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Dean

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February 23, 2016

Roy Ritzmann, PhD  
Chair, Faculty Senate  
c/o Rebecca Weiss, Secretary of the University Faculty  
Adelbert Hall  
7001

Dear Dr. Ritzmann:

As noted in the accompanying memo from Dr. Bill Schilling, Chair of the School of Medicine's Faculty Council, the Faculty Council has recommended approval of a Graduate Certificate in Maternal and Child Nutrition.

This program will formalize what has previously been known as the "Specialty in Maternal and Child Nutrition" in the Department of Nutrition and as "Maternal and Child Nutrition Option" in the General Bulletin. The courses will continue to be taught by our expert faculty and the students will be able to distinguish themselves in this area. The departments and faculty have experience with the management and coordination of necessary for successful certificate programs.

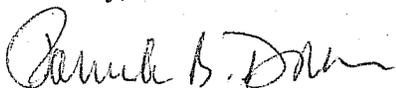
The proposal approval process is outlined in Dr. Schilling's memo. An ad hoc Committee was convened to review this new program and after revisions, the program was approved by the Faculty Council.

I concur with the Faculty of Medicine and recommend approval of this graduate certificate program.

Please submit the proposed graduate certificate program to the appropriate committees for their review at their earliest opportunity. I would be pleased to answer any questions that might arise during the review process.

Thank you.

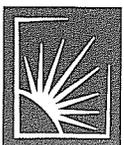
Sincerely,



Pamela B. Davis, MD, PhD

c: Dr. Bill Schilling, Chair, Faculty Council  
Nicole Deming, Assistant Dean for Faculty Affairs and Human Resources, SOM

enclosures



SCHOOL OF MEDICINE

CASE WESTERN RESERVE  
UNIVERSITY

Memorandum

To: Pamela B. Davis, MD, PhD  
Dean, School of Medicine  
Case Western Reserve University

From: William Schilling, PhD  
Chair, Faculty Council

Re: Maternal and Child Nutrition Certificate

Date: February 22, 2016

At its December 21, 2015, meeting, the Faculty Council voted to recommend approval of a Graduate Certificate in Maternal and Child Nutrition Program proposal. The certificate will be offered by the Department of Nutrition in the School of Medicine.

In accordance with our SOM practices, an ad hoc committee composed of members of the Faculty Council Steering Committee, Graduate Directors, the SOM members of the Faculty Senate's Committee on Graduate Programs, and the Associate Dean for Graduate Education was created to review the program proposal. The ad hoc committee was chaired by Nicholas Ziats and met with Hope Barkoukis, Interim Chair of Nutrition. The ad hoc committee reviewed the document, discussed the proposal, and engaged with the program presenter. After the meeting was concluded a summary of changes was created. These changes were adopted and the revised proposal was circulated to the ad hoc committee for a vote. The ad hoc committee approved the reviewed proposal and it was sent to the Faculty Council for a vote.

After your review, I hope you will join me in recommending approval of the proposal for a Graduate Certificate in Maternal and Child Nutrition by the Faculty Senate, President, and Board of Trustees as required by the Faculty Handbook. This Certificate will also require approval by the Ohio Board of Regents.

Please let me know if I can provide any additional information.

Thank you for your consideration.

Sincerely,



William P. Schilling, Ph.D.  
Faculty Council Chair  
Professor of Physiology and Biophysics  
Case Western Reserve University School of Medicine

cc: Nicole Deming, JD, MA





Department of Nutrition  
School of Medicine – Room WG 48  
2109 Adelbert Road  
Cleveland, Ohio 44106-4954  
216.368.2440

To Nick Ziats, Nicole Deming, & Committee

I am pleased to very enthusiastically support the Graduate Certificate in Maternal and Child Nutrition from the Nutrition Department that is being presented for approval. Creating an official Certificate in this specialty area is part of the Department's strategic plan to establish a clinical and educational excellence in the areas of maternal and child nutrition.

The 12 credit hours of courses included in this Certificate are currently in existence in our graduate course offerings and taught by experienced nutrition clinicians, (registered dietitians). None of these courses are new, nor do they require any alteration from their existing, approved course curriculums. Faculty load also remains unchanged by this certificate since clinical nutrition experts who currently teach these courses will remain the primary faculty of record.

The professional advantage of achieving this Certificate for our graduate students in the Public Health or Coordinated Dietetic Internship tracks is the ability to differentiate themselves as those with advanced training in these nutrition domains. Nutrition, similar to medicine, is composed of practicing dietitians who specialize in various areas of practice. These specializations are often the difference between being hired for a position or not. They also set the stage for being a component in their upward professional trajectory and development as well.

