Prof. univ. dr. Mihai Covasa
Director
Departamentul de Sănătate și Dezvoltare Umană

- Doctorat in Fiziologie si Nutritie, Universitatea Leeds, Anglia
- Conducator doctorat in domeniul Medicina, UMF “Grigore T. Popa” Iasi.
- Master in Fiziologie si Nutritie, Universitatea Leeds, Anglia
- Postdoctorand (3 ani) in Neurostiinte, Washington State University, SUA

Experienta didactica

- Asistent Universitar, Washington State University, Program de Neurostiinte
- Conferentiar universitar, titular, The Pennsylvania State University, Departamentul de Nutritie
- Director de cercetare, Institutul national de cercetare INRA, Divizia Nutritie umana, Franta
- Director, Laborator de Nutritie si Fiziologie, Institutul Micalis, Franta
- Profesor si conducator de doctorat, Universitatea Marie Curie, Paris, Franta
- Profesor asociat, Western University of Health Sciences, Facultatea de Medicina, USA

Cursuri predate:

- Principii generale de nutritie
- Nutritia si Bolile
- Dieta si Nutritia
- Bazele Nutritiei
- Nutritie si Metabolism
- Comportamentul Alimentar
- Fiziologie Gastrointestinala
- Neurostiinte

- Endocrinologie
- Fiziologia tesutului osos si muscular

Activitate stiintifica

- Editor academic Revista PlosOne
- Editor academic Revista American Journal of Physiology
- Evaluator stiintific la urmatoarele reviste:
  - American Journal of Physiology
  - Appetite
  - British Journal of Pharmacology
  - Physiology and Behavior
  - Physiology, Pharmacology and Behavior
  - Journal of Neurophysiology
  - Peptides
  - Brain Research
  - Pharmacological Research
  - Regulatory Peptides
  - Journal of Nutrition
  - Nutritional Neuroscience
  - Neuroscience
  - Neuroscience Letters
  - Journal of Autonomic Neuroscience
  - European Journal of Neuroscience
  - Neuropeptides
  - Neuroscience Research
  - Neurochemistry International
  - Endocrinology
  - Obesity Research
  - Diabetes
  - International Journal of Obesity
  - Psychopharmacology
  - Medical Principles and Practice
  - PlusOne
  - Medical Science Monitor
  - Hormones and Behavior
  - Neurogastroenterology and Motility
  - Nutrition and Diabetes
  - Neuropharmacology
  - British Journal of Nutrition
  - Nutrition Research
  - Molecular and Cellular Endocrinology
  - Biochimica et Biophysica Acta (BBA)- General Subjects
  - Current Opinions in Microbiology
  - Expert review of endocrinology and metabolism
  - Molecular Nutrition and Food Research

- Obesity Research and Clinical Practice
-- Gastro Open

Evaluator stiintific granturi cercetare:

- National Institute of Health, Bethesda, USA
- United States-Israel Binational Science Foundation (BSF)
- National Research Council Canada
- UEFISCDI, National Research Agency, Romania
- The Welcome Trust, UK
- Alberta Biosolutions, Canada
- Swiss National Research Foundation
- Association for International Cancer Research (AICR), UK.
- Graduate School, AgroParisTech, Paris, France
- Dutch Science Foundation, Netherland
- National Agency for Research France
- United Arab Emirates

Societati stiintifice

- American Nutrition Society
- American Society for Clinical Nutrition
- American Physiological Society
- Society for Ingestive Behavior
- Society for Neuroscience

Distinctii

Harold Hyam Wingate Foundation Award, England.
Overseas Research Award, University of Leeds, England.
Tetley and Lupton Award, University of Leeds, England
Life long learning, Research, Institute for Medical Educators Faculty Award, Western University of Health Sciences

Program cercetare:

- Studiul mecanismelor fiziologice, metabolice, neuronale si nutritionale implicate in excesul consumului alimentar si obezitate

- Rolul microflorei intestinale in obezitate si diabet

Proiecte coordinate:

- POC-A1-A1.1.4-E-2015 Covasa/Dimian (PIs) 2016-2020. The relationship between gut microbiota and the host with application in the prevention and control of type 2 diabetes.

This is a European Union financed project hosted by the University of Suceava, Romania. $2,187,263.

- PN-II-ID-PCE-2012-4-0608 Analysis of novel risk factors influencing control of food intake and regulation of body weight. National Research Agency, Romania. 2013-2016, $506,590. Role PI

- 423-12 (RO1-DK52849-05) July 2008- June 31, 2013. Grand Total $1, 860,448. NIDDK/DDDN. This is a collaborative grant between my laboratory and Washington State University. Role PI (WesternU). The role of glutamate in the control of food intake.

