*As experts on their funded research projects and the subsequent outcomes, grant outcomes are self-reported by the individual grant recipients.

**Abbott Nutrition Research Grant**

**Awardee: Enid Martinez, MD**  
Grant Year: 2019, 2020  
Grant Title: The role of gastrointestinal proteases and the protease-activated receptor-2 in gastric dysmotility in pediatric critical illness.

**Publications:**
2. Manuscript in progress with the Journal of Cellular and Molecular Gastroenterology and Hepatology; pending acceptance and publication.

**Abstracts:**

**Awardee: Lee-anne Chapple, PhD, MNutrDiet**  
Grant Year: 2018  
Grant Title: Effects of Standard vs Energy-Dense Formulae on Gastric Retention, Energy Delivery, and Glycemia in Critically Ill Patients.

**Publications:**
Abstracts:

Awardee: Jayshil Patel, MD
Grant Year: 2016 & 2017
Grant Title: Early Enteral Nutrition in Septic Shock

Publications:

Abstracts:

Awardee: Adam Rahman, MD, DABIM, FRCPC
Grant Year: 2015
Grant Title: Phase II, multi-center, randomized control trial of beta-hydroxy-methylbutyrate in improving physical muscle function in nutritionally at risk elderly patients.

Presentations:
2. 01/15 Speaker, NUTRIC meeting at the American Society of Parenteral and Enteral Nutrition, Clinical Nutrition Week, Phase II randomized control of Beta-hydroxy-methylbutyrate in at risk critically ill patients.
3. 05/15 Chair, Symposium, Linking nutrition to function in hospitalized and critically ill patients, Canadian Nutrition Society, Annual Meeting, Winnipeg, Manitoba 09/15 Speaker, Meaningful measures of function in ICU survivors. Body Composition Protocol Development Meeting, Waterloo, Ontario

Awardee: Elsa Bou Ghanem, PhD
Grant Years: 2013, 2014
Grant Title: Vitamin E reverses age-associated susceptibility to Streptococcus pneumoniae lung infection

Publications:
Abstracts:
2. Oral presentation; Vitamin E reverses age-associated susceptibility to *Streptococcus pneumoniae* lung infection (ASN's Nutrition, infection and immunity session at the Experimental Biology Conference, Boston, MA April 2013)
3. Poster presentation; Vitamin E reverses age-associated susceptibility to *Streptococcus pneumoniae* lung infection (Nutritional Immunology RIS trainee poster competition at the Experimental Biology Conference, Boston, MA April 2013)
4. Oral presentation; Vitamin E boosts resistance to *Streptococcus pneumoniae* infection in aged mice by inhibiting hepoxilin A3-mediated neutrophil recruitment across the lung epithelium. (Experimental Biology Conference, San Diego, CA April 2014)
5. Abstract; The Impact of Age and Vitamin E Supplementation on *Streptococcus pneumoniae* Virulence (American Society for Microbiology 114th General Meeting, Boston, MA May 2014)*

*The abstract was among the few chosen to be featured in the ASM press room*

Awardee: Kenneth Ng, DO
Grant Year: 2012
Grant Title: Role of phytosterols and FXR signaling in parenteral nutrition-associated liver disease

Publications:

Abstracts:
Awardee: Gail Cresci, PhD, RD, CNSD  
Grant Years: 2010, 2011  
Grant Title: Probiotics and the short-chain fatty acid butyrate: What is the mechanism in which these substrates prevent antibiotic associated diarrhea?  

Publications:  

Abstracts:  

Awardee: Carrie Earthman, PhD, RD  
Grant Years: 2005, 2006  
Grant Title: Clinical implications of gastric bypass surgery  

Publications:  

Abstracts:  


