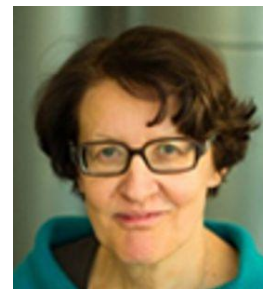


CURRICULUM VITAE



1. Full name and date:

Name: S I V O N E N, ANNA KAARINA

Gender: Female

Date of writing the CV: 4.1.2019

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

Date and place of birth: August 23, 1954, Kiuruvesi, Finland,

Citizenship: Citizen of Finland

Office address: Department of Microbiology, P.O.Box 56, Viikki Biocenter, Viikinkaari 9, FI-00014 University of Helsinki, FINLAND; Phone: +358-2-941 59270; E-mail: kaarina.sivonen@helsinki.fi

3. Education and degrees awarded:

1996 Docent (adjunct professorship) in Microbiology at the University of Helsinki

1990 Doctoral dissertation in Microbiology approved by the University of Helsinki, Faculty of Agriculture and Forestry. Title "Toxic cyanobacteria in the Finnish freshwater and the Baltic Sea"

1974-1982 M.Sc. degree. University of Helsinki, Faculty of Agriculture and Forestry, Laudatur from the Master thesis (environmental conservation, microbiology, limnology, chemistry, biochemistry).

4. Linguistic skills:

Mother tongue: Finnish; Other languages: English (fluent), Swedish, German

5. Current position: Full Professor in Microbiology at the University of Helsinki (started 1.8.2010, nomination in 2009 - permanent) – Mikrobiologian professori, Level 4

Head of the Department of Microbiology (1.1. 2018 --)

6. Previous work experience:

1.8. 2000 -31.7. 2010 Academy Professor (two 5 year periods), Akatemiaprofessori

Nomination in 2007 Professor in Limnology, University of Helsinki, Limnologian professori

Nomination 1.8.2004 - 1.5.2007 Lecturer in Microbiology, University of Helsinki, Yliopistonlehtori

1997-2000 Senior Scientist of the Academy of Finland, Project Leader, 1.8.1997-31.7.2000

1996-1997 Research Scientist, Project Leader, University of Helsinki, 1.8.1996-31.7.1997

1994 Acting Assistant Professor at the University of Helsinki, Department of Applied Chemistry and Microbiology, Division of Microbiology. 02.-03.1994.

1990-1996 Research Scientist of the Academy of Finland (Project leader), 1.8.1990-31.07.1996. Suomen Akatemian nuorempi tutkija

1986-1990 Research Assistant of the Academy of Finland. 1.8.1986-31.7.-90. Suomen Akatemian tutkimusassistentti

1984-1986 Research scholarship from the University of Helsinki. Helsingin yliopiston nuorten tutkijain apuraha, 1.9.1984 - 31.7.1986

1982 and 1983 Teaching courses at the Department of Microbiology. Exercises.

1982-1984 Research Assistant, Department of Microbiology, Univ. of Helsinki (project: Cyanobacterial biotechnology).

1977-1980 and 1983 Technical assistant/course teacher, Dept. of Limnology, University of Helsinki

Long-term visits abroad:

1991-1992 Visiting Research Associate at the University of Chicago, Department of Molecular Genetics and Cell Biology, Chicago, Illinois, USA. 17.7.1991-31.12.1992.

1990-1991 Visiting Scientist at Wright State University. Department of Biological Sciences, Dayton, Ohio, USA. 15.11.1990-15.07.1991.

1988 Visiting Scientist at Wright State University, Department of Biological Sciences, Dayton, Ohio, USA. 10.05.-12.09.1988.

1979-1980 Scholarship, Hungarian-Finnish Cultural Exchange program, (from the Ministry of Education), Eötvös Lorand Univ., Dept. of Microbiology, Budapest, Hungary. 15.10.1979-15.04.1980.

