Center, New York)
The goal of this project is to search for subtle parkinsonism in video recordings from manifesting and non-manifesting DYT-1 mutation carriers and non-DYT-1 dystonia, specifically those with cervical dystonia *(approved 2014).*
12. **Unraveling Novel Genetic Causes in Alcohol-Responsive Dystonia by Exome Sequencing**
Katja Lohmann PhD and Christine Klein MD (University of Luebeck, Germany)
The goal of this project is to identify novel genetic causes of alcohol-responsive dystonia by exome sequencing in selected cases of the Dystonia Coalition’s Project 1 Biorepository *(approved 2014).*

13. **Clinical Characteristics of Cervical Dystonia**
Scott Norris MD and Joel Perlmutter MD (Washington University, St. Louis)
The goal of this project is to describe the clinical characteristics of the first 1,000 cervical dystonia subjects enrolled by Dystonia Coalition investigators *(approved 2014).*

14. **Clinical Characteristics and Natural History of Oromandibular and Lingual Dystonia**
Laura Scorr MD and Stewart Factor DO (Emory University, Atlanta)
The goal of this project is to describe the clinical characteristics of subjects with oromandibular dystonia enrolled by Dystonia Coalition investigators *(approved 2014).*

15. **Patterns of Dystonia and Clinical Characteristics in Writer's Cramp**
Jung Park MD and Mark Hallett MD (National Institute of Neurological Disorders and Stroke, Bethesda)
The goal of this project is to describe the clinical characteristics of subjects with writer’s cramp enrolled by Dystonia Coalition investigators *(approved 2015).*

16. **Cross-Sectional Study of Medication Use in Dystonia Patients Enrolled in an International Biorepository**
Sarah Pirio Richardson, MD (University of New Mexico, Albuquerque)
The goal of this project is to better characterize and understand oral medication use in the dystonia population enrolled by Dystonia Coalition investigators. This may provide descriptive data regarding medication use, but also will explore the synergy effects with botulinum toxin use *(approved 2015).*

17. **Alcohol-Responsiveness in Dystonia Patients**
Johanna Junker MD and Christine Klein MD (University of Luebeck, Germany)
The goal of this project is to explore the characteristics of selected dystonia patients with alcohol responsiveness enrolled by Dystonia Coalition investigators *(approved 2015).*

18. **Relationship between Severity of Dystonia and Non-Motor Signs**
Christine Klein MD and Johanna Junker MD (University of Luebeck, Germany)
The goal of this project is to determine how quality of life among subjects with dystonia may be influenced by anxiety, depression, and other characteristics of their dystonia among patients enrolled by Dystonia Coalition investigators *(approved 2015).*

19. **Quantitative analysis of dysphonia and voice tremor**
Aasef Shaikh, MD, PhD (Case Western Reserve University, Cleveland)
The goal of this project is to test a new method for acoustic analysis using voice recordings from subjects with voice tremor and no spasmodic dysphonia (SD), with only SD, and with both *(approved 2015).*

20. **Tremor in laryngeal dystonia**
Aimee Morris, MD (Washington University in St. Louis)
The goal of this project is to identify and quantify acoustic features of laryngeal dystonia and use them to develop diagnostic criteria and measures of dystonia severity. *(approved 2016)*
*funded by the Dystonia Coalition's Pilot Project or Career Development Award Programs*