16. Dobratz JR, Sibley SD, Beckman TR, Lautenschlager LM, Kellogg TA, Ikramuddin S, and


**Presentations:**
1. “Vitamin D Deficiency after Bariatric Surgery: Implications and Considerations”, 9th Annual Bariatric Education Days, The University of Minnesota Medical School, Bloomington, MN. June 2013
4. “Vitamin D Status Following Gastric Bypass Surgery”, City-Wide Endocrine Conference, Department of Medicine – Endocrine Division, University of Minnesota-Twin Cities. February 2013
8. “Body Composition and Vitamin D Status Following Gastric Bypass Surgery”, Section for Clinical Nutrition, Sahlgrenska, University of Gothenburg, Gothenburg, Sweden. June 2012
13. “Diminished Vitamin D Status In Obesity: Implications and Considerations in Gastric Bypass Surgery Patients”. Institute of Toxicology and Nutrition, School of Medicine, Zhejiang University, Hangzhou, China. May 2011
14. “Vitamin D Inadequacy in Obesity: Before and After Gastric Bypass Surgery”. University of Rome – Tor Vergata, Department of Medicine and Surgery, Rome, Italy. February 2011
15. “Clinical and Nutritional Implications of Gastric Bypass Surgery”, Department of Clinical Sciences, University of Kentucky, Lexington, KY February 2010
16. “Changes in Gastrointestinal Hormones and Leptin after Roux-en Y Gastric Bypass Surgery”, (Lauren Beckman, Doctoral Student Presented twice, for the Harry M. Vars Award competition), Clinical Nutrition Week 2010, Las Vegas, NV February 2010
18. "Early Postoperative Fluid Changes Measured by Intravenous Deuterium and Bromide Dilution in Gastric Bypass Surgery Patients”, Presented at the 8th International Symposium on In-Vivo Body Composition Studies, Columbia University, July 9-12, 2008.
20. "Methodologic Considerations for Monitoring Body Composition Changes after Gastric Bypass Surgery”, City-Wide Endocrine Conference, Department of Medicine – Endocrine Division, University of Minnesota-Twin Cities. April 2007

Awardee: Bruce Grossie, PhD
Grant Years: 2003, 2004
Grant Title: Response of an inflammatory site to arginine modified parenteral nutrition

Abstracts:

Awardee: James Scolapio, MD
Grant Year: 2001
Grant Title: Gastric secretory and motor transit responses in patients with short bowel syndrome

Publications:

**Awardee: Kelly Tappenden, PhD, RD**
Grant Years: 1999, 2000  
Grant Title: Prevention of bowel ischemia with optimized nutrition

**Publications:**

**Baxter Grant for Parenteral Nutrition Research**

**Awardee: Jayshil J. Patel, MD**
Grant Year: 2019  
Grant Title: A Phase II Double Blind Randomized Controlled Trial of High Dose Vitamin B12 in Septic Shock.

**Publications:**

**Awardee: James Davison, PhD**
Grant Year: 2018  
Grant Title: Modulation of organ injury by Faecalibacterium prausnitzii in critical illness

**Abstracts:**

**Awardee: Gregory Guthrie, PhD**
Grant Year: 2016, 2017  
Grant Title: Synergy between phytosterols and inflammation to antagonize nuclear hormone receptor function in PNALD

**Publications:**
Abstracts:
1. Phytosterols Synergize with Endotoxin to Augment Inflammation in Kupffer Cells but Alone Have Limited Direct Effect on Hepatocytes, CNW2017 submission. Accepted for Vars Candidacy.

Presentations:
2. "Phytosterols have weak direct effect on hepatocyte expression but enhance Kupffer Cell activation by endotoxin", (oral and poster presentation for Emerging Leader in Nutrition Science competition) Experimental Biology Conference, Chicago, Illinois, April 2017

Awardee: Ajay Jain, MD
Grant Year: 2014-2015
Grant Title: Novel Interventions modulating the FXR-FGF19 Axis and the TGR5-GLP Axis as Therapeutic Approaches for TPN Associated Pathologies.

Publications:

Abstracts:
1. Premier Paper Session, oral presentation, Vars candidate CNW2016. Preserved gut microbial diversity accompanies upregulation of TGR5 and hepatobiiliary transporters in bile acid treated animals on Total Parenteral Nutrition (TPN). Ajay K. Jain, MD; Abhineet Sharma, student; Sumit Arora, student; Keith S. Blomenkamp, Research Asst; Ik Jun, Student; Robert Luong, Student; David Westrich, student; Asyush Mittal, student; John P. Long, PhD; Jeffrey Teckman, MD. JPEN J Parenter Enteral Nutr, Jan 2016; vol. 40, 1: pp. 115-144.


