

# NUTRITIONAL SCIENCES, M.S.

Modern nutrition is a multidisciplinary, integrative science, and the Interdepartmental Graduate Program in Nutritional Sciences (IGPNS) has been developed to meet this diversity in approach and objective. It is the program's goal to provide graduate students interested in nutrition with an opportunity to obtain specialized training in a specific research area and also to obtain a general background in the science and practice of nutrition. The program is sufficiently flexible to allow students with a wide variety of undergraduate degrees to meet the background prerequisites. The program draws on the strengths of faculty in a number of the university's colleges and academic departments to enhance the instructional and research experience.

The training objectives of the IGPNS are to provide students with an understanding of basic nutritional principles as they apply to both humans and animals, to provide them with current knowledge in a specific area of emphasis, to make them aware of the integrative and multidisciplinary nature of nutrition research, and to direct them toward a successful career through the thesis and publications.

The graduate faculty have well-developed, competitively funded research programs and have been recognized for their activities by receiving national awards. They are active in national and international nutrition activities, and serve on editorial boards, as society officers, and as participants in numerous workshops and on advisory committees.

## ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website. Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet** the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s). Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

Requirements	Detail
Fall Deadline	January 1*
Spring Deadline	January 1*
Summer Deadline	The program does not admit in the summer.
GRE (Graduate Record Examinations)	Not required.
English Proficiency Test	Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements ( <a href="https://grad.wisc.edu/apply/requirements/#english-proficiency">https://grad.wisc.edu/apply/requirements/#english-proficiency</a> ).
Other Test(s) (e.g., GMAT, MCAT)	n/a

Letters of Recommendation Required 3

\* Students are only directly admitted to the MS program if they have a mentor pre-arranged. Contact the program with questions.

Candidates for graduate study in nutritional sciences should have a strong background in mathematics, chemistry, biological sciences, medical sciences, or social sciences.

Specific prerequisites for the graduate program include the following:

- 2 semesters of General Chemistry
- 2 semesters of Biological Sciences
- 1 semester of Organic Chemistry
- Biochemistry with an Organic Chemistry prerequisite
- 1 semester of Statistics or Calculus
- 1 semester of Physiology

Students who have not completed all the requirements may be admitted, but deficiencies should be made up during the first year of graduate study.

All applicants must have a minimum grade point average of at least 3.0 (on a 4.0 scale), as well as three references, and a personal statement. Acceptance requires approval by the Department of Nutritional Sciences and the Graduate School.

## FUNDING

## GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (<https://grad.wisc.edu/funding/>) is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

## PROGRAM RESOURCES

Assistantships and fellowships are available to support students. Information about financial assistance may be obtained from the department office.

## REQUIREMENTS

## MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), in addition to the program requirements listed below.

## MAJOR REQUIREMENTS

### MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

### Mode of Instruction Definitions

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students are able to complete a program with minimal disruptions to careers and other commitments.

**Evening/Weekend:** Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

## CURRICULAR REQUIREMENTS

Requirements Detail	
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	Half of degree coursework (15 credits out of 30 total credits) must be completed graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide ( <a href="http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle">http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle</a> ( <a href="http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle/">http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle/</a> )).
Overall Graduate GPA Requirement	3.00 GPA required.
Other Grade Requirements	The Graduate School requires an average grade of B or better in all coursework (300 or above, not including research credits) taken as a graduate student unless conditions for probationary status require higher grades. Grades of Incomplete are considered to be unsatisfactory if they are not removed during the next enrolled semester.
Assessments and Examinations	Students must complete either a research-based thesis or literature-based report that passes scholarly review.
Language Requirements	No language requirements.

