Back to the Future: The University of Colorado Movement Disorders Center Year in Review (2015)

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University of Colorado Movement Disorders Center (MDC)

• Established 2012
• Mission: “To establish an internationally recognized center for excellence in movement disorders related research, education, clinical care, and community outreach....”
• Strengths: History of excellence, growing faculty, geography, and an amazing PD community
Highlights from the Past 50 years

• Peggy Hoehn and Melvin Yahr develop Hoehn and Yahr Scale (1967)
• Lori Ramig develops Lee Silverman Voice Therapy (1987)
• Curt Freed and Bob Breeze publish first and largest series of cell transplants for PD (2001)
• Maureen Leehey and colleagues describe new disorder: Fragile X Tremor Ataxia Syndrome (2001)
A National Leader

• The largest and most comprehensive movement disorders center in the Rocky Mountain Region

• We provide:
  – Multidisciplinary Clinical Care
  – Research Advances
  – Education
  – Community Outreach
Our Clinical Team

- 6 Movement Disorders Neurologists
- Pediatric Movement Disorder Specialist
- 2 Neurosurgeons
- 4 Neuropsychologists
- Physical Medicine Rehabilitation Specialist
- Psychiatrist and Psychologist
- Nurse and Nurse Practitioners
- Genetic Counselors
- Integrative Medicine Clinic
- Physical Therapy, Occupational Therapy and Speech Therapy...
Dr. Lauren Seeberger
Our Very Own Dr. Drew

Dr. Drew Kern,
Neurologist
University of Colorado

Dr. Drew Pinsky,
Addiction Medicine
Loveline
Clinical Care

• Access to clinical trials
• Individualized Care from Experts
• Specialty Clinics:
  – Ataxia
  – DBS
  – Huntington’s Disease
  – Palliative Care
  – Pediatrics and Transition to Adult
  – PD
Interdisciplinary PD Clinic

• Goal for Every PD Patient to come once per year
• Complete assessments by NP, PT, OT, and Speech (e.g. cognitive function, swallowing, balance, fine motor skills)
• Provide means of tracking progress and/or progression
• Provide data for answering research questions
Palliative Care Clinic

• For patients and caregivers who are struggling with hard to control medical symptoms, psychological issues or other challenges
• Team includes neurologist, nurse, social worker and chaplain
• May be appropriate at any time during course of an illness
• Can be for single issue, co-management or medical home
Research Advances
Research Advances

• Clinical Trials:
  – Medications, Surgery, Alternative Therapies
• Non-motor Symptoms
• Neuroimaging
• Exercise
• Genetics
• Cell Transplantation
• Basic Science...
Publications

- Neither creatine nor Coenzyme Q10 slows progression of PD (Leehey)
- Colon biopsies for alpha-synuclein are not suitably specific as diagnostic test (Kern)
- Rytary is effective in early PD (Seeberger)
- Complementary medicines are commonly used in PD and may be efficacious (Kluger)
- Special MRI analyses may hold promise in diagnosing PD and distinguishing motor subtypes (Berman)
Ongoing Research

• Exercise for PD Patients not on medictions (Schenkman)
• Transcranial magnetic stimulation for cognitive impairment in PD (Kluger)
• MRI biomarkers for PD and dystonia (Berman)
• MEG biomarkers for PD and related disorders (Kluger)
• Myobloc for drooling (Klepitskaya)
New Trials

• Outpatient palliative care for PD patients with high needs (Kluger)
• Cannabidiol (CBD) for tremor in PD (Leehey)
• Several medication trials on the way (Klepitskaya, Seeberger, Leehey, Kluger)
Our Fellows’ Research

• Dr. Holden has Michael J Fox Foundation funding to develop a test of functional disability related to cognition/dementia

• Dr. Finseth is starting a trial of music therapy to address behavioral and communication issues for patients with dementia and their caregivers
Education
Education

• We’ve trained 12 fellows and are now training 2 fellows per year.
• Involvement in neurology residency training and medical school
• Provide research experiences for numerous undergraduate, graduate and medical students
Community Outreach
Community Outreach

• Partnership with Michael J Fox Foundation
• Partnership with the Parkinson’s Association of the Rockies (PAR)
• Partnership with Parkinson Disease Foundation’s Parkinson’s Advocates In Research (PAIR) program
• Over 40 lectures to support groups and other events by our faculty in 2014-15
Seminars & Ongoing Opportunities

- To the Future and Back (>200)
- Glenwood Springs (150)
- Cheyenne (60)
- Parkinson’s Advocates In Research Grant
- PWR Lunch
- www.ucdenvermovement.org
The Future
Our Vision

• To achieve national center of excellence recognition
• To build and expand on going research programs
• To create patient-centered interdisciplinary clinics
• To expand care to other areas (Boulder, Colorado Springs, Fort Collins)
• To innovate novel community programs including rural outreach
A Comprehensive Free Standing Center