

GRETA FACCIO, PhD

Analytical and creative, innovation and communication.

EDUCATION

2011 Ph.D. in Genetics, University of Helsinki, Helsinki, FI.

2005 Master's Degree in Biological Sciences, University of Insubria, Varese, IT.

2002–2003 Erasmus program, Oxford Brookes University, Oxford, UK.

COMMUNICATION ACTIVITIES

Conceptualisation and development of the Wordpress-based personal blogs gretafaccio.net and poetryfromthelab.com (>1300 followers, SEO-optimised, Google Analytics, Twitter, Pinterest, and Facebook channels), [40](#) peer-reviewed scientific articles, 2 book chapters, 2 preprints, 1 article for Cosmetics and Toiletries, 1 white paper for Just Int. AG, 1 [patent](#), 12 articles on [Medium](#), 1 article on [ThriveGlobal](#), 1 correspondence to [Nature](#), 1 article on [Swissinfo.ch](#)

WORK EXPERIENCE

Jan 2021 – present Intellectual property manager (20%), Biosynth Carbosynth, Staad, CH.

- Management of IP protection process, patents and trademarks.
- Ideation and preparation of scientific communication material, i.e. peer-reviewed articles and website text.
- Position interfacing the R&D, marketing department, and upper management.

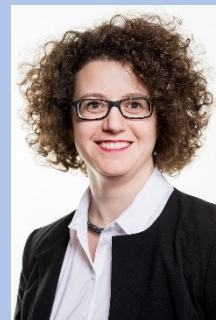
Sep-Oct 2020 Independent Expert Evaluator, European Commission H2020.

Feb 2019 – Nov 2020 Research and Innovation Scientist, R&D department, Just International AG, Walzenhausen, CH.

- Support of the innovation process, i.e. establishment of an interdepartmental research database, scientific literature analysis for novel ingredients, production of innovative product concepts, assistance to strategic internal projects, contribution to strategy development.
- Research for the claim support department and preparation of internal documentation.
- Support of the marketing department in the communications of product concepts.
- Sustainability agent of the R&D group and implementation of processes for a reduced material use and waste reduction.
- Position at the interface with the regulatory and marketing department.

Feb-Apr 2019 Expert, ANR, the French National Research Agency Contract.

Feb 2017 – present Freelance scientist.



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Residence permit: C

- Pursuing scientific communication and coaching students, e.g. one USA-based iGEM group in 2021.
- Advising companies and scientists in their communication and research efforts.

Feb 2017 – Jan 2019 Assistant to Innovation, R&D department, Just International AG, Walzenhausen, CH.

- Responsible for data analysis within strategic internal projects.
- Scientific research of active ingredients for novel products.
- Scientific support in the design of the innovation of process.
- Position at the interface with the regulatory and marketing department.

2015–2017 Scientist, Biomolecules at surfaces group, Empa, Swiss federal laboratories for materials science and technology, St. Gallen, CH.

- Preparation of scientific project proposals and acquisition of funding.
- CO-PI of a Nanotera-funded 5-institute project focusing on innovative medical materials [FLUSITEX](#).
- Scientific management of personnel, i.e. technical assistants and 4 university students.
- Publication of scientific articles in highly-ranked journals (the highest of the group).
- Member of the steering board of the industrial [platform for in vitro diagnostic](#).
- One patent filed (EP17197227).

2012-2015 Postdoc (Marie Curie COFUND fellow), Empa, Swiss federal laboratories for materials science and technology, St. Gallen, CH.

- Preparation of project proposals and acquisition of funding towards sustainable material surface treatments.
- Preparation and management of two projects focusing on solar energy harvesting.
- Scientific management of personnel, e.g. university students technical staff.
- Publication of scientific articles in highly-ranked journals.
- Organizer of the internal methods seminar.

2011-2012 Research Scientist, VTT Technical Research Centre of Finland, FI.

2006-2011 PhD student (Marie Curie fellow) and Research Scientist, VTT Technical Research Centre of Finland, FI.

