



# **NATO SPS PROJECT:**

## **“A Field Detector for Genotoxicity from CBRN and Explosive Devices”**

### **Partner Presentation:**

**Prof. Tatjana Ruskovska**

**Faculty of Medical Sciences**

**Goce Delcev University, Stip, Republic of Macedonia**

**Kick-off meeting  
Sofia, 15-16. 05. 2017**

# GOCE DELCEV UNIVERSITY



**27 March 2007 - Established by the Assembly of the Republic of Macedonia**

**28 June 2007 - The first Constitutive Assembly of the University Senate**

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Specialization



*Article*

## **Comparative Analysis of Serum (Anti)oxidative Status Parameters in Healthy Persons**

Eugène HJM Jansen <sup>1,\*</sup> and Tatjana Ruskovska <sup>2</sup>

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**Abstract:** Five antioxidant and two oxidative stress assays were applied to serum samples of 43 healthy males. The antioxidant tests showed different inter-assay correlations. A very good correlation of 0.807 was observed between the ferric reducing ability of plasma (FRAP) and total antioxidant status (TAS) assay and also a fair correlation of 0.501

*Research Article*

# **Evaluation of Assays for Measurement of Serum (Anti)oxidants in Hemodialysis Patients**

**Tatjana Ruskovska,<sup>1</sup> Eugene H. J. M. Jansen,<sup>2</sup> and Risto Antarorov<sup>3</sup>**

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## The Effect of Smoking on Biomarkers of (Anti)oxidant Status

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Review

## Serum Biomarkers of (Anti)Oxidant Status for Epidemiological Studies

Eugène Jansen<sup>1,†,\*</sup> and Tatjana Ruskovska<sup>2,†</sup>

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Academic Editor: Guido R. M. M. Haenen

RESEARCH ARTICLE

# Diurnal Variation of Hormonal and Lipid Biomarkers in a Molecular Epidemiology-Like Setting

Linda W. M. van Kerkhof<sup>1</sup>✉, Kirsten C. G. Van Dycke<sup>1,2</sup>✉, Eugene H. J. M. Jansen<sup>1</sup>, Piet K. Beekhof<sup>1</sup>, Conny T. M. van Oostrom<sup>1</sup>, Tatjana Ruskovska<sup>3</sup>, Nevenka Velickova<sup>3</sup>, Nikola Kamcev<sup>3</sup>, Jeroen L. A. Pennings<sup>1</sup>, Harry van Steeg<sup>1,4</sup>, Wendy Rodenburg<sup>1</sup>\*

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## Abstract



## **Chemistry of non-enzymatic protein modification - modulation of protein structure and function**

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ISSN 1071-5762 print/ISSN 1029-2470 online  
DOI: 10.3109/10715762.2014.991725

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healthcare

ORIGINAL ARTICLE

### **Ankyrin is the major oxidised protein in erythrocyte membranes from end-stage renal disease patients on chronic haemodialysis and oxidation is decreased by dialysis and vitamin C supplementation**

T. Ruskovska<sup>1</sup>, S. J Bennett<sup>2</sup>, C. R. Brown<sup>2</sup>, S. Dimitrov<sup>3</sup>, N. Kamcev<sup>1</sup> & H. R. Griffiths<sup>2</sup>

<sup>1</sup>*Faculty of Medical Sciences, GoceDelcev University, Stip, Republic of Macedonia,* <sup>2</sup>*Life and Health Sciences, Aston University, Birmingham, UK,* and <sup>3</sup>*Department of Haemodialysis, Clinical Hospital, Stip, Republic of Macedonia*

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JOURNAL OF PROTEOMICS 92 (2013) 323–334

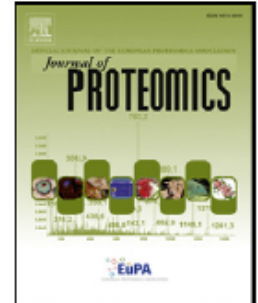


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Review

## Oxidative stress and protein carbonylation in adipose tissue — Implications for insulin resistance and diabetes mellitus<sup>☆</sup>

