

# THE INIM

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FALL 2022

Institute for  
Neuro-Immune Medicine  
NOVA SOUTHEASTERN UNIVERSITY | **NSU**  
Florida

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## INIM presenters at the IACFS/ME 2022 Medical and Scientific Conference:

- Irina Rozenfeld, DNP, MS, ARNP – a member of the organizing committee and chaired the session.
- Kristina Aenlle, Ph.D. – presented “Immune Comparison of Male and Female ME/CFS”
- Jeffrey Cournoyer, MS – presented a poster: "GWIRE: A New Frontier in Exercise and Activity Research using iOS Technologies"
- Nancy Klimas M.D. – presented “COVID-19: Understanding recruitment strategies in a community based assessment of fatigue, cognitive and functional impairments among those after SARS-CoV-2 infection.”
- DO Research fellow Jackson Gamer – currently working with **Lubov Nathanson, Ph.D.** presented a poster, “Sex Dependent Transcriptional Changes in Response to Stress in Patients with ME/CFS”
- The Clinical Systems Biology Group's Research Assistant, Rill Friedman, presented a poster at the IACFS Conference "Mathematical Modeling of Epstein-Barr Virus Persistence and Reactivation In Spite of B Cell Depletion"

## Exciting Changes at our Clinical Systems Biology Group Division!

- Dr. Kostas G. Sidropoulos was recruited as an Assistant Professor in Computational Biology in the College of Osteopathic Medicine. He will start at the beginning of October.
- Research Volunteer, Isadora De Abreu, attended the MIT Summer Research Program.
- Caleb Siguenza and Divya Komandooru joined the group as Research Volunteers.
- Rill Friedman joined the group as a Research Assistant.

# ME/CFS Research Opportunities that you can participate in...

	Study title	Where?	When
<b>Chatterjee</b>	Immune/Inflammatory Priming In Exacerbating Responses To GWI Stressors	Miami VA Kendall/Davie INIM Clinic	Recruiting now!
<b>BBRAIN</b>	Boston Biorepository, Recruitment and Integrative Network (BBRAIN) for GWI	Miami VA Kendall/Davie INIM Clinic	Recruiting now!
<b>The Kaneka Study</b>	<b>The Use Of Directed Probiotics In ME/CFS</b>	The Institute for Neuro-Immune Medicine Kendall/Davie INIM Clinic	Recruiting now!

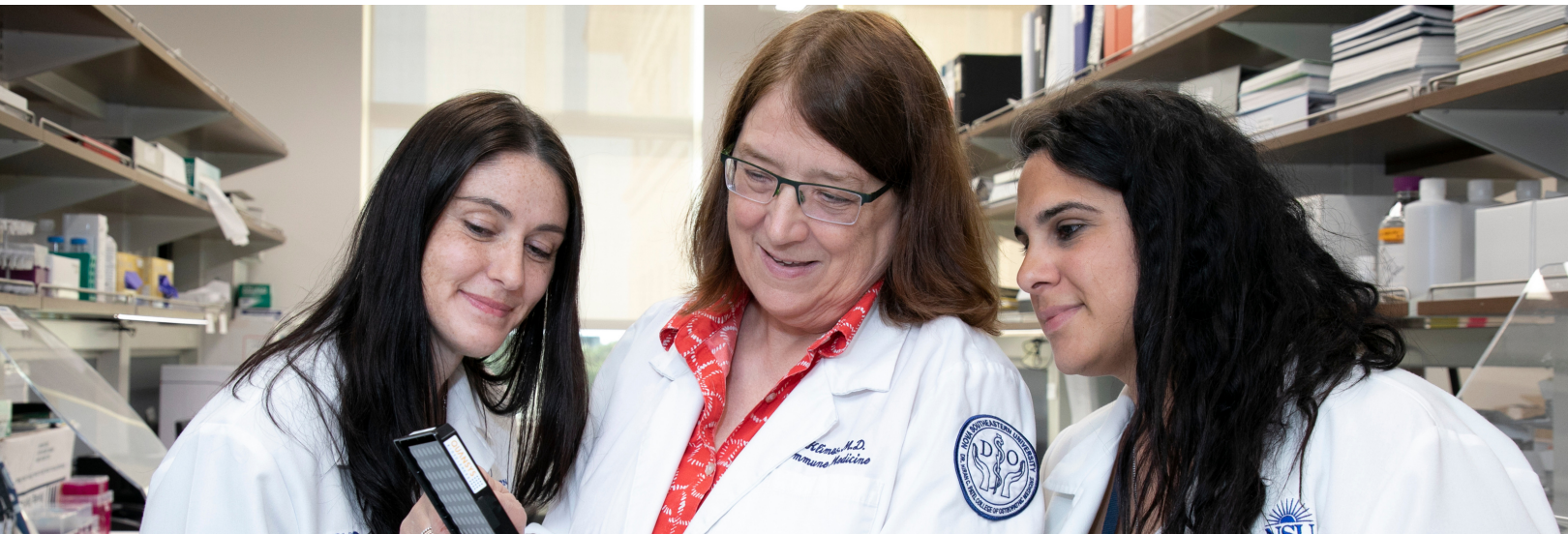
## Interested in participating?

