

CV as per
September 10, 2017



Andrei ZAVADA

General

Born 4 November, 1973 in Kharkov, USSR (now Ukraine)
Languages English, Russian (mother tongue), Ukrainian; French and Dutch (functional)
Married 2007, with two kids (2012, 2014)
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Degrees and Qualifications

2007 **PhD** in *Physiology* from the University of Groningen, The Netherlands. Dissertation Title: Defining and determining the properties of the human sleep homeostat. Supervisor & promotor: Domien G. M. Beersma.
1997 **Masters** in *Entomology* from Kharkov State University, Ukraine.

Affiliations/Employers

May 2017– <i>present</i>	Id3as LLC , remotely from Ukraine: Software Engineer (Erlang)
December 2014–April 2017	(on contract) Basho Inc , remotely from Ukraine, Georgia: Software Engineer (Erlang)
November 2013–December 2014	Massive Solutions , Ukraine: Software Engineer (Python)
June–October 2013	Clove Consulting Inc. , USA/Ukraine: Software Engineer (C++)
December 2012–May 2013	eMICT/Lotosoft , Ukraine: Software Engineer (C++)
July 2012–December 2012	StrikeAd , Ukraine: Software Engineer (Erlang)
June 2010–May 2012	Massive Solutions , Ukraine: Software Engineer (Erlang)
2008–10	University of Sussex, UK: Postdoctoral research fellow
2002–6	University of Groningen, The Netherlands: PhD student
1998–9	Schmalhausen Institute of Zoology, Kiev, Ukraine

Skills

Researcher

- Human sleep research laboratory work: mounting EEG electrodes, recording and scoring EEG.
- Radioimmunoassay analysis; qualified to work with radioactive materials.
- General entomology (with expertise in Hymenoptera: Torymidae): field collecting, museum work.

Programmer

- C and C++: omp; gsl, boost, MPI.
- Emacs, \LaTeX , Octave, Gnuplot, Maxima, R; GIMP, Inkscape, Scribus.
- Packaging (Debian).
- Functional JavaScript, HTML, MySQL, some PHP.

Projects

- Munich ChronoType Questionnaire (the online version).
- **Aghermann**, a sleep-research experiment manager, with a facility for reading, displaying, and scoring EEG recordings in EDF format; power spectra analysis and visualization; and Process S simulation following Achermann et al, 1993. I am also packaging and maintaining it for Debian.
- **CNrun**, a neuronal network simulator using NML for network description. Provides conductance- and rate-based Hodgkin–Huxley neuron models, and a number of other neurons & synapses. A 5-6-order RK method is used for integration. Very precise but slow; basic scripting capabilities. Packaged for Debian by me.

Memberships

2006–*by now virtually expired* Sleep Research Society of The Netherlands.

Participation in conferences

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| June 2003 | Oral presentation <i>A survey of chronotypes using the Munich ChronoType Questionnaire in The Netherlands</i> at the 2nd meeting of the BrainTime project (Hanover, Germany). |
| October 2004 | Poster presentation <i>Sleeping habits and circadian preference as revealed by the Munich ChronoType Questionnaire and Horne–Östberg Morningness-Eveningness Questionnaire</i> at the 17th ESRS conference (Prague, Czech Republic). |
| September 2005 | Oral presentation <i>Characteristics of sleep in early and late chronotypes</i> at the 4th meeting of the BrainTime project (Rotterdam, The Netherlands). |
| April 2006 | Oral presentation <i>Finding sleep debt</i> at the BCN Retreat (Doorwerth, The Netherlands). |
| June 2008 | Poster presentation <i>Slow-wave activity self-dissipation efficiency estimates suggest sleep homeostasis restricted to frontal cortex</i> at the SLEEP 2008 22nd Annual Meeting of the Associated Professional Sleep Societies, LLC (Baltimore, Maryland, USA). |
| February 2009 | Poster presentation <i>A neuronal network model for the detection of binary odour mixtures</i> at the COSYNE Conference (Salt-Lake City, USA). |
| March 2009 | Oral presentation <i>Defining and determining the properties of the human sleep homeostat</i> at the Center for Sleep and Consciousness, University of Wisconsin – Madison . |

Invited talks

- March 2009 *Defining and determining the properties of the human sleep homeostat* at the **Center for Sleep and Consciousness, University of Wisconsin – Madison.**

Collaborations

- 2000 CABI, Delémont, Switzerland: A project on biological control of Sulphur Cinquefoil.
2003–6 Chronobiology Group, University of Groningen, The Netherlands: Projects BRAINTIME (EC FP5) and EUCLOCK (EC FP6).
2003 The Natural History Museum, London, UK: revision of world material of *Ecdamua* Walker (Torymidae).

Other academic activities

- 2005–present Refereed articles for *Sleep Medicine*, *Brazilian Journal of Medical & Biological Research*, *Entomological Problems*.

Publications

10 publications in peer-reviewed journals

- 2011 ZAVADA A, BUCKLEY CL, MARTINEZ D, ROSPARS J-P, NOWOTNY T. Competition-based model of pheromone component ratio detection in the moth. *PLoS ONE* **6**(2):e16308. doi:10.1371/journal.pone.0016308.
- 2009 ZAVADA A, STRIJKSTRA AM, BOEREMA AS, DAAN S, BEERSMA DG. Evidence for differential human slow-wave activity regulation across the brain. *Journal of Sleep Research* **18**(1):1-2.
- 2007 ZAVADA A, BEERSMA DGM, GORDIJN MCM, DAAN S. A method to determine the true homeostatic components of sleep regulation in humans. In: *Sleep-Wake Research in the Netherlands* Vol. 17, Ruijt GSE, van Bommel AL, de Boer T, van Kasteel V & van Luijteleaer G (Eds.), NSWO, Leiden, The Netherlands, pp 133-5.
ZAVADA A. Notes on *Ecdamua nambui* (Hymenoptera: Torymidae), with a key to world *Ecdamua* species. *Phegea*, **33**(4):155-60.
- 2005 ZAVADA A, BEERSMA DGM, GORDIJN MCM, DAAN S, ROENNEBERG T. Comparison of the Munich Chronotype Questionnaire with the Horne-Östberg's morningness-eveningness score. *Chronobiology International*, **22**:267-78.
ZAVADA A, GORDIJN MCM, BEERSMA DGM, DAAN S. Human chronotypes. *BCN Annual report 2002-2003*, pp 115-8.
- 2004 ZAVADA A, BEERSMA DGM, GORDIJN MCM, DAAN S, ROENNEBERG T. Sleeping habits and morningness-eveningness preference in a Dutch population. In: *Sleep-Wake Research in the Netherlands* Vol. 15, NSWO, Leiden, The Netherlands, pp 117-8.
- 2003 ZAVADA A. Definition of subgenera and a reassessment of species groups of *Torymus* Dalman (Hymenoptera: Torymidae), based on Palearctic material. *Phegea*, **31**(3):91-120.
ZAVADA A. New species of *Torymus* (Hymenoptera: Torymidae) from Central Asia and Caucasus. *Phegea*, **29**(3):99-107.
- 2001 ZAVADA A. New Palearctic species of *Torymus* (Hymenoptera, Torymidae). *Entomological Problems*, **32**(1):85-90.

References

Prof. Domien G. M. Beersma, PhD supervisor

Dr. Arjen M. Strijkstra, Collaborator

Dr. Vlad Viazovsky, good old friend

Dr. Thomas Nowotny, Group leader