7. Research funding, leadership and supervision:

Major research funding in recent years, K. Sivonen as PI:

Receiver of the most competed funding in Finland: Academy professorship twice 2000-2005 and 2005-2010, Center of Excellence Status once from the University of Helsinki (1994-1999), twice from the Academy of Finland for years 2002-2007 and 2008-2013. International funding: participant in 11 EU-Projects, Partner in Nordic Centre of Excellence 2017-2022.

* The Academy of Finland, Research Center of Excellence status, 2002-2007.

* The Academy of Finland, RCBER, grant of the academy professors 2005-2010.

* The Academy of Finland, Research Center of Excellence status, 2008-2013 (Our share total of 1 636750 € includes 12 % overhead).

* The Academy of Finland, research grant titled "Novel bioactive compounds from cyanobacteria: structures, biosynthesis and mechanisms of action", 2012-2016 (Total of 660785 € includes 112 % overhead).

* EU- Life Sciences and Health, partner, PROKINASE 2004-2009 (Total of 789720 € includes 20% overhead).

* Waterchip-TEKES (the Finnish Funding Agency for Technology and Innovation) project titled "Low-cost, fast, miniaturised solutions for water quality assessment", 2011-2013 (TEKES share 60% = 117876 €).

* ERA-IB 6th EU Framework Programme - MESIAB "Multi enzyme systems involved in astin biosynthesis and their use in heterologous astin production" (Funding from TEKES), 2011-2014 (TEKES share 70% = 298000 €).

* Joint Academy and Brazilian FAPSEP project to prof. K. Sivonen (273798) for years 2014-2018 (Total of 556384 € includes 128 % overhead).

* BONUS project BLUEPRINT - "Biological lenses using gene prints", 2014- 30.4.2018 (funded by Academy of Finland and EU) (Total of 169686 € includes 20 % overhead).

* BLUE&GREEN, Horizon2020 EU- twining project, 2016-2018 (Total of 119158 € 25 % overhead).

* Nordic Centre of Excellence: "Towards versatility of aquatic production platforms: unlocking the value of Nordic bioresources", 2017-2022, partner (182030 €).

* Jane and Aatos Erkkö Foundation, "Characterization of antifungal and anti-cancer compounds from cyanobacteria" 2017-2020, (524000€ 15% overhead).

Leadership in research work: Independent P.I. since 1990. Years 2002-2007 Director of the National Research Center of Excellence "Microbial resources" (selected by the Academy of Finland); 2008- 2013 Vice director of the National Research Center of Excellence "Integrated photosynthesis, bioactive compound and biohydrogen research" (selected by the Academy of Finland)

Supervision of post-doc researchers: Total of 18, KS as responsible supervisor in all: Chantal Vezie (French), 1997 - 1998, 16 mo; Sari Repka, 1999 - 2003, 58 mo; Jaana Lehtimäki, 2000 - 2003, 24 mo; Kaisa Haukka, 1997 - 2005, 72 mo, Berit Siemer (Danish), 1999 - 2000, 20 mo; Anja Lampio, 2000- 2002, 34 mo; Vesa Harjunpää, 2000 - 2001, 10 mo; Christina Lyra, 2002-2006, 44 mo; Leo Rouhiainen, 2004 – 2010, 72 mo; David Fewer (Irish), 2001 – presently as independent P.I.; Jouni Jokela, 2002 – presently as senior researcher; Anne Rantala (Ylinen), 2007 – 2013 (senior researcher); Kaisa Haukka, 2012 – 2013 (senior scientist); Teppo Hiltunen, 2011 – 2017 (Currently Academy Fellow); 2015 Suvi Suurnäkki 2 mo, 2015-2017 Tania Shishido (Brazilian) 11 mo, 2015-2017, Jonna Teikari, 3.5 mo (2018), Danilo Alavarenga (Brazilian) 12 mo (1.7. 2018-31.06. 2019).

