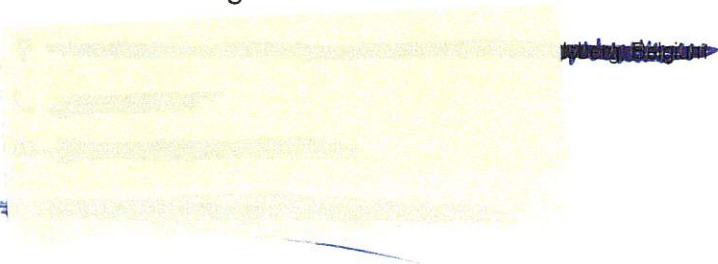


PERSONAL INFORMATION **Inka Vanwonterghem**



**TECO Mobility Grant Application**

WORK EXPERIENCE

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- February 2018 – current    **Senior Engineer (postdoctoral level)**  
 Centre for Microbial Ecology and Technology (CMET), Ghent University, Belgium

  - Optimization of electrochemical disinfection unit for decentralised treatment of septic tank effluent
  - Grant proposal writing
- July – December 2017    **Research Associate**  
 Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium

  - Quantitative mapping of Food Systems Research (EC Food 2030)
  - Science communication – Practical guidelines for the application of windbreaks as emission mitigation strategy
  - Modelling – Flow of antibiotic residues from livestock to ground- and surface waters (EC Life+)
- August – October 2016    **Tutor - Biochemistry**  
 Murdoch University, Australia

  - Practicals for Bachelor students
- July 2015 – May 2016    **Postdoctoral Research Fellow**  
 Australian Centre for Ecogenomics, University of Queensland, Australia

  - Comparative metabolic and phylogenomic analyses of novel microorganisms
  - Development of microbial genomics course
- April – July 2015    **Research Assistant**  
 Australian Centre for Ecogenomics, University of Queensland, Australia

  - Microbial data analysis from thawing permafrost soils and carbon flux analysis
- September 2011 – March 2015    **PhD Thesis**  
 Advanced Water Management Centre, University of Queensland, Australia

  - Biotechnological solutions to Australia's transport, energy and greenhouse gas challenges
  - Microbial community dynamics, functions and interactions in anaerobic digestion
  - Laboratory work, reactor operation, field work, data analyses, statistics, bioinformatics
- September 2010 – June 2011    **Master Thesis**  
 Centre for Microbial Ecology and Technology (CMET), Ghent University, Belgium

  - Microbial interactions and metabolic networking in a methanotrophic community

- July – August 2010    **Research Assistant**  
 Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium

  - Indoor air quality, emissions and ventilation in livestock
  
- August 2009    **Research Assistant**  
 Centre for Microbial Ecology and Technology (CMET), Ghent University, Belgium

  - Laboratory work
  
- July 2009    **Internship**  
 Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium

  - Evaluation of biological and chemical air scrubbers for emission mitigation in intensive livestock

Sectors Environmental Engineering, Environmental Science, Anaerobic digestion, Waste(water) management, Microbial Ecology, Molecular Biology, Metagenomics, Agricultural Research, Food Research

**EDUCATION AND TRAINING**

- September 2011 – June 2015    **PhD Thesis in Chemical Engineering**  
 University of Queensland, Australia

  - Dean's Award for Outstanding Research Higher Degree Thesis
  
- September 2009 – June 2011    **Master in Environmental Engineering**  
 Ghent University, Belgium

  - Graduated with highest distinction
  
- September 2006 – June 2009    **Bachelor in Bioscience Engineering**  
 Ghent University, Belgium

  - Graduated with highest distinction

**PERSONAL SKILLS**

Mother tongue(s)    Dutch

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	B1	B2	B1	B1	B1

- Consulting skills    ▪ Molecular microbiology data analysis and interpretation
  
- Tutoring/mentoring skills    ▪ Tutoring Biochemistry, Microbial Genomics, Cell Structure & Function, and Principles of Biological Engineering practicals for Bachelore students

  - Mentoring PhD students

## Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient	Proficient	Proficient	Independent	Independent

- good command of Microsoft Office, Illustrator, Inkscape, statistical computing language R, Linux

## Other skills

- Experience in nature/wildlife conservation through volunteering (2016-2017)
- Carnivore & Elephant Research & Conservation; Animal Sanctuary, N/a'an ku sê, Namibia
  - Rhino Research & Conservation, Ziwa Rhino Sanctuary, Uganda
  - Turtle Research & Conservation, Marine Conservation Society, Seychelles
  - Dolphin Research & Conservation, Department of Parks & Wildlife, Australia
  - Animal carer, Lone Pine Koala Sanctuary, Australia