Contact the National Recruitment Coordinator, Zachary Barnes:

[zachary.barnes@va.gov](mailto:zachary.barnes@va.gov)

Office - (305) 575 - 7000 ext 14217

Cell - (617) 435 - 5634



## Gulf War Illness Studies underway at INIM

- **The Reboot Study** - TNF & Glucocorticoid Antagonist for GWI Associated Multi-Symptom Disease Hemostasis Reset
  - Recruiting 18 male Operation Desert Shield/Desert Storm Veterans
- **Bacopa Study** - Nutraceutical for GWI Associated Cognitive Dysfunction & Biological Response
  - Recruiting Operation Desert Shield and/or Operation Desert Storm Veterans born between the years of 1946 to 1974.

For more information about these studies, contact us at 954-262-2870  
or email [GWICTIC@nova.edu](mailto:GWICTIC@nova.edu).

# We're on Instagram!



# FOLLOW

US ON INSTAGRAM



@NSU\_INIM

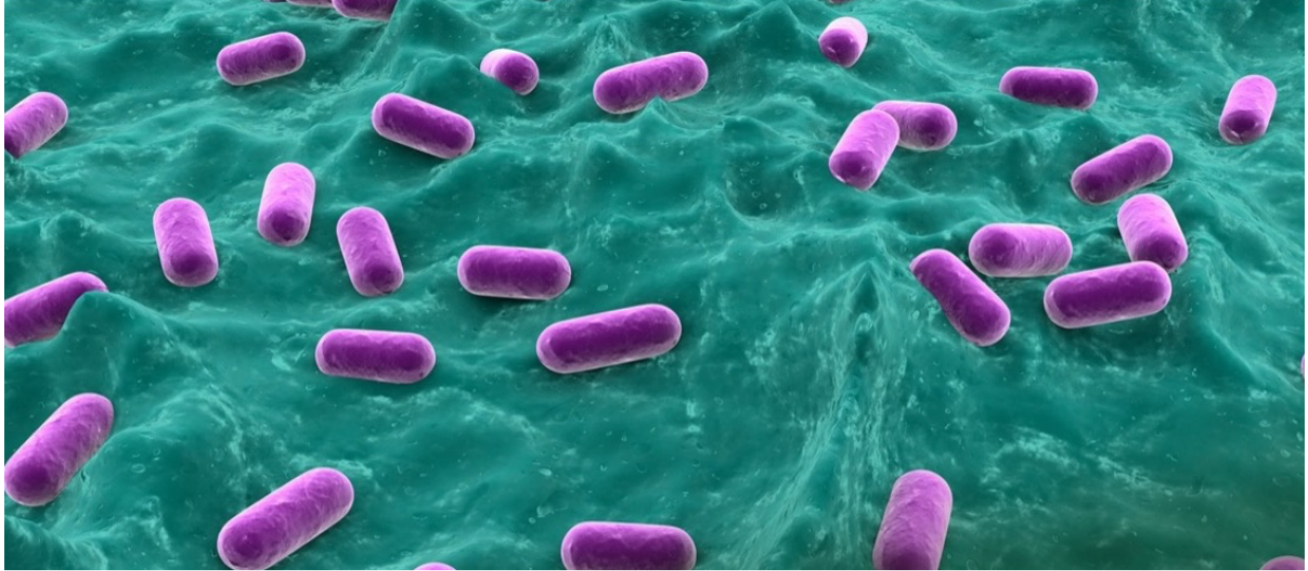


Don't forget to connect with us on:



*Now Recruiting!*

## The Use Of Directed Probiotics In ME/CFS



### The Use Of Directed Probiotics In ME/CFS

In this study, we aim to use the probiotic, Floradapt Intensive GI (other name i3.1), to reduce gastrointestinal (GI) inflammation and normalize the GI, to determine whether resetting your microbiome will help your gut health and perhaps your body as well while simultaneously assessing the effectiveness and safety of this intervention based on the severity of illness.

#### Who can Participate?

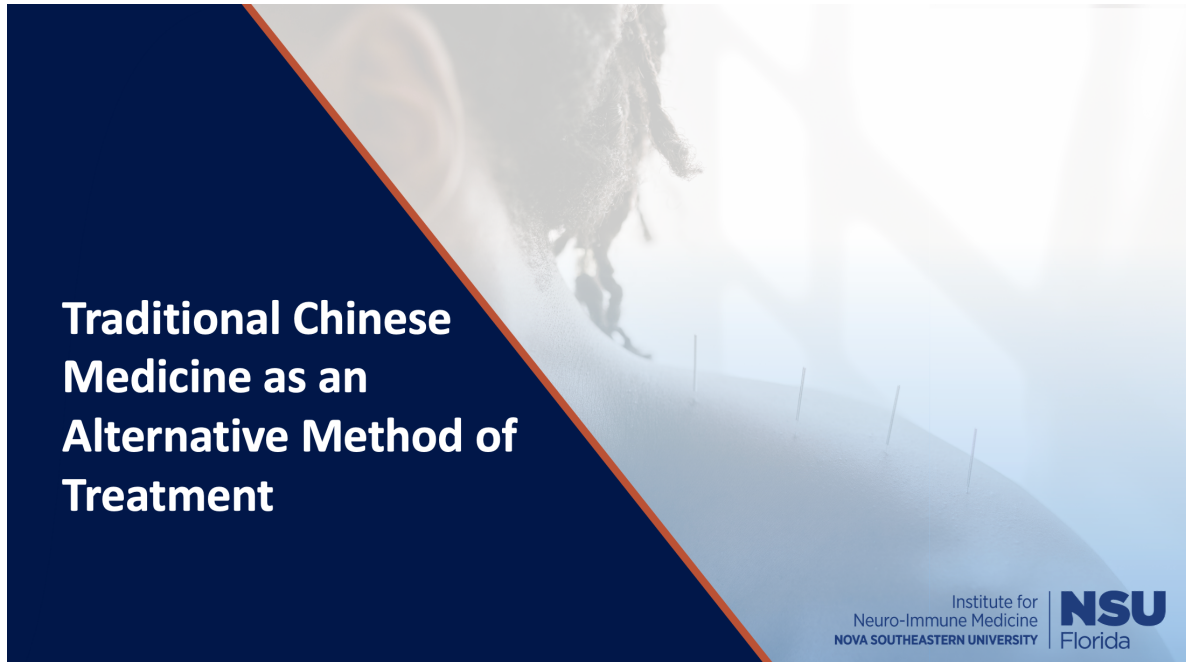
INIM Researchers will evaluate the use of probiotics in 100 participants who:

- Are between 45 to 70 years of age
- Meet the Institute of Medicine (Canadian Consensus Criteria) case definition for ME/CFS
- May or may not be diagnosed with irritable bowel syndrome (IBS)

For more information, please email [KanekaStudy@nova.edu](mailto:KanekaStudy@nova.edu).

