Message from Claire Henchcliffe, MD, DPhil

Stanley van den Noort Endowed Chair of Neurology



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2020 Parkinson's Symposium

The 2020 Parkinson's Symposium on October 24, offered a live virtual event featuring expert speakers from the UCI Health Parkinson's & Movement Disorders Program. Nearly 300 participants joined the symposium live on Zoom and viewed via live-stream on YouTube.

The latest research and advances in Parkinson's Disease, including stem cell research, deep brain stimulation, and best practice physical therapy methods were the highlights of the public educational forum.

Dear Friends and Colleagues,

What a privilege it is to join UCI Neurology at such a pivotal time. I am struck by the stellar work of our faculty here at the forefront of neuroscience, integrative medicine, engineering, public health and so much more.

I recently came from Weill Cornell Medical College in New York City, as vice-chair for clinical research in neurology, chief of neurodegenerative disorders, and head of a clinical research program, focused on developing new therapeutic approaches to Parkinson's disease, including stem cell-based regenerative and gene therapy.

Forging an interdisciplinary team approach through collaborations will be my primary goal at UCI. This will ensure that we are able to translate

new research advances into better neurological care for our patients, while supporting our researchers as they develop a pipeline of innovative technologies and treatments for a better future.

As an attending physician at New York Presbyterian Hospital during the novel Coronavirus surges, I understood the challenges of our patients, as well as those of faculty at the front lines of care in our community. During these stressful times, I want everyone to be healthy and to enjoy the holidays safely with loved ones and family! I look forward to getting to know you all.

Sincerely,

Claire Henchcliffe, MD, DPhil Stanley van den Noort Chair Department of Neurology



Parkinson's Symposium speakers (left to right, top to bottom): Dr. Claire Henchcliffe; Betsaida Cruz Coble; Dr. David Swope; Dr. Sanaz Attaripour; Dr. Nicolás Phielipp; Dr. Frank Hsu; Marie Wencel; Dr. Alejandra Garland; and Breana Chew.

Sponsors included Boston Scientific and Neurocrine Bioscience, plus nine exhibitors and two community support organizations who were also on hand to provide information.

To view the recorded sessions, go to **Parkinson's Symposium**

Research Highlights

NIH awards over \$100 million to examine biomarkers of Alzheimer's disease in adults with Down syndrome



The Alzheimer's Biomarkers Consortium - Down Syndrome (ABC-DS), a multi-institution research team, co-led by members from the University of California, Irvine, has been awarded an unprecedented five-year, \$109 million grant by the National Institutes of Health (NIH), to expand research on the biomarkers of Alzheimer's disease in adults with Down syndrome.

UCI principal investigators Mark Mapstone, PhD (above), professor in Neurology, and Elizabeth Head, PhD, professor and vice chair for research in Pathology & Laboratory Medicine, are renowned researchers in the area of aging and Alzheimer's disease in Down syndrome. Together, they will co-lead the international project, along with their colleagues from the University of Pittsburgh and the University of Wisconsin, aimed at improving the quality of life of our aging population through advancing progress toward effective prevention and treatment of Alzheimer's disease (AD).

Read the article **HERE**



UCI Down syndrome expert Dr. Ira T. Lott examines ABC-DS participant Jeremy Throckmorton.

Simple sugar found in breast milk possible therapy for MS

N-acetylglucosamine, a simple sugar found in human

breast milk and sold as an over-the-counter dietary supplement in the United States, promotes myelin repair in mouse models and correlates with myelination levels in multiple sclerosis patients according to a new UCI-led study involving Michael Demetriou, MD, PhD (right), Michael Sy, MD, PhD, and Alexander Brandt, MD (bottom with

MS Team).



Published in the Journal of Biological Chemistry, the study also demonstrates that in mice, delivering N-acetylglucosamine orally to lactating mothers drove primary myelination in their nursing offspring. N-acetylglucosamine is a simple sugar that is metabolically attached to proteins at the cell surface to control cellular function.

"We found that N-acetylglucosamine activates myelin stem cells to promote primary myelination and myelin repair," said Michael Demetriou, MD, PhD, FRCP(C), professor of neurology, microbiology and molecular genetics at UCI School of Medicine and leader of the study. "Our data raises the intriguing possibility that N-acetylglucosamine may be a simple therapy to promote myelin repair in multiple sclerosis patients."