## REQUIRED COURSES

Code	Title	Credits
<b>Core Courses</b>		
NUTR SCI/ BIOCHEM 619	Advanced Nutrition: Intermediary Metabolism of Macronutrients	3

NUTR SCI/ POP HLTH 621	Introduction to Nutritional Epidemiology	1
NUTR SCI 623	Advanced Nutrition: Minerals	1
NUTR SCI 625	Advanced Nutrition: Obesity and Diabetes	1
NUTR SCI/ AN SCI 626	Experimental Diet Design	1
NUTR SCI 627	Advanced Nutrition: Vitamins	1
NUTR SCI 600	Introductory Seminar in Nutrition	1
NUTR SCI 931	Seminar-Nutrition	1
NUTR SCI 799	Practicum in Nutritional Sciences Teaching (or equivalent experience)	1-3

### Research

NUTR SCI 991	Research Nutrition <sup>1</sup>	1-12
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### Electives

Students select 6 credits of electives from the following or from other courses in consultation with their advisor. 6

STAT/F&W ECOL/ HORT 571	Statistical Methods for Bioscience I	
STAT/F&W ECOL/ HORT 572	Statistical Methods for Bioscience II	
BMOLCHEM 504	Human Biochemistry Laboratory	
BIOCHEM 601	Protein and Enzyme Structure and Function	
BIOCHEM/ GENETICS/ MICROBIO 612	Prokaryotic Molecular Biology	
BIOCHEM/ GENETICS/ MD GENET 620	Eukaryotic Molecular Biology	
BIOCHEM 624	Mechanisms of Enzyme Action	
BIOCHEM 625	Mechanisms of Action of Vitamins and Minerals	
BIOCHEM/ PHMCOL-M/ ZOOLOGY 630	Cellular Signal Transduction Mechanisms	
BIOCHEM/ CHEM 665	Biophysical Chemistry	
BIOCHEM/ GENETICS 703	Topics in Eukaryotic Regulation	
BIOCHEM 801	Biochemical Applications of Nuclear Magnetic Resonance	
NUTR SCI 731	Research in Progress Seminar	

**Total Credits** 30

<sup>1</sup> After enrolling in other coursework, students enroll in enough credits of NUTR SCI 991 to reach a total of 12 credits per fall and spring semesters.

## POLICIES

### GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/acadpolicy/>) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the

degree program faculty. Policies set by the academic degree program can be found below.

## MAJOR-SPECIFIC POLICIES

### PRIOR COURSEWORK

#### Graduate Work from Other Institutions

With approval of the certification committee, students are allowed to count up to 14 credits of graduate coursework from other institutions. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

#### UW–Madison Undergraduate

With approval of the certification committee, students may count up to 7 credits from a UW–Madison undergraduate degree, numbered 400 and above, toward the M.S. degree, provided that the course satisfies a requirement within the student's core curriculum or IGPNS emphasis group. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

#### UW–Madison University Special

With approval of the certification committee, students are allowed to count no more than 14 credits of coursework taken as a UW–Madison Special student, provided the course satisfies a requirement within the student's core curriculum or IGPNS emphasis group and is numbered 300 or above. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

### PROBATION

The IGPNS requires a cumulative 3.0 GPA for all courses taken in the UW Graduate School. Grades in research (Nutri Sci 991) are not included in the calculation of the GPA. A student who does not maintain a 3.0 GPA can continue on probationary status for two semesters at the recommendation of the major professor. If, at that time, the student does not achieve a cumulative 3.0 GPA, they will be dropped from the program.

The Graduate School regularly reviews the record of any student who earned grades of BC, C, D, F, or Incomplete in a graduate course (300 or above), or grade of U in research credits. This review could result in academic probation with a hold on future enrollment or in being suspended from the Graduate School.

### ADVISOR / COMMITTEE

Every graduate student is required to have an advisor and a committee. Master degree committees consist of at least three members. To ensure that students are making satisfactory progress toward a degree, the Graduate School expects them to meet with their advisor and committee on a regular basis.

An advisor generally serves as the thesis advisor. In many cases, an advisor is assigned to incoming students. Students can be suspended from the Graduate School if they do not have an advisor. An advisor is a faculty member, or sometimes a committee, from the major department responsible for providing advice regarding graduate studies.

A committee often accomplishes advising for the students in the early stages of their studies.

