Margaret A. McNurlan, PhD

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ACADEMIC TRAINING:

1970 BS with distinction in Zoology, University of Wisconsin, Madison

1980 PhD London University, England. Thesis: Protein Synthesis in the Liver and

Small Intestine of the Rat.

CAREER:

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2005-	Professor of Surgery, State University of New York at Stony Brook
2003-	Clinical Associate Professor of Health Sciences, School of Health
	Technology and Management, Stony Brook, NY
2003	Director GCRC Core Lab now called the Biomedical Assay Core
1999-	Associate Professor of Surgery
	State University of New York at Stony Brook, Stony Brook, NY
1993-1999	Assistant Professor of Surgery
	State University of New York at Stony Brook, Stony Brook, NY
1991-1993	Principal Scientific Officer (Equivalent to Associate Professor)
	Clinical Metabolism Group, Rowett Research Institute, Bucksburn,
	Aberdeen, Scotland and Honorary Lecturer, Department of Medicine,
	University of Aberdeen, Aberdeen, Scotland
1984-1991	Senior Scientific Officer (Equivalent to Assistant Professor),
	Rowett Research Institute
1981-1983	Postdoctoral Research Fellow, Department of Biochemistry, St. George's
	Hospital Medical School, London, England
1975-1980	Research Officer, Department of Human Nutrition, London School of
	Hygiene and Tropical Medicine, London
1970-1974	Research Specialist, Department of Nutritional Sciences, University of
	Wisconsin, Madison, Wisconsin

SOCIETY MEMBERSHIP:

Biochemical Society (UK)

Nutrition Society (UK)

European Society of Parenteral and Enteral Nutrition American Society of Parenteral and Enteral Nutrition

American Physiological Society

American Federation for Medical Research

American Institute of Nutrition

American Society for Clinical Nutrition

EDITORIAL RESPONSIBILITIES:

1986 Editorial Adviser - Biochemical Journal

1990 Editorial Board - Biochemical Journal

1997 Editorial Board- American Journal of Physiology

Recent ad hoc reviewer for European Journal of Biochemistry, Clinical Science, JPEN, Journal of Surgical Research, Human and Experimental Toxicology, GH & IGF Research.

GRANT REVIEW COMMITTEES:

Department of Defense, Women's Health Extramural Research Program

NIH, Review of the General Clinical Research Center, Tufts Medical School

NIH, Review of Program Project on Anabolic Therapy in AIDS, Charles Drew and Harbor UCLA, Los Angeles, CA

NIH, Review of the Program Project on Simian AIDS at New England Regional Primate Research Center, Boston, MA

NIH, Special Review: Treatment of AIDS Wasting Syndrome

NIH, Review of Center Grant on Rehabilitation of Burned Children, University of Texas Medical Branch and Shriners Hospital for Children, Galveston, TX

NIH, Special Emphasis Panel, Treatment of HAART-Associated Metabolic Changes in Patients with HIV Infection

NIH, Review of the General Clinical Research Center, University of Texas Medical Branch Galveston. TX

NIH, Institute of Aging PO1 grant: Functional and Metabolic Effects of Bed Rest, site visit Donald W. Reynolds Center on Aging, Little Rock, Arkansas (2003)

Research in Aging, London, UK grant review (2004)

NIH, Special Emphasis Panel, Aids, Clinical and Epidemiologic Studies (2004)

Office of Scientific Affairs, Stony Brook, Targeted Research Opportunities

NIH, Special Emphasis Panel, Aids Clinical and Epidemiologic Studies, April, 2004

NIH, Integrative Physiology of Obesity and Diabetes Study Section, February, 2005

NIH, Integrative Physiology of Obesity and Diabetes Study Section, June, 2005

NIH/NCRR Review of Boston University GCRC, July, 2005

NIH, Clinical and Integrative Diabetes and Obesity, February, 2006

NIH, Diabetes, Endocrinology, and Metabolic Diseases B subcommittee review, February, 2007.

NIH, Exercise, Insulin Action, and Muscle Metabolism review, January, 2008

NIH, CAM Approaches in the Management of HIV Disease and Its Complications, June, 2008.

NIH, Clinical and Integrative Diabetes and Obesity February 2009.

Health Research Board of Ireland, grant review, February 2009

NY State: ECRIP program July, 2009.

NIH Clinical and Integrative Diabetes and Obesity, February, 2010.

NY State: ECRIP program July, 2011.

NIH, Novel Therapies for NIDDM, October, 2011.