Tatjana Ruskovska<sup>a,\*</sup>, David A. Bernlohr<sup>b</sup>

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<sup>b</sup>Department of Biochemistry, Molecular Biology and Biophysics, The University of Minnesota, Minneapolis, USA



# EXPERIMENTAL MODEL

- 3T3L1 adipocytes
- Treatment with TNF $\alpha$ 
  - 0.1nM; 0.5nM; 1.0nM for 24h



# **POSITIVE: Interindividual variation in response to consumption of plant food bioactives and determinants involved**

**Leader: Dr. Christine Morand**

Working group 2

1. Subgroup: Meta-analysis
2. Subgroup: Cell and Molecular Targets

# Subgroup: Meta-analysis



*nutrients*



*Review*

## Impact of Flavonols on Cardiometabolic Biomarkers: A Meta-Analysis of Randomized Controlled Human Trials to Explore the Role of Inter-Individual Variability

Regina Menezes <sup>1</sup>, Ana Rodriguez-Mateos <sup>2</sup>, Antonia Kaltsatou <sup>3</sup>, Antonio González-Sarrías <sup>4</sup>, Arno Greyling <sup>5</sup>, Christoforos Giannaki <sup>6</sup>, Cristina Andres-Lacueva <sup>7</sup>, Dragan Milenkovic <sup>8</sup>, Eileen R. Gibney <sup>9</sup>, Julie Dumont <sup>10</sup>, Manuel Schär <sup>11</sup>, Mar Garcia-Aloy <sup>7</sup>, Susana Alejandra Palma-Duran <sup>12</sup>, Tatjana Ruskovska <sup>13</sup>, Viktorija Maksimova <sup>13</sup>, Emilie Combet <sup>12</sup> and Paula Pinto <sup>1,14,\*</sup>

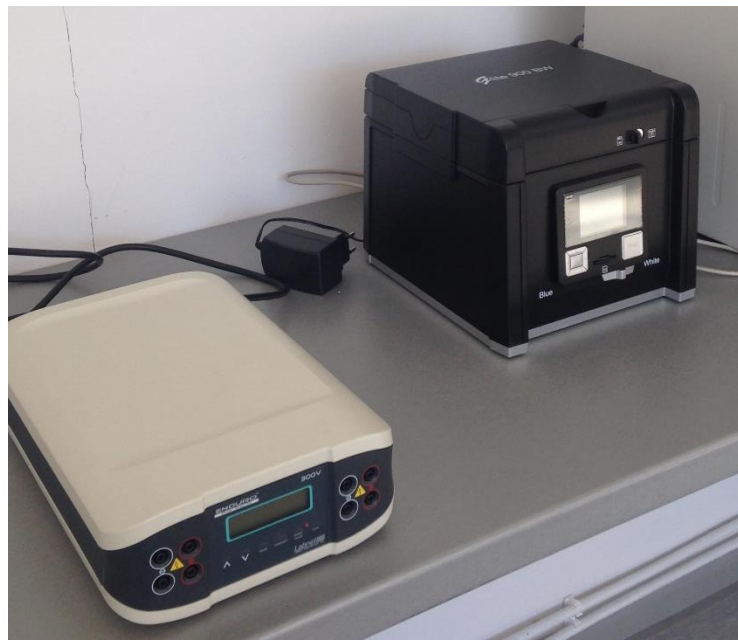
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<sup>2</sup> Division of Diabetes and Nutritional Sciences, Faculty of Life Sciences and Medicine, King's College London, London SE1 9NH, UK; ana.rodriguez-mateos@kcl.ac.uk

<sup>3</sup> FAME Laboratory, School of Exercise Science, University of Thessaly, 42100 Volos, Greece; akaltsat@gmail.com

<sup>4</sup> CEBAS-CSIC. E-30100 Murcia. Spain; agsarrrias@cebas.csic.es

Subgroup analysis showed a more pronounced effect of flavonol intake in participants from Asian countries and in participants with diagnosed disease or dyslipidemia, compared to healthy and normal baseline values.





**Thank you for  
your attention!**