- Scientific planning and execution of experimental work.
- Dissemination of results in scientific conferences and scientific articles.
- Scientific management of technical assistants, organizer of the internal seminar series.
- Acquisition of personal funding.

TRAINING and COURSES (selected)

2021 Sustainability Essentials for Business, Universität Cambridge ([link](#)).

2020 Oxford Women's Leadership Development Programme, University of Oxford, Saïd Business school.

2019 Open Innovation, Futurelearn-Durham University.
2018 Innovation Management, Erasmus University Rotterdam.
2018 From ideas to action, IDEO U, Online, www.ideo.com.
2018 Introduction to Design thinking, IDEO U, Online, www.ideo.com.
2016 BRAAVOO Workshop and Creative Design Course, Lausanne, CH.
2015 Leading with Energy and Focus, University of St. Gallen, HSG, CH.
2014 Patents and IP protection workshop, Empa, St. Gallen, CH.
2013 Project Management for Research – Methods and Tools, 3 days, ETHZ, CH.
2012 Basics in Management, Empa Akademie, Dübendorf, CH.

LANGUAGES and IT SKILLS

Mother tongue Italian, excellent English, full working German (B1, telc A2), basic Finnish.

IT: Office (Word, Excel, PowerPoint, Outlook Express) in Windows environment, Firefox, Adobe Photoshop, Corel Draw, various scientific software for molecule and data visualisation.

OTHER INFORMATION

Second-hand lover, blogger, knitter, passionate of communication and inspiration, founder of <https://scienceloveskids.wordpress.com/> (in progress).

LIST OF PUBLICATIONS

[Google Scholar](#) [ResearcherID](#) [ORCID](#)

Peer-reviewed publications

39. **Faccio G.** 2021, [Shadowing Plants: Phytochemicals for Sustainable Sun Protection, A Commentary](#). *Cosmetics & Toiletries*.
38. Faccio G, 2020 [Plant complexity and cosmetic innovation](#), *iScience*, DOI:<https://doi.org/10.1016/j.isci.2020.101358>
37. Weishaupt R, Zünd JN, Heuberger L, Zuber F, **Faccio G.** Robotti F, Ferrari A, Fortunato G, Ren Q, Maniura-Weber K, Guex AG. 2020 [Antibacterial, Cytocompatible, Sustainably Sourced: Cellulose Membranes with Bifunctional Peptides for Advanced Wound Dressings](#), *Advanced Healthcare Materials*, 1901850. <https://doi.org/10.1002/adhm.201901850>
36. **Faccio* G,** Cont A, Mailand E, Zare-Eelanjegh E, Malini RI, Maniura-Weber K, Rossi RM, Spano* F, 2019 [Complete inclusion of bioactive molecules and particles in polydimethylsiloxane: a straightforward process under mild conditions](#), *Scientific reports* 9 (1), 1-8
35. Weishaupt R, Heuberger L, Siqueira G, Gutt B, Zimmermann T, Maniura-Weber K, Salentinig S*, **Faccio G*** [Enhanced biocidal activity and structural transitions of a nanocellulose-nisin biocomposite suspension](#), *ACS Appl. Mater. Interfaces*, 10, 23, 20170-20181, <http://dx.doi.org/10.1021/acsami.8b04470>
34. Vandenbossche M, Gunkel-Grabole G, Car A, Bernard L, Rupper P, Maniura-Weber K, Heuberger M, **Faccio G,** Hegemann D. [Near-surface structure of plasma polymer films affects surface behavior in water and its interaction with proteins](#), *Plasma Chemistry and Plasma Processing*, 38(4):851-870, <https://doi.org/10.1007/s11090-018-9897-z>
33. **Faccio G,** [From Protein Features to Sensing Surfaces](#). INVITED REVIEW, *Sensors*, 18(4), doi:10.3390/s18041204,
32. Bernard L, Rupper P, **Faccio G,** Hegemann D, Scholder O, Heuberger M, Maniura-Weber K, Vandenbossche M 2018 [Plasma polymer film designs through the eyes of ToF-SIMS](#), *Biointerphases* 13, 03B417 doi: .10.1116/1.5016046
31. Nivala O, **Faccio G,** Arvas M, Permi P, Buchert J, Kruus K, Mattinene M-L 2017 [Characterization of sulfhydryl oxidase from *Aspergillus tubingensis*](#), *BMC Biochemistry* 18:15, doi: 10.1186/s12858-017-0090-4
30. **Faccio* G,** Salentinig* S. 2017 [Enzyme-triggered dissociation of a FRET-based protein biosensor monitored by synchrotron SAXS](#) *Biophysical Journal*, 113(8):1731-1737. <https://doi.org/10.1016/j.bpj.2017.08.044>
29. Ihssen J, Jankowska D, Ramsauer T, Reiss R, Luchsinger R, Wiesli L, Schubert M, Thöny-Meyer L, **Faccio* G** 2017 [Engineered *Bacillus pumilus* laccase-like multi-copper oxidase for enhanced oxidation of](#)

