Curriculum vitae (CV)

Personal information

First name, last name

Ilona Vanaga

Birth data

04.07.1985.

Education

09/2008 – 06/2010 University of Latvia, Faculty of Biology, Master of health sciences in nutritional science (Mag.Sal.), ISCED – 740.

09/2004 – 07/2008 Riga Technical University, Faculty of Material Science and Applied Chemistry, Bachelor of engineering sciences in chemical engineering (B.Sc.), ISCED - 640

Current employment

Since 12/2013 SIA "Silv EXPO", 12-2 Alberta str., Riga LV-1010, Latvia.

R&D manager in a health product development company. Development of new products from natural raw material extractives. In charge of joint research projects with academic bodies. Product registration as medical devices and dietary supplements in local and European agencies. Cooperation contracts, branch-specific text translations, communication with partners abroad and joint project management

Previous employment

02/2012 – 02/2013 **SIA "BIC"**, metalworking and manufacturing of aluminium parts for marine, aviation and machine industries. Strategic acquisition of the new export markets, building and maintaining successful business relationships, product promotion, logistics, partnership agreements, translations

10/2009 – 03/2011 Agency of Latvia University of Agriculture Research Institute of Biotechnology and Veterinary Medicine "Sigra", Laboratory of Biochemistry and Microbiology. HPLC-MS/DAD/FD analysis of amino acids and PAHs in foodstuffs

08/2006 – 11/2008 Riga Technical University, Department of Chemical Technology of Biologically Active Compounds, Faculty of Material Science and Applied Chemistry. Biodiesel and fatty acid epoxide and estolide synthesis for biodegradable chainsaw oils. Product analysis with spectrophotometry, IR. NMR

Research experience

2013. – 2015. g. **P29** "The conifer isoprene alcohol biological activity studies in pathology models". According to the Agreement No. L-KC-11-0001, concluded on 05.04.2011. between Limited Liability Company "Pharma and Chemistry Competence Centre of Latvia" and Government Agency "Investment and Development Agency of Latvia" is financed through the project "Pharma and Chemistry Competence Centre of Latvia"

2013. – 2015. g. **P1.7** The conifer isoprene alcohol biological research as well as their effect determination on metabolism, particularly dolichol mevalonate pathway". According to the Agreement No. L-KC-11-0005, concluded on 11.04.2011. between Limited Liability Company "Environment, Bioenergetics and Biotechnology Competence centre" and Government Agency "Investment and Development Agency of Latvia" is financed through the project "Environment, Bioenergetics and Biotechnology Competence centre"

2015. g. **P37** "Study on the Baltic origin plant and berry bioactive substances and their effects on the body's oxidative capacity". According to the Agreement No. L-KC-11-0001, concluded on 05.04.2011. between Limited Liability Company "Pharma and Chemistry Competence Centre of Latvia" and Government Agency "Investment and Development Agency of Latvia" is financed through the project "Pharma and Chemistry Competence Centre of Latvia"

Capacity in all the above mentioned projects: research project management, scientific and medical literature review and analysis, project documentation preparation, technical specifications for procurement. Scientific publications and patents, final project report preparation.

Publications

Jansone, B., Dzirkale, Z., Jekabsons, K., Pilipenko, V., Beitnere, U., Magure, I., Skumbins, R., Kletnieks, U., <u>Vanaga, I.</u>, Muceniece, R., Klusa, V. (2016). Spruce needle polyprenols protect against atorvastatin-induced muscle weakness and do not influence central nervous system functions in rats. *Proc. Latv. Acad. Sci., B Nat. exact appl. sci.*, 70 (1), 20 – 30.

[https://www.degruyter.com/dg/viewarticle.fullcontentlink:pdfeventlink/\$002fj\$002fprolas.2016.70.issue-1\$002fprolas-2016-0003\$002fprolas-2016-0003.pdf/prolas-2016-

0003.pdf?t:ac=j\$002fprolas.2016.70.issue-1\$002fprolas-2016-0003\$002fprolas-2016-0003.xml]

I.Vanaga, U.Kletnieks. Nutritional supplement for heart health. Latvian Patent No. LV 15057 B. A23L1/30, A23L1/302, A61K36/13, A61K36/55. 20.12.2015.