NY State, Empire Clinical Research Training Program, 2013

RECENT GRANT SUBMISSIONS

Doxycycline treatment for obesity-related insulin resistance (with M. Gelato, November,

Mesenchymal stem cell treatment in cancer (with G. Caso, June, 2012)

PREVIOUS RESEARCH FUNDING:

- PI, National Institutes of Health RO1 grant: Cellular Mechanisms for Sarcopenia in the Elderly. July 2001- July 2005. Total direct costs \$1,881,250, salary support 50%.
- Co-I, National Institutes of Health R01 grant: PPAR-mediated Gene Expression in HIV Patients. Total direct costs \$1,536,000, salary support 20%.
- Co-I, National Institutes of Health R01 grant: A Novel Therapy for Glucose Intolerance in HIV. Total direct costs \$1,250,000, salary support 15%.
- Co-I, National Institutes of Health R21 grant. Chromium Treatment of Obesity-related Insulin Resistance. Total direct costs \$400,000. Salary Support 10%
- Co-PI, National Institute of Health RO1 grant: Cellular Mechanisms of Metabolic Dysfunction in HIV. July 1999- June 2003. Total direct costs \$1,204,033, salary support 20%.
- PI, funding from Nestec Ltd., Switzerland: Urinary Production of Nitric Oxide from L-Arginine. Total direct costs \$50,000 (unrestricted period).
- GCRC Program grant (MO1RR10710) Total direct costs \$3,252,796, salary support 30%. CTSA Planning grant
- PI, National Institute of Health RO1 grant: Control of Muscle Protein Metabolism by Insulin and Amino Acids. February 1996- February 1999, including no cost extension. Total direct costs \$239,804, salary support 50%.
- Co-PI, National Institute of Health RFA grant: Muscle Protein Synthesis and GH/ IGF Axis in AIDS. September 1994- September 1999. Total direct costs \$639,283 (4 yrs), salary support 20%.
- Co-PI, National Institute of Health R01 grant: Metabolic Implications of Dietary Arginine Supplements. September 1997- September 1999 (no cost extension to September 2000). Total direct costs \$80,000, 5% effort.
- PI, funding from Nestec Ltd., Switzerland: Interactions of Nutrition and Pathological Conditions on Body Protein Metabolism with Particular Emphasis on L-Glutamine and L-Arginine. 1991-1992. Total direct costs, , □50,000, salary support, 100%.
- PI, funding from Nestec Ltd., Switzerland: Investigations into Clinical Conditions Associated with the Loss of Body Protein: The Impact of Nutrition. 1990-1991. Total direct costs, , 50,000, salary support, 100%.
- PI, funding from Nestec Ltd., Switzerland: Comparison of [¹⁵N]Glycine and [¹⁵N]Soy Protein for the Measurement of Whole-body Protein Metabolism in Man. 1989-1990. Total direct costs, , □50,000, salary support, 100%.
- Co-PI, funding from Nutricia, The Netherlands: Study of Protein Metabolism and the Utilisation of Substrates for Energy in Controlled Zinc Deficiency in Man. 1990-1993. Total direct costs, \Box , 65,000.
- Co-PI, funding from Milupa AG, Germany: Clinical Investigation of Nutritional Efficacy of Infant Formulae. 1990-1993. Total direct costs, □, 115,000

RESEARCH ACTIVITIES (in addition to grant funded projects above):

1. Benefit of Coenzyme Q-10 in HMG Co A Reductase Inhibitor, "Statin", Treated Patients; A Randomized, Placebo Controlled, Double Blind, Prospective Study

(with W Lawson)

- 2. An Open Randomized Metabolic Clinical Trial to Evaluate the Effects of Propranolol alone and an NSAID (Etodolac) alone compared to Propranolol in Combination with Etodolac on Metabolic Flux and Inflammatory Markers in Subjects Diagnosed with Metastatic Cancer (with S-S Yeh)
- 3. The use of human mesenchymal stem cells in the treatment of colorectal cancer (with P. Brink and R. Bergamaschi

TEACHING AND UNIVERSITY RESPONSIBILITIES:

Teaching: 1) Course Co-ordinator for Nutrition for the medical and dental students. 2) Training in clinical research for surgical residents, medical fellows, medical students, post-doctoral fellows, and undergraduate students. This training is carried out in the context of on-going research projects and didactic teaching of grant writing in the K30 training program.

Research mentoring (current):

Benefit Of Coenzyme Q-10 in HMG Co A Reductase Inhibitor, "Statin", Treated Patients; A Randomized, Placebo Controlled, Double Blind, Prospective Study, with William Lawson MD and Giuseppe Caso

Research mentoring (previous):

The Effects of Chromium Supplementation on Insulin Sensitivity and Reproductive Function in Patients with Polycystic Ovarian Syndrome with Michael Lydic, MD

Effects of patterns of weight loss and program variables on changes in resting metabolic rate and maintenance of weight loss, with Josephine Connolly, MS, RD (Department of Family Medicine)

The Role of Visceral Adipose Tissue in Inflammation with Michael Pearl, MD (Department of Obstetrics and Gynocology) and Dennis Mynarcik (Department of Endocrinology)