Theses supervised:

Supervisor/cosupervisor of 22 completed **PhD theses**: (J. Rapala, J. Lehtimäki, M. Laamanen, C. Lyra, I. Oksanen, L. Rouhiainen, P. Wacklin, J. Vaitomaa, A. Rantala, K. Halinen, K. Berg, N. Leikoski, H. Sinkko, H. Wang, L. Liu, T. Shishido, S. Suurnäkki, S. Coloma, J. Teikari, A. Humisto) and two for foreign universities (M. Gugger, S. Gkelis), a licenciate thesis (M. Färdig).

Supervisor/cosupervisor of 35 **Master's theses** (J. Lehtimäki, J. Rapala, L. Räsänen, P. Lehtinen, M. Koivula, J. Kukkonen, K. Halinen, L. Sihvonen, K. J. Laakso, K. Koskenniemi, E. Eronen, N. Lehtonen, M. Köykkä, H. Hirvonen, K. Rantasärkkä, U. Kaasalainen, H. Wang, A. Quesada, J. Vestola, S. Känä, S. Narayanasamy, G. V. Gómez Sáez, A. Partanen, S. Jäppinen, J. Teikari, C.-T. Kumer, E. Paukku, S. Suominen, P. Alakoski, A. Humisto, J. Cairns, A. Tamrakar, N. Renner, L. Heinilä, R. Shenstra).

8. Merits in teaching and pedagogical competence:

I am responsible for organizing both undergraduate (major teaching responsibilities currently "Structure and function of microbes" lecture course for over 200 students, master theses and candidate theses evaluation, final examinations) and graduate student courses (total of 18 Ph D courses organized in various topics including several international courses over the years) as a professor in microbiology and board member of the graduate programs. I will give annually about 1215 credit points for the students (includes both undergraduate and graduate students). I also have formal pedagogical education at the

Helsinki University (5 ECTS) as well as leadership. Annually about 6 master and 3-6 Ph D students receive the degree thru my involvement as responsible teacher.

Distinctions received by PhD and Master students supervised/co-supervised by K. Sivonen:

- * Rector of Helsinki University awarded the Great Ph.D. Thesis Award to Ilona Oksanen in 2004 and in 2008 to Anne Rantala for their Ph D theses. Jaana Lehtimäki was selected in 2001 by Finnish Environmental Science Society as the Recipient of the Best Thesis Price in Finland for her thesis. Tania Shishido received the best Ph D thesis award in Viikki 2015 (from Viikki Research Organization).
- * Grading Committees (external evaluators) rated the Ph.D. theses of Jaana Lehtimäki (2000), Ilona Oksanen (2004), Leo Rouhiainen (2004), Anne Rantala (2007), Niina Leikoski (2013), Tania Shishido (2015) and Jonna Teikari (2018) with the highest possible grade, "Pass with distinction".
- * The undergraduate students (19 out of 35) Kati Laakso (2004), Kerttu Koskenniemi (2005), Eeva Eronen (2007), Niina Lehtonen (2007), Miikka Köykkä (2007), Hao Wang (2008), Ulla Kaasalainen (2008), Alba Quesada (2010), Johanna Vestola (2011), Suvi Känä (2011) Shaman Narayanasamy (2012), Gonzalo V. Gómez Sáez (2012 - awarded), Clara-Teresia Kumer (2013), Eeva Pauku (2013), Saara Suominen (2014) and Pirita Alakoski (2014), Anu Humisto (2014) and Johannes Cairns (2015), Rashmi Shestra (2018) received the highest or second highest grade from their Master Degree theses. Kerttu Koskenniemi and Hao Wang received the best thesis in Biotechnology in the year 2005, 2008 awards from the Biotechnology Division of Finnish Chemical Society and Clara-Teresia Kumer obtained the best thesis award in 2013 from the Faculty.