[the lignin model compound guaiacol](#) Protein Engineering, Design & Selection, 1-5.

doi: <https://doi.org/10.1093/protein/gzx026>

28. Weishaupt R, Siqueira G, Schubert M, Kämpf MM, Zimmermann T, Maniura-Weber K, **Faccio* G** 2017 [A Protein-nanocellulose paper for sensing copper ions at the nano- to micromolar level](#), Adv. Funct. Mat., 27(4), 1604291 doi: 10.1002/adfm.201604291

27. Jankowska D, Bannwarth MB, Schulenburg C, **Faccio G**, Maniura-Weber K, Rossi RM, Scherer L, Richter M, Boesel L 2017 [Simultaneous detection of pH value and glucose concentrations for wound monitoring](#), Biosensors and Bioelectronics, 87,312–319 <http://dx.doi.org/10.1016/j.bios.2016.08.072>

26. Vandebossche* M, Bernard L, Rupper P, Maniura-Weber K, Heuberger M, **Faccio G**, Hegemann D, [Micro-patterned plasma polymer films for bio-sensing](#), Materials & Design, 114: 123-128. <http://dx.doi.org/10.1016/j.matdes.2016.10.058>

25. Zare-Eelanjegh E, Bora D, Rupper P, Schrantz K, Thöny-Meyer L, Maniura-Weber K, Richter M, **Faccio* G**, 2016 [Affinity-driven immobilization of proteins to hematite nanoparticles](#), ACS Appl. Mater. Interfaces, 8 (31), pp 20432–20439 doi 10.1021/acsami.6b03284

24. **Faccio* G†**, Schulenburg C†, Jankowska D, Richter* M, 2016, [A FRET-based biosensor for the detection of neutrophil elastase](#), Analyst, 2016, **141**, 1645-1648
DOI: 10.1039/C5AN01747E, Communication

23. **Faccio* G**, Bannwarth MB, Schulenburg C, Steffen V, Jankowska D, Pohl M, Rossi RM, Maniura-Weber K, Boesel L, Richter* M, 2016, [Encapsulation of FRET-based glucose and maltose biosensors to develop functionalized silica nanoparticles](#), Analyst, 2016, **141**, 3982-3984, DOI: 10.1039/C5AN02573G,
Communication

22. Weishaupt R, Siqueira G, Schubert M, Tingaut P, Maniura-Weber K, Zimmermann T, Thöny-Meyer L, **Faccio G***, Ihssen J 2015 [TEMPO-oxidized nanofibrillated cellulose as a high density carrier for bioactive molecules](#), Biomacromolecules, 16, 3640–3650, DOI: 10.1021/acs.biomac.5b01100

21. Richter M*, Schulenburg C, Jankowska D, Heck T, **Faccio G**, 2015, [Novel materials through Nature's catalysts](#), Materials Today, 18(8):459-467.
[doi:10.1016/j.mattod.2015.04.002](https://doi.org/10.1016/j.mattod.2015.04.002)

20. **Faccio* G**, Senkalla S, Thöny-Meyer L, Richter M 2015 [Enzymatic multi-functionalization of microparticles under aqueous neutral conditions](#), RSC Advances, 2015, **5**, 22319-22325, doi:10.1039/C5RA00669D

