

## ChromaDex's Ground-Breaking Milestones

Earlier this month, ChromaDex was excited to announce the [launch of pharmaceutical-grade Niagen® \(patented nicotinamide riboside chloride, or NRC\), currently referred to as Niagen+](#). Authorized by the FDA for compounding by 503B facilities, pharmaceutical grade NRC will be available in IV, shot, and push forms at select clinics with a prescription. Though NAD+ IV has gained popularity in recent years, in part due to growing media attention and widespread usage among influencers, athletes, and biohackers, a recent [randomized clinical pilot study](#) funded by ChromaDex demonstrated that Niagen IV significantly reduces infusion time and adverse side effects compared to traditional NAD+ IV, while enhancing peak blood NAD+ levels. Based on these results, Niagen IV appears to be much faster, providing superior tolerability and NAD+-boosting potential over NAD+ IV. The study, published in preprint format in MedRxiv, will be submitted to a journal for peer-reviewed publication in the near future.

Through CERP®, we encourage investigators to help advance the science of Niagen+; as such, Niagen+ will be available to scientific investigators in limited quantities. CERP is accepting applications for research proposals using Niagen+; however, since material availability is limited, applications exploring research questions of business interest will receive priority. If you are interested in investigating Niagen+, please contact us at [cerp@chromadex.com](mailto:cerp@chromadex.com) and visit [www.niagenplus.com](http://www.niagenplus.com); also, see the infographic on page 4 of this newsletter.

In another significant development, ChromaDex has received [Orphan Drug Designation \(ODD\) and Rare Pediatric Disease \(RPD\) Designation](#) from the U.S. FDA for NRC as a treatment candidate for Ataxia Telangiectasia (AT). This rare, progressive childhood disease is characterized by severe neurological and immunological symptoms and currently has no cure. With two independent, peer-reviewed clinical studies demonstrating the potential therapeutic efficacy of NRC for AT, ChromaDex now plans to file an Investigational New Drug (IND) application to begin further human clinical trials. Dr. Vilhelm Bohr, a world-leading expert in aging science and ChromaDex SAB member, Dr. Mary Kay Koenig Professor & Associate Vice-Chair for Clinical Research

Endowed Chair of Mitochondrial Medicine Director, Center for the Treatment of Pediatric Neurodegenerative Disease Department of Pediatrics, Division of Child and Adolescent Neurology at the University of Texas, Houston and Dr. Susan Perlman, Clinical Professor of Neurology and Director of the Ataxia Center at the UCLA Medical Center, will offer valuable guidance as ChromaDex embarks on future clinical research aimed to advance AT treatment and ultimately offer new hope to the AT community.

Lastly, ChromaDex was pleased to hear about the publication 'Nicotinamide riboside for peripheral artery disease: the NICE randomized clinical trial' in [Nature Communications](#). The phase II randomized controlled study, led by Dr. Mary M. McDermott of Northwestern University, using Niagen® provided through CERP, demonstrated a clinically meaningful improvement in the six-minute walking distance performance in patients with peripheral artery disease (PAD) after 6-months of NR supplementation, compared to placebo. Interestingly, combining NR with resveratrol did not appear to confer additional benefits on walking performance. These promising results underscore the need for further investigation in larger, randomized clinical trials to fully explore the benefits of NR in managing PAD. Dr. Chris Martens, another CERP investigator, at the University of Delaware, also contributed to this work as a co-author.

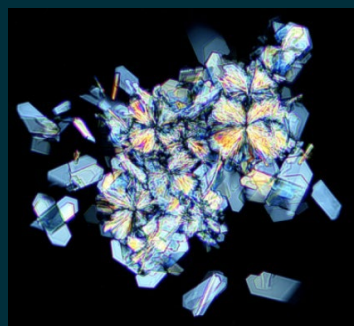
ChromaDex's recent advancements highlight the company's dedication to pioneering NAD+ research applications and addressing rare diseases.

### In This Issue

- ChromaDex Milestones
- ASN 2024
- FASEB NAD+ Conference
- NR in the news
- Call for research for IV and injectable NR research

**Expand your NAD+ research portfolio by including rarely studied NAD+ Precursors**

For more information send an email to [CERP@ChromaDex.com](mailto:CERP@ChromaDex.com) with the subject line: **Novel NAD+ precursors.**



# See you in Chicago at Nutrition 2024



The CERP® Science Team is eagerly preparing to attend Nutrition 2024 in Chicago, Illinois. As proud and active Sustaining Partners of the American Society for Nutrition (ASN), Drs. Andrew Shao and Yasmeen Nkrumah-Elie will not only be there as ChromaDex employees, but also in their volunteer roles as leaders in the organization. We are also excited to see and support our past and present CERPIs in attendance and presenting their NAD+ research. If you will be in attendance and would like to schedule a meeting with Andrew and/or Yasmeen, please send an email to [cerp@chromadex.com](mailto:cerp@chromadex.com).

