

The background features a large, semi-transparent watermark of the University of Delaware seal. The seal is circular and contains the text 'UNIVERSITY OF DELAWARE' around the top edge and '1743' at the bottom. In the center, there is a shield with two open books. The left book is labeled 'GRAMM PHILOL RHETOR ETHICA' and the right book is labeled 'METAPH LOGICA MATHEM PHYSICA'.

Collaborative Care of Parkinson's  
Disease at the University of  
Delaware

# NMPCC Parkinson Clinic

- At the UD NMPCC, we provide comprehensive multidisciplinary care for patients with Parkinson's and support for their families and caregivers.
- Our Nurse Practitioners utilize evidence-based practice to assess our patients before one of our two movement disorder specialists exam them further via telemedicine visits.
- Our model of care is also used to train future Nurses and Nurse Practitioners.
- Although there is currently no cure for Parkinson's disease (PD), multidisciplinary medical care interventions can help people with Parkinson's lead fulfilling and productive lives for many years while also decreasing the physical and emotional burden of PD.
- We also collaborate with PD researchers within the University of Delaware and are currently assisting with the enrollment for any applicable studies.

# Speech-Language-Hearing Clinic

- Our Mission

We train and inspire future clinicians through a comprehensive clinical education experience. Our team provides quality, person-centered care to a diverse community using research, collaboration and innovation.

- Areas of expertise across the lifespan

- Articulation
- Augmentative and Alternative Communication
- Cognition
- Fluency
- Hearing
- Expressive and Receptive Language
- Social Communication
- Swallowing (including Vital Stim)
- Voice and Resonance (including LSVT Loud, Speak Out)

# Physical Therapy Clinic

- Physical therapy at the University of Delaware can help maintain and restore mobility, balance, strength, confidence, and functional issues related to Parkinson's



## Delaware Physical Therapy Clinic

540 S. College Ave., Suite 160  
Newark, DE 19713  
Phone: (302) 831-8893  
Fax: (302) 831-4468  
[www.udptclinic.com](http://www.udptclinic.com)

- Exercise has been shown to improve and prevent disability related to Parkinson's Disease. UDPT will help develop an in-clinic and at-home exercise routine individualized to your needs
- We have neurologic and geriatric certified specialists with years of experience and additional certifications for working with individuals with Parkinson's Disease



# Clinical Exercise Physiology

- Aim 1: 12-month Masters of Science graduate program dedicated to developing the highest qualified clinical exercise professionals in the field and preparing them to meet certification qualifications.
- Aim 2: Provide individuals with Parkinson's Disease a safe and enjoyable atmosphere to exercise in while contributing to various research efforts within the KAAP department and training future certified Clinical Exercise Physiologist.

# Nutrition Clinic

- Diet and nutrition are important components in the treatment and management of Parkinson's Disease
- A comprehensive nutritional assessment, performed by a Registered Dietitian/Nutritionist, is an integral part of the multidisciplinary team approach to caring for adults with Parkinson's Disease.
- Our Registered Dietitian Nutritionists work with individuals living with Parkinson's and their caretakers to create a personalized eating plan that will address common nutritional concerns including levodopa-protein interaction, dry mouth, chewing/swallowing difficulty, sweet cravings, weight management, tips for grocery shopping, eating out, healthy recipes, and guidance on meal planning.

# Health Coaching

Clinical Health Coaches motivate patients toward readiness to change, assist them to make real-world, long-lasting behavioral changes, inclusive of their actions, thoughts, and emotions, and empower patients to achieve better health outcomes.

Health Coaches can:

- Motivate clients toward readiness to change
- Assist with adherence to care plans
- Support in accessing resources
- Assist in changing unhelpful behavior patterns
- Consult in the context of self-management to help achieve improved health outcomes.