Awardee: Matthew Lungren, MD
Grant Year: 2012
Grant Title: Bacteriophage antimicrobial-lock technique for Staphylococcus aureus venous parenteral nutrition catheter-related infection: an in vivo model evaluation

Publications:

Abstracts:

Fresenius Kabi Parenteral Nutrition Research Grant

Awardee: Darla Shores, MD
Grant Year: 2016
Grant Title: Biomarkers of intestinal injury in infants

Abstracts:
1. Serum detection of ingested proteins in mice with necrotizing enterocolitis. CNW2017 submission.
2. Post-operative Feeding Guidelines for Infants at risk of intestinal Failure. CNW 2017 submission.

Awardee: Hongyu Xue, MD
Grant Years: 2013, 2014
Grant Title: Modulating cardiotoxicity and anti-cancer efficacy related to anthracycline
Chemotherapy by glutamine and n-3 PUFAs

Publications:

Abstracts:

Nestlé Nutrition Institute Maurice Shils Grant

Awardee: Fatemeh Ramezani, PhD
Grant Year: 2020
Grant Title: Can tributyrin supplementation protect intestinal health during recurrent Clostridium difficile colonization and antibiotic treatment?

Abstracts:

Awardee: Hannah Piper, MD
Grant Year: 2018
Grant Title: Targeted Probiotic Therapy to Improve the Gut Microbiota and Growth in Children with Short Bowel Syndrome.

Publications:

Abstracts:
Awardee: Adam Kuchnia, MS, RD
Grant Year: 2016
Grant Title: Determination of protein requirements using a stable isotope multi-step feeding protocol and evaluation of an innovative ultrasound device and other bedside technologies for lean tissue assessment in individuals with head and neck cancer.

Abstracts:

Awardee: Kate Walton, PhD
Grant Year: 2015
Grant Title: Towards therapeutic strategies to improve patient outcome with total parenteral nutrition: clues from cell signaling networks

Publications:

Publications in Preparation:

Abstracts:

Awardee: Crystal Levesque, PhD
Grant Years: 2013, 2014
Grant Title: A pilot study of systemic glucagon-like peptide combined with oral epidermal growth factor and characterization of gut microbiome in short bowel piglets with and without ileum

Publications:

Abstracts:

Awardee: Joseph Boullata, PharmD, BCNSP
Grant Years: 2011, 2012
Grant Title: Drug compatibility and stability in enteral nutrition

Publications:

Abstracts:

Awardee: Diana Mager, PhD, RD
Grant Years: 2009, 2010
Grant Title: Altered postprandial lipid metabolism as a mediator to hepatic steatosis in overweight and obese children with non-alcoholic steatosis (NASH)

Publications:
2. Mager DR, Rivera I, Gilmour SM, Yap J. The effect of a low fructose and low glycemic index/load (FRAGILE) dietary intervention on indices of liver function, cardio-metabolic risk factors and body composition in children and adolescents with nonalcoholic fatty
DOI:1177/0148607113501201


**Abstracts:**

1. Mager DR, Mazurak, V, Proctor, S, Gilmour S, Yap J. Dietary intake may influence essential fatty acid and long chain polyunsaturated fatty acid expression in children with nonalcoholic fatty liver disease (NAFLD). AASLD Meeting, Washington DC. *Hepatology* 2013 58:A817A.


9. Rodriguez-Dimitrescu C, Yap J, Mazurak V, Jetha M, Ball G, Mager DR. Does prolonged post prandial hyperinsulinemia contribute to altered lipid metabolism in overweight and obese children with nonalcoholic fatty liver disease (NAFLD)? *Hepatology* 2010:52:


**Presentations:**


3. Invited Speaker: Childhood NAFLD in Canada. School of Public Health, Xinjiang Medical University, Xinjiang Autonomous Region, People’s Republic of China, June 2010.


**Further Funding:**

1. Alberta Diabetes Institute
2. Canadian Liver Foundation
3. Canadian Institutes of Health Research

**Nestlé Health Science Enteral Nutrition Research Grant**

**Awardee: Zudin Puthucheary PhD, MBBS, BMedSci., MRCP, EDICM, D. UHM, PGCME, FHEA, FFICM**
Grant Years: 2018
Grant Title: Assessment of differential amino acid uptake and metabolomics profiles between intermittent and continuous feeding protocols in the critically ill: an IVC trial (NCT02358512)

