

CURRENT POSITION

Assistant Professor,
Center for Clinical Research and Health Promotion
Medical Sciences Campus
University of Puerto Rico

CONTACT INFORMATION

Email: maria.trak@upr.edu
Phone: (787) 758-2525 x 1186
Cellphone: (469) 835-7320
Address: PO Box 365067, San Juan, PR 00936-5067

EDUCATION AND TRAINING

PhD (Cum Laude) **2001-2004***
Ludwig-Maximilians-University, Faculty of Medicine, Division of Metabolic Diseases and Nutrition. Munich, Germany.
Dissertation Topic: "Food, Fatty Acids and Antioxidants Intake and Atopic Disease in Adults".
Mentor: Berthold Koletzko * Defended in July 2011

Masters of Public Health **1999-2001**
Ludwig-Maximilians-University, Faculty of Medicine, Institute of Social Pediatrics and Adolescent Medicine, Division of Epidemiology. Munich, Germany.
Thesis: "Relationship between consumption of carbohydrates / fat and obesity in children".
Mentor: Rüdiger von Kries

Clinical Nutrition and Nutrition Support in Critical Patient Certificates **1994-1996**
Caracas Medical Center. Postgraduate Academic Fellowship Program. Caracas, Venezuela.
Academic Director: Jacqueline Álvarez

Bachelor of Science in Dietetics and Nutrition **1989-1994**
Universidad Central de Venezuela. Caracas, Venezuela.
Final Project: Food consumption, nutritional evaluation and socioeconomic parameters in families from the Metropolitan Area of Caracas.

PROFESSIONAL EXPERIENCE

Assistant Professor **2012-**
Center for Clinical Research and Health Promotion, Medical Sciences Campus, UPR.

Coordinator **2011-**

Pregnancy and Early Lifestyle Improvement Study (PEARLS* GRANT NUMBER: 1U01HD072z834).
Center for Clinic Research and Health Promotion, Medical Sciences Campus, UPR.
* The PEARLS study is nested within the LIFE-Moms Consortium, which includes seven clinical research centers in the mainland US and a coordinating center in DC.
<http://pearlspr.weebly.com>; <https://clinicaltrials.gov/ct2/show/NCT01771133>

Coordinator (Nutrition Component) **2011-2014**

San Juan Overweight Adult Longitudinal Study (SOALS). Center for Clinical Research and Health Promotion, Medical Sciences Campus, UPR.
<http://soals.rcm.upr.edu/>

Nutrition Consultant 2008-2015

Private Practice: Individual client counseling. San Juan, Puerto Rico.

Clinical Dietitian 2008-2011

Medical Nutrition Provider. Diagnosis and Treatment Center (Villa Los Santos).
Arecibo, Puerto Rico.

Research assistant 2003-2004

German Society for Clinical Nutrition (DGEM). Munich, Germany.

Clinical Dietitian 2001-2004

Division of Metabolic Disorders and Nutrition. Dr. von Hauner Children's Hospital.
Ludwig-Maximilians-University. Munich, Germany.

Research assistant 2000-2001

Division of Pediatric Epidemiology. Ludwig-Maximilians-University. Munich, Germany.

Consultant 1998-2001

Deutsches Herzzentrum (German Heart Centre). Munich, Germany.

Fellow 1995-1996

Post-graduate Academic Clinical Nutrition Fellowship Program.
Caracas Medical Centre, Venezuela.