# The Parkinson's Workshop: An Interprofessional Educational Experience



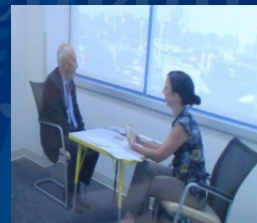
1. NMPC



2. Nutrition



3. Exercise



4. Speech



5. PT



6. Care  
Coordination

## Our Aim:

*To create a collaborative,  
interprofessional learning  
environment of next generation of  
health care professionals*

- Student Observer
- Student Provider
- Student Case Manager



# The Neuro Notes

- A choir for empowerment and community!
- Promoting physical, emotional, and overall well-being for people with Parkinson's and their allies.
- Meets Tuesday nights in STAR 113 from 6:30–7:30
- <https://www.music.udel.edu/community/community-music-school/choirs/neuro-notes-parkinsons-choir>

# Dr. John Jeka

Director of the Control of Balance and Locomotion Lab

- The primary goal of the CoBaL lab is to understand the neural and biomechanical basis of human upright balance. The goal is to better understand patient populations with neurological disease and injury that lead to balance problems

# Measure What Matters Lab

Matthew L. Cohen, Ph.D.

- **Ultimate goal of research: to make healthcare more person-centered for people with neurological conditions like Parkinson's disease (PD). We do this by improving the way that clinicians and researchers measure what matters to people with these conditions.**
  - It's difficult for clinicians and researchers to improve things that they can't measure. Unfortunately, the things that matter most to the patient – like quality of life – are often the most difficult to measure. Our lab develops patient-reported outcome measures (questionnaires) that help clinicians and researchers quantify health concepts that matter to people with neurological conditions like PD.

# Prajwal Paudel/Zhuang

## Lab/VeniPD

- We aim to provide non-invasive blood test for early diagnosis of Parkinson's Disease (PD) to hospitals and patients to combat disease progression and develop meaningful lifestyle changes.
- Patients are enrolled, and blood samples taken at the NMPCC.



**Roxana G. Burciu, Ph.D.**

**Motor Neuroscience and Neuroimaging Lab  
Department of Kinesiology and Applied Physiology**

In our lab we use a range of neuroimaging techniques including functional magnetic resonance imaging (fMRI), structural MRI, diffusion MRI coupled with measures of motor function, and genotyping.

**Research Interests:**

- Functional organization of the motor system related to lower limb movements in Parkinson's disease.
- Unimanual and bimanual force control in Parkinson's disease
- Neuroimaging markers of motor subtypes in Parkinson's disease
- The role of the cerebellum in Parkinson's disease

# Dr. Chris Knight

## Director, Exercise Neuroscience Research Program

SpeedGeezer: Speed-based exercise for PD and aging

“SpeedGeezer” is a bicycle-based exercise program designed to improve speed in people who are slowing down like people with Parkinson’s disease (PD) and many older adults. We use brief bouts of fast pedaling to activate parts of the nervous system that are dedicated to fast movements.

SpeedGeezer is designed to be a **high-speed** interval training program rather than a **high-intensity** interval program. By using high speed pedaling against low resistance we can activate your nervous system while keeping cardiovascular and muscular strain at a lower (safer) level. Once our research participants ‘graduate’ from a 4-week program, we encourage gradual increases in the resistance settings on the bike.

The evolving design of SpeedGeezer is based on both published and ongoing scientific experiments from our lab. Our partners in the Clinical Exercise Physiology Master’s degree program and generous support from Shake It Off, Inc. help us to provide SpeedGeezer classes for people in the local community. Classes usually include 4-6 individuals and we monitor blood pressure, heart rate and blood oxygen saturation periodically.

# Lori's Hands

- Lori's Hands college student volunteers provide in-home support to people with chronic illnesses like cancer, MS, Parkinson's Disease, and heart failure. While our students assist with grocery shopping, yard work and other tasks made difficult by disease, clients provide valuable insights into the human experience of chronic illness. Students serve through the student club and through service learning classes. In both cases, their volunteer experiences are life-changing parts of their academic careers, preparing them to be compassionate, informed professionals.

[www.lorishands.org](http://www.lorishands.org)