**Publications:**


2. Manuscripts related to this project are in progress with the Journal of Respiratory and Critical Care Medicine.
Maurice Shils Grant
Jointly sponsored by Baxter Healthcare and Nestlé Nutrition Prior to 2010

Awardee: Barbara Stoll, PhD
Grant Years: 2007, 2008
Grant Title: Parenteral nutrition and hepatic insulin resistance in neonatal pigs

Publications:

Abstracts:

Awardee: Catherine Crill, PharmD
Grant Year: 2005
Grant Title: Effect of parenteral nutrition light exposure on urinary markers of oxidative stress in preterm infants

Abstracts:

Awardee: Steven Steiner, MD
Grant Year: 2005
Grant Title: Metabolic response to Infliximad in pediatric ulcerative colitis

Publications:
Abstracts:

Awardee: Hua Yang, MD, PhD
Grant Year: 2004
Grant Title: IL-7 modulation of intraepithelial lymphocytes with TPN

Publications:

Awardee: Paul Wischmeyer, MD
Grant Year: 2002
Grant Title: Effect of glutamine administration to the intact rat on myocardial ischemia and reperfusion injury

Publications:

Awardee: N. Joseph Espat, MD
Grant Years: 2000, 2001
Grant Title: Proposal to investigate anti-inflammatory therapies (Omega-3 fatty acids and cyclo-oxygenase II inhibitors in the treatment of cancer-associated cachexia

Publications:


**Awardee: Deborah Swartz-Basile, PhD**

Grant Years: 1998, 1999

Grant Title: Retinoid modulation of intestinal epithelial adaptation

**Publications:**


**Awardee: Malcolm Robinson, MD**

Grant Years: 1996, 1997

Grant Title: Sepsis, malnutrition and liver dysfunction: The role of glutathione

**Publications:**


**Awardee: W. Scott Helton, MD**

Grant Years: 1994, 1995

Grant Title: Nutritional modulation of macrophage function

**Publications:**


**Abstracts:**


Presentations:
5. Frontiers in Antioxidant Research, Co-Chair, A.S.P.E.N. Research Workshop, January 18, 1998, Orlando Florida

Further Funding:
1. CNRU, University of Washington
2. NIH R-13, R-29, R03
3. University of Illinois
4. Ross Labs
5. American Cancer Society

Norman Yoshimura Grant by B. Braun and the Aesculap Academy

Awardee: Lori Bechard, PhD, MEd, RD
Grant Years: 2018, 2019
Grant Title: The consequences of malnutrition in mechanically ventilated critically ill
children- a multicenter prospective cohort study of nutritional practices and clinical outcomes in pediatric intensive care units around the world.

Publications:

Abstracts:

Awardee: Kenneth Christopher, MD
Grant Year: 2015
Grant Title: Nutritional metabolome in critical illness

Publications:

Abstracts:
1. Premier Paper Session, CNW16, Austin Texas. Oral presentation: Plasma Metabolome Alteration in Critical Illness According to Nutrition Status: a Cohort Study. Kris Mogensen, MS, RD, LDN, CNSC ; Jessica Lasky-Su, PhD ; Angela Rogers, MD; Rebecca Baron, MD; Laura Fredenburg, MD; James Rawn, MD; Malcolm Robinson, MD; Anthony Massaro, MD; Augustine Choi, MD; Kenneth Christopher, MD. JPEN J Parenter Enteral Nutr, January 2014; vol. 38, 1: pp. 124-149.

Awardee: Christy Lawson, MD
Grant Years: 2012, 2013
Grant Title: Cross-talk between insulin and angiotensin in burn trauma

Abstracts:

Awardee: Gerdien Ligthart-Melis, PhD
Grant Years: 2009, 2010
Grant Title: The contribution of glutamine to citrulline and arginine synthesis, when alanyl-glutamine is supplied in an enteral dose of 0.5g/kg, in critically ill patients.

Abstracts:
2. Vermeulen MAR, van Leeuwen PAM, Ligthart-Melis, GC, Bet P, Beishuizen A, Dejong CH,

**Awardee: Renee Stapleton, MD**
Grant Year: 2006
Grant Title: Anti-inflammatory effects of enteral n-3 fatty acids in patients with acute lung injury

**Publications:**


**Abstracts:**


**Presentations:**


3. Visiting Professor, University of Pennsylvania Perelman School of Medicine, Division of Pulmonary, Allergy, and Critical Care Medicine, “Omega-3 Fatty Acids for the Treatment of Acute Lung Injury.” February 2011.