HONORS

- Dannon Institute Travel Award. 2004
- Post-graduate studies Scholarship, Ludwig Maximilians University. Munich, Germany. 2000
- Fundación Gran Mariscal de Ayacucho Scholarship, Venezuela. 1991-1994

PROFESSIONAL MEMBERSHIPS

- Academy of Nutrition and Dietetics
- Early Nutrition Academy (ENeA)
- Puerto Rican Association for Nutrition and Dietetics (CNDPR)
- Latin-American Nutrition Society (Sociedad Latinoamericana de Nutrición; SLAN)

PROFESSIONAL SERVICES

SERVICE TO THE DISCIPLINE

Ad-Hoc Editorial Member

- Latin-American Nutrition Archives (Archivos Latinoamericanos de Nutrición). Since 2013

Ad-Hoc Manuscript Reviewer

- Journal of the American Dental Association
- Latin-American Nutrition Archives (Archivos Latinoamericanos de Nutrición)
- Puerto Rico Health Sciences Journal
- WHO's Evidence Library for Nutrition Projects

SERVICE TO THE UNIVERSITY OF PUERTO RICO (UPR)

- Invited Professor and researcher (ad-Hoc). Nutrition Program, Graduate School of Public Health, Medical Sciences Campus, UPR 2008-2014.
- Evaluator of abstracts, oral and poster presentations for the Annual Research and Education Forum, Medical Sciences Campus, UPR. 2014.
- Conference in Nutrition for pregnant and breastfeeding mothers, Center for Preschool Development, Medical Sciences Campus, UPR. 2009.

SERVICE TO THE COMMUNITY

- Ad-Hoc nutritional counseling for low-income patients in Puerto Rico, 2011-2015.
- Lecturer. Conference on Nutrition and Sports Training, Dallas, Texas, 2007.
- Lecturer. Conference on Healthy dietary habits early in life for immigrant families in Munich, Germany, 2003
- Biology guide. Children's Museum of Caracas (Fundación Museo de los Niños), Venezuela, 1990.

LICENSURES

Nutrition and Dietetics License for Puerto Rico; # 1535, since 2008.

Teaching and education

Lecturer. Anthropometry and evaluation of infant growth	May and December 2014
Training for all nutritionists (n=200) of the Women and Infant Care (WIC) program in Puerto Rico.	
Invited Lecturer. Link to Connect Leadership & Teamwork Workshop.	2014
Clinical and Translational Research Postgraduate Training Programs. School of Medicine, UPR .	
Invited Lecturer of the required course NUTR-6531: Human Nutrition (5 credits)	2008-2010
Nutrition Program, Graduate School of Public health, Medical Sciences Campus, UPR.	
Invited Lecturer of the required course NUTR-6555: Quality of life and nutrition in the elderly (2 credits)	2009
Nutrition Program, Graduate School of Public health, Medical Sciences Campus, UPR.	
Invited Lecturer	2005
Technological University. Guadalajara, Mexico.	
Lecturer of the required course Nutrition and Dietetics	1996
Nurses' College Caracas Medical Center. Venezuela.	
Instructor for Nutritional Support, Military Hospital. Caracas, Venezuela.	1996
Instructor for Diabetes Counseling, Medical Center. Caracas, Venezuela.	1995
Lecturer. Workshop: Nutritional Management of the Diabetic Patient	1995

Presented in the Medical Society, Caracas Medical Center, Venezuela

Instructor for Maternal and Infant Health and Overweight patients
Center for Family and Sexual Orientation. Eastern Maternity & Infant Hospital. Caracas, Venezuela

1993-1994

MENTORING:

Mentor to undergrad students from the University of Puerto Rico Program in Nutrition and Dietetics and Biology.

Mentor to Pregnancy and Early Lifestyle Improvement Study junior staff.

MANUALS OF OPERATIONS AND OTHER EDUCATIONAL MATERIALS

TEACHING AND EDUCATION

Developed the Anthropometric Manual for assessing infant growth for the training of the nutritionists from the Women, Infants and Children (WIC) program in Puerto Rico. The manual contains technical information on anthropometric measurements and appropriate use and interpretation of the WHO and CDC growth charts.

Created patient education handouts for the management of diabetes mellitus, hyperlipidemias, hypertension, hyperuricemia and obesity. German Heart Centre, Munich, Germany.

Generated educational materials for pediatric patients with malnutrition, gastrointestinal diseases, food allergies and intolerances, metabolic diseases and enteral nutrition. Division of Metabolic Disorders and Nutrition. Dr. von Hauner Children's Hospital. Ludwig-Maximilians-University. Munich, Germany.

