

## **CURRICULUM VITAE**

### **Prof. Marie Černá M.D., Ph.D.**

Work address: Dept. of Medical Genetics, 3LF UK, Ruská 87, 100 00 Praha 10

#### **Educational history**

1983-1989 First Faculty of Medicine, Charles University in Prague, Czech Republic (M.D.)

1990-1994 Doctorate in immunology, First Faculty of Medicine, Charles University (Ph.D.)

Theme of doctorate thesis: Human leucocyte antigens in populations and diseases

2007 Habilitation in medical biology, Second Faculty of Medicine, Charles University (Doc.)

Theme of habilitation thesis: Some molecular mechanisms of genetic predisposition  
for diabetes mellitus and its complications

2017 Professor in medical biology, Second Faculty of Medicine, Charles University (Prof.)

#### **Postdoctoral research training**

1990-1993 Southwestern Medical Center, University of Texas, Dallas, U.S.A.

#### **Position**

1989-1999; Medical doctor; Institute for Clinical and Experimental Medicine IKEM Prague  
Department of Immunology, National HLA Center

1999 to present; Third Faculty of Medicine, Charles University (3LF UK) in Prague

1999-2007 Assistant professor, Department of Cell and Molecular Biology

2007-2008 Associate professor, Department of Cell and Molecular Biology

2008-2016 Associate professor, Department of General Biology and Genetics

Head of Department of General Biology and Genetics

2017- Professor, Department of Medical Genetics

Head of Department of Medical Genetics

#### **Membership in scientific societies**

European Federation for Immunogenetics

Czech Immunological Society

Czech Medical Society of J.E.Purkyne: Society for Medical Genetics and Genomics

#### **Current research interests and achievements**

##### Population studies

DNA-HLA comparative analysis in American Indians, Gypsies, Caucasoid population

##### Transplantation immunogenetics

DNA, serologic and cellular HLA typing for organ and bone marrow transplantations

##### Immunogenetics of autoimmune multifactorial diseases (T1D, RA, JIA, SLE)

HLA (polymorphism, regulation regions, expression, epigenetic modifications) + other genes

##### Etiopatogenesis of multifactorial diseases associated with metabolic syndrome X

Type 2 diabetes mellitus and its complications (diabetic nephropathy)

#### **Invited lectures**

##### International meetings

9-10. 10. 2006 – 2<sup>nd</sup> International Symposium of the Human Nutrition & Metabolism  
Research and Training Center, University of Graz, Austria

##### National meetings

19-22. 9. 2007 – 51<sup>st</sup> Congress of Slovak and Czech Rheumatologists, Banská Bystrica, SR

## **Grants**

### Principal Investigator

PECO 93 – 1037: HLA Promoter Region Methylation in Disease (grant with international collaboration)

Kontakt MŠM 03/014: Genetic susceptibility to diabetic nephropathy in type 1 and type 2 diabetes (grant for exchanged stay with international collaboration)

IGA MZ NB/7432-3/03: The significance of the hereditary prognostic markers of T1DM for the clinical diagnosis and prognosis – *evaluation of the Final report in A category*

IGA MZ NS/9970-3/09: The role of prolactin in immune response to bacterial infection – *evaluation of the Final report in A category*

### Co-investigator

EU grant LSHM-CT-2005-018733: The Identification of Risk Factors for the Development of Diabetic Nephropathy: The PREDICTIONS Project (main coordinators Prof. Fokko J. van der Woude and Dr. Bart Janssen, Ruprecht-Karls-University Heidelberg)

IGA MZ NR/8191-3/04: Stress and idiopathic hyperprolactinemia in patients with SLE, RA and autoimmune diabetes mellitus (principal investigator Prof. MUDr. Ctibor Dostál, DrSc.) – *evaluation of the Final report in A category - nomination for the Minister's Prize*

IGA MZ NS/10618-3/09: The role of the prolactin gene polymorphism and its expression in peripheral mononuclear cells in the autoimmune diseases pathogenesis – SLE, inflammatory joint diseases (psoriatic and rheumatoid arthritis) and psoriasis vulgaris (principal investigator MUDr. Markéta Fojtíková) – *evaluation of the Final report in A category*

### Co-worker

FRVŠ 1631/2001/H: Establishment of the molecular and cell biology practices at UK 3. LF (principal investigator RNDr. Pavel Hozák, DrSc.)

IGA MZ NF/6560-3/01: Immunoablative treatment with support of autologous stem cells in advanced multiple sclerosis not responding on convention treatment (principal investigator MUDr. Tomáš Kozák)

IGA MZ NH/6665-3/01: Study of fetal cells in maternal circulation, their isolation and significance in prenatal diagnostics (principal investigator RNDr. Emanuel Žďárský, CSc.)

IGA MZ NB/7420-3/03: Validation of diagnostic proceeding in children and young people with randomly finding hyperglycemia (principal investigator Prof. MUDr. Jan Lebl, CSc.)

### Coordinator

262703/SVV/2011: Genetics of diabetes mellitus and its complications

264702/SVV/2012: Genetics of diabetes mellitus and its complications

260042/SVV/2014: Diabetes mellitus, a complex metabolic disorder with many aspects

### Participation

MSM 111200001: The initial stages of diabetes, metabolic, endocrine and environmental damages of the organism (coordinator Prof. MUDr. Michal Anděl, CSc.)