Lastly, students who may be in other clinically based fields, such as medical or nursing or physician assistant students would also benefit from this Certificate. They would benefit from having exposure to expert instructors who also happen to be experienced, exceptional clinicians too.

Please do not hesitate to contact me for further information. I will look forward to the successful development of this Certificate.

Sincerely,

Hope Barkoukis, PhD, RDN, LD  
Interim Chair and Associate Professor  
Department of Nutrition, CWRU

**Proposal**  
**Graduate Certificate in Maternal and Child Nutrition**  
**August 2015**

The Department of Nutrition in the School of Medicine presents this proposal and is committed to sponsoring this new graduate certificate program. This program has been informally administered as an “option” or as a “specialty” by the previous Director of the MS/Public Health Nutrition Dietetic Internship Program. The Department wishes to formalize this program as an official graduate certificate program at Case Western Reserve University for our MS/Dietetic Internship students and non-degree Registered Dietitian Nutritionists or other licensed health care professionals who are pursuing certifications for their professional advancement or for continuing education credits.

**Justification for a Graduate Certificate in Maternal and Child Nutrition**

*Healthy People 2020* identified 33 objectives for Maternal and Child Health. Many, if not most of these objectives have a strong nutrition component. Ensuring good nutritional status for women of child-bearing age before conception and during pregnancy is crucial to achieving objectives like MICH-1.1: Reduce the rate of fetal deaths at 20 or more weeks of gestation and MICH 8: Reduce low birth weight and very low birth weight.

Maternal and child malnutrition, defined as both under-nutrition and over-nutrition, is a global problem. Maternal iron deficiency can contribute to fetal growth restriction, maternal death and low birth weight while maternal overweight and obesity are associated with maternal death, preterm birth, and increased infant mortality. Undernutrition in infants and children can contribute to increased mortality, stunting of growth and delayed development, and an increase in infectious diseases. Overweight and obesity is increasing in children younger than 5 years of age and can contribute to increased risks for diabetes and cardiovascular disease.

Registered Dietitian Nutritionists are the food and nutrition experts on the inter-professional health care team who are uniquely trained to help our nation achieve the objectives of *Healthy People 2020* and beyond. They provide care for people with various health diseases that are the direct result of over-nutrition and under-nutrition.

Many institutions grant graduate degrees with an emphasis on Maternal and Child Health (for example Boston University and George Washington University) and several universities award graduate certificates in Maternal and Child Health (for example Emory University and Johns Hopkins University). The University of California, Davis offers a graduate program in Maternal and Child Nutrition which requires 36 units of graduate and upper division courses and awards the degree of Master of Advanced Study to those completing the program. There were no graduate certificate programs in Maternal and Child Nutrition identified in a recent search of

Association of Schools and Programs of Public Health's website, [gradschools.com](http://gradschools.com), or [graduateprograms.com](http://graduateprograms.com) in Northeast Ohio nor in the state of Ohio.

The Master of Science/Coordinated Dietetic Internship and the Master of Science/Public Health Nutrition Dietetic Internship Programs in the Department of Nutrition prepare students to become Registered Dietitian Nutritionists. In the future, there will be increased demand for these professionals and an increase in their employment in community nutrition practice and interventions for disease prevention according to the Accreditation Council for Education in Nutrition and Dietetics. Graduates of both of these MS programs can enhance their employment opportunities by demonstrating competence and focused study in Maternal and Child Nutrition.

**Requirements to earn the Graduate Certificate in Maternal and Child Nutrition for students enrolled in the MS/Coordinated Dietetic Internship or the MS/Public Health Nutrition Dietetic Internship.**

Four courses, totaling 12 credit hours, will be required for the proposed certificate. Any student who is enrolled in the MS/Coordinated Dietetic Internship or the MS/Public Health Nutrition Dietetic Internship and the MD/MS in Nutrition, the SOM, Cleveland Clinic Lerner College of Medicine, Physician Assistant Program, and Nurse Practitioner Program can earn this certificate.

Students who are enrolled in either of the two MS/Dietetic Internship Programs can earn the graduate certificate while completing their degree program.

Students enrolled in the MS in Nutrition program and students enrolled in other MS programs in the School of Medicine will not be eligible due to the strong clinical nutrition component in the required coursework.