- French Institute of Agricultural Research., INRA DARESE, competitive international grant 2010-2014. Grand Total $600,000. Role: PI. The role of microbiota in control of food intake and energy homeostasis.

- 423-12 55JT (RO1-DK065709-01) Jan 2004- Dec 2009. Grand Total $ 1,816,081. Role PI (PSU site). This is a equally shared joined collaborative grant between my colleague Dr. Andras Hajnal and my laboratory.
- Dopamine mechanisms in development of type-2 diabetes.

- 423-12 39XT (RO1-DK52849-04) April 2003- March 31, 2008. Grand Total $1, 750,000. NIDDK/DDDN. Total awarded to PSU: $271,605. Joint collaborative grant with Burns, GA and Ritter, RC at Washington State University. Role: PI at PSU site. The role of glutamate in the control of food intake.

- 5-HT3 receptor mediation of 5-HT and CCK-induced satiation. F31 NS 051868 (M. Hayes, Sponsor: Covasa) NIH/NINDS 06/01/2005 – 05/31/2008. The major goal of this project is to identify the gastric involvement of 5HT-3 receptors mediation of cholecystokinin-induced satiation.

- NCI 25XS101 National Cancer Institute (PI: T. Hartman, Co-PI: M. Covasa). 9/05- 9/07. The effects of a high legume low glycemic index diet on insulin resistance and inflammation in patients at high risk for colorectal adenoma recurrence. National Cancer Institute, $400,000. Role: Co-PI

- The Pennsylvania State University, College of Health and Human Development. Mihai Covasa (PI) 01/01/03-12/31/03. $14,985. Reduced sensitivity to satiation signals.

- 2008-2009 Social Science Institute, The Pennsylvania State University: Nicotine's Effects on Obesity and Addiction in a Mouse Mode. "Are Agouti Mice a Canary-in-the-Coal-Mine of Obesity and Addiction Research?" PI: David Vandenbergh; Co-PI; M. Covasa

- PA Department of Health. Tobacco Formula Funded Health Research (R. Norgren, PI) 2003-2006. Consortium on Nutritional Neuroscience. $ 230, 861. Role: Co-PI

Publicatii (selectie)

Capitole de carte

Ovidiu Schipor, Oana Geman, Iuliana Chiuchisan and **Mihai Covasa** (2016). From Fuzzy Expert System to Artificial Neural Network: Application to Assisted Speech Therapy, Artificial Neural Networks - Models and Applications, Dr. Joao Luis Garcia Rosa (Ed.), InTech, DOI: 10.5772/63332.

Duca, F. Gérard, P. Covasa, M. Lepage, P. The metabolic interplay between gut bacteria and their host. Frontiers of Hormone Research. S. Karger Publishers, Basel, Switzerland, 2014.

Covasa, M & Swartz, T.D. The role of cholecystokinin (CCK) in eating behaviour. In: Victor R. Preedy, Ronald Ross Watson, Colin R. Martin, Eds. The handbook of eating behavior, Food and Nutrition. Springer Press, 2010.

Covasa, M & Swartz, T.D. The role of ghrelin in eating behaviour. In: Victor R. Preedy, Ronald Ross Watson, Colin R. Martin, Eds. The handbook of eating behavior, Food and Nutrition. Springer Press, 2010.

Covasa, M & Swartz, T.D. The role of glucagon-like-peptide-1 (GLP-1) in eating behaviour. In: Victor R. Preedy, Ronald Ross Watson, Colin R. Martin, Eds. The handbook of eating behavior, Food and Nutrition. Springer Press, 2010.

Covasa, M. Post-absorptive endocrine factors controlling food intake and regulation of body adiposity: animal research. In R.B.S. Harris and R.D. Mattes (eds). Appetite and Food Intake: Behavioral and Physiological Considerations. Taylor&Francis, 2008.

Covasa, M. & Ritter, R.C. Satiation in response to macronutrient signals from the intestine: mechanisms and implications for macronutrient selection. In H.R. Berthoud and R.J. Seeley (eds.): Neuronal control of macronutrient selection. CRC Press, Boca Raton, 1999.

Articole de sinteza

Zhong L, Zhang X, Covasa M. Emerging roles of lactic acid bacteria in protection against colorectal cancer. World J Gastroenterol. 20: 7878-7886, 2014.

Duca, FA, Sakar, Y., Covasa, M. The modulatory role of high fat feeding on gastrointestinal signals in obesity. Journal of Nutritional Biochemistry 24(10):1663-1677, 2013.