MSM 0021620814: Prevention, diagnostics and therapy of diabetes mellitus, metabolic and endocrinal affections of organism (coordinator Prof. MUDr. Michal Anděl, CSc.)

PRVOUK P31: Initial stadia of diabetes, obesity and other metabolic diseases (coordinator Prof. MUDr. Michal Anděl, CSc.)

UNCE 204015: University centre for energetic metabolism research (coordinator Prof. MUDr. Michal Anděl, CSc.)

## BIBLIOGRAPHY

### 10 the most cited publications according to WOS

1. Janssen B, Hohenadel D, Brinkkoetter P, Peters V, Rind N, Fischer C, Rychlik I, **Cerna M**, Romzova M, de Heer E, Baelde H, Bakker SJL, Ziric M, Rondeau E, Mathieson P, Saleem MA, Meyer J, Köppel H, Sauerhoefer S, Bartram CR, Nawroth P, Hammes HP, Yard BA, Zschocke J, van der Woude FJ: Carnosine as a protective factor in diabetic nephropathy: Association with a leucine repeat of the carnosinase gene CNDP1. *Diabetes*, 2005: 54 (No 8): 2320-2327. **IF 8,028 SCI: 141**
2. **Cerna M**, Falco M, Friedman H, Raimondi E, Maccagno A, Fernandez-Vina M, Stastny P: Differences in HLA class II alleles of isolated South American Indian populations from Brazil and Argentina. *Human Immunology*, 1993: 37: 213-220. **IF 2,898 SCI: 96**
3. Alkhalaf A, Zürgbig P, Bakker SJL, Bilo HJG, **Cerna M**, Fischer C, Fuchs S, Janssen B, Medek K, Mischak H, Roob JM, Rossing K, Rossing P, Rychlík I, Sourij H, Tiran B, Winklhofer-Roob BM, Navis GJ: Multicentric validation of proteomic biomarkers in urine specific for diabetic nephropathy. *PLoS One*, 2010: 5: e13421. **IF 4,411 SCI: 62**
4. **Cerna M**, Fernandez-Vina MA, Ivaskova E, Stastny P: Comparison of HLA class II alleles in Gypsy and Czech populations by DNA typing with oligonucleotide probes. *Tissue Antigens*, 1992: 39: 111-116. **IF 3,297 SCI: 49**
5. Cinova J, Palova-Jelinkova L, Smythies LE, **Cerna M**, Pecharova B, Dvorak M, Fruhauf P, Tlaskalova-Hogenova H, Smith PD, Tuckova L: Gliadin peptides activate blood monocytes from patients with celiac disease. *Journal of Clinical Immunology*, 2007: 27: 201-209. **IF 2,886 SCI: 47**
6. Romzova M, Hohenadel D, Kolostova K, Pinterova D, Fojtikova M, Ruzickova S, Dostal C, Bosak V, Rychlik I, **Cerna M**: NF $\kappa$ B and its inhibitor I $\kappa$ B in relation to type 2 diabetes and its microvascular and atherosclerotic complications. *Human Immunology*, 2006: 67: 706-713. **IF 2,605 SCI: 35**
7. Feigerlová E, Průhová Š, Dittertová L, Lebl J, Pintérová D, Kološtová K, **Černá M**, Pedersen O, Hansen T: Aetiological heterogeneity of asymptomatic hyperglycaemia in children and adolescents. *European Journal of Pediatrics*, 2006: 165: 446-452. **IF 1,137 SCI: 32**
8. **Cerna M**, Novota P, Kolostova K, Cejkova P, Zdarsky E, Novakova D, Kucera P, Novak J, Andel M: HLA in Czech adult patients with autoimmune diabetes mellitus: comparison with Czech children with type 1 diabetes and patients with type 2 diabetes. *European Journal of Immunogenetics*, 2003: 30: 401-407. **IF 1,009 SCI: 29**
9. Maahs DM, Siwy J, Argilés A, **Cerna M**, Delles C, Dominiczak AF, Gayraud N, Iphöfer A, Jansch L, Jerums G, Medek K, Mischak H, Navis G, Roob JM, Rossing K, Rossing P, Rychlík I, Schiffer E, Schmieder RE, Wascher TC, Winklhofer-Roob BM, Zimmerli LU, Zürgbig P, Snell-Bergeon JK: Urinary collagen fragments are significantly altered in diabetes: a link to pathophysiology. *PLoS One*, 2010: 5: e13051. **IF 4,411 SCI: 26**
10. **Cerna M**, Fernandez-Vina M, Friedman H, Moraes JR, Moraes ME, Diaz L, Stastny P: Genetic markers for susceptibility to endemic Brazilian pemphigus foliaceus (Fogo Selvagem) in Xavante Indians. *Tissue Antigens*, 1993: 42: 138-140. **IF 3,441 SCI: 24**

### Total numbers of results for last 5 years (2012-2017):

No of articles in impact journals: 11

No of monographies: 1

No of chapters in monographies: 1

**Citation according to WOS total: 844**

**H-index according to WOS: 16**