### CREDITS PER TERM ALLOWED

12 credits: Fall and Spring semesters

2 credits: Per eight-week summer session

### TIME CONSTRAINTS

Master's degree students who have been absent for five or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

### GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (<https://doso.students.wisc.edu/bias-or-hate-reporting/>)
- Graduate Assistantship Policies and Procedures (<https://hr.wisc.edu/policies/gapp/#grievance-procedure>)
- Hostile and Intimidating Behavior Policies and Procedures (<https://hr.wisc.edu/hib/>)
  - Office of the Provost for Faculty and Staff Affairs (<https://facstaff.provost.wisc.edu/>)
- Dean of Students Office (<https://doso.students.wisc.edu/>) (for all students to seek grievance assistance and support)
- Employee Assistance (<http://www.eao.wisc.edu/>) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (<https://employee disabilities.wisc.edu/>) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (<https://grad.wisc.edu/>) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (<https://compliance.wisc.edu/>) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office of Student Conduct and Community Standards (<https://conduct.students.wisc.edu/>) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (<http://www.ombuds.wisc.edu/>) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (<https://compliance.wisc.edu/titleix/>) (for concerns about discrimination)

### College of Agricultural and Life Sciences: Grievance Policy

In the College of Agricultural and Life Sciences (CALs), any student who feels unfairly treated by a member of the CALs faculty or staff has the right to complain about the treatment and to receive a prompt hearing. Some complaints may arise from misunderstandings or communication breakdowns and be easily resolved; others may require formal action. Complaints may concern any matter of perceived unfairness.

To ensure a prompt and fair hearing of any complaint, and to protect the rights of both the person complaining and the person at whom the complaint is directed, the following procedures are used in the College of Agricultural and Life Sciences. Any student, undergraduate or graduate, may use these procedures, except employees whose complaints are covered under other campus policies.

1. The student should first talk with the person at whom the complaint is directed. Most issues can be settled at this level. Others may be resolved by established departmental procedures.

2. If the student is unsatisfied, and the complaint involves any unit outside CALS, the student should seek the advice of the dean or director of that unit to determine how to proceed.
  - a. If the complaint involves an academic department in CALS the student should proceed in accordance with item 3 below.
  - b. If the grievance involves a unit in CALS that is not an academic department, the student should proceed in accordance with item 4 below.
3. The student should contact the department's grievance advisor within 120 calendar days of the alleged unfair treatment. The departmental administrator can provide this person's name. The grievance advisor will attempt to resolve the problem informally within 10 working days of receiving the complaint, in discussions with the student and the person at whom the complaint is directed.
  - a. If informal mediation fails, the student can submit the grievance in writing to the grievance advisor within 10 working days of the date the student is informed of the failure of the mediation attempt by the grievance advisor. The grievance advisor will provide a copy to the person at whom the grievance is directed.
  - b. The grievance advisor will refer the complaint to a department committee that will obtain a written response from the person at whom the complaint is directed, providing a copy to the student. Either party may request a hearing before the committee. The grievance advisor will provide both parties a written decision within 20 working days from the date of receipt of the written complaint.
  - c. If the grievance involves the department chairperson, the grievance advisor or a member of the grievance committee, these persons may not participate in the review.
  - d. If not satisfied with departmental action, either party has 10 working days from the date of notification of the departmental committee action to file a written appeal to the CALS Equity and Diversity Committee. A subcommittee of this committee will make a preliminary judgement as to whether the case merits further investigation and review. If the subcommittee unanimously determines that the case does not merit further investigation and review, its decision is final. If one or more members of the subcommittee determine that the case does merit further investigation and review, the subcommittee will investigate and seek to resolve the dispute through mediation. If this mediation attempt fails, the subcommittee will bring the case to the full committee. The committee may seek additional information from the parties or hold a hearing. The committee will present a written recommendation to the dean who will provide a final decision within 20 working days of receipt of the committee recommendation.
4. If the alleged unfair treatment occurs in a CALS unit that is not an academic department, the student should, within 120 calendar days of the alleged incident, take his/her grievance directly to the Associate Dean of Academic Affairs. The dean will attempt to resolve the problem informally within 10 working days of receiving the complaint. If this mediation attempt does not succeed the student may file a written complaint with the dean who will refer it to the CALS Equity and Diversity Committee. The committee will seek a written response from the person at whom the complaint is directed, subsequently following other steps delineated in item 3d above.

