Curriculum Vitae Ms Sabrina Schoenborn

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Education

Feb. 2020 – ongoing	***Doctor of Philosophy (PhD) in Medical Engineering*** **University of Queensland, Australia** *(Feb. 2020 – Jun. 2021 at Queensland University of Technology)*
Aug. 2020 - Nov. 2020	***Bionics DeepTech Mentoring and Commercialisation Training Program*** Start-up training program facilitated by partners at Antler Australia for winners of the Bionics Queensland Challenge
Jul. 2019	***Professional Engineer (Mechanical)*** **Engineers Australia** My German qualifications have been formally certified by Engineers Australia's *Migration Skills Assessment* program as being equivalent to an Australian four-year Bachelor of Engineering degree.
Apr. 2017 - Mar. 2019	***Master of Plastics and Textile Engineering (Medical Engineering)*** **RWTH Aachen University, Germany** GPA: 1.2 (on a scale of 1 - 5 where 1 is the highest possible grade, 4 is the minimum passing grade and 5 is a fail) – *equivalent to 6.8 / 7.0*
Oct. 2013 - Mar. 2017	***Bachelor of Mechanical Engineering*** **Occupational Field: Textile Technology** **RWTH Aachen University, Germany** GPA: 2.5 (on a scale of 1 - 5 as above) – *equivalent to 5.5 / 7.0* *(accelerated degree with completion in 7 semesters, usually 10)*

Work Experience

May 2021 - ongoing	***Educator (part-time)*** **Full Spectrum Education** Mathematics tutoring for high school students
Mar. 2020 - ongoing	***Tutor (part-time)*** **Queensland University of Technology, Australia** • Biomaterials • Mathematical Methods in Physics • Fundamentals of Mechanical Design

Mar. 2020 - ongoing
Tutor (part-time)
University of Queensland, Australia

- Thermodynamics and Heat Transfer
- Additive Manufacturing
- Fluid and Particle Dynamics

Feb. 2020 - ongoing
German Teacher (part-time)
Brisbane German Language School, Australia

Apr. 2018 - Mar. 2019:
Occupational trainee and master's thesis (full-time)
Institute of Health and Biomedical Innovation, QUT, Australia

- I manufactured physiological aortic root scaffolds with improved strength and compliance for tissue engineering applications using Melt Electrowriting, Computer Aided Design and Additive Manufacturing.

May 2017 - Mar. 2018:
Graduate student research assistant (part-time)
Institute of Aerodynamics, RWTH Aachen University, Germany

- I analysed blood flow properties in aortic aneurysms using particle image velocimetry (PIV) technology to create a fluid-structure interaction model to predict the progression of aneurysms.

Oct. 2016 - Mar. 2017:
Internship and bachelor's thesis (full-time)
Truetzschler Moenchengladbach, Germany

- I independently analysed the effect of a novel detaching roller drive system on the energy consumption and product quality of combing machines using sensors (temperature and energy) and textile test benches, and then provided a summary of recommendations for machine users.

Jun. 2016 - Sep.2016:
Undergraduate research projects (part-time)
Institute of Textile Technology, RWTH Aachen University, Germany

- I designed and manufactured and textile composite vascular grafts using warp knitting technology. The grafts were then mechanically analysed using a pulsatile fluid flow test bench.
- I surface engineered cam systems in knitting machines to reduce the oil contamination of medical textiles by testing different coatings with regards to friction using temperature sensors, torque sensors, and microscopy.

Aug. 2015 - Sep. 2015:
Internship (full-time)
FEG Textiltechnik (DynaMesh), Aachen, Germany

- Hand-manufactured and quality-tested production (implanted in patients) surgical meshes for hernias and pelvic floor/urethral prolapses in a cleanroom (class 7).

Jun. 2013 - Aug. 2013: ***Internship (full-time)***
Forschungszentrum Juelich, Germany

- Work placement in a corporate traineeship to gain practical experience in steel processing methods (including welding, sawing, and filing).

Publications and Conferences

- **Oral presentation** for the 6th TERMIS World Congress, 15-19 November 2021, Maastricht. S Schoenborn, MA Woodruff, MC Allenby: Numerical and Experimental Study of Haemodynamics and Wall Compliance in the Anastomosis of Small-Diameter Vascular Grafts with Patient-Specific Geometries for Translation to Tissue Engineering

- **Oral presentation** for the International Society for Biofabrication Conference, 27-29 September 2021, Wollongong. S Schoenborn, MA Woodruff, MC Allenby: Numerical and Experimental Platform for the Characterisation of Patient-Specific Small-Diameter Vascular Graft Anastomoses for Translation to Tissue Engineering

- **E-poster presentation** for the *Herston Health Precinct Symposium*, 7-11 December 2020, Herston. S Schoenborn, MA Woodruff, MC Allenby: Engineering Personalised Small-Diameter Arterial Phantoms for Numerical and Experimental Studies on Vascular Anastomosis

- **E-poster presentation** for the *Herston Healthcare State of the Art Symposium*, 9-12 September 2019, Herston. S Schoenborn: Manufacturing and microscopic analysis of a melt electrospun aortic root scaffold with physiological thickness and fibre alignment.

Languages

German: **Native language (spoken and written)**

English: **Highly Fluent (spoken and written)**

- Common European Framework of Reference (CEFR) level: C2 (highest level)
- IELTS: Overall Band Score 8.5 / 9 (99th percentile of all test takers)
- Cambridge English: Grade A in the Certificate of Proficient English (225 / 230)
- NAATI Credentialed Community Language Test: 78.5 / 90

Certificates

Jun. 2022 **NAATI**
Certified Provisional Interpreter German and English

Jul. 2019 **Engineers Australia**
Professional Engineer (Mechanical)

Ongoing	**Queensland Government** Working with Children Check (Blue Card: 1816555/2)	
Mar. 2019	**NAATI** Credentialed Community Language Test	

Scholarships and Awards

Aug. 2020	**Bionics Queensland** **Grand Challenge Winner (Mobility)** *Awarded to the best research or industry project for bionic innovation in Queensland* *(Project name: Training bespoke tissue-engineered vascular grafts via soft robotics)*	AU$ 50,000
Feb. 2020 - Feb. 2024	**QUT Postgraduate Research Award** **GOstralia! Research Centre PhD Stipend for QUT** *Awarded yearly to 2 international PhD students at QUT from Germany; selection is based on academic merit, community engagement and leadership*	AU$ 270,000 over 4 years
Oct 2013 - Mar 2019	**Friedrich-Ebert-Stiftung (FES)** **Student Scholarship Program** *Awarded yearly to 600 out of 2.9 million university students in Germany; selection is based on academic merit, community engagement and leadership*	AU$ 120,000 over 5.5 years
Nov. 2018	**ATA Scientific - Young Scientist Encouragement Award** *Awarded to 3 candidates out of 100 applicants for the best English essay on a specific scientific topic*	AU$ 600
2018	**Dean's List** **Plastics and Textile Engineering** *Awarded to top 5% of students*	