Increased Dietary Supply of Glutamine to Improve Chemotherapeutic Efficacy of L-Asparaginase with Tracy Anthony, PhD (Indiana University School of Medicine, Evansville, IN)

Effect of Dietary Protein Source on Modulating Muscle Protein Synthesis and Translation Initiation following Exercise with Tracy Anthony, PhD (Indiana University School of Medicine, Evansville, IN)

The role of inflammation in gynecological cancers, with A. Zemlyak (Surgical Resident)

Differences in gene expression in different fat depots, with J. Zakhaleva (Surgical Resident)

Effect of oral leucine supplementation on protein synthesis in children with type 1

diabetes, with V. Desikan (Pediatric Endocrinology Fellow).

Effect of insulin on protein metabolism in rapidly growing pubertal children with type 1 diabetes, with I. Braziuniene (Pediatric Endocrine Fellow).

Biomarkers of insulin resistance in HIV-infected subjects, with S. Qurashi (Endocrinology Fellow)

Measurement of metabolic dysfunction in HIV-infected subjects, with M. Melendez (Surgical Resident)

Treatment of statin-related myopathic pain with coexzyme Q10, with P. Kelly (Cardiology Fellow) and G. Caso (Post-doc). This project resulted in R21 funding for Dr. Caso.

Effect of insulin with concurrent amino acid infusion on protein metabolism in rapidly growing pubertal children with type 1 diabetes, with M. Godil (Pediatric Endocrinology Fellow

Measuring protein balance and predicting energy needs in critically ill patients, with Elliot Chen (Surgical Resident)

Impact of coronary artery surgery with or without bypass on protein metabolism, with James Vosswinkel, MD (Surgical Resident)

The effect of normal eating on rates of protein synthesis, with James Vosswinkel, MD (Surgical Resident)

Intestinal priming with intact protein versus protein hydrolysate-effect on protein turnover in induction of enteral nutrition in premature neonates, with Sadish Chandra, MD (Neonatology Fellow

See also publications (total of 64) from P.E.Ballmer, T.Bark, H. Barle, A. Bruce, G Caso, P.Essén, L.Gamrin, Z. Glick, S.D. Heys, R. Imoberdorf, A. Janusziewicz, Y.Hashiguchi, K.Hunter, D.Macallan, K.C. McHardy, S. Melville, A. Pierro, K.G.M.Park, S. Skullman, H. Suh, and I.Tjäder

PhD supervision

1997 Louise Thomas: Protein and energy metabolism in human zinc deficiency1996 Kirsty Hunter: Studies of the regulation of plasma protein synthesis in man using stable isotopes

Medical School service

2012	Biostatistical Consulting Core Advisory Committee
2010	Curriculum review committee B
2008	Appointments, Promotion and Tenure Committee
2004	Search committee Associate Dean School of Nursing

2003	Chair, subcommittee for first year course schedule for medical school
2002-2003	Member of the Strategic Planning Committee for Research, School of
	Medicine
2000-	Member Hospital Nutrition Committee
1999-	Committee for Research in Human Subjects (CORIHS)
1998-	Co-chair (1/00), Advisory Committee for the General Clinical Research
	Center.
1998- 2002	Advisory committee for Division of Laboratory Animal Resources (DLAR)
1997-	Course co-ordinator for the medical school course in nutrition
1997-	Faculty Senate representative from Surgery
1994-1999	member of the University Hospital Research Committee
1984-1993	Honorary appointment in Dept. of Medicine, University of Aberdeen.
	Member of Curriculum Committee, Masters degree course in Human
	Nutrition, Dept. of Medicine, University of Aberdeen.

Professional service

- 2000 Member International Scientific Review Committee, AIDS Conference, Durban, S.A.
- 2001 Member International Scientific review Committee, AIDS Conference, Nice, France
- 2002 Member International Scientific Review Committee, AIDS Conference, Barcelona, Spain
- 2003 Member International Scientific Review Committee, AIDS Conference
- 2004 Member International Scientific Review Committee, European Society for Enteral and Parenteral Nutrition
- 2004-2006 Steering Committee Energy and Macronutrient Research Interest Section, American Society for Nutritional Sciences
- 2006 European Society of Enteral and Parenteral Nutrition, Scientific Review for Congress in Istanbul, Turkey
- 2008 European Society of Enteral and Parenteral Nutrition, Scientific Review for Congress in Florence, Italy
- 2010-present. Board of Governors for Long Island Research Corporation at Northport Veterans Administration
- 2011 European Society of Enteral and Parenteral Nutrition, Scientific Review for Congress in Gothenburg, Sweden
- 2012 European Society of Enteral and Parenteral Nutrition, Scientific Review for Congress in Barcelona, Spain