

Curriculum vitae (January 3, 2019)

1. Full name, gender and date of compiling the CV¹

- Full name: Yli-Kauhaluoma, Jari Tapani
- Gender: male

2. Date and place of birth, nationality, current address

- Date and place of birth & nationality: March 3, 1966, Karvia, Finland; Finnish
- Work address: Faculty of Pharmacy, Drug Research Program, P.O. Box 56 (Viikinkaari 5 E), FI-00014 University of Helsinki (UH), Finland; e-mail: jari.yli-kauhaluoma@helsinki.fi; Phone: +358-50-4151604

3. Education and degrees awarded

- Degree title, educational institution, major subject, supervisors, graduation date, grade: *PhD*, UH, organic chemistry, K.D. Janda, R.A. Lerner & A. Hase, 16.5.1997, *laudatur*; *MSc*, UH, pharmaceutical chemistry, J. Halmekoski & E. Honkanen, 2.4.1992, *laudatur*; *MSc*, UH, organic chemistry, T.A. Hase & T. Humpi, 10.10.1991, *laudatur*; *BSc*, UH, chemistry, 1.2.1990; *Matriculation Examination*, Honkajoki Senior Secondary School, 31.5.1985, *laudatur*
- Title of docent: field, university and date when conferred: *Docent of Pharmaceutical Chemistry*, UH, 16.11.2001; *Docent of Bioorganic Chemistry*, Helsinki University of Technology, 1.6.2000

4. Other education and training, qualifications and skills

(i) *Research Visit* to the National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan, M. Kodaka group: combinatorial chemistry, 26.5.-1.6.2002; (ii) *Postdoctoral Fellow*, Massachusetts Institute of Technology, Cambridge, MA, USA, R.L. Danheiser group: catalyzed enediyne cycloaddition reactions, 1.9.1997-31.8.1998; (iii) *Research Associate and Doctoral Student*, The Scripps Research Institute, La Jolla, California, USA, K.D. Janda & R.A. Lerner group: antibody catalysis of chemical reactions, 1.5.1992-31.7.1995.

5. Linguistic skills

- Mother tongue *Finnish*; Other languages *English & German*, excellent command; *Swedish*, good command; *Latin*, good written skills

6. Current position

- Current position, employer and place of work, start and end date of employment relation: *Professor of Medicinal Chemistry*, Faculty of Pharmacy, UH, 1.5.2006-; *Vice Dean for Research*, Faculty of Pharmacy, University of Helsinki, 1.1.2018-
- Research career phase: Leading Researcher

7. Previous work experience

-*Acting Professor of Medicinal Chemistry*, Faculty of Pharmacy, UH, 1.1.2004-30.4.2006
-*University Lecturer*, Department of Pharmacy, UH, 1.8.2002-31.12.2003
-*Academy Fellow*, Academy of Finland, Department of Pharmacy, UH, (i) 1.1.-31.7.2002, substitute position; (ii) 1.5.2006-30.4.2011, declined due to the appointed professorship at the UH
-*Chief Research Scientist*, Technical Research Centre of Finland, 1.10.2001-31.5.2013
-*Principal Investigator*, Drug Discovery Technology Center, UH, 1.9.2000-31.12.2005
-*Senior Research Scientist*, Technical Research Centre of Finland, Finland, 1.10.1998-31.9.2001
-*Postdoctoral Fellow* on a Fulbright research grant, Prof. R.L. Danheiser group, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA, 1.9.1997-31.8.1998
-*Research Associate*, Prof. K.D. Janda & R.A. Lerner group, Departments of Molecular Biology and Chemistry, The Scripps Research Institute, La Jolla, California, USA, 1.5.1992-31.7.1995