## Driving licence

B

## ADDITIONAL INFORMATION

## Publications

- **Inka Vanwongerghem**, Paul N Evans, Donovan H Parks, Paul D Jensen, Ben J Woodcroft, Philip Hugenholtz and Gene W Tyson (2016) *Methylotrophic methanogenesis discovered in the archaeal phylum Verstraetearchaeota*. Nature Microbiology, 1(16170)
- **Inka Vanwongerghem**, Paul D Jensen, Komeel Rabaey and Gene W Tyson (2016) *Genome-centric resolution of microbial diversity, metabolism and interactions in anaerobic digestion*. Environmental Microbiology, 18(9):3144-3158
- **Inka Vanwongerghem**, Paul D Jensen, Komeel Rabaey and Gene W Tyson (2015) *Temperature and solids retention time control microbial population dynamics and volatile fatty acids production in replicated anaerobic digesters*. Scientific Reports, 5:1-8
- **Inka Vanwongerghem**, Paul D Jensen, Paul G Dennis, Philip Hugenholtz, Komeel Rabaey and Gene W Tyson (2014) *Deterministic processes guide long-term synchronized population dynamics in replicate anaerobic digesters*. The ISME Journal, 8:2015-2028
- **Inka Vanwongerghem**, Paul D Jensen, Dang P Ho, Damien J Batstone and Gene W Tyson (2014) *Linking microbial community structure, interactions and function in anaerobic digesters using new molecular techniques*. Current Opinion in Biotechnology, 27:55-64
- Mukan Ji, Chris Greening, **Inka Vanwongerghem**, Carlo Carere, Matthew Scott, Ian Snape, Philip Hugenholtz and Belinda Ferrari (2017) *Atmospheric trace gasses drive primary production in an Antarctic desert ecosystem*. Nature Microbiology, 552:400-403
- David W Waite, **Inka Vanwongerghem**, Christian Rinke, Donovan H Parks, Ying Zhang, Ken Takai, Stefan M Sievert, Jörg Simon, Barbara J Campbell, Thomas E Hanson, Tanja Woyke, Martin G Klotz and Philip Hugenholtz (2017) *Comparative genomic analysis of the class Epsilonproteobacteria and proposed reclassification to Epsilonbacteraeota (phyl. nov.)*. Frontiers in Microbiology, 8(682):1-19
- Paul G Dennis, Bernardino Virdis, **Inka Vanwongerghem**, Alif Hassan, Philip Hugenholtz, Gene W Tyson and Komeel Rabaey (2016) *Anode potential influences the structure and function of anodic electrode and electrolyte-associated microbiomes*. Scientific Reports, 6:39114
- Nurdyana Abdul Rahman, Donovan H. Parks, **Inka Vanwongerghem**, Mark Morrison, Gene W. Tyson, Philip Hugenholtz (2015) *A phylogenomic analysis of the bacterial phylum Fibrobacteres*. Frontiers in Microbiology, 6:1469
- Sunil A Patil, Jan B Arends, **Inka Vanwongerghem**, Jarne van Meerbergen, Kun Guo, Gene W Tyson and Komeel Rabaey (2015) *Selective enrichment establishes a stable performing community for microbial electrosynthesis of acetate from CO<sub>2</sub>*. Environmental Science & Technology, 49(14): 8833-8843
- De Vrieze J, Gildemyn S, Arends JB, **Vanwongerghem I**, Verbeken K, Boon N, Verstraete W, Tyson GW, Hennebel T and Rabaey K (2014) *Biomass retention on electrodes rather than electrical current enhances stability in anaerobic digestion*. Water Research, 54:211-221
- Florent E Angly, Paul G Dennis, Adam Skarszewski, **Inka Vanwongerghem**, Philip Hugenholtz and Gene W Tyson (2014) *CopyRighter: a rapid tool for improving the accuracy of microbial community profiles through lineage-specific gene copy number correction*. Microbiome, 2(11):1-13

- Presentations
- Oral presentation, **National Seminar for EC Joint Programming Initiatives**, Brussels 2017 (Belgium)
  - Oral presentation, **Australian Society for Microbiology Conference**, Perth 2016 (Australia)
  - Oral presentation, **PhD defence seminar**, University of Queensland, Brisbane 2015 (Australia)
  - Poster presentation, **International Society for Microbial Ecology Conference**, Seoul 2014 (South-Korea)
  - Poster presentation, **American Society for Microbiology General Meeting**, Boston 2014 (US)
  - Oral presentation, **Biofuels Cluster Symposium**, Commonwealth Scientific and Industrial Research Organization, Canberra 2012, Brisbane 2013, Canberra 2014 (Australia)
  - Poster presentation, **Microbial Resource Management in Biotechnology Symposium**, Ghent 2011 (Belgium)
- Honours and awards
- Dean's Award for Outstanding Research Higher Degree Thesis, UQ Graduate School, 2015
  - Travel Award, American Society for Microbiology, 2014
  - Best Presentation Award, Postgraduate Engineering Conference, 2013
  - University of Queensland International Scholarship, 2011
  - Fundamental Research Flanders Scholarship, 2011