Duca FA, Covasa M. Current and emerging concepts on the role of peripheral signals in control of food intake and development of obesity. Br. J. Nutr, 13:1-16, 2012.

Covasa, M. Deficits in gastrointestinal responses controlling food intake and body weight. Am J Physiol Regul Integr Comp Physiol. 299:R423-439, 2010.

Covasa M. CCK- and leptin-induced vagal afferent activation: a model for organ-specific endocrine modulation of visceral sensory information. Am J Physiol Regul Integr Comp Physiol. 290: R1542-1545, 2006

Ritter, R. C., Covasa, M., and Matson, C.A. Cholecystokinin: Proofs and prospects for involvement in control of food intake and body weight. Neuropeptides 33(5): 387-399, 1999.

Forbes, J.M. & Covasa, M. Application of diet selection by poultry with particular respect to whole cereals. World Poultry Science Journal 51(2): 149-165 (1995).

Publicatii in reviste cu factor de impact

Wang, J.; Dong, X.; Cao, L.; Sun, Y.; Qiu, Y.; Zhang, Y.; Cao, R.; Covasa, M.; Zhong, L. (Association between telomere length and diabetes mellitus: A meta-analysis. Journal of International Medical Research 44(6): 1156-1173, 2016.

Duca FA, Katebzadeh S, Covasa M. Impaired GLP-1 signaling contributes to reduced sensitivity to duodenal nutrients in obesity-prone rats during high-fat feeding Obesity (Silver Spring) 11 :2260-8, 2015.

Duca FA, Swartz TD, Covasa M. Effect of diet on preference and intake of sucrose in obese prone and resistant rats. PLoS One. 9(10):e111232, 2014..

Duca FA, Zhong L, Covasa M. Reduced CCK signaling in obese-prone rats fed a high fat diet. Horm. Behav. 64(5): 812-817, 2013.

Swartz, TD. Sakar, Y., Duca, FA., Covasa, M. Preserved adiposity in the Fisher 344 rat devoid of gut microbiota. FASEB, 27(4): 1701-1710, 2013.

Duca, F., Sakar, Y., Covasa, M. Combination of obesity and high-fat feeding diminishes sensitivity to GLP-1R agonist, Exendin-4. Diabetes 62(7): 2410-2415, 2013.

Duca, F., Swartz, TD., Sakar, Y., Covasa, M. Decreased intestinal nutrient response in diet-induced obese rats: role of gut peptides and nutrient receptors. International Journal of Obesity 37: 375-381, 2013.

Duca, F., Swartz, TD., Sakar, Y., Covasa, M. Increased oral detection but decreased intestinal signaling for fats in mice lacking gut microbiota. PLoS ONE 7(6):e39748, 2012.

Swartz, TD., Duca, F., de Wouters, T., Sakar, Y., Covasa, M. Upregulation of intestinal T1R3 and SGLT-1 expression and increased sucrose intake in mice lacking gut microbiota. Br J Nutr 107:621-630, 2012.

Wright, J., Campos, C., Herzog, T., Covasa, M., Czaja, K., Ritter, R.C. Reduction of food intake by cholecystokinin requires activation of hindbrain NMDA-type glutamate receptors. Am. J. Physiol. 301(2):R448-55, 2011.

Swartz TD, Savastano DM, Covasa M. Reduced sensitivity to cholecystokinin in male rats fed a high-fat diet is reversible. J Nutr. 140: 1698-1703, 2010.

Swartz, T.D., Duca, F., Covasa, M. Differential feeding behavior and vagal responses to CCK in obesity-prone and –resistant rats. Brain Res. 1308:79-86, 2010.

Swartz, T.D., Hajnal, A., Covasa, M. Increased orosensory sensitivity to oils in CCK-1 receptor deficient rats. Physiol Behav. 99:109-117, 2010.

Abraham, H., Covasa, M., Hajnal, A. Cocaine- and amphetamine-regulated transcript (CART) peptide immunoreactivity in the brain of the CCK-1 receptor deficient obese OLETF rat. Experimental Brain Research 96(4):545-56, 2009.

Guard, DB., Swartz, T.D., Ritter, R.C., Burns, GA., Covasa, M. Blockade of hindbrain NMDA receptors containing NR2 subunits increases sucrose intake. American Journal of Physiology 2969(4): R921-928, 2009.

Guard, DB, Swartz, T.D., Ritter, R.C., Burns, GA., Covasa, M. NMDA NR2 receptors participate in CCK-induced reduction of food intake and hindbrain neuronal activation Brain Research 1266; 37-44, 2009