## OTHER

n/a

## PROFESSIONAL DEVELOPMENT

### GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (<https://grad.wisc.edu/pd/>) to build skills, thrive academically, and launch your career.

## LEARNING OUTCOMES

1. Articulates, critiques, and elaborates the theories, research methods, and approaches to inquiry in nutritional sciences. Specific knowledge areas of focus include intermediary metabolism, functions and metabolism of vitamins and minerals, nutrition-related diseases such as obesity and diabetes, and fundamental principles of epidemiology and nutrition policy.
2. Identifies sources and assembles evidence pertaining to questions or challenges in nutritional sciences.
3. Selects and/or utilizes the most appropriate methodologies and practices.
4. Evaluates or synthesizes information pertaining to questions or challenges in nutritional sciences.
5. Communicates clearly in ways appropriate to the field of nutritional science. This includes the composition of primary research and review articles. Demonstrates competent communication in the form of oral and poster presentations.
6. Recognizes and applies principles of ethical and professional conduct.

## PEOPLE

### FACULTY

#### MEMBERS OF THE INTERDEPARTMENTAL GRADUATE PROGRAM IN NUTRITIONAL SCIENCES WITHIN THE DEPARTMENT

**Eide, Dave** (Department Chair), Professor of Nutritional Sciences; Ph.D., 1987. Nutritional genomics and molecular responses to changes in nutrient status

**Eisenstein, Richard**, Professor of Nutritional Sciences; Ph.D., 1985. Iron metabolism; posttranscriptional control of proteins required for the uptake, storage, and use of iron

**Fan, Jing**, Assistant Professor of Nutritional Sciences, Ph.D., 2014. Cancer metabolism; metabolic regulation in dynamic mammalian systems

**Groblewski, Guy**, Professor of Nutritional Sciences; Ph.D., 1991. Intracellular signal transduction and membrane/ protein trafficking in gastrointestinal epithelial cells

**Kuchina, Adam**, Assistant Professor of Nutritional Sciences; Ph.D., 2017; Muscle and Protein Metabolism; Understanding how disease affects muscle and protein metabolism and muscle assessment techniques

**Lai, Huichuan**, Professor of Nutritional Sciences; Ph.D., R.D., 1994. Epidemiological studies linking nutrition and disease outcomes in pediatric populations

**Ney, Denise**, Professor of Nutritional Sciences; Ph.D., 1986. Nutritional management of phenylketonuria and gastrointestinal physiology

**Ntambi, James**, Steenbock Professor of Nutritional Sciences (also Biochemistry); Ph.D., 1985. Mechanisms of fat cell differentiation; regulation of gene expression by dietary and hormonal factors

**Olson, Beth**, Associate Professor. Ph.D. – Nutrition, University of California at Davis. Breastfeeding support and improving infant feeding practices

**Parks, Brian**, Assistant Professor of Nutritional Sciences, Ph.D., 2008. Systems genetics, Gene-diet interactions, and molecular mechanisms of obesity and diabetes

**Sunde, Roger**, Professor of Nutritional Sciences; Ph.D., 1980. Selenium deficiency as a model for nutrient regulation of gene expression; molecular mechanism of selenium regulation and homeostasis; biochemical functions of selenium

**Tanumihardjo, Sherry**, Professor of Nutritional Sciences; Ph.D., 1993. Vitamin A assessment methodology; carotenoid bioavailability; and international nutrition

**Yen, Eric**, Assistant Professor of Nutritional Sciences; Ph.D. 2000. Intestine, assimilation of dietary fat, and energy balance

### **MEMBERS OF THE INTERDEPARTMENTAL GRADUATE PROGRAM IN NUTRITIONAL SCIENCES FROM OUTSIDE THE DEPARTMENT:**

The department faculty above are also included in the trainers for IGPNS.