# Event Recap

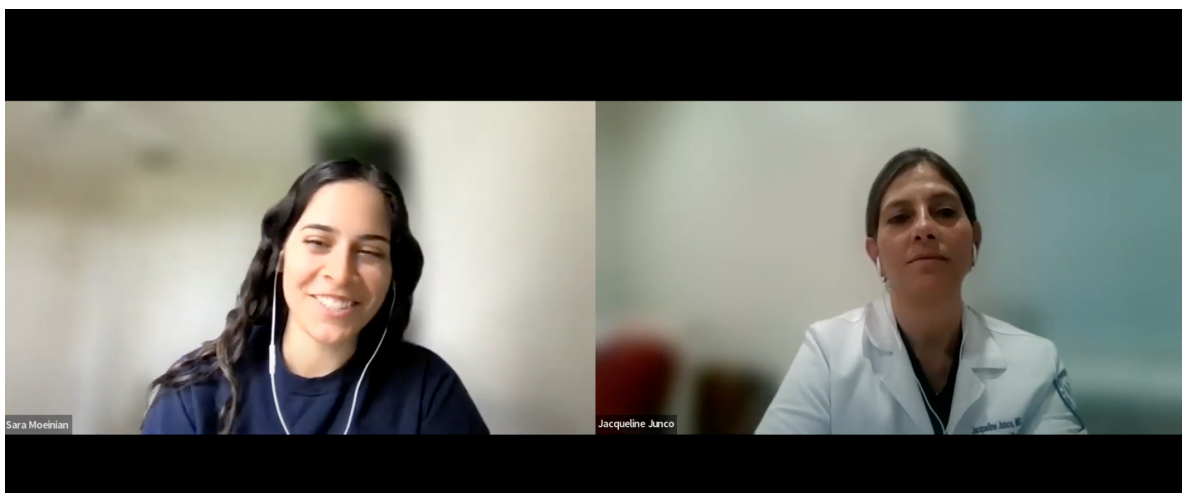
## Traditional Chinese Medicine as an Alternative Method of Treatment



On Friday, August 26th, we hosted an hour long webinar - Traditional Chinese Medicine as an Alternative Method of Treatment. Jacqueline Junco, M.D., MPH, AP, presented how traditional Chinese medicine (TCM) can be used to address various health problems.

The recording is available on our YouTube channel:  
[https://www.youtube.com/watch?v=b36os8my\\_6g](https://www.youtube.com/watch?v=b36os8my_6g)

If you are interested in these services or would like to learn more, please contact our Davie Clinic at: (954) 262-2850.



## Recent Publications

A Case Series of 39 United States Veterans with Mild Traumatic Brain Injury Treated with Hyperbaric Oxygen Therapy.

- Bsted AC, Rana AM, Hardigan P, Niyirora J, Cheema A, Antony G, Defina PA, Machado C. Clinical and Translational Neuroscience. 2022; 6(3):21. <https://doi.org/10.3390/ctn6030021>  
Access the full article: <https://www.mdpi.com/2514-183X/6/3/21/pdf>

Nutritional Themes in Care for Patients with Myalgic Encephalomyelitis/Chronic Fatigue Syndrome

- Rozenfeld, Irina & Renesca, Violetta & Nunez, Maria. (2021). European Journal of Integrative Medicine. 48. 101935. [10.1016/j.eujim.2021.101935](https://doi.org/10.1016/j.eujim.2021.101935).

