GMDI 2022 Conference
Abstract Submission Announcement

GMDI is pleased to announce our GMDI 2022 Conference will take place on May 4-7, 2022, in Henderson, Nevada, U.S.A. We welcome abstracts that communicate current research, case studies, educational tools, development of new services and clinics, and public policy efforts that are relevant to the nutritional management of inherited metabolic diseases.

- Abstracts describing original research and related-efforts relevant to inherited metabolic diseases must be submitted in English.
- Abstracts submitted for presentation at the 2022 GMDI Conference will be reviewed by our GMDI Research Committee. Two abstracts will be selected for oral presentation. Other accepted abstracts will be invited to give poster presentations.
- **All accepted abstracts will be published in *Molecular Genetics and Metabolism*.**
- Abstracts submitted after the stipulated deadline will not be considered. Authors are strongly advised to submit prior to the deadline. The copyright in the abstracts are retained by the authors; however, the authors give permission to the GMDI 2022 Conference organizing committee to publish the abstracts in the journal.

Abstract Submission Deadline: Wednesday, December 15, 2021

We will inform you if your abstract has been accepted for poster or oral presentation by Friday, February 1, 2022.

Abstract Preparation: Please format your submission (as shown on pg. 3) with the first letter of the first word in the title capitalized and include all authors' affiliations (Department, Institution, City, State/Province, Country). Organize the abstract using the following headings: Background, Methods, Results, and Conclusions. Abstracts must be written in English using complete sentences. Do not include tables or figures. The word limit for abstracts is 350 words. Please include funding disclosures and/or clinical trial registration information as appropriate. An example of the abstract format is provided on page 3 of this announcement.

Abstract Requirements:

1) Authorship
- The first author of the abstract is the presenting author and will be expected to attend the conference for poster or oral presentation.
- The presenting author must confirm that all co-authors agree with the abstract submission and publication.

2) Conflicts of Interest and Financial Disclosures
- The presenting author is responsible for disclosing the presence or absence of conflict(s) of interest and financial disclosures for all authors during the abstract submission.

3) Approval for Research
- All studies involving human subjects or animal models must have received approval by Institutional Review Boards, Institutional Animal Care and Use Committee (IACUC) or other regulatory bodies, as applicable.

4) Abstract Publication
- Accepted abstracts will be published in *Molecular Genetics and Metabolism*.

Abstract Selection Procedure

- All abstracts will be reviewed by the GMDI Research Committee. Authors of accepted abstracts will be notified via e-mail by February 1, 2022. Two abstracts will be selected for oral presentation.
- Instructions for the poster or oral presentation format will be sent to you if your abstract is accepted. Authors of oral presentations will be asked to provide learning objectives. GMDI will offer a discounted registration fee ($250 discount) to one author of each abstract selected for oral presentation. Awardees will be notified by February 1, 2022.

Because the accepted abstracts will be published, the GMDI Research Committee will not accept abstracts that do not follow the instructions described in this document.

For questions related to abstract preparation or submission, please contact GMDI Research Committee Co-Chairs, Bridget Stroup (stroup@bcm.edu) and Nicole McWhorter (Nicolemcwhorterrd@gmail.com).

GMDI ABSTRACT FORMAT EXAMPLE

Blood phenylalanine concentrations, body composition, and dietary intake patterns in children with phenylketonuria

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Background: Phenylketonuria (PKU) treatment consists of life-long protein restriction and Phe-free medical foods for adequate nutritional intake and growth. A relationship between body composition and blood phenylalanine (Phe) concentrations in subjects with PKU has been proposed.

Methods: Dietary intake, lean body mass (LBM) and fat mass (FM) were measured in 30 pediatric subjects with PKU compared to 30 age, and sex matched controls. The relationship between body composition and blood Phe was analyzed within the PKU cohort from clinically collected dried blood spot Phe concentrations.

Results: Male subjects with PKU had less LBM% and more FM% than controls (p=0.024). There was no difference in the percentage of LBM and FM among female subjects. Age (p=0.01) and FM% (p=0.02) were positively correlated to dried blood spot Phe so that as age or FM% increases, Phe levels also increase. Natural protein intake (g/kg body weight) was negatively correlated with FM% so that as natural protein intake increased, FM% decreased.

Conclusions: Children with PKU face additional dietary challenges maintaining healthy growth and body composition while keeping Phe levels low. We observed higher FM% and lower LBM% in male subjects with PKU. Correlations do not prove cause and effect but suggest a relationship between increased blood Phe, lower natural protein intake and increased FM%. Future studies may explore if lower blood Phe concentrations is associated with a lower FM% and higher LBM%; particularly among adult patients now managed on Palynziq™ who consume normal amounts of natural protein or among younger patients who consume glycomacropeptide.