¹Link to the University of Helsinki Tuhat Database: <http://bit.ly/2iepyqX>

8. Research funding as well as leadership and supervision

- Major research funding
Academy of Finland: Sustainable Drug Discovery and Development with End-of-Life Yield (No. 320210, Strategic Research Council, SUDDEN), 2018-2021, €1,501,092; Transforming waste into new antibiotics (No. 307464, Biofuture 2025 academy program, TWIN-A), 2017-2020, €500,002; Bromotyrosine alkaloids of marine sponges from the Indian Ocean as an inspiration for novel bioactive compounds (No. 285103, researcher mobility), 2015-2016, €24,800; Design, synthesis and biological activity of selective antimicrobial agents against intracellular pathogens (No. 265481, academy project), 2013-2017, €315,002; Wood diterpenes as leads to new anti-biofilm strategies (No. 264020, academy project), 2013-2015, €307,859; High throughput genetic and chemical analysis of birch wood towards new biorefinery products, (No. 264621, academy project), 2013-2015, €59,000; Seven (7) past Academy of Finland projects etc. during 2002-2011, total €846,255.
European Commission & Innovative Medicines Initiative: Multidisciplinary ETN for development of personalized anti-infective medical devices combining printing technologies and antimicrobial functionality, PRINT-AID (H2020-MSCA-ITN-2016-722467), 2017-2020, €538,291; European Gram Negative Antibacterial Engine, ENABLE (IMI-115583), 2014-2020, €1,370,000; Understanding chronic pain and new druggable targets: Focus on glial-opioid receptor, GLORIA (FP7-HEALTH-2013-INNOVATION-1-602919), 2013-2018, €460,000; Small molecules activating RET for the treatment of Parkinson's disease, GDNF mimetics (FP7-IAPP-2013-612275, Marie Curie), 2013-2017, €100,000; Four past EC projects (ProKinase, Forestspecs, Marex, Grease) during 2004-2014, total €1,765,000.
Jane and Aatos Erkko Foundation: Novel *quorum* sensing inhibitors to target bacterial biofilms infections, 2017-2019, €227,098; Novel inhibitors of protozoan parasites, 2015-2018, €437,301; New protein kinase modulators for cancer and Alzheimer's disease, 2014-2016, €320,000.
Tekes – the Finnish Funding Agency for Technology and Innovation: Smart Small Molecule Drugs, SSMD (No. 1611/31/2018), 2018-2020, €337,000; Efficient treatment of waste water containing pharmaceutical residues, EPIC (No. 849/31/2016), 2016-2019, €51,539; Induction of new cells by innovative pharmaceuticals for vitality of people, 3i PROJECT (No. 40395/13, New Strategic Research Opening), 2014-2018, €1,808,000; Seven (7) past Tekes projects, 2000-2013, total €1,616,273.
World Anti-Doping Agency, WADA (Canada): Three (3) past WADA projects in 2006-2012, \$437,500
Other Domestic and International Funding: *Tres Cantos Open Lab Foundation (UK):* Identifying benzimidazole-derived leads against Plasmodium falciparum (No. TC045), 2012-2014, £135,240; *Center for International Mobility Fellowships:* Five (5) projects, 2005-2012, total €42,480; *Explo'ra Doc 2007 France:* funding for a doctoral student from UCB, Lyon 1, 2007, €22,860; *Finland-US Educational Exchange Commission, Fulbright Scholar Grant,* 1997-1998, \$80,000; *Fulbright Scholar Program,* 2012-2013, \$50,000; *Finnish Pharmaceutical Society, FinMedChem 2013 meeting,* 2013, €1,000; *Foundation for Research of Natural Resources in Finland,* 2006-2008, €122,000; *The Finnish Work Environment Fund,* 2002-2003, €100,913; *Magnus Ehrnrooth Foundation,* 2013, €5,000; *Marjatta ja Eino Kollin Säätiö,* 2007-2009, €180,000; *UH Research Funds,* two (2) project, 2002-2004 & 2014-2018, total €261,000; *Päivikki and Sakari Sohlberg Foundation,* 2010-2011, €70,000; *Research Foundation for Clinical Chemistry,* 2007, €8,600; *Walter och Lisi Wahls stiftelse för naturvetenskaplig forskning,* 3 projects, 2004-2008, total €8000
- Role in the preparation of funding applications for a research group
-Project team member, Betulin, abietanes and resins as novel lead compounds for cancer, Academy of Finland, 2011-2015, total funding €540,003, Principal Investigator (PI) K.-M. Oksman-Caldentey
-Project team member, Fine chemicals and polymers via catalytic activation of carbon dioxide, Academy of Finland, 2009-2011, total funding €151,000, PI Salme Koskimies