**Anderson, Rozalyn**, Assistant Professor, Ph.D., 2000. Nutrient sensitive regulatory pathways in aging and age-associated disease

**Arriola Apelo, Sebastian I**, Assistant Professor of Dairy Science; Ph.D., 2013. Mechanistic mathematical models of nutrient metabolism and cellular signaling, with the major goal of maximizing nutrient efficiency for a sustainable dairy industry

**Attie, Alan**, Professor of Biochemistry; Ph.D., 1980. Cell biology of lipoprotein assembly; genetics of obesity and diabetes

**Binkley, Neil**, Associate Professor of Medicine, M.D., 1979. Vitamin K insufficiency and osteoporosis

**Bolling, Brad**, Associate Professor of Food Sciences, Ph.D., 2007. Food chemistry and analysis, dietary phytochemicals, functional foods and prevention of chronic disease.

**Carey, Hannah**, Professor of Veterinary Medicine; Ph.D., 1983. Gastrointestinal physiology; intestinal adaptation; mammalian hibernation and its application to biomedicine; cellular and physiological responses to stress

**Crenshaw, Thomas**, Professor of Animal Science; Ph.D., 1980. Skeletal tissue growth and assessment; statistical approaches to establishment of mineral and amino acid requirements; swine nutrition

**Davis, Dawn**, Assistant Professor; M.D., Ph.D., 2003. Dissertation: "Changes in pancreatic beta cell gene expression in response to obesity and in the setting of beta cell proliferation"

**Denu, John**, Professor of Biomolecular Chemistry; Ph.D., 1993. Investigation of the proposed "Histone Code"; understanding the mechanisms of enzymes that reversibly modify proteins and the effects of these modifications on protein function

**Engelmann, Corinne**, Associate Professor of Population Health Sciences; Ph.D. (2006). Study design and data analysis of genetic, demographic, socioeconomic, behavioral, physiological and environmental factors of complex diseases, including biomarkers and preclinical traits related to Alzheimer's disease, and also vitamin D deficiency

**Engin, Feyza**, Assistant Professor of Biomolecular Chemistry; Ph.D., 2007. Investigating the molecular mechanisms of organelle dysfunction and cellular stress responses in the pathogenesis of diabetes

**Fenandez, Luis**, Professor of Surgery, M.D., 1987. Islet cell transplantation and beta cell biology

**Funk, Luke**, Assistant Professor of Surgery. 2005 MD, Ph.D., FACS. Bariatric and metabolic surgery, esophageal and gastric disorders, abdominal wall hernias and gall bladder disorders

**Galmozzi, Andrea**, Assistant Professor; Ph.D., 2010. Trafficking of signaling metabolites.

**Goldman, Irwin**, Professor of Horticulture; Ph.D. Vegetable breeding and genetics, human health attributes of vegetable crops and breeding of vegetables for culinary quality

**Hernandez, Laura**, Assistant Professor of Dairy Science; Ph.D., 2008. Regulation of lactation and milk synthesis in relation to the autocrine, paracrine, endocrine and serotonin systems. Regulation of mammary gland calcium transport and maternal calcium homeostasis during lactation

**Kanarek, Marty**, Professor of Population Health Sciences and Environmental Studies; Ph.D., 1978. Environmental epidemiology; potential population health effects from consumption of fish contaminated with mercury, PCBs, and other chemicals

**Karasov, William**, Professor of Wildlife Ecology; Ph.D., 1981. Molecular mechanisms of intestinal enzyme adaptation, intestinal absorption, nutritional ecology of wild vertebrates

**Kimble, Michelle**, Assistant Professor of Medicine; Ph.D., 2003. Pancreatic beta-cell response to nutrient and hormonal stimulation