Baiba Jansone, Zane Dzirkale, Kaspars Jekabsons, Vladimirs Pilipenko, Ulrika Beitnere, Raimonds Skumbins, Karlis Kletnieks, <u>Ilona Vanaga</u>, Ruta Muceniece, Vija Klusa (IUPHAR 2015). Polyprenols isolated from *Picea abies* L. Spruce needles influence atorvastatin-mediated muscle strength weakness in *Wistar* female rats. *Chin. J. Pharmacol. Toxicol*, 29 (1), 113.

Conferences

I. Vanaga, I. Nakurte, K.Jekabsons, R.Muceniece, B.Jansone, V.Klusa, G.Latkovskis, V.Saripo, K.Kletnieks, U.Kletnieks. Advances in research of polyprenol chemistry and biological activity. 6th Global Summit on Medicinal and Aromatic Plants, Riga, May 23-26, 2016, 18.

A.Skesters, A.Silova, <u>I.Vanaga</u>, U.Kletnieks, A.Sitovs, I.Nokalna, N.Boks, K.Kletnieks. The effect of natural antioxidants on oxidative stress markers in rats. 6th Global Summit on Medicinal and Aromatic Plants, Riga, May 23-26, 2016, 19.

I.Nokalna, A.Silova, A.Šķesters, <u>I.Vanaga</u>, U.Klētnieks, K.Klētnieks, A.Korica, A.Šitovs. Antioxidative potential and ability to bind free radicals of Sea buckthorn (*Hippophae rhamnoides* L.) shoots' extract bioactive substances *in vitro*. *RSU Scientific Conference*, Riga, March 17-18, 2016, 29.

Latkovskis G., Saripo V., Vanagele D., Sokolova E., <u>Vanaga I.</u>, Erglis A. Safety and efficacy of polyprenols and coenzyme Q10 for statin-induced myopathy: the first results of a pilot study. *XVII International Atherosclerosis Symposium 2015*, Amsterdam, The Netherlands, May 23-26, 2015, 869.

llona Vanaga, Ilva Nakurte, Ewa Swiezewska, Ausma Korica, Ugis Kletnieks, Ruta Muceniece. Separation of polyprenols isolated from *Picea abies* L. Sprice needles by ultra-performance-liquid-chromatography-time of flight mass spectrometry. *7th EU FP project Innovabalt and Latvian institute of organic synthesis*, Riga, August 27 – 29, 2015, OP53, 73.

Ilona Vanaga, Baiba Jansone, Gustavs Latkovskis, Vita Saripo, Vija Klusa, Ruta Muceniece, Kaspars Jekabsons, Karlis Kletnieks. Polyprenol effects on blood biochemical parameters in Atorvastatin-induced myasthenia model rats and humans with statin-induced myopathies. *NUGO: Mechanisms of a long-life health*, Barcelona, Spain September 7 – 9, 2015, 133.

Awards and scholarships

10/2009 – 06/2010 ESF scholarship (contract Nr. 2009/0162/1DP/1.1.2.1.1/09/IPIA/VIAA/004)

11/2007 – 06/2008 Scholarship of Latvian Academy of Sciences foundation in the name of academics Emīlija Gudriniece and Alfrēds Ieviņš in chemistry

Thesis work led
Pedagogical work
Participation in scientific bodies
10/2009 – 03/2011 Agency of Latvia University of Agriculture Research Institute of Biotechnology and Veterinary Medicine "Sigra", Laboratory of Biochemistry and Microbiology. HPLC-MS/DAD/FD analysis of amino acids and PAHs in foodstuffs
08/2006 – 11/2008 Riga Technical University, Department of Chemical Technology of Biologically Active Compounds, Faculty of Material Science and Applied Chemistry. Biodiesel and fatty acid epoxide and estolide synthesis for biodegradable chainsaw oils. Product analysis with spectrophotometry, IR, NMR
Institutional positions