-*Leader of a subproject*, Agonists of glutamate receptors, total funding €201,700; Inhibitors of COMT and methyltransferases, total funding €63,900, Tekes, 2000-2001, PI Jyrki Taskinen

- Leadership in research work: *Co-ordinator* of the EC project PRINT-AID (H2020-MSCA-ITN-2016-722467), Multidisciplinary European training network for development of personalized anti-infective medical devices combining printing technologies and antimicrobial functionality, 2017-2020; *Vice Co-ordinator* of the EC project GLORIA (FP7-HEALTH-2013-INNOVATION-1-602919), 2013-2018; *Co-ordinator* of the Academy of Finland Research Consortia SUDDEN (Strategic Research Council, No. 320210), 2018-2021; TWIN-A (Biofuture-2025-307464), 2017-2020 & WOODYFILM (SA-SHOK-264020 & 264064), 2013-2015; *Co-ordinator* of the ERA-NET project GREASE (SA-256515), 2012-2014; *Vice Co-ordinator* of the EC project MAREX (FP7-KBBE-2009-3-245137), 2010-2014; *Vice Co-ordinator* of the EC project FORESTSPECS (FP7-KBBE-2008-2B-227239), 2009-2012; *Member of the Project Coordination Committee and WP Leader* of the EC-FP6 ProKinase project LSHB-CT-2004-503467, 2004-2009; *Co-ordinator* of the COST D16 “Combinatorial Chemistry” Working Group, 2003-2004
- Supervision of post-doctoral researchers: *Pirjo Hanhinen* 2000-01; *Swapan K. Samanta* 2002-05; *Ingo Aumüller* 2003-10, 2014-15; *Mohanathas Rajaratnam* 2007-10; *Paula Kiuru* 2007-15; *Gustav Boije af Gennäs* 2011-16; *Vânia Moreira* 2012-17; *Alexandros Kiriakis* 2012-18; *Chinmaya Bhat* 2015-16; *Leena Keurulainen* 2015-17; *Jayendra Patel* 2017-19; *Narendar Kumar Khatri* 2018; *Andrew Neal* 2018-19; *Teppo Leino* 2018-19
- Experience as officially appointed supervisor to under and post-graduate students/doctoral students
Current supervision of doctoral students: *Tiina Ahonen*, expected graduation date 2020; *Ralica Arnaudova*, exp. 2020; *Shella Gibert-Girard*, exp. 2021; *Niklas Johansson*, exp. 2020; *Mikael Jumppanen*, exp. 2019; *Sofia Nilsson*, exp. 2019; *Riccardo Provenzani*, exp. 2020; *Ines Reigada*, exp. 2021; *Julius Sipilä*, exp. 2019
Completed supervision of doctoral students: *Martti Alkio* 2008; *Ingo Bichlmaier* 2008 (GSPR Thesis Award, Albert Wuokko Award of the Finnish Pharmaceutical Society); *Kirsi Harju* 2009 (GSPR Thesis Award); *Gustav Boije af Gennäs* 2011; *Alexandros Kiriakis* 2012; *Nenad Manevski* 2013 (FPDP Thesis Award); *Sami Alakurtti* 2013; *Tuomo Leikoski* 2014; *Yuezhou Zhang* 2014; *Leena Keurulainen* 2015; *Raisa Haavikko* 2015; *Teppo Leino* 2018; *Laura Kolsi* 2019
Supervision of undergraduate and postgraduate students: *Licentiate of Philosophy:* *Ingo Bichlmaier*, Martin-Luther-Universität Halle-Wittenberg, Germany, 2005; *Master of Science:* UH (39); Helsinki University of Technology & Aalto University (8); University of Turku (1); European Universities (20)

9. Merits in teaching and pedagogical competence²

-*Person-in-Charge of Pharmaceutical Chemistry and Medicinal Chemistry* at the UH since 1.8.2010 with active involvement in curriculum planning and the implementation of courses, development of teaching methods and supervision of PhD, MSc and BSc theses.