9. Awards, prizes and honours:

2016	Knight, First Class, of the Order of the White Rose of Finland
2000 - 2010	Academy Professorship (the Academy of Finland, two 5 year periods)
2001	Science award from the Helsinki City for excellent research on cyanobacteria
2002	Elected member of the National Academy of Sciences and Letters (Biosciences)
2002 - 2007	Director of the National Research Center of Excellence "Microbial resources" (selected by the Academy of Finland)
2008 - 2013	Vice director of the National Research Center of Excellence "Integrated photosynthesis, bioactive compound and biohydrogen research" (selected by the Academy of Finland)

Invited keynote speaker/ invited oral presentations and lectures total of 55.

Invitations to chair sessions in the international conferences: 25.

10. Other academic merits:

Scientific expert positions: **Pre-examiner of 25 doctoral dissertations:** S. Jansson, 1995, Stockholm University; A. Soitamo, 1997, University of Turku; M. Grahn, 1997, University of Helsinki; P. Hobson, 2001, Flinders University of South Australia; V. Sipiä, 2001, Åbo Academy University; M. Kaebernick, 2002, University of Sydney; K. Fergusson, 2003, Univ. of South Australia; M. Metsä-Ketälä, 2003, Univ. of Turku; C. Garnett, 2005, Univ. of Queensland; M. Herranen, 2005, Univ. of Turku; J. Oberholster, 2005, Univ. of Pretoria; P. Zhang, 2006, University of Turku; K. R. Conradie, 2008, North-West University; H. Juottonen, 2008, Univ. of Helsinki; J. Hultman, 2008 Univ. of Helsinki; S. Giglio, 2010, University of South Australia; J. Larsson, 2011, Univ. of Stockholm; M. Pitkäranta 2011, Univ. Helsinki; D. Carmel, 2011, Univ. of Turku, T. Oja, 2012, Univ. of Turku; A. Atanasova 2013, Univ. Helsinki; A.-M. Örmälä-Odegrip 2015, Univ. Helsinki; H. Kinnula 2016 Univ. of Jyväskylä; A. Helfenstein 2017 Univ. Helsinki (Pharmacy), M. Tossavainen 2018 Univ Helsinki (Lahti)..

Official opponent for 12 doctoral dissertations: C. Vezie, 1995, Univ. of Rennes; P. Henriksen, 1997, Univ. of Copenhagen; S. Lyck 2001, Univ. of Copenhagen; C. Engelke, 2001, Univ. of Aberdeen; C. Lugomela, 2002, Univ. of Stockholm; D. Papaefthimiou, 2007, Univ. of Stockholm; M. Paavelainen, 2008, Univ. of Helsinki; M. Hamisi, 2010, Univ. of Stockholm, H. E. Nonga 2011, Norwegian School of Veterinary Science, L. Giaramida 2013 Univ. of Aberdeen, R. Rahkila 2015, Univ. of Helsinki, J. Soares De Oliveira Martins 2016, Univ. of Porto; and a Licenciante thesis (Liang Ran, 2005, Stockholm University).

CUSTOS and Member of Evaluation Committees of 23 Ph D Students (excluding own students) in the **University of Helsinki in years 2010-2018.**

Examiner for 13 docent qualifications (K. Ylihonko, 1999, T. Tyystjärvi, 2004, Univ. of Turku; V. Sipiä, 2004, Univ. of Helsinki; E. Torvinen, 2008, Univ. of Kuopio; S. Suikkanen 2013, Univ. of Helsinki; M. Metsä-Ketälä 2013, Univ. of Turku; R. Foster 2014, Univ. of Stockholm; Rauni Kivistö ja Elina Säde, 2015, Univ. of Helsinki, Kaisa

Hakkila 2015, Univ. Turku; Emma Master 2017, Aalto University; Dariusz Dziga, 2017, Åbo Akademi; Pauli Kallio 2017, Univ. Turku).

