

Contact: Rachel Boon

**REQUEST FOR NEW PROGRAM AT THE UNIVERSITY OF IOWA:  
MASTER OF CLINICAL NUTRITION**

**Action Requested:** Consider approval of the request by the University of Iowa to establish a Master of Clinical Nutrition (MCN) in the Carver College of Medicine.

**Executive Summary:** The proposed Masters of Clinical Nutrition degree is targeted to dietetic Interns admitted to a post-baccalaureate dietetic internship program. The MCN program was designed to utilize existing courses and staffing when possible. The proposed program addresses the Board of Regents Strategic Plan objective 1.1; “The Regent institutions provide clear pathways for students to enter, move through and complete their education and career goals.” The Council of Provosts and the Board office reviewed this proposal and recommend approval.

**Background:**

**Description of proposed program.** The proposed Masters of Clinical Nutrition degree is targeted to dietetic Interns admitted to a post-baccalaureate dietetic internship program with accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) which is the Academy of Nutrition and Dietetics (AND) accrediting agency for education programs preparing students for careers as registered dietitians (RD).

**Academic objectives.**

- 1) to meet the requirements of the Academy of Nutrition and Dietetics (AND) to change the education requirement for entry-level registration eligibility for dietitians from a baccalaureate degree to a minimum of a graduate degree
- 2) to provide future registered dietitians an expansion of knowledge that is necessary to meet the need for deeper and wider clinical nutrition expertise in the health care profession.
- 3) to position registered dietitians to become leaders in the nutritional care process
- 4) to enhance the preparation for practice to lead to better critical thinking and a higher quality of care and protection of the public
- 5) to provide innovative interprofessional education and delivery of superb clinical care

**Need for proposed program.** On June 12, 2013, the Commission on Dietetic Registration (CDR), the credentialing agency for the Academy of Nutrition and Dietetics, passed the motion to “move to change the entry-level registration eligibility education requirements for dietitians, beginning in 2024, from a baccalaureate degree to a minimum of a graduate degree. Given the requirement that entry-level dietitians be required to attain a minimum of a graduate degree in a seamless program of academic coursework and supervised practice, it is necessary that a master’s program be incorporated into the supervised practice component of the University of Iowa (UI) dietetic internship program.

Graduates of the UI dietetic internship are pursuing advanced degrees post-internship. Survey results from the past 5 years at one year post graduation, show that 63% of graduates surveyed were in the process of or had attained a master’s degree.

**Link to institutional strategic plan.** University of Iowa Health Care including the Carver College of Medicine (CCOM) and University of Iowa Hospitals and Clinics (UIHC) prepare health care professionals to provide the highest quality of clinical care to the state of Iowa and worldwide.

The Master of Clinical Nutrition degree will be housed centrally in the Carver College of Medicine and managed by the Department of Food and Nutrition Services within the University of Iowa Hospitals and Clinics.

This degree offering is consistent with the Carver College of Medicine's education mission to inspire and educate world-class healthcare providers and scientists for the people of Iowa and our global community, and the University of Iowa Hospitals and Clinics educational mission to provide innovative interprofessional education and delivery of superb clinical care.

The Department of Food and Nutrition Services has a clinical focus as well and a mission of providing quality service to all customers of the University of Iowa Hospitals and Clinics in a caring and professional manner. The department is a leader in the nutrition care and education of patients, staff and students. Our clinical focus extends to the community through our efforts to support community nutrition needs.

Likewise, the mission of the dietetic internship is to prepare individuals to transition from a student to an entry-level registered dietitian nutritionist to promote the quality of life of Iowans and others by providing knowledge and information on nutrition and health. The UI dietetic internship has a clinical focus with a concentration in Medical Nutrition Therapy. The internship combined with the Master of Clinical Nutrition provides rigorous training in clinical nutrition to fully prepare students to provide nutritional care in comprehensive clinical settings with complex patients.

Relationship to existing programs. There are no comparable existing programs at the University of Iowa; however, the MCN program was designed to utilize existing courses and staffing when possible. Both the College of Public Health and College of Liberal Arts and Sciences, Department of Health and Human Physiology have courses that complement the program. The Master of Clinical Nutrition program curriculum includes 9 semester hours from the College of Public Health and 3 semester hours from the Department of Health and Human Physiology. After the program is established, there is the possibility of enhancing current programs at the university by adding an additional track of study for working professionals (current RD's who have not attained their masters) and health care students (medical, dental, pharmacy, etc.)

Within Iowa, Iowa State University (ISU) currently offers a M.S. Degree in Diet and Exercise and also in Nutritional Sciences. The MS in Diet and Exercise is an on-campus, combined Bachelor of Science and Master of Science program that offers students advanced study in the theory and application of nutrition and exercise science. The MS in Nutritional Science is an on-campus, interdepartmental graduate program integrating information from across ten disciplines to give students a well-rounded understanding of nutrition and its application; providing the structure for coordinating and enhancing interdisciplinary nutrition research and graduate education. The above programs do not have the required clinical focus of the proposed Master of Clinical Nutrition program or the practical application of varied, diverse, and challenging clinical opportunities that only a comprehensive, tertiary-level academic health center can provide.