There is no required clinical component for the Graduate Certificate in Maternal and Child Nutrition. However, one of the required courses, NTRN 533 – Neonatal Nutrition (see page 4) is taught in the NICUs at MetroHealth Medical Center and University Hospitals Case Medical Center. Students gain about 30 hours of clinical experience as a component of this course. Students in both programs are taking graduate courses while simultaneously completing supervised practice hours that require demonstration of competence in nutrition assessment, nutrition diagnosis, and nutrition intervention in pregnant and lactating women, infants, and children. In addition, students enrolled in these programs may elect to take NTRN 532c (see page 4) which provides 3 credit hours (minimum of 135 clinical hours) of individually arranged clinical experience.

Students will be made aware of the certificate program by their academic advisors as well as by announcements on the Department of Nutrition's website and promotional materials. Students who are already enrolled in one of the two MS/Dietetic Internship programs must complete the "Intent to Complete the Graduate Certificate in Maternal and Child Nutrition Form" (see page 6) after successfully completing one of the required courses with a grade of "B" or better. After completion of all required courses, the student must formally apply to Graduate Studies for the certificate. The certificate will be awarded at the completion of a student's degree program if the

student has earned at least a “B” in all of the required courses. Courses taken at other educational institutions will not be accepted in lieu of any of the 12 credits required for the Certificate.

**Requirements to earn the Graduate Certificate in Maternal and Child Nutrition for students enrolling as non-degree students**

Four courses, totaling 12 credit hours, will be required for the proposed certificate. Practicing Registered Dietitian Nutritionists and other credentialed health care clinicians (such as physician assistants, nurse practitioners, and others) who have already earned a Bachelor’s degree may enroll in the University as non-degree students in order to earn this graduate certificate to enhance their knowledge base or for continuing education credits. These students are not required to complete the MS in Nutrition in order to earn the graduate certificate. If students later decide to complete the MS in Nutrition degree, the credits earned for the courses required for the graduate certificate would be counted towards the 30 credit hours required for the degree if within the time frame specified by Graduate Studies at the time of matriculation.

There is no required clinical component for the Graduate Certificate in Maternal and Child Nutrition. However, one of the required courses, NTRN 533 – Neonatal Nutrition (see page 4) is taught in the NICUs at MetroHealth Medical Center and University Hospitals Case Medical Center. Students gain about 30 hours of clinical experience as a component of this course.

The Department of Nutrition will actively promote the Graduate Certificate in Maternal and Child Nutrition initially to Registered Dietitian Nutritionists who are currently practicing dietetics in Northeast Ohio via announcements through the Ohio Academy of Nutrition and Dietetics and through regional affiliates such as Greater Cleveland Academy of Nutrition and Dietetics. Other credentialed health professionals will be targeted in the second year of the graduate certificate program.

Non-degree students who wish to earn this graduate certificate must complete the “Intent to Complete the Graduate Certificate in Maternal and Child Nutrition Form” after successful completion (grade of “B” or better) of one of the required courses. After completion of all required courses, the student must formally apply to Graduate Studies for the certificate. The certificate will be awarded after satisfactory completion of all the required courses with a grade of “B” or above. Courses taken at other educational institutions will not be accepted in lieu of any of the 12 credits required for the Certificate.

**Capacity and current interest in the Graduate Certificate in Maternal and Child Nutrition**

The Department of Nutrition plans to accept a maximum of 5 students initially to the Graduate Certificate Program. We will target students currently enrolled in both of the MS/Dietetic Internship Programs although acceptance will not be limited to these students. There are 3 students who are currently enrolled in the MS/Public Health Nutrition Dietetic Internship Program who have expressed strong interest in earning this graduate certificate. Recruitment will be managed by the academic advisors for these students, currently Tamara Randall and Stephanie Harris, who will also provide guidance through completion of the graduate certificate.

## **Coursework Required for the Graduate Certificate in Maternal and Child Nutrition**

The following courses, all of which currently exist and are being taught by Department of Nutrition faculty, will be required:

### **NTRN 435 - Nutrition for Pregnancy and Lactation. 3 Units.**

Study of current research literature on nutrition for pregnancy and lactation including nutrient requirements, nutrition assessment, and nutrition intervention.

### **NTRN 436 - Pediatric Nutrition. 3 Units.**

This course will focus on understanding the nutritional needs of infants, children and adolescents. Evidence based guidelines will be used as we discuss best clinical practice for the management of pediatric nutrition issues. Anthropometric measurements used in growth assessment will be reviewed. Nutrient requirements for each stage of development will be explored with a specific focus on micronutrients relevant to pediatrics such as fluoride, iron, calcium and vitamin D. Abnormal growth resulting in malnutrition and obesity will be examined with a focus on prevention, diagnosis and treatment. Skills necessary to complete a pediatric nutrition assessment will be reviewed with opportunities to practice and demonstrate competency.

