**Proposal Submission: Osher Center Integrative Health Equity Small Grants**

<https://open-proposals.ucsf.edu/integrative_health_equity-2025/details>

Project Description (1-page maximum) including: - due May 30th

**Project Title**

“Enhancing Equity in Long COVID Management Through Integrative Medicine Education”

**Names of Project Lead(s) and Key Team Members**

* **Project Lead**: Carla Kuon, MD; University of California at San Francisco (clinic, education)
* **Supervisor**: Dr. Kavita Mishra
* **Key Team Members**:
	+ Michael Peluso, MD, MPh, MHS; Zuckerberg San Francisco General Hospital (clinic, research)
	+ Nikki Gentile, MD, PhD; University of Washington (education and research)
	+ Kathryn Hansen, ANP-BC; Vanderbilt University
	+ Iman Majd, MD, LAc; University of Washington
	+ Aiko Bailey, LAc; University of Washington
	+ Wu-Hsun Tom Yang, ND, LAc; University of Washington
	+ Other collaborators from the Long COVID Interest Group (affiliated with the International Congress on Integrative Medicine and Health).

**Project Description: (1 page maximum)**

Project significance and innovation: Higher prevalence of Long COVID has been associated with female gender, Hispanic origin, the presence of a disability, low socioeconomic status, nonurban residence, and other factors. 1-4 These populations face higher rates of infection, limited access to specialized care, and prolonged disability, economic hardship, and productivity loss. Lack of familiarity with integrative medicine approaches—effective for managing symptoms such as fatigue, brain fog, persistent pain, and emotional stress—among clinicians further limits exposure to these helpful modalities, exacerbating existing health disparities.

This project addresses these disparities by increasing access to integrative care through evidence-informed educational resources in English and Spanish. Deliverables include (1) Flipped classroom modules with REDCap pre- and post-training evaluations to measure changes in clinician knowledge, confidence, and competency, and (2) creation of patient-facing video content with Spanish captioning for patients with Long COVID describing dietary changes, supplement use, pacing, addressing post-exercise fatigue, mind/body techniques, symptom management (3) patient-facing printable materials in both Spanish and English, published online at the Osher website for widespread access.

**Video Content:** A set of 3, 50-minute videos will be created for patients in English (with English and Spanish captions), addressing the following holistic health interventions detailed below.

1. Nutrition: The anti-inflammatory diet and the low-histamine diet will be explained in detail. Dietary modifications of autoimmune conditions are addressed. The five “superfoods” will be explained: anti-inflammatory vegetables, antioxidant-rich foods, omega-3-rich foods, spices, and cooked mushrooms. Additionally, avoidance of inflammatory foods such as sugar, processed meats, and dairy will be detailed.
2. Supplement /nutraceutical use: Correcting low vit D and iron stores, use of mitochondrial supplements such as riboflavin, L-carnitine, Quercetin, fish oil, magnesium, and use of NAC or glutathione antioxidants will be explained. Use of LDN will be explained.
3. Exercise: Post-exertional malaise can be addressed via pacing, restorative recumbent exercise according to Dysautonomia International Protocols.
4. Mind-body: Techniques to address dysautonomia and runaway stress, including a 4-7-8 breath experiential, mindfulness, guided imagery, and gentle yoga, will be discussed. Vagal toning exercises and emerging evidence for TVNS (transcutaneous vagal nerve stimulation) will be discussed.

**Patient-facing educational materials:**

A set of 3 patient-facing educational handouts will be created in both English and Spanish to accompany the video content, detailing the four holistic interventions detailed above. Of note, these interventions are covered in the Osher Long COVID Group Medical visit (LC-GMV) series. Once published, they would be available to patients in ZSFGH and also to Osher patients, including those enrolled or waiting to enroll in the LC-GMVs at Osher.