Developed patient education handouts for dietary ambulatory treatment of diverse pathologies, including but not restricted to: obesity (in infants, children and adults), cardio-metabolic diseases, renal insufficiency, inflammatory bowel diseases, and diabetes mellitus. Diagnosis and Treatment Center (Villa Los Santos). Arecibo, Puerto Rico.

RESEARCH

LIFE-MOMS CONSORTIUM* (PEARLS. GRANT NUMBER: 1U01HD072Z834), current:

- Developed the protocol for breast milk collection and analysis as a member of the breast milk scientific working group.

PREGNANCY AND EARLY LIFESTYLE IMPROVEMENT STUDY (PEARLS. GRANT NUMBER: 1U01HD072Z834), current:

- Developed guidelines for study procedures implementation and conduction.
- Streamlined screening procedures.
- Created visit flow diagrams and guidelines.
- Co-developed a study records handling protocol.
- Co-developed a manual of operation for blood collection.
- Co-developed a manual of operation for urine collection.
- Co-developed a manual of operation for fecal samples collection.
- Co-developed a manual of operation nail and hair samples collection.

Nutritional consultation to TigerKids-active Kindergarten

2004

- Participated in the initial development of the project and created a teaching guide chapter on carbohydrate intake. The "TigerKids" intervention program was developed to enhance regular physical activity and to modify habits of food and drink consumption in preschool children, it has

been successfully implemented in over 5000 kindergartens in South Germany. Clinical Nutrition 28,

RESEARCH

Pregnancy and Early Lifestyle Improvement Study (PEARLS. Grant Number: 1U01HD072z834), current:

- Active member of the Coordinators Committee; participated in meetings with national and international collaborators of the LIFE-Moms Consortium.
- Mediated with regulatory bodies, stakeholders and academic authorities.
- Ensure adequate and timely safety reporting to the NIH and IRB.
- Acted as the primary coordinator and member of the site steering committee; co-managed a large team (ca. 25 investigators and staff).
- Played a central role in implementing a complex clinical trial protocol, developed and optimized study procedures.
- Conducted presentations for study introduction, implementation and study quality directed to nurses and physicians.

San Juan Overweight Adult Longitudinal Study (SOALS. Grant Number: R01DE020111), current:

- Implemented and coordinated the study's nutritional component.
- Interacted with regulatory bodies.
- Contributed to the cultural adaptation and validation of a FFQ for Puerto Rican adults.
- Trained research staff to conduct nutritional surveys (FFQ) and to perform anthropometric measurements in obese adults.
- Developed a short assessment questionnaire for the dietary exposure to Advanced Glycation End Products (AGEs).
- Developed a short questionnaire to assess dietary bisphenol A exposure in adults.

Validation and reproducibility of a semi-quantitative FFQ as a measure of dietary intake in adults from Puerto Rico 2010

Collaborated in a study aimed to assess the relative validity and reproducibility of a semi-quantitative Food Frequency Questionnaire (FFQ) in Puerto Rican adults. Participants completed an FFQ, followed by a 6 d food record and a second administration of the FFQ. Contributed with the culturally adaptation of the dietary assessment instrument (FFQ) and participated in the data collection. Public Health Nutr. 2015 Jan 27:1-9

European Childhood Obesity Project 2001-2004

Participated in a multicenter randomized controlled intervention trial funded by the Research Directorate of the European Commission, aiming to investigate whether protein supply in infancy affects early growth and later obesity risk. Contributed to the development of dietary assessment methods to determine nutrient intake in infants and participated in the elaboration and coordination of the nutritional component of the study. JPGN 2011;52: 96–102

Guidelines for Parenteral Nutrition 2002-2004

Member of the coordination team for the development of Guidelines for Parenteral Nutrition, prepared by the German Society for Nutritional Medicine (DHEM), in collaboration with other medical associations to provide guidance for quality assurance for parenteral nutrition (PN) practice, and to promote health and quality of life of patients concerned. The coordination team proposed topics, working with group leaders who along with working group members performed

systematic literature searches and drafted recommendations in a nominal group process. Ger Med Sci. 2009 Nov 18;7:Doc26.

