

## DISSERTATIONS from the Minerva Institute

2020

**Dan Pham Duc:** Novel roles of p75 neurotrophin receptor in Low-density lipoprotein receptor regulation and lipid signaling. June 4, 2020.

**Veijo Salo:** Lipogenic subdomains of the ER: The role of seipin. April 17, 2020.

**Amr Abouelezz:** The structure and dynamics of the actin cytoskeleton in the axon initial segment. February 28, 2020.

2019

**Iryna Hlushchenko:** Actin regulation in dendritic spines: From synaptic plasticity to animal behavior and neurodevelopmental disorders. August 16, 2019.

2018

**Panu Luukkonen:** Heterogeneity of non-alcoholic fatty liver disease – Genetic and nutritional modulation of hepatic lipid metabolism. September 7, 2018.

**Henriikka Kentala:** ORP2 – A sterol sensor controlling hepatocellular bioenergetics and actin cytoskeletal functions. August 18, 2018

**Raghavendra Mysore:** Novel molecular regulators of adipose tissue metabolism. May 18, 2018.

**Anna Tikka:** Characterization of ANGPTL3 deficiency and molecular mechanisms of ANGPTL3 deficiency-induced hypolipodemia. January 19, 2018.

**Susanna Lallukka:** Non-alcoholic fatty liver disease: The role of insulin resistance, inflammation and the PNPLA3 I148M variant. January 13, 2018.

2017

**Jenni Hyysalo:** Prevalence and Genetics of Non-Alcoholic Fatty Liver Disease. December 16, 2017.

**Elina Isokuortti:** Non-alcoholic fatty liver disease – Studies on pathogenesis and diagnosis. October 28, 2017.

**Boris Vassilev:** Studies on proteins influencing cancer progression and regulating endocytic lipid trafficking. April 28, 2017.

2016

**Johanna Mäkelä:** Neuroprotective effects of PGC-1 $\alpha$  activators in dopaminergic neurons. May 20, 2016.

2015

**Veronica Kalhori:** Sphingosine-1-phosphate-evoked invasion of follicular thyroid cancer cells: Evidence for the involvement of HIF-1 $\alpha$ , MMP2 and MMP9. September 11, 2015.

**Tho Huu Ho:** Development of amplification-based technologies for enrichment of nucleic acids with difficult sequences or low-abundance point mutations. February 13, 2015.

2014

**Alise Hyrskyluoto:** Endoplasmic reticulum stress, regulation of autophagy and ubiquitin-proteasome system in cellular models of Huntington's Disease. September 12, 2014.

**Leena Juurinen:** Insulin therapy in type 2 diabetes - Initiation, impact on liver fat, role of combination therapy with glitazones or glinides. May 16, 2014.

**Jere Paavola:** Aberrant intracellular calcium cycling in the heart - Mechanistic insights into catecholaminergic polymorphic ventricular tachycardia and heart failure. March 28, 2014.

2013

**Anders Eriksson-Palojärvi:** Neurohumoral response and pathophysiologic changes during progression of mitral regurgitation in the Cavalier King Charles spaniel. November 29, 2013.

**Wei Wang:** Studies on the transcriptional and enzymatic control of steroid metabolism: Regulation by lysosomal acid lipase, 24-dehydrocholesterol reductase, and amyloid precursor protein. November 28, 2013.

**Raili Koivuniemi:** Regulation of neural progenitor cell proliferation and fate by proteolytic pathways and inflammatory signals in the brain. September 6, 2013.

**You Zhou:** Oxysterol binding protein homologues: Novel functions in intracellular transport and adipogenesis. January 25, 2013.

2012

**Noora Putkonen:** Organelle specific mechanism of neuronal cell death. October 26, 2012.

**Terhi Vihervaara:** The role of oxysterol binding proteins in macrophages. October 5, 2012.

**Paulina Skrobuk:** Glucose and lipid metabolism in human skeletal muscle. September 7, 2012.

2011

**Ksenia Sevastianova:** Combination antiretroviral therapy-associated lipodystrophy: insights into pathogenesis and treatment. November 25, 2011.

