**Jan Kopecky, MD, PhD, DSc**

*Affillation:*

* Department of Adipose Tissue Biology, Institute of Physiology (**IPHYS**) of the Czech Academy of Sciences
* Director of IPHYS

*Born:* 1951, Czechoslovakia

*Education:*

1969-75, Faculty of Pediatrics, Charles University, Prague - MD

1975-78, postgraduate studies, 1st Institute of Medicinal Chemistry, Charles University - thesis:

Mitochondrial proton transporting ATPase.

2001, DSc degree in biochemistry - Mitochondrial uncoupling proteins UCP1and UCP2

*Positions/experience:*

1978-92, scientist, IPHYS (in the laboratories of Z. Drahota, 1978-87; and J. Houstek)

1987-92, Visiting Scientist (14 months), Roche Inst. Mol. Biol. Nutley, NJ, USA: cloning of vacuolar

ATPase subunit gene; microsequencing of membrane proteins

1991-92, Visiting Scientist (10 months), L.P. Kozak, The Jackson Laboratory, Bar Harbor, ME, USA:

brown fat- specific enhancer of mitochondrial UCP1 gene; and obesity-resistant transgenic

mice with UCP1 in white fat (Kopecky et al, JCI, 1995; the most cited paper of JK, see below)

1992- now, head of the Department of Adipose Tissue Biology, IPHYS: mechanisms of the effects

of omega-3 fatty acids in mice and in human obese and diabetic patients (collaboration with

Prof. T. Pelikanova, MD, DSc; Diabetes Center, IKEM, Prague)

2015 (July) – now, director of IPHYS

*Associate Editor:* Frontiers in Fatty Acid and Lipid Physiology (2011-2015); Annals of Nutrition and

Metabolism (2011- now); and Obesity Facts (2012-2015)

*Other scientific functions:* 1997 – 2008, member of the Board of the director of IPHYS; 1996 –2007, Vice-Chairman of the Scientific Council (**SC**) of IPHYS; 2011-now, member of the SC of the Endocrinological Institute (Prague); 2012 -now, member of the SC of the 1st Medical Faculty, Charles University, Prague 2014-now, member of the Academic Assembly of the Czech Academy of Sciences

*Awards*: 1986, Prize of the Czechoslovak Academy of Sciences; 1995-2000 International Research Scholar of the Howard Hughes Medical Institute; 2013, Special prize awarded by the Minister of Education, Youth and Sports of the Czech Republic for a set of papers on the effects of omega-3 fatty acids (*all these studies were supported by the CSF*)

*Major international grants:* March of Dimes Birth Defect Foundation grants (1998-2000 and 2000- 2003); Welcome Trust Collaborative Research Grant (2003 – 2006); partner in EU FP6 integrated projects EXGENESIS (2005-2009) and EARNEST (2005-2010), and EU FP7 integrated projects BIOCLAIMS (2010-2015) and DIABAT (2011-2015); and European Foundation for Study of Diabetes (2010-2012)

*Publications:* WOS *-* Research ID = B-8244-2012; 168 primary publications, 4 book chapters,

**SCI citations (without autocitation) >3,200; h-index: 35**

*Selected Publications (during the last five years; out of 30 impacted articles in total for the period):*

Medrikova D, Macek Jilkova Z, Bardova K, … Kopecky J. 2012. Sex differences during the course of diet-induced obesity in mice: adipose tissue expandability and glycemic control. *Int J Obes.* 36:262-72. IF = 5.00

Rossmeisl M, Macek Jilkova Z, Kuda O, … Kopecky J. 2012. Metabolic Effects of n-3 PUFA as Phospholipids Are Superior to Triglycerides in Mice Fed a High-Fat Diet: Possible Role of Endocannabinoids. *PLoS ONE* : e38834. IF = 3.23

Horakova O, Medrikova D, van Schothorst EM, … Kopecky J. 2012. Preservation of metabolic flexibility in skeletal muscle by a combined use of n-3 PUFA and rosiglitazone in dietary obese mice. *PLoS ONE* 7:e43764. IF = 3.23