Formal human studies will be required to test this theory. Myelination in the central nervous system also plays an important role in cognitive development during childhood. Read more about **N-acetylglucosamine** research.

Support Multiple Sclerosis Research

With the success of the MS Regale in late 2018 (right), the MS Team purchased an optical coherence tomography (OCT) imaging machine and also found a breakthrough therapy for



the debilitating disease.

A social media Zot-Funder campaign to raise funds for the MS Comprehensive Care Center will launch in Spring 2021. Please go to MS Research Fund to give your support today.

Philanthropy News



Another '60 Minutes' with Claudia Kawas, MD

Six years after their initial report, Lesley Stahl visits surviving members of the 90+ Study and finds out what Dr. Claudia Kawas (above) has learned from following the study's participants.

"We're a nation living longer and longer. Over the next 30 years, the number of Americans age 90 and above is expected to triple, and an NIH-funded research study called 90+ at the University of California Irvine is trying to learn all it can right now from a group of men and women who've already managed to get there." reports Leslie Stahl.

"Six years ago, we first reported on their first set of findings. Factors associated with longer life: exercise, moderate drinking of alcohol and caffeine, social engagement, and our favorite: putting on a few pounds as we age. The 90+ study's focus is now on memory and dementia. What they've learned -- and what they haven't -- drew us back, as did the 90+ers."

See the article and video: 60 Minutes 2020

To support the research go to: Alzheimer's Research

Support the 90+ Study and Alzheimer's Research

Join us in our vision of a Brilliant Future. Now is a time to review the benefits of your gift to UCI Neurology. Whether it's a charitable gift annuity, bequest, cash, stock, real estate or other appreciated assets, I am here to talk with you confidentially about maximizing the benefit of your gift to The 90+ Study, Alzheimer's & Dementia, or any area in Neurology. Thank you for your support.

Contact: Nancy M. Young, CFRE Senior Director of Development, Neuroscience **UCI Health Advancement** T: (714) 509-2109

E: nancy.young@uci.edu

Give online: www.connect.uci.edu/neurology

Meaningful connections spur giving to Parkinson's Research for the Cassins

When Denise Cassin received a diagnosis of Parkinson's disease in fall 2015 from **Dr. Nicolás Phielipp** (below), she recalls feeling surprisingly at ease because of his wonderful, calm and caring manner. Since then, Denise and her husband Kevin, have been deeply committed to supporting his research in the quest for biomarkers to allow for earlier and more precise diagnosis of Parkinson's

disease. Their significant contributions over the past four years have made a large impact.

"Kevin and I often remark that living here in Irvine," said Denise. "We're very fortunate to have world-class health care at our disposal at UCI Health. We like the idea of keeping our philanthropy local so that we can make a larger impact, see results, and develop



personal and meaningful connections with those who are doing this vital work like Dr. Phielipp and his team."



We thank the Cassins for their generosity and on-going partnership. **Dr. Nicolas Phielipp** is Assistant Professor of Clinical Neurology, a fellowship-trained neurologist specializing in Parkinson's disease, dystonias, tremor, Huntington's disease and other movement disorders. He offers a range of treatment options, including

pharmacological therapies, botulinum toxin, deep brain stimulation and lifestyle modifications. To support the Parkinson's Disease research program, go to Parkinson's Research.

Top 2 Stroke Care Awards won by UCI **Health for 4th Consecutive Year**

UCI Medical Center has received the top two awards for Stroke Care in 2019 from American Heart Association for the 4th consecutive year. UCI will be recognized in the AHA congratulatory ad in the US News & World Report 2020 Edition of Best Hospitals. Our quality improvement research project "Three easily-implementable changes reduce



median door-to-needle time for intravenous thrombolysis by 23 minutes" was recently published in BMC Neurology.

Wengui Yu, MD, PhD (right), is the Director of the Comprehensive Stroke & Cerebrovascular Center, and Professor of Clinical Neurology and Vice Chair for Hospital Affairs, Department of Neurology.

To support the Stroke and Cerebrovascular research program, go to: Stroke Research Fund.

Faculty News & Views

Memory Disorders

Dr. Ahmad Sajjadi (right) published "Utility of MRI in the Identification of Hippocampal Sclerosis of Aging Related Atrophy" in Alzheimer & Dementia. See the Hippocampal Sclerosis article.