**Clinician-facing educational materials:**

A set of two 60-minute educational videos for clinicians will be created in English with English captions for the hearing impaired, followed by a brief knowledge assessment via Educational Technology Services (ETS). REDCap pre- and post-surveys will be built into the educational activity. Findings from piloting the resources via REDCAP surveys would factor back into the design and development of the physician educational materials, which could include development of future handouts and online resources, such as those seen in the following site: [https://med.stanford.edu/long-covid-care-reach.html](https://med.stanford.edu/long-covid-care-reach.html%22%20%5Co%20%22https%3A//med.stanford.edu/long-covid-care-reach.html%22%20%5Ct%20%22_blank)

By piloting these resources through UCSF in Collaboration with San Francisco Zuckerberg General Hospital, and the University of Washington Osher Centers and Long COVID clinics, this initiative aims to improve access to integrative medicine for underserved populations, inform future education projects, and enhance health equity across programs.

Clinician-facing video content, along with associated knowledge assessments, will be submitted for CME accreditation as an enduring activity. The accrediting entity is yet to be determined and will depend on cost associated with submitting the final video product. The team is currently exploring options including the UW and the American Academy of Family Physicians (AAFP). A request for 2-3 CME credits will be made for the video package and supporting materials.

**Project Timeline, Feasibility, and Anticipated Impact:**

Project Timeline: The proposed project is feasible within the 12-month timeline and aligns with the Osher Collaborative’s mission to advance integrative health equity through education. Collaborators bring multidisciplinary expertise to develop evidence-informed, accessible materials for diverse clinical settings.

Q1: Development of patient-facing video content and patient-facing handout materials

Q2: Editing of video content and finalizing patient-facing handouts. Translating handouts into the Spanish Language and adding Spanish captions on videos.

Q3: Creation of CME content for physicians. This would include video creation and REDCap pre- and post-surveys.

Q4: Optimizing and finalizing CME content creation. Publishing all content onto the Osher Collaborative Website.

Dr Kuon, Director of UCSF’s Long COVID OPTIMAL clinic and co-investigator in the Long COVID Care AHRQ Network, is a leading expert in clinical care for Long COVID. She provides international expertise in the clinical management of Long COVID and as creator of UCSF’s group medical visits, is an expert in developing and delivering protocolized care in a group setting.

Dr. Peluso, Director of Zuckerberg San Francisco General’s Long COVID Clinic, Division of HIV, Infectious Diseases and Global Medicine, UCSF, is a clinician and researcher in long COVID through the LIINC (Long-term Impact of Infection with Novel Coronavirus). He provides expertise in Long COVID research. He is the PI on the Long COVID Care AHRQ Network.

Dr. Gentile, UW Osher Center faculty, Co-Director of the UW Long COVID Clinic and Co-PI in the Long COVID Care Network, provides national expertise and a mechanism for broad dissemination to communities disproportionately impacted by Long COVID. She is currently designing a CME program for physician education on Long COVID. The team’s combined expertise ensures the creation, piloting, and dissemination of resources to address clinician and patient education gaps in integrative care.

**Impact:**

1. **Clinicians**: Increased knowledge and confidence in applying integrative techniques to manage Long COVID, improving access for underserved and marginalized populations.
2. **Patients**: Empowerment through actionable education, addressing gaps in care and tailoring resources for adults, children, and disadvantaged groups.

This collaboration strengthens health equity by improving access to integrative care for Long COVID patients across diverse communities.

**Total Budget Requested: $20,000**

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References

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2. Sweis JJG, Alnaimat F, Esparza V, et al. From acute infection to prolonged health consequences: understanding health disparities and economic implications in Long COVID worldwide. Int J Environ Res Public Health. 2024;21(3):325. doi:10.3390/ ijerph21030325

3. Shah DP, Thaweethai T, Karlson EW. Sex differences in Long COVID. JAMA Netw Open. 2025;8(1):e2455430. doi:10.1001/ jamanetworkopen.2024.55430

4. Vahratian A, Saydah S, Bertolli J, Unger ER, Gregory CO. Prevalence of post-COVID-19 condition and activity-limiting post-COVID-19 condition among adults. JAMA Netw Open. 2024;7(12):e2451151. doi:10.1001/jamanetworkopen.2024. 51151 57. Taghrir M