Flachs P, Rossmeisl M, Kuda O, Kopecky J. 2013. Stimulation of mitochondrial oxidative capacity in white fat independent of UCP1: A key to lean phenotype. *BBA* 1831:986-1003. IF = 5.16

Macek Jilkova Z, Hensler M, Medrikova D, … Kopecky J. 2014. Adipose tissue-related proteins locally associated with resolution of inflammation in obese mice. *Int J Obes*. 38:216-223. IF = 5.00

Theodoro J, Zouhar P, Flachs P, … Kopecky J. 2014. Enhancement of brown fat thermogenesis using chenodeoxycholic acid in mice*. International Journal of Obesity*. 38:1027-34. IF = 5.00

Rossmeisl M, Medrikova D, van Schothorst EM, … Kopecky J. 2014. Omega-3 phospholipids from fish suppress hepatic steatosis by integrated inhibition of biosynthetic pathways in dietary obese mice. *BBA* 1841:267-278. IF = 5.16

Masoodi M, Kuda O, Rossmeisl M, … Kopecky J. 2015 Lipid signaling in adipose tissue: Connecting inflammation a metabolism. *BBA* 1851: 503-518. IF = 5.16

Veleba J, Kopecky J, Jr., Janovska P, … Kopecky J, Sr., Pelikanova T. 2015 Combined intervention with pioglitazone and n-3 fatty acids in metformin-treated type 2 diabetic patients: improvement of lipid metabolism. *Nutr. Metab.* 12:52. IF = 3.26

Kuda O., Brezinova M, Rombaldova M, Slavikova B, Posta M, Beier P, Janovska P, Veleba J, Kopecky J Jr., Kudova E, Pelikanova T, Kopecky J. 2016. Docosahexaenoic acid-derived fatty acid esters of hydroxy fatty acids (FAHFAs) with anti-inflammatory properties, Diabetes. 65: 2580-2590.

IF = 8.78

Rohm M., Schafer M., Laurent V., Ustunel B.E., Niopek K., Algire C., Hautzinger O., Sijmonsma T.P., Zota A., Medrikova D., Pellegata N.S., Ryden M., Kulyte A., Dahlman I., Arner P., Petrovic N., Cannon B., Amri E.Z., Kemp B.E., Steinberg G.R., Janovska P., Kopecky J., Wolfum Ch., Bluher M., Diaz M.B., Herzig S. 2016 . An AMP-activated protein kinase-stabilizing peptide ameliorates adipose tissue wasting in cancer cachexia in mice. Nature Medicine. 22: 1120-1130

IF = 30.30

Flachs P, Adamcova K, Zouhar P, Marques C, Janovska P, Viegas I, Jones JG, Bardova K, Svobodova M, Hansikova J, Kuda O, Rossmeisl O, Liisberg U, Borkowska AG, Kristiansen K, Madsen L and Kopecky J. 2017. Induction of lipogenesis in white fat during cold exposure in mice: link to lean phenotype. International Journal of Obesity. 41: 372-380. IF = 5.34

*Three most frequently cited articles:*

Kopecky, J; Clarke, G; Enerback, S; et al. 1995 Expression of the mitochondrial uncoupling protein gene from the aP2 gene promoter prevents genetic obesity. *JCI*  96: 2914-2923. Cited 352x.

Flachs, P; Mohamed-Ali, V; Horakova, O; ….Kopecky, J. 2006 Polyunsaturated fatty acids of marine origin induce adiponectin in mice fed a high-fat diet. *Diabetologia* 49: 394-397. Cited 212x.

Flachs, P; Horakova, O; Brauner, P; …Kopecky, J . 2005 Polyunsaturated fatty acids of marine origin upregulate mitochondrial biogenesis and induce beta-oxidation in white fat. *Diabetologia* 48: 2365-2375. Cited 187x

*Patent:*

M. Bryhn, A.K. Holmeide, J. Kopecký, 2009: New DHA derivatives and their use as medicaments.

US Patent in 2009 (US 7,550,613 B2). Prihláška mezinárodní ze dne 9.11.2006 (WO 2006/117664, PCT/IB2006/001155). Datum udělení patentu, USA: 23.6.2009