Movement Disorders

Hosted 2020 Parkinson's Symposium (virtual) on Oct 24 for patients, with attendance of over 250 households.

Dr. Nicolas Phielipp had two research studies funded:

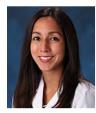
- NINDS, Grant \$77,697: A Dose Selection Trial of Light Therapy for Impaired Sleep in Parkinson's Disease
- CIRM \$356,217. Open-Label Safety Study of Glial Cell Line-Derived Neurotrophic Factor Gene Transfer (AAV2-GDNF) in Parkinson's Disease.
- "Effect of Ezogabine on Cortical and Spinal Motor Neuron Excitability in Amyotrophic Lateral Sclerosis: A Randomized Clinical Trial," (with Dr Namita Goya and larger team) in JAMA Neurol. Nov. 23, 2020

Neurocritical Care

Dr. Leonid Groysman is currently enrolling for two COVID 19 stem cell trials and three other COVID19 trials.

Neuromuscular

Dr. Manisha Korb (below) published:



- "Crusted scabies triggering autonomic dysreflexia in a patient with spinal cord injury," in JAAD 6(7):640-642
- With Dr. T. Mozaffar, "Multisystem proteinopathy: where myopathy and motor neuron disease converge," in *Muscle and Nerve: 1-13.* https://doi.org/10.1002/mus.27097

Organized CureVCP, a standard of care international conference (Dec 2020 and April 2021)

Invited lectures(virtual): "Approach to Neuropathy" for Grand Rounds at Northridge Hospital, Northridge, CA; and at Grossmont Hospital, San Diego, CA

Neuro-Oncology

Dr. Daniela Bota is PI for two studies:

- Enzastaurin Added to Temozolomide During and Following Radiation Therapy in Newly Diagnosed Glioblastoma Patients Who Possess the Novel Genomic Biomarker DGM1
- NOVOTTF-200A In Bevacizumab-Naive Subjects With Recurrent WHO Grade III Malignant Astrocytoma

Dr. Xiao-tang Kong is PI for four studies:

- Ipilimumab and Nivolumab versus Temozolomide in Patients with Newly Diagnosed MGMT (Tumor O-6-Methylguanine DNA Methyltransferase) Unmethylated Glioblastoma
- PARP Inhibitor Olaparib (AZD2281) in IDH1 and IDH2 Mutant Advanced Solid Tumors
- CB-839 in Combination with Radiation Therapy and Temozolomide in Patients with IDH-Mutated Diffuse Astrocytoma and Anaplastic Astrocytoma

 Stereotactic Radiosurgery Compared with Hippocampal-Avoidant Whole Brain Radiotherapy (HA-WBRT) Plus Memantine for 5-15 Brain Metastases

Research

Dr. Tallie Z. Baram published:

- "Unexpected role of physiological estrogen in acute stressinduced memory deficits. J Neurosci. 2020 Nov 30.
- "Neurodevelopmental Optimization after Early-Life Adversity: Cross-Species Studies to Elucidate Sensitive Periods and Brain Mechanisms to Inform Early Intervention." *Trends Neurosci.* 2020.

Dr. Mark Mapstone is PI on two funding projects:

- NIH/National Institute of Aging: The Alzheimer's Biomarker Consortium – Down Syndrome (ABC-DS) \$19,494,739.
- Lipid and Energy Metabolism in MODEL-AD Mice \$250,000.

and published (see article on Page 2):

- "Blood biomarkers of cognitive health and disease in older adults," in AK Thomas & A. Gutchess (Eds.), The Cambridge Handbook of Cognitive Aging: A Lifecourse Perspective. Cambridge Handbooks in Psychology. Cambridge University Press.
- "Metabolic correlates of prevalent mild cognitive impairment and Alzheimer's disease in adults with Down Syndrome;"
 "The Alzheimer Biomarker Consortium-Down Syndrome (ABC-DS): Rationale and Methodology;" "Proteomic Profiles for Alzheimer's Disease and Mild Cognitive Impairment Among Adults with Down Syndrome Spanning Serum and Plasma: An ABC-DS Study;" "Plasma tau and Neurofilament light (NfL) as diagnostic biomarkers of Alzheimer's Disease in adults with Down syndrome;" "The A/T/N Framework for Alzheimer's Disease in Adults with Down Syndrome" in Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring.
- "Cognitively supernormal older adults maintain a unique structural connectome that is resistant to Alzheimer's pathology," in NeuroImage:

 Clinical, 28,102413.
 Yount, Jessie, "UCI Spearheads \$109M Down Syndrome, Alzheimer's Study." Orange County Business Journal, (2020, Nov 30)



Stroke

Dr. Wengui Yu published:

- "Impact of COVID-19 on Acute Stroke Presentation at a Comprehensive Stroke Center" with Boden-Albala B) in Front. Neurol. 2020
- "Language disparity is not a significant barrier for time-sensitive care of acute ischemic stroke." with Flanagan, L - above and Stradling, D) in BMC Neurol. 2020
- "Intracerebral hemorrhage: who gets tested for methamphetamines and why might it matter?" (with Osman S, Zhu Z, Farag M, Groysman M, Dastur CK, Akbari Y, Stern-Nezer SRJ, Stradling D) in BMC Neurol 2020
- "Electroencephalography Might Improve Diagnosis of Acute Stroke and Large Vessel Occlusion. Stroke. 2020
- "Artificial Intelligence and Acute Stroke Imaging, in AJNR Am J Neuroradiol. 2020

Faculty Appointments

Introducing new Chair of Neurology

Dr. Claire Henchcliffe is the new Stanley van den Noort Chair of the Department of Neurology. Starting on October 1, 2020, she began working alongside her colleagues to ensure the department meets the growing needs for neurological care, combining compassionate and patient-centered care with transformative research. She is a strong proponent of mentorship for trainees, faculty, and staff, and is committed to expanding the department's diversity, equity, and inclusion in all areas.

Dr. Henchcliffe earned her MD from Columbia University College of Physicians and Surgeons in New York, and completed a residency in neurology, and a fellowship in movement disorders at the Neurological

Institute of New York. She completed her DPhil in molecular and cell biology at the University of Oxford in England, and

post-doctoral fellowship in genetics at Cambridge University and UC Berkeley.

"In addition to serving those with neurological disorders, there's also a need for us to expand our efforts on keeping brains healthy as people age," she says. "This is an area in which UCI neurologists lead." We welcome Dr. Claire Henchcliffe in this vital role.



New Faculty 2020

Bruce Albala, PhD



Dr. Albala is Associate Dean for Innovation & Clinical Trials, Director of Center for Clinical Research, and Professor of Neurology. He joined UCI after 35 years conducting clinical trials in the private sector, including as executive director and

international project team leader for Eisai, Inc. He received his Ph.D. in Biopsychology from Syracuse University.

Sanaz Attaripour Isfahani, MD

Dr. Attaripour Isfahani is Assistant Professor of Neurology, specializing in Movement Disorders. She earned her MD at Tehran University of Medical Sciences in Iran, completed a residency in general neurology at Drexel University where



she served as a chief resident, and a fellowship in movement disorders at the National Institute of Neurological Disorders and Stroke.

Alejandra Becerra Garland, MD



Dr. Becerra Garland is Assistant Professor of Neurology, specializing in Movement Disorders. She completed her MD at University of San Martín de Porres in Lima, Peru, a neurology residency at Georgetown University, and

fellowship in movement disorders at Cedars Sinai Medical Center.

Yoon Jae Choi, MD

Dr. Choi is Assistant Professor of Neurology, specializing in Neuro-Oncology. She received an MD from Korea University Medical Center and completed a residency at University of Chicago. She also completed a Neuro-oncology Fellowship at UCLA, and Clinical Neurophysiology Fellowship at Rush University.

Albert La Spada, MD, PhD

Dr. La Spada is Distinguished Professor and Vice Chair of Pathology & Laboratory Medicine, and Director of Institute for Neurotherapeutics. He received his MD and PhD from University of



Pennsylvania, and was Neurogenetics Fellow, Pharmacology Postdoctoral Fellow, and Medical Genetics Clinical Fellow at University of Washington.

David Swope, MD

Dr. Swope is the new Director of Parkinson's and Movement Disorders Program, and Professor of Neurology. He directed movement disorder services at Loma Linda

University for 15 years before working at New York University and the Mount Sinai Health System in New York, where he completed a fellowship in movement disorders. Dr. Swope earned his MD and completed a residency at Loma Linda University.



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