Nutraceuticals for a Healthier Life (NUHEAL)

2001-2003

Assessed the dietary intake of DHA and folate during pregnancy. The NUHEAL study, is a prospective cohort study, which compared the effects of dietary supplementation with DHA and/or methyltetrahydrofolate from week 21 of gestation until child birth in mothers from three different European countries (Germany, Hungary and Spain). Ann Nutr Metab 2008;53:167–174

Bone Mass Density in patients with PKU

2001

Assessed calcium intake and Bone Mass Density in pediatric patients with phenylketonuria.

SUBMITTED PROPOSALS

MBRS-Score SC1 (P.I. Palacios C)

Effect of Soluble Corn Fiber supplementation for 1 year on bone metabolism in adolescents

Submitted 01/25/2015. Under review.

\$450,000

Role: collaborator

NIH, NHLBI Clinical Trial Pilot Studies (R34) PAR-13-002 (P.I. Palacios C)

Feasibility and efficacy study of vitamin D and Omega 3 supplementation in Hispanic obese adolescents

Submitted 06/06/2014. Not funded

\$450,000

Role: collaborator

Fundación El Angel (P.I.s Palacios C and Trak MA).

Asociaciones entre la obesidad, la actividad física y el consumo de nutrientes con las fracturas en niños puertorriqueños

Submitted 08/13/2009. Not funded.

\$50,000

Puerto Rico Clinical and Translational Research Consortium (PRCTRC) (P.I. Palacios C)

Pilot Projects

Risk factors associated with fractures in Puerto Rican children and adolescents

Submitted 06/18/2009. Not funded.

\$50,000

Role: collaborator

RESEARCH SUPPORT

Relationship between fiber intake and periodontal disease, analysis derived from the National Health and Nutrition Examination Surveys (NHANES), current.

This project aims to explore the association between soluble and insoluble dietary fiber and severity of periodontal disease in adults, combining NHANES 24 h dietary recalls and Oral Health data (2009-2010)

Role: As co-investigator, mentored by Dr. Joshipura, working with Drs. Dye and Joy Nielsen (CDC).

PUBLICATIONS

Peer-reviewed publications based on research

1. Palacios C; **Trak M**; Betancourt J; Joshipura KJ and Tucker KL. Validation and reproducibility of a semi-quantitative FFQ as a measure of dietary intake in adults from Puerto Rico. Public Health Nutrition 2015. Published online: 27 January 2015. <http://dx.doi.org/10.1017/S1368980014003218>.
2. Palacios C; Segarra A; **Trak MA**; & Colón I. Reproducibility and validity of a food frequency questionnaire to estimate calcium intake in Puerto Ricans. Arch Latinoam Nutr 2012; 3(62): 205-212.
3. Franke C, Verwied-Jorky S, Campoy C, **Trak-Fellermeier M**, Decsi T, Koletzko B. Dietary Intake of Natural Sources of Docosahexaenoic Acid and Folate in Pregnant Women of Three European Cohorts, Ann Nutr Metab 2008;53:167-174.
4. **Trak-Fellermeier M.A**, Brasche S, Winkler G, Koletzko B, Heinrich J. Food and Fatty Acid Intake and Atopic Disease in Adults. Eur Respir J 2004; 23: 575–582.
5. **Trak-Fellermeier M.A** et al. Dietary Assessment Methods by the European Childhood Obesity Program. (Abstract published at the 2nd World Congress of Pediatric Gastroenterology in Paris, 2004)
6. Blanco B, Bonveccio A, **Trak M.A**. Influence of the Media in the Nutritional Habits of the Venezuelans. An Venez Nutr 1997; 10(1): 44-57.
7. Verwied-Jorky S, Schiess S, Luque V, Grote V, Scaglioni S, Vecchi F, Martin F, Stolarczyk A, Koletzko B; European Childhood Obesity Project. Methodology for longitudinal assessment of nutrient intake and dietary habits in early childhood in a transnational multicenter study. J Pediatr Gastroenterol Nutr. 2011 Jan;52(1):96-102. doi: 10.1097/MPG.0b013e3181f28d33.* Cited as collaborator

