## **CURRICULUM VITAE**

## PERSONAL INFORMATION

## Teresa González de Chávez Capilla

Institute of Geography (GIUB),

University of Bern, Hallerstrasse 12, 3012 BERN-CH. +41(0)31 631 85 57, <a href="mailto:teresa.gonzalez@giub.unibe.ch">teresa.gonzalez@giub.unibe.ch</a>

ORCiD: 0000-0002-8666-5518

Twitter: https://twitter.com/DrChavezCapilla

Languages: Spanish (native), English (C2), French (B2), German (A2), Italian (A2)

#### **EDUCATION**

11/04/2018 **PhD in Applied Science**, Institute for Applied Ecology (IAE), University of Canberra (UC, Australia)

Supervisors: Prof Simon Foster, Prof William Maher, Prof Tamsin Kelly

Title: The metabolism of arsenic in humans: bioaccessibility in the gastrointestinal tract, diffusion

across lipid membranes and biotransformations in liver cells

11/11/2011 MSc in Inorganic Chemistry and Chemical Engineering

National University for Distance Education (UNED), Madrid, Spain

Title: Synthesis and characterization of metal oxides for supercapacitors

Final grade: 9/10

30/09/2009 Licentiate's degree (BSc + MSc) in Chemistry, Autonomous University of Madrid (UAM), Spain

Final grade: 8.23/10

30/06/2008 Erasmus Academic Exchange, University of Sussex, Brighton, UK

## **EMPLOYMENT HISTORY**

01/03/2022 - Research Associate/Lecturer

(Interim Head of the Chemistry Laboratory and Lecturer in Laboratory Methods)

Institute of Geography (GIUB), University of Bern, Switzerland

01/05/2019 - **Postdoctoral Fellow**, GIUB, University of Bern, Switzerland

28/02/2022 Advisor: Prof Adrien Mestrot

01/12/2017 - **Research Fellow**, MyHealthTest Pty Ldt and UC, Australia

30/11/2018 Advisor: Prof Simon Foster

15/04/2013 – **Doctoral Researcher**, IAE, UC (Australia)

21/07/2017 Advisors: Prof Simon Foster, Prof William Maher, Prof Tamsin Kelly 02/11/2009 – **Predoctoral Researcher**, Institute IMDEA Energy, Madrid, Spain

20/07/2012 Advisors: Dr Raül Díaz, Dr Jesús Palma del Val, Prof Marc Anderson

01/09/2008 - Collaboration Fellow, Department of Chemistry, UAM, Spain

30/06/2009 Advisor: Prof Manuel Alcamí Pertejo

## **APPROVED RESEARCH FUNDING**

01/2021 – 12/2021	Seal of Excellence Fund (University of Bern)	CHF 59,600
06/2020	Berne University Research Foundation	CHF 1,400
04/2013 – 04/2016	Arsenic Metabolism and Toxicology in Humans funded by the W.J. Weeden Postgraduate Scholarship (UC)	AUD 176,074 (CHF 113,975)
02/2013 – 02/2016	Enhancement and Detection of Fingermarks on Non-Porous Surfaces using Functionalised and Organic Upconverting Nanoparticles	AUD 158,979 (CHF 102,909)

funded by the University of Technology Sydney President and International

Research Scholarships (UTSP and UTS IRS)

(I declined this grant to accept the W.J. Weeden Postgraduate Scholarship)

EUR 1,000 (CHF 1,071)

## PRIZES, AWARDS AND FELLOWSHIPS

Com	petitive

06/2021 - 02/2022 COMET Career Program for Female Postdocs (University of Bern) CHF 3,500 02/2020 Seal of Excellence Horizon 2020 Marie Skłodowska-Curie actions (H2020-MSCA-IF-2019 call) Proposal score 91.2% (Cut-off score 93%) Outstanding Service to the Student Community (IAE, UC) 12/2017 For supporting other postgraduate students, improving the collegiate student culture and organising the 2017 IAE Postgraduate Student Conference 04/2017 - 06/2017 PhD to Postdoc Career Program (UC and Postdoc solutions) AUD 660 (CHF 441) Scientific Breakthrough by a Postgraduate Student (IAE, UC) 12/2016 For developing new methods to better understand the metabolism and toxicity of arsenic

from food in humans
04/2014 – 10/2016 IAE PhD Funding (UC)
AUD 27,32

04/2014 – 10/2016 IAE PhD Funding (UC) AUD 27,327 (CHF 17,689) 04/2013 – 04/2016 IAE Research Funding (UC) AUD 9,000 (CHF 5,826)

09/2009 *IV Research Initiation Programme in Physical Chemistry and Biological Physical Chemistry*Institute of Physical Chemistry *Rocasolano*, Spanish National Research Council (CSIC)

 09/2008 – 06/2009
 Collaboration Fellowship (Spanish Ministry of Education)
 EUR 2,700 (CHF 2,892)