2010

**Päivi Lakkisto:** Heme oxygenase-1 in cardiovascular diseases. December 17, 2010.

**Minna Kairisalo:** Oxidative stress and XIAP signalling in neuronal cells. October 15, 2010.

**Sami Reijonen:** Endoplasmic reticulum stress and cell death mechanisms in the cell model of Huntington's disease. October 8, 2010.

**Nina Bergelin:** Interactions between sphingosine 1-phosphate and vascular endothelial growth factor signaling in thyroid carcinoma cells. September 17, 2010.

**Tero Viitanen:** GABA<sub>A</sub> reseptor mediated signalling in the brain: inhibition, shunting and excitation. June 23, 2010.

**Janne Makkonen:** Adipose tissue inflammation, liver fat and insulin resistance in humans. June 18, 2010.

2008

**Anna Kotronen:** Liver fat in the metabolic syndrome and type 2 diabetes.

2007

**Cia Ramström:** Ceramides and DAG as regulators of potassium channel function.

2006

**Tomas Blom:** Sphingolipid-mediated regulation of cellular calcium signaling and survival.

2005

**Mirja Tiikkainen:** Effects of weight loss, rosiglitazone and metformin on liver fat content, insulin resistance and gene expression in adipose tissue”

2004

**Marjo Tamminen:** Vascular and Platelet Function in Insulin Resistance

**Esa Leppänen:** Experimental basis for standardization of blood specimen collection. (started in Minerva but was completed in Jyväskylä)

2003

**Elena Korsheninnikova:** Molecular mechanisms of insulin resistance in human skeletal muscle and lipodystrophic adipose tissue. July 4, 2003.

**Robert Bergholm:** Effects of weight loss, physical training and anti-inflammatory therapy on endothelial function in vivo.

**Jussi Sutinen:** Pathogenesis and treatment of lipodystrophy in HIV-infected patients receiving highly active antiretroviral therapy.

2002

**Nina Uhlenius:** Angiotensin II and nitric oxide in chronic experimental nephritis.

2001

**Jukka Westerbacka:** Insulin action on large artery stiffness in normal and insulin resistant subjects.

**Satu Vehkavaara:** Identification and treatment of endothelial dysfunction and cardiovascular risk markers in disorders of glucose metabolism and in postmenopausal women.

2000

**Benoît Dugué:** Variabilité Biologique. Influence des facteurs preanalytiques in vivo (stress physique, stress psychologique, chronobiologie) sur les résultats d'analyses de marqueurs biologiques sanguins et cellulaires.

1999

**Markus Sundblom:** Neuropeptide FF in human blood and cerebrospinal fluid.

1998

**Leena Karhapää:** Effects of caffeine and thimerosal on the regulation of intracellular calcium concentration in GH4C1 rat pituitary cells.

1997

**Marja-Leena Sirviö:** Endothelin-1; cardiopulmonal expression, metabolism and regulation of atrial natriuretic peptide release.

1995

**Antti Virkamäki:** Mechanism and causes of abnormal carbohydrate metabolism during experimental and natural infections.

1994

**Outi Saijonmaa:** Endothelin-1: Plasma levels in cold pressor test and regulation in endothelial cells.

**Karri Helin:** Neutral endopeptidase inhibition in experimental heart failure. 1994

1991

**Sari Tikanoja:** Free thyroid hormones in serum: performance of different assay methodologies in thyroid diseases and non-thyroidal illnesses.