**Further Funding:**

1. NIH
2. University of Vermont/Fletcher Allen Health Care
3. American Heart Association
4. Canadian Institutes of Health
5. Center of Biomedical Research Excellence

**Awardee: Julian Spallholz, PhD**

Grant Year: 2005

Grant Title: Selenium dietary supplements in the mitigation of arsenicosis and associated skin cancers
Abstracts:

Awardee: David Foster, PharmD
Grant Year: 2004
Grant Title: The effects of green tea polyphenols on intestinal hyperpermeability

Publications:

Further Funding:
American College of Clinical Pharmacy

Awardee: Roland Dickerson, PharmD
Grant Year: 2002
Grant Title: Drug compatibility and stability in enteral nutrition

Publications:

Awardee: Alexander Dzakovic, MD
Grant Year: 2001
Grant Title: Protective effect of increased hepatic glutathione during TPN

Publications:

Abstracts:
response to endotoxin exposure” Society of University Surgeons, 63rd Annual Meeting, February 13-16, 2002 Honolulu, HI

**Foundation Grants**

**ASPEN Rhoads Research Foundation Grant**

**Awardee: Hannah Piper, MD**  
Grant Year: 2017  
Grant Title: Targeted Probiotic Therapy to Improve the Gut Microbiota and Growth in Children with Short Bowel Syndrome.

**Publications:**  

**Abstracts:**  

**C. Richard Fleming Grant**

**Awardee: Hassan Dashti,**  
Grant Year: 2019  
Grant Title: Assessing circadian misalignment from overnight parenteral nutrition.

**Abstracts:**  
2. Presentation at NUTRITION 2020 conference's “gene-diet interaction forum” describing how electronic health records could be leveraged to study complex diseases in the hospitalized patients (meeting may be cancelled due to COVID-19).

**Awardee: Lisa Martin, PhD, RD, MSc**  
Grant Year: 2017  
Grant Title: Diagnostic criteria for malnutrition in overweight and obese cancer patients

**Publications:**

Abstracts:

Awardee: Beth Lyman (Ashley Hayden)
Grant Year: 2015
Grant Title: Enteral Feeding Set Handling Techniques: A comparison of bacterial growth, time, labor, and material costs

Publications:

Abstracts:
CNW16 abstract presented:

Awardee: Michele Nicolo, MS, RD, CDE, CNSC
Grant Year: 2014
Grant Title: Clinical outcomes in critically ill patients associated with protein delivery

Publications:

Abstracts:

Allison Blackmer, PharmD, BCPS
Grant Year: 2012
Grant Title: Neurodevelopmental outcomes of pediatric patients treated with modified intravenous lipid emulsion for the treatment and/or prevention of parenteral nutrition associated liver disease

Publications:
Abstracts:

Awarded: Yongjia Feng, PhD
Grant Year: 2011
Grant Title: Modulation of glucagon like peptide-2 and epidermal growth factor signaling in intestinal epithelial cell proliferation and apoptosis in a TPN mouse model

Publications:

Abstracts:

Awarded: Matthew C. Koopman, MD
Grant Year: 2009
Grant Title: What is the optimal time to administer GLP-2 in SBS?

Publications:

Abstracts:
Nutrition Week, Vancouver, BC, Canada, 2011

**Awardee: Alisha Rovner, PhD**
Grant Year: 2004
Grant Title: Bone health in children with sickle cell disease.

*Publications:*

**Awardee: Robert Chang, MD**
Grant Year: 2003
Grant Title: Evaluation of serial enteroplasty: A novel bowel lengthening procedure

*Publications:*

**Awardee: Jennifer Muir Bowers, PhD, RD**
Grant Year: 2002
Grant Title: Cytokine response in malnutrition and severe fatigue related to coccidioidomycosis

*Presentations:*

**Awardee: Rose Ann DiMaria-Ghalili, PhD, RN, CNSC, FASPEN**
Grant Year: 2000
Grant Title: Comparison of weight changes in older and younger persons undergoing CABG surgery

*Publications:*

**Abstracts:**

**Presentations:**
4. DiMaria-Ghalili RA. *Nutrition in Older Adults*. Dartmouth-Hitchcock Medical Center in Lebanon, NH, 2009.