19. **Faccio G**, Schrantz K, Ihssen J, Boudoire F, Hu Y, Mun BS, Bora DK, Thöny-Meyer L, Braun* A, 2015, [Charge transfer between photosynthetic proteins and hematite in bio-hybrid photoelectrodes for solar water splitting cells](#), Nano Convergence , 2:9 doi:10.1186/s40580-014-0040-4

18. Braun* A, Boudoire F, Bora DK, **Faccio G**, Hu Y, Kroll A, Mun BS, Wilson ST, [Biological Components and Bioelectronic Interfaces of Water Splitting Photoelectrodes for Solar Hydrogen Production](#), Chemistry – A European Journal, Chem. Eur. J. 2014, **20**:1–13, doi: 10.1002/chem.201405123

17. **Faccio* G**, Kämpf MM, Piatti C, Thöny-Meyer L, Richter* M 2014 [Tyrosinase-catalyzed site-specific immobilization of C-phycoerythrin to surface](#), Scientific Reports 4, Article nr.: 5370, doi:10.1038/srep05370
16. Reiss R, **Faccio G**, Thöny-Meyer L, Richter* M 2014 [Cloning, expression and biochemical characterization of the cholesterol oxidase CgChoA from *Chryseobacterium gleum*](#), BMC Biotechnology, 14:46
doi:10.1186/1472-6750-14-46
15. Ihssen* J, Braun A, **Faccio G**, Gajda-Schranz K, Thöny-Meyer L 2014 [Light harvesting proteins for solar fuel generation in bioengineered photoelectrochemical cells](#), Current Protein & Peptide Science, Special Issue, 15(4):374-384. doi: 10.2174/1389203715666140327105530
14. Nivala O, Mattinen* M-L, **Faccio G**, Buchert J, Kruus K. 2013 [Discovery of novel secreted fungal sulfhydryl oxidases with a plate test screen](#), Applied Microbiology and Biotechnology, 97(21):9429-37
doi: 10.1007/s00253-012-4753-9
13. **Faccio* G**, Arvas M, Thöny-Meyer L, Saloheimo M. 2013 [Experimental and bioinformatic investigation of the proteolytic degradation of the C-terminal domain of a fungal tyrosinase](#), Journal of Inorganic Biochemistry, 121:37–45, doi:10.1016/j.jinorgbio.2012.12.006
12. Heck T, **Faccio G**, Richter M, Thöny-Meyer *L. 2012 [Enzyme-catalyzed protein crosslinking](#) MINI-REVIEW, Applied Microbiology and Biotechnology, 97(2):461-475, doi:10.1007/s00253-012-4569-z
11. **Faccio G**, Kruus K, Saloheimo M, Thöny-Meyer* L. 2012 [Bacterial tyrosinases and their applications](#) REVIEW, Process Biochemistry, 47(12):1749–1760, doi: /10.1016/j.procbio.2012.08.018
10. Kalliola AK, Savolainen A, Ohra-Aho T, **Faccio G** & Tamminen T. 2012 [Reducing the content of VOCs of softwood kraft lignins for material applications](#), BioResources, 7(3): 2871-2882
9. **Faccio* G**, Flander L, Buchert J, Saloheimo M & Nordlund E. 2012 [Sulfhydryl oxidase enhances the effects of ascorbic acid in wheat dough](#), Journal of Cereal Science, 5(1):37-43, doi:10.1016/j.jcs.2011.10.002
8. **Faccio* G**, Nivala O, Kruus K, Buchert J & Saloheimo M. 2011 [Sulfhydryl oxidases: sources, properties, production and applications](#) INVITED MINI-REVIEW, Applied Microbiology and Biotechnology, 91(4):957-66 doi:10.1007/s00253-011-3440-y
7. **Faccio G**. 2011 [Discovery of oxidative enzymes for food engineering. Tyrosinase and sulfhydryl oxidase](#) (Academic dissertation), Espoo 2011. VTT Publications 763. 101 p. + app. 67 p. ISBN 978-951-38-7737-8
6. **Faccio* G**, Kruus K, Buchert J & Saloheimo M. 2011 [Production and characterisation of AoSOX2 from *Aspergillus oryzae*, a novel flavin-dependent sulfhydryl oxidase with good pH and temperature stability](#), Applied Microbiology and Biotechnology, 90(3):941-949, doi:10.1007/s00253-011-3129-2
5. Monogioudi* E, **Faccio G**, Lille M, Poutanen K, Buchert J. & Mattinen M. 2011, [Effect of enzymatic cross-linking of \$\beta\$ -casein on proteolysis by pepsin](#), Food Hydrocolloids, 25(1):71-81,
doi:10.1016/j.foodhyd.2010.05.007

