

# DR SAMUEL FROST | RESUME



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## Summary

As a Learning Design Specialist in the Blended Learning Team at The College, I collaborate with stakeholders to deliver captivating student-centric learning experiences and apply my pedagogical expertise to create innovative solutions that meet all student learning outcomes. I advise the development of media, learning objects, and resources while utilising my project management capabilities to ensure successful completion of all projects. I also stay up-to-date with innovative digital curriculum development, learning technologies, and project management techniques.

I have exceptional problem-solving skills, high-level organisational skills, and strong knowledge of Workplace Health and Safety regulations. I also have several years' experience as an educator and researcher, with a strong background in, and affinity for, STEM-based subjects.

## Core Qualifications

- › Ability to work across multiple projects to strict deadlines within a project management framework with excellent organisational and management skills
- › Strong understanding/experience of a wide range of pedagogies.
- › High proficiency in multiple digital authoring tools.
- › Advanced knowledge of multiple LMSs/e-learning development software.
- › Experience in curriculum development for dozens of subjects as part of pathway programs, first year University, and RTOs.
- › Strong foundation in learning design with a focus on access/inclusion and accessibility (W3 – WCAG 2.1).
- › Advanced knowledge of Australian Workplace Health and Safety Guidelines, policies and procedures .

## Experience

2022 – Present    **Learning Designer**    [Western Sydney University – The College](#)

- › Collaborate with stakeholders to develop innovative learning solutions aligned with the University's 21C principles, Quality Matters standards, and College transition pedagogy principles, on time and on budget.
- › Deliver captivating, student-centric learning experiences as part of The College's curriculum renewal.
- › Apply pedagogical expertise to create dynamic solutions that meet all learning outcomes during course and subject development, and partner with subject matter experts and key stakeholders to develop engaging, authentic, and active learning experiences suitable for hybrid, blended, and online delivery.

2020 – 2022    **Digital Media Designer**    [Western Sydney University – The College](#)

- › Collaborate with learning designers/learning and teaching coordinators to design and deliver engaging and pedagogically sound digital learning objects for assessment, teaching, and learning in College courses (including the RTO).
- › Update and maintain Blended Learning resources in digital repositories and manage content storage, dissemination, and archiving of project media.
- › Deliver training, conduct presentations, and upskill team members in digital media.

2017 – Present	<b>Test Day Supervisor/Administrator</b>	Western Sydney University – The College
	<ul style="list-style-type: none"> <li>» Organise, deliver, and supervise high-stakes computer-delivered English proficiency examinations for both IELTS and Pearson PTE-A.</li> <li>» Duties include day-to-day test centre operations, supervision of staff, customer service, troubleshooting software and hardware problems in real-time, with a strong emphasis on data security and privacy.</li> </ul>	
2013 – 2020	<b>Casual Academic</b>	Western Sydney University
	<ul style="list-style-type: none"> <li>» Teach Undergraduate Chemistry and Physics both theoretically and practically, including the explanation and demonstration of complex chemical concepts in an easy-to-understand manner.</li> <li>» Duties include supervising laboratory practicals, tutoring (including one-to-one and at a class level), creation of teaching materials, and marking.</li> </ul>	
<b>»» Education</b>		
2021	<b>Cert IV TAE</b>	The College RTO
	<ul style="list-style-type: none"> <li>» TAE40116 obtained through Western Sydney University The College RTO.</li> <li>» Strong foundation and understanding gained into the complex compliance structures the RTO operates in.</li> </ul>	
2014 – 2018	<b>Doctor of Philosophy</b>	Western Sydney University
	<ul style="list-style-type: none"> <li>» Focus on the development and characterisation of novel photo-activated biomaterials for sutureless tissue repair.</li> <li>» Primarily self-managed research-based activities, planning and conducting experiments (including WHS assessment/risk protocols), writing and presenting own original work, and collaborating with academics and researchers across the globe.</li> </ul>	
2013	<b>Bachelor of Science - Honours</b>	Western Sydney University
	<ul style="list-style-type: none"> <li>» Honours Class I (Dean's Merit List for GPA above 6.0 and in top 10 percent of students). Thesis title: In Vitro Characterisation of a Novel Extracellular Matrix-Based Biomaterial for Sutureless Tissue Repair.</li> <li>» Gained experience operating Lasers, Mechanical Testing of Materials, Atomic Force Microscopy and Scanning Electron Microscopy.</li> </ul>	
2010 – 2012	<b>Bachelor of Science (Adv. Science)</b>	Western Sydney University
	<ul style="list-style-type: none"> <li>» Science degree in Medical Nanotechnology heavily focussed on research with the need to maintain a distinction average.</li> <li>» Majoring in Chemistry with a Sub-Major in Physics.</li> </ul>	

## »» Publications

**Samuel J. Frost**, Jessica Houang, James M. Hook, Antonio Lauto. *Chitosan adhesives with sub-micron structures for photochemical tissue bonding*. *Laser Therapy*. **2022**. 10.4081/ltj.2022.306

Ashour Sliow, Zhi Ma, Gaetano Gargiulo, David Mahns, Damia Mawad, Paul Breen, Marcus Stoodley, Jessica Houang, Rhiannon Kuchel, Giuseppe C. Tettamanzi, Richard D. Tilley, **Samuel J. Frost**, John Morley, Leonardo Longo, Antonio Lauto. *Stimulation and Repair of Peripheral Nerves Using Bioadhesive Graft-Antenna*. *Advanced Science*. **2019**. 10.1002/adv.201801212

**Samuel J. Frost**. *Chitosan-based nano-structured biomaterials for sutureless tissue repair* **2018**.

**Abstract** "Sutures and staples have long been considered the gold standard for tissue wound repair and re-constructive surgeries. Their usage can often result in foreign-body inflammation, infection, excessive scarring, as well as air and fluid leakage in procedures involving the lungs, blood vessels, dura mater, and urethra. With the advent of bioadhesives, there are now several alternative techniques available that limit these adverse effects. Although the majority of these techniques are minimally invasive and provide sufficient wound closure, they can lack flexibility, and present a risk of cytotoxicity. Sutureless procedures for wound repair and closure have recently integrated nano-structured devices to improve their efficacy and clinical outcome. Gecko-inspired adhesives, for example rely mostly on van der Waals forces to adhere to a surface. This adherence is challenged by the moist environment of the tissue during wound closure and significantly compromises the bonding strength."

**Samuel J. Frost**, Damia Mawad, Richard Wuhrer, Simon Myers, Antonio Lauto. *Semitransparent bandages based on chitosan and extracellular matrix for photochemical tissue bonding*. Biomedical Engineering Online. **2018**. 10.1186/s12938-018-0444-1

**Samuel J. Frost**, Damia Mawad, Michael J. Higgins, Herleen Ruprai, Rhiannon Kuchel, Richard D. Tilley, Simon Myers, James M. Hook, Antonio Lauto. *Gecko-inspired chitosan adhesive for tissue repair*. NPG Asia Materials. **2016**. 10.1038/am.2016.73

**Samuel J. Frost**, Damia Mawad, James Hook, Antonio Lauto. *Micro-and Nanostructured Biomaterials for Sutureless Tissue Repair*. Advanced Healthcare Materials. **2015**. 10.1002/adhm.201500589

Matthew J. Barton, John W. Morley, David A. Mahns, Damia Mawad, Richard Wuhrer, David Fania, **Samuel J. Frost**, Christian Loebbe, Antonio Lauto. *Tissue repair strength using chitosan adhesives with different physical-chemical characteristics*. **2014**. 10.1002/jbio.201300148

## »» Referees

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