### **NTRN 533 - Nutritional Care of Neonate. 3 Units.**

Nutritional assessment and management of high-risk newborns with emphasis on prematurity and low birth weight. Review of current literature coordinated with clinical experience in the neonatal intensive care unit. Issues on follow-up included.

### **NTRN 532C - Specialized Public Health Nutrition Field Experience. 1 - 3 Units**

Individually arranged clinical experience.

**Note:** 3 units of this course will be required for the Graduate Certificate in Maternal and Child Nutrition. The clinical experience will be focused on maternal and child nutrition and will include a minimum of 135 hours of clinical experience. Non-degree students who are pursuing this certificate are not eligible to select this course because they are not recognized under the current affiliation agreements with the clinical practice sites.

**OR**

### **NTRN 446. Advanced Maternal Nutrition: Special Topics. 3 Units.**

Analysis of the problems commonly associated with high-risk pregnancies and fetal outcome. Discussion of causes, mechanisms, management and current research.

### **Importance of the Proposed Graduate Certificate to the Department of Nutrition**

The proposed Graduate Certificate in Maternal and Child Nutrition reflects the strategic plan of the Department of Nutrition in several important ways. First, it will strengthen the academic offerings at the MS level. Second, it may enhance the employment opportunities for our MS graduates. Third, it will strengthen the reputation of the Department and of the School of Medicine as a leader in this specialty field and will set the groundwork for the Department of Nutrition's future plans for collaborating with Rainbow Babies and Children's Hospital for an Advanced Practice Residency in Pediatric Nutrition.

Students enrolled in the either of our two MS/Dietetic Internship Programs who successfully complete the certificate would show strong competence in these important practice areas and possibly be able to leverage the certificate in lieu of clinical experience to obtain employment in these specialty areas. The opportunity to obtain this enhanced entry-level competence would be an important recruiting message for applicants to our MS/Dietetic Internships.

Students enrolled as non-degree students who successfully complete the certificate may also have enhanced employment opportunities in addition to the strong competence in these practice areas. These students may be able to use the coursework required for the certificate to count towards the requirements to obtain an additional credential of "Board Certified Specialist in Pediatric Nutrition" as administered by the Commission on Dietetic Registration. This would be a unique recruiting message to increase applications for this graduate certificate program.

### **Importance of the Proposed Graduate Certificate to the School of Medicine**

The graduate Certificate in Maternal and Child Nutrition, if accepted, would be totally unique in the state of Ohio and therefore of great value to the School of Medicine. The proposed Graduate Certificate in Maternal and Child Nutrition fits perfectly with the School of Medicine's vision to demonstrate leadership in building collaborations across the community, region, and nation to catalyze better health care. There are no universities who offer a similar Graduate Certificate. This program also fits with the School of Medicine's desire to develop, expand, and market MS, certificate, and related programs to provide cutting edge and in demand educational opportunities.

### **Importance of the Proposed Graduate Certificate to Case Western Reserve University**

The proposed Graduate Certificate in Maternal and Child Nutrition fits well with the University's Strategic Plan to advance interdisciplinary initiatives in research and education that align our expertise with the world's most pressing needs and to enhance learning, course design, advising, and research.

### **Costs and Income from the Proposed Graduate certificate in Maternal and Child Nutrition**

There is no cost associated with this certificate program for enrolled in the MS/Coordinated Dietetic Internship or the MS/Public Health Nutrition Dietetic Internship or MD/MS program since the required courses currently exist. The movement of students through the coursework will be supervised by their academic advisors.

There will be some cost to advising non-degree students who wish to pursue this graduate certificate. The exact cost is not known at this time.

Nominal administrative costs are anticipated which will be covered by the traditional tuition return for our graduate Nutrition students. An administrative fee of \$100 will be utilized to cover costs for non-degree applicants in addition to graduate Studies fees required for the application process for admission.

### **Program administration, oversight, and evaluation**

The Graduate Certificate Program will be administered by the Director of the MS/Public Health Nutrition Dietetic Internship Program, currently Tamara Randall, with the assistance of the Department of Nutrition Graduate Program Coordinator, currently Pamela Woodruff.

The MS Curriculum Committee in the Department of Nutrition will oversee the certificate program and collect outcome data related to enrollment, course evaluations, student satisfaction with the program, curriculum changes, and employment outcomes for those who complete the certificate program. The committee will review this data annually and make recommendations for any needed changes in the graduate certificate program.