ISU has an on-line master's program with the primary audience for the program being students completing the Dietetic Internship Graduate Certificate. The ISU and UI dietetic internship programs are differentiated from each other as Iowa State has a dietetic internship with a concentration of Technology in Health Promotion that provides general and broad training allowing graduates to work in a wide variety of work environments. The concentration of UI Dietetic internship is Medical Nutrition Therapy with a clinical focus on preparing students to work in a clinical setting with complex patients.

The ISU and UI internship programs are proposing separate Master's programs and are supportive of the differentiated programs. The focus of ISU's proposed Master of Professional Practice in Dietetics has an emphasis on Health Promotion. UI's clinical focus of the MCN will meet the need for in-depth training in clinical nutrition to support future clinical positions within the state and nation.

Dietetic Internship Masters Proposal		
University of Iowa (SUI) and Iowa State (ISU)		
Comparison of Programs		
Category	SUI	ISU
Emphasis of Supervised Practice:	Medical Nutrition Therapy	Technology in Health Promotion
Masters:	Master of Clinical Nutrition	Masters of Professional Practice in Dietetics
Emphasis of Masters:	Clinical Practice	Health Promotion
Format:	On-Campus	100% online
Accreditation:	ACEND	ACEND
Class Size:	12 (increase to 20)	160
Length of Program:	22 Months: 12 month coursework (Fall 12 hour, Spring 12 hours, Summer 6 hours); 10 month Supervised Practice	18 months: 4 semesters January class: spring, summer, fall, spring June class: summer, fall, spring, summer
Students:	Emphasis on Science Background: Average (5 year) GPA: Overall 3.7; Science 3.5	
Instructors:	College of Public Health (Snetselaar PhD,RD) Health and Human Physiology (Mellen PhD, RD) and Adjunct practitioners (Masters Required) practicing NCP on complex patient population (nutrition support, etc.) in intensive care units (NICU, MICU, SNICU, Burn, Pulmonary Rescue, Bone Marrow Transplant, peds speciality clinic, etc)	<b>Food Science and Human Nutrition faculty:</b> Anderson MS, RDN; Bassler MS, RDN, Bergquist, MPA RDN; Campbell PhD, RDN; Francis PhD, RDN; Hendrich PhD; Hollis PhD; Johnson MS, RDN; Krueger MA, RDN; Kruzich MS; Lanningham-Foster PhD; Litchfield PhD, RDN; MacDonald PhD, RDN; Martin MS, RDN; Reddy PhD; Rowling PhD; Schalinske PhD; St Germain MS, RDN; White PhD; Willette PhD; Winham PhD, RDN
Granting College:	Carver College of Medicine	College of Human Sciences
Granting Department:		Food Science and Human Nutrition
Enrollment:	Students completing the DI Graduate Certificate (plus current RD's on staff who have not attained Master's Degree)	Current: MPPD optional for dietetic interns 2024: MPPD required for all dietetic interns

Unique features. The University of Iowa Dietetic Internship is managed by the Department of Food and Nutrition Services within the University of Iowa Hospitals and Clinics (UIHC). The internship has a concentration of medical nutrition therapy and graduates students who are leaders in clinical services. The dietetic internship program provides varied, diverse and challenging clinical opportunities that only a comprehensive, tertiary-level academic health center can provide.

Resources to establish a high-quality program. Due to the existence of the current dietetic internship program, additional facilities and equipment will not be required. The Master of Clinical Nutrition program was designed to utilize existing UI courses and staffing as much as possible. Nine semester hours will be provided through existing courses in the College of Public Health by Dr. Linda Snetselaar who is renowned in the field of nutrition and education. Dr. Snetselaar is a registered dietitian and obtained her MS in Nutrition and PhD in Health Sciences Education. She is UI Professor and Chair of Preventive Nutrition Education, UI Director of Nutrition Center, UI Associate Provost of Outreach and Engagement, and Editor in Chief of the Journal of the Academy of Nutrition and Dietetics.

An additional three semester hours will be provided through existing courses in the College of Liberal Arts and Sciences, Department of Health and Human Physiology by Dr. Kathy Mellen. Dr. Mellen is a registered and licensed dietitian with a PhD in Nutrition Epidemiology as well as certified as a Specialist in Sports Dietetics. The administration of the program will be by the existing position of director of the dietetic internship. Senior level registered dietitian practitioners with Masters Degrees within the department of Food and Nutrition Services are currently serving as adjunct professors for other programs and will be utilized in teaching this program. Faculty, educators, and administrators of this program are highly qualified to establish and maintain a high quality program.