Post COVID-19 joint pain: Preliminary report of the relationship with antinuclear antibodies and inflammation

- Tamariz L, Bast E, Abad M, Klimas N, Caralis P, Palacio A. J Med Virol. 2022 Aug;94(8):3479-3481. doi: [10.1002/jmv.27753](https://doi.org/10.1002/jmv.27753). Epub 2022 Apr 9. PMID: 35355291; PMCID: PMC9088578.

Is there an interplay between the SARS-CoV-2 spike protein and Platelet-Activating factor?

- Antonopoulou S, Petsini F, Detopoulou M, Theoharides TC, Demopoulos CA. Biofactors. 2022 Jul 19;10.1002/biof.1877. doi: [10.1002/biof.1877](https://doi.org/10.1002/biof.1877). Epub ahead of print. PMID: 35852257; PMCID: PMC9349578.

Corneal fibrosis abrogation by a localized AAV-mediated inhibitor of differentiation 3 (Id3) gene therapy in rabbit eyes in vivo

- Gupta S, Fink MK, Kempuraj D, Sinha NR, Martin LM, Keele LM, Sinha PR, Giuliano EA, Hesemann NP, Chaurasia SS, Mohan RR. Mol Ther. 2022 Jul 2;S1525-0016(22)00419-1. doi: [10.1016/j.yymthe.2022.06.018](https://doi.org/10.1016/j.yymthe.2022.06.018)

# Recent Publications

Genetics of COVID-19 and myalgic encephalomyelitis/ chronic fatigue syndrome: a systematic review

- Tziastoudi M, Cholevas C, Stefanidis I, Theoharides TC. Annals Clinical Translational Neurology. In press.

A computational analysis of colchicine structural analogs as potential microtubule destabilizing agents.

- Rocha De Abreu, I., Barkdull, A., & Craddock, T. J. (2022). The FASEB Journal, 36.

Electronic Energy Migration in Microtubules.

- Kalra, A. P., Benny, A., Travis, S. M., Zizzi, E. A., Morales-Sanchez, A., Oblinsky, D. G., ... & Scholes, G. D. (2022). arXiv preprint arXiv:2208.10628.

Our fourth year medical students, Lindsey Taylor and Ting Yu Wu, along with premed student, Nikita Bansal, were a part of a very select, few finalists that had their environmental toxins poster accepted as a finalist for presentation at the Florida chapter of the American College of Physicians!



The image shows a promotional graphic for the ACP Florida Chapter. It features a hand in a white lab coat pointing at a grid of medical icons (stethoscope, microscope, DNA, etc.) on a light blue background. The text 'CONTINUING EDUCATION' is in the top right. Below the icons is the ACP Florida Chapter logo with the tagline 'Leading Internal Medicine, Improving Lives'. The main text reads '54<sup>th</sup> Annual Scientific Meeting' followed by the dates 'October 21 - 23, 2022' and the theme '“Current Practical Approaches to Internal Medicine”'.

Abstract title: "Environmental Toxins in the Urinalysis of Patients Diagnosed with Myalgic Encephalomyelitis"

# Food is Medicine: Cooking with Haylie Pomroy

*Haylie Pomroy serves as the Assistant Director of the Integrative Medicine Program at the Dr. Kiran C. Patel College of Osteopathic Medicine and The Institute for Neuro-Immune Medicine at Nova Southeastern University.*

Haylie Pomroy is the founder and CEO of The Haylie Pomroy Group, an integrative health care practice that helps clients achieve their health, wellness, and weight-loss goals through strategic programs fueled by world class supplements.

Her expertise has helped diagnose and heal a wide range of issues and disorders related not just to weight and metabolic dysfunction but also to digestion, hormonal balance, autoimmunity, and more.



Step into my kitchen and let's make my incredible Baked Carrot Cake Oatmeal Bars together! I'm a big carrot cake fan, so I use lots of carrots in this recipe, but you can substitute sweet potatoes or zucchini and add in your favorite fruit, like apples, mangos, or cherries, in place of the pineapple.