## Where to Find Us

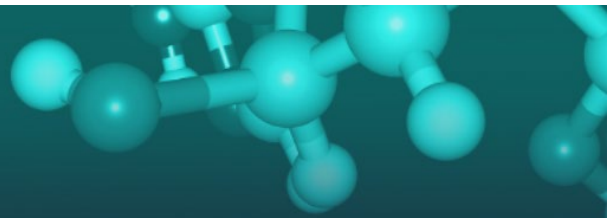
- **Andrew Shao, PhD**
  - ASN Publications Committee Meeting
    - Sunday, June 30<sup>th</sup>, 9:00-11:00 AM, Location: TBD
  - Building Successful Academic-Industry Partnerships – *Speaker and Panelist*
    - Monday, July 1<sup>st</sup>, 4:00 PM – 5:00 PM, Location: W375B
- **Yasmeen Nkrumah-Elie, PhD**
  - Young Investigators Underrepresented in Nutrition Research Award Competition and Networking Event – *Judge*
    - Saturday, June 29<sup>th</sup>, 10:00 AM – 12:30 PM, Location: W183
  - Welcome Reception, Women in Nutraceuticals (WIN) table
    - Saturday, June 29<sup>th</sup>, 6:30 PM – 8:30 PM, Location: Hall F1 (The Hub)
  - IDEA Committee Meeting - *Member*
    - Sunday, June 30<sup>th</sup>, 9:30 AM – 10:30 AM, Location: W178B
- **Both**
  - Speed Mentoring for Students – *Mentors*
    - Sunday, June 30<sup>th</sup>, 7:00 PM – 9:00 PM, Location: Hyatt Regency Prairie
  - ASN Board of Directors & Sustaining Partners Breakfast
    - Monday, July 1<sup>st</sup>, 7:30 AM – 8:30 AM, Location: Hyatt Regency
  - Vitamins and Minerals GEM Forum – *Sponsor*
    - Monday, July 1<sup>st</sup>, 2:30 PM – 3:30 PM, Location: W375C
  - Networking Table Talks with Industry Representatives – *Moderator & Industry Representatives*
    - Monday, July 1<sup>st</sup>, 5:15 PM – 6:00 PM, Location: W375B

We are looking to grow our global CERPI community in 2024!

Please share this newsletter and/or our QR code with interested colleagues and junior scientists. We are accepting applications in the following areas:

- Women's Health
- Aesthetics/Topical
- IV/Injection
- Novel NAD+ precursors
- Comparisons of NAD+ precursors
- Animal & pet nutrition





# NAD Metabolism and Signaling

August 25, 2024 - August 29, 2024

Lisbon, Portugal

#NADSRC

**Abstracts Due: June 30<sup>th</sup>**

<https://events.faseb.org/event/nad-metabolism-and-signaling/summary>

Interested in learning more about how to develop intellectual property that industry would want to license or how to commercialize your ideas?

If so, ChromaDex has a dynamic Business Development Team that would love to talk with you.

For more information, send and email to [CERP@ChromaDex.com](mailto:CERP@ChromaDex.com) with the subject line: Business Development, and we will get you connected.

## Q2 CERP® Peer-Reviewed Advances in NAD+ Science

- [Targeting the autophagy-NAD axis protects against cell death in Niemann-Pick type C1 disease models](#)
- [Effects of nicotinamide riboside in ovo feeding on high-yield broiler performance, meat quality, and myopathy incidence](#)
- [Nicotinamide riboside for peripheral artery disease: the NICE randomized clinical trial](#)

## Other Studies and Articles That Sparked Our Interest

- [What Is an NR Supplement? Benefits, Dosage, and Risks](#)
- [Nicotinamide Riboside Ameliorates Hyperpigmentation on Photo-Irradiated Skin](#)
- [Nicotinamide Mononucleotide and Nicotinamide Riboside Reverse Ovarian Aging in Rats Via Rebalancing Mitochondrial Fission and Fusion Mechanisms](#)
- [Hepatic steatosis induced by nicotine plus Coca-Cola™ is prevented by nicotinamide riboside \(NR\)](#)
- [Morphology of Doxorubicin-Induced Organopathies under Different Intravenous Nicotinamide riboside Administration Modes](#)
- [Insulin and glycolysis dependency of cardioprotection by nicotinamide riboside](#)
- [Boosting wound healing in diabetic rats: The role of nicotinamide riboside and resveratrol in UPR modulation and pyroptosis inhibition](#)
- [Nicotinamide ribose ameliorates myocardial ischemia/reperfusion injury by regulating autophagy and regulating oxidative stress](#)
- [The Efficacy of Risk Factor Modification Compared to NAD+ Repletion in Diastolic Heart Failure](#)



# Unlock the Potential of Nicotinamide Riboside with Pharmaceutical Grade NIAGEN+

Why limit your research to oral administration?

NIAGEN+ • IV • Intramuscular • Subcutaneous  
Clinical Pharmaceutical Grade

Explore the possible benefits of novel routes of administration.

NIAGEN® is a patented form of nicotinamide riboside chloride that has shown promise in multiple clinical and preclinical studies.

Most studies have focused on oral ingestion; intravenous and intramuscular administration methods offer exciting possibilities to enhance bioavailability and efficacy.

## Opportunities for You



### Bulk Material Support

We offer up to 500 grams of bulk material for preclinical studies and pharmaceutical-grade material for clinical research\*.

\*Due to high demand and competitive interest, there is limited availability for clinical pharmaceutical grade material.



### Research Support

We provide technical expertise and support so that you can get the most out of our bulk material.



### Intellectual Property Support

Explore opportunities for IP development. We would like to support your inventorship and patent protection domestically and globally.

[www.chromadex.com/cerp](http://www.chromadex.com/cerp)

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The Industry's **Gold Standard** for Excellence in External Research

Thank you to our contributors for this issue of the CERPI Communiqué:

Angie Ho, Rebecca Idoine, Jun Kwon, Anthony Low, Yasmeen Nkrumah-Elie, and Andrew Shao