1989

**Per-Henrik Groop:** The relationship between gastric inhibitory polypeptide (GIP) and beta-cell function in man.

**Tuula Tikkanen:** Atrial natriuretic peptide in experimental heart failure.

**Kaj Metsärinne:** Renin substrate in human plasma and amniotic fluid.

1987

**Kid Törnquist:** 1,25-dihydroxyvitamin D3 and the secretion of thyrotropin and prolactin from the rat pituitary gland.

**Katarina Rosenlöf:** Erythropoietin: receptor and comparison with renin substrate.

1986

**Virpi Oksanen:** Neurosarcoidosis: A clinical, laboratory and neuroradiological study.

**Jean-Louis Guéant:**

1984

**Markku M. Nieminen:** Renin-Aldosterone axis in man following ingestion of ethanol.

**Christel Lamberg-Allardt:** Serum 25-hydroxy-vitamin D concentration and vitamin D intake.

**Terje Forslund:** Induction of rat angiotensin converting enzyme by captopril and enalapril.

1983

**Ilkka Immonen:** Factors affecting human plasma renin substrate concentration with emphasis on estrogens and pregnancy.

1982

**Jaakko Linkola:** Strain differences in water and electrolyte metabolism between alcohol preferring (AA) and alcohol avoiding (ANA) rats.

**Tom Petterson:** Pleural effusions in infectious, neoplastic and connective tissue diseases. A study of cellular and immunological reactions with emphasis on the role of T and B lymphocytes.

1981

**Ilkka Kouvonen:** Structure of the porcine intestinal intrinsic factor (IF) receptor.

**Ilkka Tikkanen:** Hypertensive effect of autoimmune nephritis in DOCA-NaCl-treated and in spontaneously hypertensive rats.

**Georg Borgström:** Clinical implications of chromosome aberrations in hematologic neoplasia.

1980

**Carola Grönhagen-Riska:** Angiotensin converting enzyme and sarcoidosis.

**Fredrika Pekonen:** The interaction of thyrotropin with its receptors.

1978

**Thomas Tötterman:** Thyroid-infiltrating immunocompetent cells in human autoimmune thyroid disease.

**George Marcoullis:** Soluble and membrane-bound proteins involved in vitamin B12 transport.

**Pertti Soveri:** Renin in human pregnancy and during oral contraception.

1975

**Gustav Wägar:** Effect of TSH and cyclic adenosine 3', 5'-monophosphate on thyroidal protein synthesis.

**Jim Schröder:** Passage of blood cells between foetus and mother.

1974

**Ariel Gordin:** Thyrotrophin in human serum; A methodological and clinical study in diseases of the thyroid gland.

**Ulf-Håkan Stenman:** Studies on cobalophilin. Vitamin B12-binding proteins of R-type.

**Ritva-Kajsa Selander:** Kromosomala makromolekylers effekt på vissa akridinderivats absorption och fluorescens.

1973

**Aldur Eriksson:** Human twinning in and around the Åland Islands.

1972

**Jorma Mäenpää:** Hypothyroidism and autoimmune thyroiditis in childhood.

**Risto Kala:** Venous plasma angiotensin II in man. Diurnal variation and response to various postural stimuli and exercise.

1971

**Johan Wennström:** Effect of ionizing radiation on the chromosomes in meiotic and mitotic cells.

**Frej Fyhrquist:** Radioimmunoassay of plasma angiotensin II in patients with hypertension, in renal transplant recipients, and in anephric patients.

1970

**Johan Edgren:** Effect of cysteine on chromosome aberrations induced by radiation of human lymphocytes in vitro.

1969

**Teddy Weber:** Isolation and characterization of a lymphocyte-stimulating leucoagglutinin from red kidney beans. (*Phaseolus vulgaris*).

1968

**Rolf Nordman:** Endemic goitre in Finland in the light of thyroids of newborn in 1962-1965.

**Kristian Liewendahl:** Iodochloroxyquinoline and the thyroid gland. Metabolism of iodochloroxyquinoline iodine and its effect on the thyroid iodine metabolism in rats.

1964

**Kaj Simons:** Vitamin B12 binders in human body fluids and blood cells.

1962

**Albert de la Chapelle:** Cytogenetical and clinical observations in female gonadal dysgenesis.