 10/2007 – 06/2008
 Erasmus Grant
 EUR 2,844 (CHF 3,046)

02/2005 – 09/2009 Non-competitive

02/2020 Funding for 500 Women Scientists in the Pub CHF 500

(Office for Gender Equality, University of Bern)

## **PARTICIPATION IN RESEARCH PROJECTS**

01/09/2019 – Interfaculty Research Cooperation One Health

Funding body: University of Bern

Honours Academic Awards (UAM)

01/12/2017 – Next Generation Dried Blood Spot Pathology Testing using LC-MS

30/11/2018 Funding body: Australian Department of Industry, Innovation and Science/Cooperative

Research Centres Program

15/04/2013 – Arsenic Metabolism and Toxicology in Humans

21/07/2017 Funding body: University of Canberra

01/01/2012 – CAPSETA2: Tailored semiconductor nanocrystals for supercapacitors

20/07/2012 Funding body: Spanish Ministry of Science and Innovation/Subprogram of fundamental not-

oriented research

01/04/2010 – HESCAP: High Energy and power density SuperCAPacitor based energy storage system

20/07/2012 Funding body: European Union / FP7 – Cooperation

02/11/2009 – SA<sub>2</sub>VE: Advanced Energy Storage Systems: Applications to the railway transport and energy

31/07/2010 *sectors* 

Funding body: Spanish Ministry of Science and Innovation and FEDER funds/Singular and

Strategic Projects

# **INSTITUTIONAL RESPONSIBILITIES AND COMMUNITY SERVICE**

01/03/2022 – Head of the Laboratory Commission, GIUB, University of Bern

I coordinate, organise and communicate all the laboratory related activities to all users

01/03/2022 – **Building Evacuation Officer**, GIUB, University of Bern

01/03/2022 – Chemical Safety Officer, GIUB, University of Bern

01/03/2022 – Laboratory Representative, GIUB House Commission, University of Bern

I represent the needs and interests of the chemical laboratory users in terms of infrastructure

for storage, equipment requirements and safety measures

01/03/2022 – Laboratory Representative, GIUB IT Commission, University of Bern

I represent the IT interests and needs of the chemical laboratory users at the GIUB

16/08/2021 -One Health International Bachelor and Master Summer School, University of Bern I organised and led a session for the Summer School for BSc and MSc students to explore 20/08/2021 the microbial-mediated connections between soil, plant, animal and human health in different food production systems **Coordinator**: Soil Science Colloquium and Environmental Pollution Seminar Series (GIUB) 02/2020 - 06/2021 I coordinated and led a weekly seminar series for researchers in my institute including invited speakers and workshops Coordinator: Mentoring for Women in Science, Technology, Education and Mathematics 01/2018 - 11/2018 I coordinated and led monthly mentoring sessions for women in science **Coordinator**: Analytical Applications Program Meetings (UC) 06/2018 - 11/2018 I coordinated and led a fortnightly seminar series for researchers in Forensic Science and Environmental Chemistry research groups 02/2016 - 10/2017 **Organiser**: Skills in Academia and General Ecology Seminars (IAE) I organised and chaired seminars for my institution including invited speakers: The Origins of Sex and Death by Professor Charley Lineweaver Fossil Fuel Free University by Tom Swann 06/2016 - 06/2017 **Postgraduate Student Representative (IAE)** I represented the interests of MSc and PhD students in my institution by organising group discussions and surveys; and communicating student interests, concerns and feedback to the executive through bimonthly meetings and reports 10/2014 Co-coordinator: Round Table Discussion, Postgraduate Corroboree, Kioloa, Australia (IAE) I co-coordinated a discussion session for PhD students to provide feedback on supervision and institutional culture and reported the outcome to the executive

## NON-INSTITUTIONAL COMMUNITY SERVICE

11/2020 - 8/2021 Co-coordinator: 500 Women Scientists Bern-Fribourg I co-coordinated the local chapter of 500 Women 10/2019 -Founder and coordinator: 500 Women Scientists in the Pub I organise and lead science outreach events to increase the visibility of female scientists (e.g., 11/02/2020 and 17/12/2020 at ONO Bern and 20/05/2021 Online Extravaganza) 09/2018 Judge: Aranda Primary School Science Fair, Canberra, Australia I evaluated science projects of primary school students