-The UH Pharmacy Student Association *awards for excellent teaching*, 2004 & 2017; Two *nominations for the Eino Kaila Distinguished Teacher Prize* in the UH, 2006 & 2007.

10. Awards, prizes and honours

Alfred Kordelin Foundation, Science Award, 2015; Medal of the FWO, Belgium, 2014; UH Pharmacy Student Association teaching award, 2004 & 2017; VTT Award for an outstanding work in synthetic bioorganic chemistry, 1998; The UH award for an excellent PhD thesis, 1998; The young researcher's award of the Finnish Chemical Society, 1992; Prof. E. Hjelt award of the UH for an outstanding MSc thesis in organic chemistry, 1992; International XVII Chemistry Olympiad, bronze medal, Bratislava, Czechoslovakia, 1985.

11. Other academic merits

- Service as a pre-examiner of PhD dissertations: Finland (14 times), international (12 times)
- Service as an opponent of PhD dissertations: Finland (5 times), international (6 times)

²A detailed *Teaching and Pedagogical Portfolio* with e.g. teaching experience and appointments is available on request.

- Evaluation of academic/scientific competence: *Professorships*, Finland (1), international (9 times); *Docentships*, Finland (6 times)
- Member of international peer evaluation committees of funding applications: INTAS Grants, EC 2003-2006; Estonian Science Foundation 2004-2011; National Science Foundation, USA, 2006-2007; Biomedical Research Council, Singapore, 2007; Czech Science Foundation, 2009; The Danish Council for Independent Research, 2010; The Danish Agency for Science, Technology and Innovation, 2014; Ministry of Science and Technological Development, Serbia, 2010; The Icelandic Centre for Research, 2012; Swiss National Science Foundation, 2012; Estonian Research Council, 2012, 2016; Member of the FWO Expert Panel “Med1”, Belgium, 2012-2014; MIUR, Rome, Italy, 2016; University of Calabria, Italy, 2017.
- Memberships and positions of trust in scientific societies: Finnish National Committee for Chemistry, chair, 2016-2018; Finnish Chemical Society, member, 1985-; member of the board, 2012-2015 & 2018-; vice president, 2014-2015, president 2016-2018; Finnish Pharmaceutical Society, member, 1986-; American Chemical Society, member, 1992-; AAAS, member, 1992-; The Sigma Xi, The Scientific Research Society, member, 1998-
- Membership in national or international expert groups, evaluation or steering committees & other expert duties: Evaluation of two candidates to be nominated as the Beijer researchers at the Faculty of Pharmacy, Uppsala University, Kjell och Märta Beijers Stiftelse, Stockholm, 2018; Faculty of Pharmacy and University Pharmacy Committee, member, 2015-2017; Prize for Young Medicinal Chemist in Industry, member of Selection Committee, European Federation for Medicinal Chemistry, 2014; Orion Research Foundation, member, 2012-2017; FWO Expert Panel “Med1”, Belgium, 2012-2014; Teachers’ Academy of the UH, member of the evaluation committee, 2012; Pharmacopoeia Committee of the Finnish Medicines Agency, member, 2008-; Scientific Advisory Board for Defence, member, 2006-; UH Research Funds, Post-doctoral grants, member of the evaluation panel, 2006; Advisory Panel of the Emmanuel Merck Prize, Finnish Chemical Society, member, 2003
- Positions as editor-in-chief, editor, or member of editorial boards of scientific and scholarly journals and publication series: *Anti-Cancer Agents in Medicinal Chemistry*, member of editorial board, 2009-; *Frontiers in Chemistry: Medicinal and Pharmaceutical Chemistry*, member of editorial board, 2014-
- Referee for scientific and scholarly journals: 34 medicinal, bioorganic and organic chemistry journals
- Administrative responsibilities at higher education institutions
Doctoral program administration: Director of the Pharmacy Section of FinPharma Doctoral Program, 2012-2013, Acting director 1.1.-31.3.2014; The Paul Ehrlich MedChem Euro-PhD Network, member of the board, 1.1.2010-; Vice-Director of the Graduate School in Pharmaceutical Research 2010-2011
Faculty administration (UH, Faculty of Pharmacy): Head of the Division of Pharmaceutical Chemistry and Technology, Faculty of Pharmacy, UH, 2014-2017; Head of the Pharmaceutical Design and Discovery group of the Drug Research Program, Faculty of Pharmacy, UH, 2016-2017; Faculty Council: member 2010-2017, deputy member 2004-2009; Faculty Steering Group 2014-2017; Vice Dean for Research 1.1.-31.7.2010; Faculty Research Committee: chair 1.1.-31.7.2010, member 2004-2009; Head of the Division of Pharmaceutical Chemistry 2009-2013; Admissions Committee: chair, 2007-2009
University administration (UH): ChemLab Gadolin, member of steering group, 2010-; Viikki Science Library, member of board, 2007-2009; Drug Discovery & Development Technology Center, member of board, 2005; Viikki Drug Discovery Technology Center, member of steering group, 2000-2005
Other research administration: Member of the Kemia-Suomi Working Group, 2014-; COST CM0801, New drugs for neglected diseases, member of the management group, 2009-2012; Biocenter Viikki Research Group Organization, UH, chairman, 2002; Drug Research Program at the Biocenter Viikki, UH, co-ordinator, 2001-2008; COST D16 Combinatorial Chemistry, member