This recipe is loaded with ingredients that are incredible digestive aids—they're going to help you burn right through complex carbs, help with brain function, and inflammation. Carrots are loaded with vitamin A and great for collagen and elastin—a few major components that give you beautiful, glowing skin. They're also great for eye health.

These delish bars are so easy to make, freeze well, and are great to take with you as a snack on-the-go. Remember, pleasure stimulates the metabolism, so having a delicious treat like this is going to be so amazing for your body.

## **Baked Carrot Cake Oatmeal Bars**

### **Ingredients**

- 2 1/2 cups old-fashioned oats
- 1 1/2 cups grated carrots
- 1/2 cup chopped pineapple
- 2 teaspoons ground cinnamon
- 1 teaspoon ground ginger
- 1 teaspoon baking powder
- 1/4 teaspoon ground nutmeg
- 1/4 teaspoon sea salt
- 1 cup unsweetened oat milk or rice milk
- 1/2 cup xylitol, or more to taste
- 1 large egg
- 2 teaspoons pure vanilla extract



### **Directions**

1. Preheat the oven to 350 degrees F. Line an 8-inch square baking pan with a piece of parchment paper cut to fit.
2. In a large bowl, combine the oats, carrot, pineapple, cinnamon, ginger, baking powder, nutmeg, and salt and stir until well mixed.
3. In a medium bowl, whisk together the milk, xylitol, egg, and vanilla until smooth.
4. Pour the milk mixture into the flour mixture and stir gently until fully combined. Pour the batter into the prepared pan and spread it to cover the bottom evenly.
5. Bake for about 40 minutes, or until golden brown and set in the middle. Remove from the oven and cool for 5 minutes, then cut into 6 squares and serve.

<https://hayliepomroy.com/blogs/cooking-classes/baked-carrot-cake-oatmeal-bars>



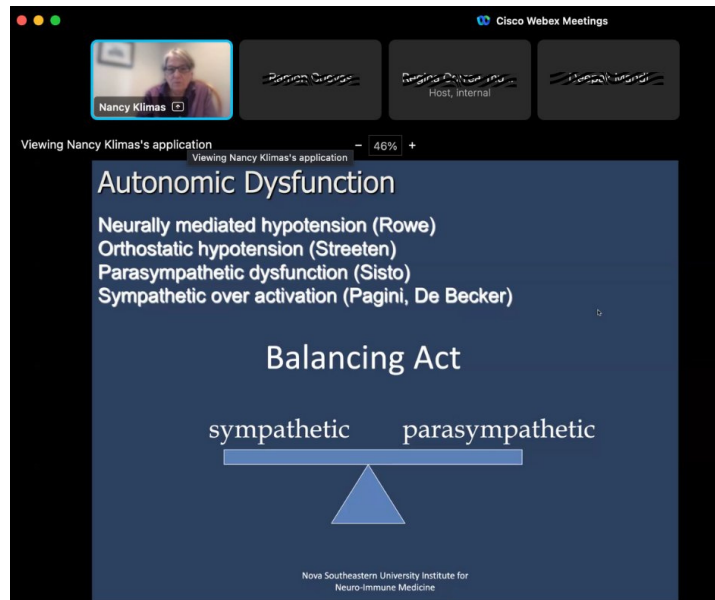
# In the Community

## Research Lunch & Learn with West Palm Beach VA

Dr. Nancy Klimas presented "Current and Future Health Concerns for 1990-1991 Gulf War Veterans" at West Palm Beach VA Healthcare System's Research Lunch & Learn!

You can view the recording here:  
<https://www.youtube.com/watch?v=dw9Bnff8aFc>

The presentation was offered to VA employees in an effort towards raising awareness of Gulf War



illness amongst providers with an emphasis of recognizing and treating it.



Our work continues, not just with the dedication of our team members, but with your ongoing support to our cause. So, this year, as you reflect on what 2022 has brought you, and perhaps taught you, please consider donating to the INIM.

Any amount is appreciated and will go directly to our research projects or clinical care.

Text "NSUINIM" to 41444

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