**Kling, Pamela**, Associate Professor of Pediatrics; M.D. 1985. Erythropoiesis, iron metabolism and roles of erythropoietin in early development

**Knoll, Laura**, Associate Professor of Medical Microbiology & Immunology; Ph.D., 1994. Using -omics technology to study host/ pathogen interactions and metabolism of the intracellular parasite *Toxoplasma gondii*

**Kudsk, Kenneth**, Professor of Surgery; M.D., 1975. Effect of route and type of nutrition on surgical outcome; mucosal immunity and response to infection

**Lamming, Dudley**, Assistant Professor of Endocrinology, Diabetes, and Metabolism; Ph.D., 2008. Protein regulation of cellular processes that affect growth, metabolism, and aging

**Leone, Vanessa**, Assistant Professor of Animal Biologics and Metabolism; Ph.D., 2009. Intersection of diet, gut microbes, circadian rhythms, and metabolism using preclinical models.

**Mares, Julie**, Professor of Ophthalmology; Ph.D., 1987. Epidemiological study of relationships between diet and age-related eye disease

**Malecki, Kristen**, Assistant Professor of Population Health Sciences, Ph.D. 2005. Epidemiological study of relationships between environment and health; system-science approaches to addressing health disparities, translational community base environmental health research

**Merrins, Matthew**, Assistant Professor of Medicine; Ph.D., 2008. Ability of pancreatic islet beta cells to trigger cell proliferation and release of insulin during periods of increased insulin demands

**Prolla, Tomas**, Professor of Genetics and Medical Genetics. Ph.D. 1994. Molecular mechanisms of ageing and its retardation through caloric restriction

**Reed, Jess**, Professor of Animal Sciences; Ph.D. 1983. Flavonoids and other phytochemicals in animal and human health and nutrition

**Reeder, Scott**, Professor. M.D., Ph.D. Abdominal adiposity, liver fat, liver iron overload and other features of diffuse liver disease, quantification of perfusion in liver tumors, hemodynamics of portal hypertension, and the use of new contrast agents in liver and biliary diseases

**Rey, Federico**, Associate Professor of Bacteriology; Ph.D. 2006. Understand how variations in the gut microbiome modulate the effects of diet and host's susceptibility to cardiometabolic disease

**Schrage, William**, Professor of Kinesiology; Ph.D., 2001 (Physiology). Human cardiovascular studies focused primarily on regulation of skeletal muscle or cerebral blood flow in response to exercise or environmental stress, and how obesity and insulin resistance alter this regulation.

**Simcox, Judith**, Assistant Professor of Biochemistry; Ph.D., 2014. Transcriptional Regulation of Nutrient Responsive Pathways in Thermogenesis

**Simon, Philipp**, Professor of Horticulture; Ph.D., 1977. Biochemical genetics and breeding of carrots, alliums, and cucumber; genetic improvement of vegetable culinary and nutritional value

**Trentham-Dietz, Amy**, Professor of Cancer Epidemiology. Ph.D. 1997. Modifiable lifestyle factors including obesity, physical activity, and environmental factors to better understand breast cancer etiology and reveal avenues for prevention

**Van Pijkeren, Jan Peter**, Assistant Professor of Food Science, Ph.D., Diet-Microbe-Phage interactions in the gut ecosystem.

**Westmark, Cara**, Assistant Professor of Neurology. Ph.D. Alzheimer's disease and fragile X syndrome focuses on the synaptic function of amyloid beta protein precursor (APP) and amyloid-beta

**White, Heather**, Assistant Professor of Dairy Science; Ph.D. 2010. Nutritional Physiology – Focus on hepatic carbon flux specifically during the coordinated responses to the transition to lactation, nutrition, and

stress in dairy cattle and during onset and progression of NAFLD and NASH in humans

## SUPPORT STAFF

**Graduate Coordinator:** Katie Butzen MS.Ed., [kbutzen@wisc.edu](mailto:kbutzen@wisc.edu)