of the management group, 2001-2004; Biocenter Viikki Research Group Organization, UH, member of the board, 2000

12. Scientific and societal impact of research¹

- Total number of publications: Peer-reviewed scientific articles (175); Non-refereed scientific articles (2); Scientific books and monographs (3); Theses (3)
- Merits related to the production and distribution of research results: Publications intended for professional communities (17); Publications intended for the general public (23)
- Invention disclosures, patents and other commercialization-related merits: Patents and the past Invention Disclosures led to the patenting process (23); Current Invention Disclosures (1); Collaboration with industry: Hormos Medical Oy Ltd, Turku, Finland, 2000-2008; Oy Juvantia Pharma Ltd, Turku, Finland, 2000-2006; Orion-yhtymä Oyj, Orion Pharma, Espoo, Finland 2000-2006; Granula Oy, Kotka, Finland, 2004-2008; Raisio Benecol Oy, Raisio, Finland, 2004; Valio Oy, Helsinki, Finland, 2004; UPM-Kymmene Oy, Helsinki, Finland, 2004-2008; GlaxoSmithKline, Tres Cantos, Spain, 2012-2013; Northern Antibiotics Ltd., 2015-; Voxdale BVBA, 2017-2020; Aptuit LLC/Evotec, 2017-2020; Aranda Pharma Ltd. 2018-; Member of the Generation Green team, Helsinki Challenge, a science-based competition, 2015

13. Positions of trust in society and other societal merits

- *Organizing committees*: Finnish Chemical Congress 2003, 2013; 18th & 19th Helsinki Drug Research Conference, 2006, 2008; The IX & X Spring Meetings of Synthetic Chemistry, Association of Finnish Chemical Societies 2006, 2007; Taskinen Symposium on Drug Design and Metabolism, 2007; 1st & 2nd FinMedChem Symposium 2011, 2013; FinPharmaNet Meeting 2011; The 4th International Conference on Pharmaceutical Sciences, Bled, Slovenia, 29.9.-1.10.2011, Slovenian Pharmaceutical Society; XXIII International Symposium on Medicinal Chemistry, Lisbon, Portugal, 7.-11.9.2014, EFMC.
- Member of Satalinnan Säätiö, Helsinki, 2017-; Inspector of the Satakunta Nation (SatO), University of Helsinki, 2017-; Member of the Emil Cedercreutz Foundation, 2017-