4. **Faccio* G**, Kruus K, Buchert J & Saloheimo M. 2010, [Secreted fungal sulfhydryl oxidases: sequence analysis and characterisation of a representative flavin-dependent enzyme from *Aspergillus oryzae*](#), BMC Biochemistry, 11(31), doi:10.1186/1471-2091-11-31
3. **Faccio* G**, Kruus K, Buchert J & Saloheimo M. 2010, [Secreted fungal sulfhydryl oxidases: sequence analysis and characterisation of a representative flavin-dependent enzyme from *Aspergillus oryzae*](#), Young Scientist Forum. FEBS Journal, 277:273–305, doi: 10.1111/j.1742-4658.2010.07681.x
2. **Faccio* G**, Gasparetti* C, Arvas M., Buchert J, Saloheimo M & Kruus K. 2010, [Discovery of a new tyrosinase-like enzyme family lacking a C-terminally processed domain: production and characterization of an *Aspergillus oryzae* catechol oxidase](#), Applied Microbiology and Biotechnology, 86(1):212-226, doi: 10.1007/s00253-009-2258-3
1. Buchert* J, ErciliCura D, Ma H, Gasparetti C, Monogioudi E, **Faccio G**, Mattinen M, Boer H, Partanen R, Selinheimo E, Lantto R & Kruus K. 2010, [Crosslinking Food Proteins for Improved Functionality](#), Annual Review of Food Science and Technology, 1(1):112-128. doi:10.1146/annurev.food.080708.100841

Patents

1. Spano F, Faccio G, Rossi R.M. [LIQUID DROPLET POLYMER COMPOSITE COMPOSITIONS AND METHODS FOR THEIR PRODUCTION](#), Oct 2017 (#EP17197227)

Book chapters

2. **Faccio G**, 2019 [Proteins as Nanosized Components of Biosensors](#), in Nanomaterials Design for Sensing Applications, 2019, Pages 229-255, Elsevier, Editor: Dr. Olena Zenkina ISBN: 978-0-12-814505-0 [Download](#)
1. **Faccio G**, Richter M, Thöny-Meyer L, 2019 [Bioprospecting for microbial tyrosinases](#) in Microbial Catalysts. Volume 2, Nova Science Publisher, New York . ISBN: 978-1-53616-088-8.

Other

6. **Faccio G**. Contributor at [Medium](#) (>10 articles) since Feb 2020
5. **Faccio G**, 2019, [Do your maths, reframe the time spent at work](#), ThriveGlobal.
4. **Faccio G**, Cont A, Mailand E, Zare-Eelanjegh E, Innocenti Malini R, Maniura-Weber K, Rossi RM, Spano F, 2019, [Complete inclusion of bioactive molecules and particles in polydime-thylsiloxane: a straightforward process under mild conditions](#), arXiv preprint arXiv:1907.09710
3. **Faccio G**, 2018 [From Protein Features to Sensing Surfaces](#). Preprints 2018, 2018030012 (doi: 10.20944/preprints201803.0012.v1). INVITED REVIEW submitted to Sensors 02.2018.
2. **Faccio G**, 2017 Sexism: [Flagging gender bias doesn't always work](#), Nature 547, 32, Correspondence, doi:10.1038/547032c
1. **Faccio G**, [Swiss fight drug-resistant bacteria on many fronts](#), 20.07.2016