## SUPERVISION, TRAINING AND MENTORING

01/03/2022 -

01/03/2022 -

11/2021 -

PhD and MSc stude	<u>ents</u>
10/2019 –	<b>Mohana Mukherjee</b> , PhD, IRC One Health (Gut Microbiology, University of Bern) Co-supervisors: Prof Siegfried Hapfelmeier-Balmer, Prof Adrien Mestrot Title: <i>Studying microbiota-dependent arsenic biotransformations, body distribution and excretion in mouse models</i>
05/2019 –	<b>Hang Guan</b> , PhD, IRC One Health (Soil Science Unit, University of Bern) Title: <i>Maize (Zea mays L.) plants interact with soil microbes to reduce arsenic toxicity in soil-plant system</i>
01/2020 – 06/2020	Viktoria Mueller, MSc (University of Aberdeen and University of Bern) Co-supervisors: Prof Jörg Feldmann, Prof Adrien Mestrot Title: Effect of increased temperature and flooding on the release, biomethylation and biovolatilisation of arsenic in Swiss soil
10/2019 – 12/2019	Melanie Scalise, MSc (Gut Microbiology, University of Bern)
Laboratory staff	
01/03/2022 –	René Nussbaumer, Laboratory Technician (GIUB, University of Bern)

**Maarika Bischoff**, Laboratory Technician (GIUB, University of Bern)

Livia Vogel, Laboratory Student Assistant (GIUB, University of Bern)

**Anika Sidler**, Laboratory Technician (One Health IRC, University of Bern)

09/2020 – 08/2021	Stephanie Pfister, Laboratory Technician (One Health IRC, University of Bern)
08/2019 –12/2019	Evelyne Vonwyl, Research Assistant (Soil Science Unit, University of Bern)
05/2019 – 07/2019	Anna Muntwyler, Research Assistant (Soil Science Unit, University of Bern)
10/2018 – 11/2018	Carly Beggs, Laboratory Technician (Forensic Sciences, University of Canberra)
06/2015 – 09/2015	<b>Mona Beshai</b> , Laboratory Assistant (Ecochemistry Laboratory, University of Canberra)

#### **TEACHING EXPERIENCE**

01/12/2020 – Lecturer and Laboratory Demonstrator

BSc and MSc programs in Geography, \*International interdisciplinary summer program

Faculty of Science (University of Bern, Switzerland)

Academic year	Level	Course	Credits	Imparted (h)	Format
2022	BSc and MSc	Laboratory Safety			
HS2022	MSc	Laboratory Methods I	3	TBD	T, P, G
HS2022	MSc	Laboratory in Soil Biogeochemistry	5	TBD	P, G
HS2022	BSc	Introduction to Laboratory Methods	1.5	TBD	T, P, G
FS2022	BSc	Propadeutikum	6	4	T, P, G
FS2022	MSc	Laboratory Methods II	3.5	42	P, G
HS2021	MSc	Laboratory Methods I	3	2	Т
HS2021	MSc	Soil Science Seminar	5	24	T, P, G
Summer 2021	BSc and MSc*	One Health Summer School	N/A	17	T, P
HS2020	MSc	Soil Biogeochemistry	3	2	Т

T: theory, P: practical, G: grading

01/08/2013 – 30/11/2018 Lecturer, Tutor and Laboratory Demonstrator

BSc programs of Environmental, Pharmaceutical, Biomedical and Sports Sciences Faculty of Science and Technology (University of Canberra, Australia)

Academic year	Level	Course	Credits	Imparted (h)	Format
Spring 2018	BSc	Analytical Chemistry	3	50	T, P, G
Fall 2018	BSc	Concepts in Biology	3	49	T, P, G
Spring 2017	BSc	Analytical Chemistry	3	108	T, P, G
Fall 2017	BSc	Ecochemistry	3	67	P, G
Fall 2017	BSc	Concepts in Biology	3	100	T, P, G
Spring 2016	BSc	Analytical Chemistry	3	108	T, P, G
Fall 2016	BSc	Concepts in Biology	3	25	G
Fall 2015	BSc	Concepts in Biology	3	47	T, P, G
Spring 2013	BSc	Analytical Chemistry	3	95	P, G

T: theory, P: practical, G: grading

01/10/2016 – 31/01/2017 **Chemistry Tutor** (Canberra, Australia)

I taught high-school level Chemistry weekly to one student

01/10/2008 – 30/06/2009 **English Tutor** (Madrid, Spain)

I taught high-school level English weekly to one student

01/10/2008 – 30/06/2009 **Mathematics Tutor** (Madrid, Spain)

I taught high-school level Mathematics weekly to one student

## **MEMBERSHIPS IN PANELS, BOARDS AND INDIVIDUAL SCIENTIFIC REVIEWING ACTIVITIES**

08/2020 –	Management Committee Substitute, COST Action PLANTMETALS (CA1	9116)
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11/2019 Session Chair, Physical Geography Forum (GIUB), Fribourg, Switzerland
 2018 Evaluation Committee Member, BSc thesis final presentation (UC)

02/2017 **Co-organiser**: IAE Postgraduate Conference (UC)

12/2014 Session Chair: 22<sup>nd</sup> RACI Research and Development Topics Conference, Adelaide, Australia

Journal reviewer Science of the Total Environment, Ecotoxicology and Environmental Safety