**Media Mention:**

**Further Funding:**
American Nurses Foundation

**Awardee: Philip Pearson, MD**
Grant Year: 2000
Grant Title: The role of leptin in intestinal adaptation after massive small bowel resection

**Publications:**


**Daniel H. Teitelbaum Grant**

**Awardee: Liam McKeever, PhD, MS, RDN**
Grant Year: 2017
Grant Title: Feeding the Critically Ill During Phases of Altered Redox Status (FEDOX): a Prospective Randomized Trial

**Publications:**

Abstracts:

C. Richard Fleming and Daniel H. Teitelbaum Grant

Awardee: Debora Melo van Lent, PhD
Grant Year: 2020
Grant Title: Relationships between the Dietary Inflammatory Index and MRI markers of brain aging and markers of cerebral small vessel disease, and PET imaging biomarkers of Alzheimer’s disease.

Abstracts:

Small Research Project Grant

Awardee: Nicole Gavin, PhD
Grant Year 2015
Grant Title: The safety of parenteral nutrition regarding microbial growth and vascular catheter-related infection (The FACT Study)

Publications:

Abstracts:
CNW2017, 3 submissions:
CONTROL ID: 2600946
TITLE: Does a dedicated lumen for parenteral nutrition administration reduce the risk of catheter-related blood stream infections? A systematic literature review.
CONTROL ID: 2595964
TITLE: A dynamic model for the investigation of touch contamination in intravascular device-related infections
TITLE: Does parenteral nutrition increase the risk of vascular catheter-related blood stream infection? A systematic literature review.

Awardee: Allison Buti – Shapiro, PhD, MPH
Grant Year: 2014
Grant Title: Investigating the Mediating Roles of Sirtuin 1 and PPAR-γ in the Relationship between Maternal Dietary Niacin Intake and Infant Adiposity

Publications:

Accepted Feb 2016

Submitted

Abstracts:

Poster Presentations:

Oral Presentations:

Awardee: Rebecca Persinger-Soultanakis, MS, RD
Grant Year: 2001
Grant Title: Evaluation of catabolic and anabolic cytokines in skeletal muscle tissue from cachectic individuals with chronic heart failure (CHF)

Publications:

Awardee: Bobbi Langkamp-Henken, PhD
Grant Year: 1998
Grant Title: Effect of dietary supplementation of arginine on immune function in nursing home residents with pressure ulcers

**Publications:**

**Abstracts:**

**Further Funding:**
NIH

**Awardee: Charlene Compher, PhD, RD**
Grant Year: 1997
Grant Title: Effects of intracolonic butyrate infusion on aberrant crypt foci in male fischer 344 rat exposed to azoxymethane.

**Publications:**

**Presentations:**

**Awardee: Catherine Klein, PhD, RD**
Grant Year: 1997
Grant Title: Magnesium and zinc balance in critically ill patients treated with continuous renal replacement therapy.

Publications:

Abstracts:
Presentations:
7. “Overfeeding Macronutrients to Critically I Adults: Metabolic Complications” teleconference in the “Nutrition Updates” series for the University of Texas Health Science Center at San Antonio, San Antonio, Texas. Wednesday, June 16, 1999.

Media mention:

Further Funding:
Dietitians in Nutrition Support-American Dietetic Association

Awardee: Kelly Tappenden, PhD, RD
Grant Year: 1996
Grant Title: The effect of SCFA supplemented TPN on multi-organ response to intestinal resection

Publications:
Awardee: Stephanie Brooks, MS, RD
Grant Year: 1995
Grant Title: Comparison of muscle function testing in HIV infected subjects and non-infected controls as an index of nutritional status.

Publications:

Awardee: Deborah Andris, RN, MS, ARNP
Grant Year: 1994
Grant Title: The impact of antibiotic lock on microbial surface colonization of silicone catheters

Publications:

Awardee: Carol Braunschweig, PhD, RD
Grant Year: 1994
Grant Title: The metabolic role of zinc in acute phase response

Publications:

Further Funding:
1. NIH
2. American Cancer Society
3. University of Illinois at Chicago

Awardee: Lisa Freeman, PhD, DVM
Grant Year: 1994
Grant Title: The role of cytokines in canine cardiac cachexia

Publications:

**Abstracts:**