Submitted manuscripts to peer-reviewed journals or in preparation

1. **LIFE-Moms Research Group***. Consortium Design of Lifestyle Intervention Trials to Prevent Excessive Gestational Weight Gain in Overweight and Obese Women (submitted in December 2014 to the Obesity Journal). *As a member of the Research Group.
2. Torres R, Soltero S, **Trak-Fellermeier M.A.**, Tucker C, Mendez K, Campos M, Willett W, Melendez M, Gillman MW, Franks PW, Joshipura K, Pomeroy J, Palacios C. Lifestyle modification intervention for overweight and obese Hispanic pregnant women: development, implementation, lessons learned and future applications (*in preparation*).

Non-peer reviewed publications

1. Demmelmeir H, Broekaert I, Münch K, **Trak M**, Koletzko B. Comparison of the effects of rapeseed oil, olive oil and hydrogenated plant oil on postprandial lipids and fatty acid oxidation

PRESENTATIONS AT SCIENTIFIC MEETINGS AND SEMINARS

Conference presentations

Introductory talk about Glycemic Index. Presented in the Interdepartmental Research Seminar, UPR 2014

Breastmilk: Impact of Early Nutrition. Presented in the Interdepartmental Research Seminar, UPR

2013

- Nutrition for pregnant and breastfeeding mothers* 2009
Presented at the Center for Preschool Development, Medical Sciences Campus, UPR.
- Breastfeeding, ablactation and dietary factors associated with infant allergies* 2004
Workshop for Pediatricians, presented in the Dr. von Hauner Childrens' Hospital, Munich
- Food and Fatty Acid Intake and Atopic Disease in Adults.* 2004
German Society for Clinical Nutrition Congress (DGEM)
- Nutritional Support* 1996
Presented in the Military Hospital, Dr. Carlos Arvelo, Caracas, Venezuela

Posters

1. Van Arsdall S, Joshipura K, **Trak MA**, Constituents of Non-alcoholic Beverages and Impact on Health. 2013. Student poster presented at the Harvard Dental School Research Day, Boston, 2013.
2. Segarra A, **Trak MA**, Colón I, Palacios C. Reproductivity and validity of a food frequency questionnaire to estimate calcium intake. Student poster presented at the Annual Medical Sciences (UPR) Forum, 2011 and at the Annual Conference of the American Dietetic Association, PR 2011.
3. Palacios C, Segarra A, **Trak MA**, Colón I. Association between dietary patterns and body composition in Puerto Rican adults. Student poster presented at the Annual Conference of the American Dietetic Association, PR 2011.
4. **Trak-Fellermeier MA** et al. Dietary Assessment Methods by the European Childhood Obesity Program. Presented at the 2nd World Congress of Pediatric Gastroenterology in Paris, 2004.

MEDIA APPEARANCES/INTERVIEWS

- Early nutrition Intervention.* WIPR (940 AM) radio. Moderator: Luis Antonio Rivera. 17/01/2013
Program: Yoyo Boing. San Juan, Puerto Rico.
- Childhood Obesity Prevention.* WNIK 1230 AM radio. Moderator: Ernesto Delgado. 5/18/2011
Program: Punto de Encuentro (Meeting Point). Arecibo, Puerto Rico.
- The importance of a balanced nutrition for a healthy life.* Moderator: Ernesto Delgado. 8/11/2010
Program: Punto de Encuentro (Meeting Point). Arecibo, Puerto Rico.

LANGUAGES

- Spanish (first language)
- English (bilingual)
- German (bilingual)