Evaluator for the qualification for academic positions: Evaluator of group leader position at CNRS, France, 2005. Researcher position at University of California, Santa Cruz, 2005. External evaluator of adjunct Associate Professor in the Department of Life Sciences at Ben-Guron University, Israel 2005. Researcher position for the National Research Foundation, South Africa, in 2006, 2010, Evaluator for professorship 2007 Univ. of Tennessee, USA. Evaluator of professorship in microbial ecology, Univ. of Telemark (Høgskolen i Telemark), Norway 2011. Evaluator of full professorship, The University of Tromsø, Norway 2015. Examiner of foreign and national research grant applications. 2017 member of selection committee of Tvärminne professorship (Univ. of Helsinki, Biosciences). Evaluator of the tenure track/ associate professor and university lecturer positions for University of Jyväskylä (2018).

Editorial board memberships and referee for scientific journals: Regional editor of **Environmental Toxicology** (2002--); Member of the editors of **International Journal of Microbiology** (2008--); Member of the Editorial Board of **Applied and Environmental Microbiology** (2003 - 2014), **TOXICON** (started 1.10 2003--). Proceedings Editor of *Phycologia* 1996 “1st International Conference on Toxic Cyanobacteria”, Guest Editor of *Environmental Toxicology* 2005 “6th International Conference on Toxic Cyanobacteria”. **Referee for overs 40 Scientific Journals. Editor of Book** (2017) (John Wiley and Sons Ltd).

Scientific positions of trust and administration:

2018 – current	Head of the Department of Microbiology
2018 – current	Member of the Faculty Council
2016 – current	Director of HAMBI culture collection
2013 – current	Members and Vice-director (2018 onwards) of the Doctoral Programme in Microbiology and Biotechnology
2014 – 2017	Council member of the Department of Food and Environmental Sciences
2017	Vice-member of the Faculty Council (Faculty of Agriculture and Forestry)
2007 – 2016	Biocentrum Helsinki - Member of the steering committee
2009 – 2015	Vice-director of VALUE nation-wide Graduate Program
2012 – 2016	Board member (MC) and vice leader of the WP1 of the European-wide COST action ES1105 “Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and management”
2010 - 2014	Member of the national standardisation committee on water microbiological methods.
2011	Co-ordinator of MICRO-group (85 persons) in the Helsinki University Research Evaluation
2003 - 2013	Viikki Graduate Program in Biosciences – Member of the steering committee
2007 - 2009	Representative of Faculty of Agriculture and Forestry in collaboration committee of Helsinki University and Finnish Institute of Marine Research.
1999 - 2004	Member of the steering committee of Nordic Research Network (NorFa) "Cyanobacteria, toxins, water quality and health"
1998 - 2003	Member of the steering committee of the European Science Foundation program "CYANOFIX - Cyanobacterial nitrogen fixation"
1996 - 2002	Board Member of Societas Biochemica Biophysica et Microbiologica Fenniae
1996 - 2000	Coordinator of the Biocenter Viikki Research Program “Microbial ecology and biotechnology”

Recent conference organization: Organizer or member of organizing committee total of six since 2003.

Memberships in International Scientific Organisations:

1996 --Member of the International Society of Toxicology; 2001-- Member of the American Society of Microbiology; 2005-- Member of International Society of Microbial Ecology

11. Scientific and societal impact of research:

Scientific papers in international refereed journals (published or in press): 220. In books and printed international conference proceedings with peer-review: 27. Finnish journals and books: 19. Popularisation of science (in Finnish): 16. Chairperson in international meetings: 25. Invited lectures in international conferences, foreign universities and research institutes: 55. Two Finnish patent applications filed in May 2003. One patent continued in Europe [EP1629114 (A2)] and USA, US patent no. 20070059699. Date of International patent publication 06.12.2007, PTC/FI2007/050312.

K. Sivonen in Web of Science (21.12.2018 – all databases): H-index 61, sum of times cited n. 10900 (excluding self-citations). Citations show increasing trend: record year 2018, citations over 1000.