Administrative support of the master's program will be provided by the current dietetic internship program director (0.4 FTE) in Year 1 and .6 FTE in Year 2-7. Instructional support for the nine semester hours from the College of Public Health and three semester hours from Department of Health and Human Physiology will continue to be provided from the respective departments. The remaining instructional support will be provided by adjunct professors within the Department of Food and Nutrition services (total of .7 FTE).

Student demand. There is a deficit of dietetic internships across the nation. According to ADA times (Winter 2010), "96% of dietetic students plan to become RD's; however, less than half of them will find internships". The availability for internships has fallen short of demand for more than a decade. Currently nationwide, the match rate for dietetic internship programs is 50%. Given CDR's masters requirement to sit for the national registration examination to become a registered dietitian nutritionist, all students admitted to the dietetic internship program would be enrolled in the master's program as well.

Workforce need/demand. According to the U.S. Department of Labor Statistics, Occupational Outlook Handbook, the employment of registered dietitians is projected to grow 16% from 2014 to 2024, much faster than the average for all occupations. With the emphasis on malnutrition identification and clinical documentation driving additional need for medical nutrition therapy intervention, the requirement for individuals with rigorous training in clinical nutrition will continue to increase into the foreseeable future. Dietitians at UIHC doubled in size from 19 FTE's in 2014 to 38 FTE's in 2017 and further growth is expected.

Revenue.

Tuition allocated to UI General Fund:

\$148,570 (new to university)

Tuition allocated to Carver College of Medicine: \$148,569 (new to university)  
 Tuition allocated to College of Public Health: \$55,714  
 Tuition allocated to College of Liberal Arts & Sci HHP: \$18,571 (new to university)

Cost.

	<b>TOTAL COSTS</b>	<b>TOTAL NEW COSTS</b>
Year 1	\$142,779	\$81,920
Year 2	\$176,673	\$1,638
Year 3	\$180,206	\$1,672
Year 4	\$183,810	\$1,704
Year 5	\$187,487	\$1,739
Year 6	\$191,236	\$1,773
Year 7	\$195,061	\$1,809

Projected enrollment.

Graduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	12	32	34	38	40	40	40
Non-Majors	0	0	0	0	0	0	0

Anticipated sources of students. Students will be from the Dietetic Internship Certificate program.

Articulation agreement. None planned.

Off-campus delivery. No plan to offer off the UI campus.

Accreditation. The UI Dietetic Internship is accredited through ACEND. The proposed Master of Clinical Nutrition was included in the recent re-accreditation materials and was reviewed and discussed with site reviewers in September 2016. Upon approval of the master's program, the dietetic internship will submit as a major change of program to ACEND.

Opportunities for internships. The master's program will be included in the current accredited dietetic internship program.

Date of implementation. Creation of the proposed program will become effective upon approval by the Board of Regents and will be included in the University's General Catalog. The anticipated implementation date is August 2018.

IOWA STATE UNIVERSITY  
OF SCIENCE AND TECHNOLOGY



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July 12, 2017

Dear Laurie,

Thank you for meeting with us to discuss the proposed Master of Clinical Nutrition that is being developed by the University of Iowa. We understand that the intent of this degree program is to allow students to meet the impending changes being imposed by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) that will require a Master's degree for Registered Dietitian credentialing by 2024. From the documentation provided, this program will be offered on campus, with an emphasis on medical nutrition therapy, and enroll 20 students per year by the end of the 5<sup>th</sup> year. The UI curriculum will be delivered by two faculty with PhDs in nutritional science, and registered dietitian practitioners with Masters degrees.

As you know, we have submitted a request to the Board of Regents to develop an online Masters in Professional Practice in Dietetics (MPP-D) that will allow students enrolled in our Dietetic Internship (DI) graduate certificate program to complete a Master's degree in accordance with the ACEND standards. The ISU DI program enrolls over 160 students per year, and is considered to be the largest internship program in the country. Our MPP-D will be offered fully online and will be coursework-intensive.

Iowa State University offers both a Masters and PhD in Nutritional Sciences through our Interdepartmental Graduate Program in Nutritional Sciences. These degrees are research-focused and require students to complete a thesis/dissertation. We have 32 faculty, 15 with PhD degrees in nutritional science, who provide high quality education and research opportunities for both graduate and undergraduate students. The MPP-D will utilize these faculty strengths to provide coursework and student mentoring.

Given the ACEND requirements, both institutions will need to provide MS level education for our continued participation in education of Registered Dietitians. The programs we offer are distinct in size, delivery approach and specialization focus. Therefore, ISU is supportive of the proposal from UI for the Master of Clinical Nutrition.

We look forward to continuing the strong collaboration and cooperation between our two institutions that will provide high quality education for our students.

Sincerely,

