

MONDAY 16/11	Topic and Presenter	Description		Location
8.30-8.45	Welcome and Housekeeping			Guthrie theatre CB06.03.028
8.55-9.55	SESSION A			
8.55-9.55	Preventative Maintenance for Microscopes Rod Aggett / Aaron Taplin from Edu Supplies	Learn how to keep your school lab gear in top shape! Join us for a presentation on microscope maintenance and care. Gain invaluable insights and practical tips for general use and troubleshooting issues; as well as a step-by-step guide on how to get your equipment back up and running!	A1	Classroom CB06.03.051
8.55-9.55	How to test your equipment and do any minor repairs if needed Bob Death	Bring along any equipment that you are having trouble with, and Bob will endeavour to show you how to repair.	A2	Classroom CB06.03.053
8.55-9.55	Part A: Review Basic Chemical Calculations Dearne Stephen from John Edmonson High School and Ines Ryde, Bowral HS	This Part A course is a prerequisite for Session D6: Part B – Prepare, Label and Dispose of a Chemical Solution. Participants will review the Periodic Table and Chemical Calculations using the formula $M \times V \times MW$ from previous Chemical Calculations courses.	A3	Classroom CB06.03.056
8.55-9.55	Outdoor Education Melissa Leslie from Robert Townson High School	Time to get outside for some hands-on science! Learn how to use science equipment that you already have for outdoor experiments and research. You'll also have the opportunity to learn about citizen science projects and participate in one!	A4	Laboratory CB04.03.510
8.55-9.55	Lunar Battery STEM Design Challenge Ben Newsome from Fizzics Education	Surviving the lunar night is challenging, especially as the Artemis missions seek to establish a permanent base on the moon. We'll examine this in detail as we look at a STEM lesson that combines electrical energy, data & heat exchange all in a design thinking environment, whilst linking the concepts to known NASA shortfalls.	A5	Laboratory CB04.03.520
8.55-9.55	Air Rockets Matt Dodds from Science with Mat	Come along and learn how to safely build and launch Air Rockets! This simple and easy bit of kit can be used by Yr.11 & Yr.12 Physics but also works really well with junior years. Don't forget about experience days too!	A6	Laboratory CB04.03.551

		This small, compact and lightweight system can be set up in less than 1 minute, it only takes a few pumps to get it up to operating pressure. Warning, this workshop could be the most fun you have had this year!		
8.55-9.55	Preparing your chemical waste for collection Nicole Warren and Greg Lawrence from Evoro	Tips on how to manage your chemical storage and waste. How to prepare your waste ready for collection	A7	Lecture Theatre CB06.03.022
8.55-11.05	SESSION AB			
8.55 - 11.05	KidWind Challenge - Harnessing renewable energy Katie Cadogan and Stuart Lewis from Scientrific	This session demonstrates how hands-on engineering design can generate authentic datasets that drive deep scientific understanding. Participants will explore how students collect, interpret, and refine performance data from wind tunnels or solar testing arrays, transforming raw measurements into meaningful insights about energy transfer, efficiency, blade design, and environmental variables. Delegates will: Experience a condensed KidWind design-and-test cycle. Analyse real turbine performance data to identify patterns and optimisation strategies. Explore how data literacy, critical thinking, and problem-solving are embedded in the engineering process. Discover practical strategies for implementing renewable energy challenges in their own schools. The workshop will also highlight how large-scale collaborative challenges foster engagement, teamwork, presentation skills, and cross-school networking — creating powerful learning communities grounded in authentic STEM inquiry.	AB1	Classroom CB06.03.052
8.55-11.05	Genetic Engineering in the classroom Jeanette Tran from STEM Reactor	Understanding Genetic Change is a key component of the Biology curriculum. Learn about genetic engineering by modifying E. coli bacteria to express Jellyfish protein! Join our engaging workshop and conduct a real-world bacterial transformation experiment, introducing the Green Fluorescent Protein (GFP) gene into E. coli bacteria and witnessing the power of DNA manipulation first-hand. Through practical application and guided instruction, attendees will gain a solid understanding of core molecular biology concepts. You will learn:	AB2	Laboratory CB04.03.430

		- The fundamental principles of bacterial genetic transformation and how bacteria can take up foreign DNA. - The role of plasmids as vectors for introducing new genes into cells. - How antibiotic selection is used to identify genetically modified organisms. - The process of gene expression and how genes like GFP lead to observable traits. - Practical techniques for handling bacteria and performing basic molecular biology procedures.		
10.05-11.05	SESSION B			
10.05-11.05	Exploring Miracle Berries Daniela Migliorati from Science Supply Australia	It's a miracle...Sour to Sweet! Explore what happens when we eat a West African berry that makes common sour & bitter foods taste sweet by temporarily masking your taste buds! A great topic starter when teaching sense of taste or within a psychology unit. A fun experience for any curious mind!	B1	Classroom CB06.03.051
10.05-11.05	Rock Identification workshop Joshua Robertson from AusEarthEd	Develop your confidence in identifying and managing rocks commonly found in school laboratory collections. Participants will examine a range of igneous, sedimentary and metamorphic rocks, using features such as mineral composition, grain size, texture and structure to classify and identify specimens. This practical workshop will also cover best practice considerations for storage and disposal. Participants will leave with a systematic approach for assessing and maintaining their school's rock collection.	B2	Classroom CB06.03.053
10.05-11.05	Westlab's LABDISC – data hub Niall Collins from Westlab	LABDISC. One Device. 15+ Sensors. Simple Software. One Bluetooth Connection. Join Westlab's workshop session to discover the future of data.	B3	Classroom CB06.03.056
10.05-11.05	Carry out a Titration Darryl Hearsch	You will be introduced to all the equipment needed to carry out a titration and then it will be demonstrated how to carry out a titration between a standard solution of Sodium carbonate (Na_2CO_3) and Hydrochloric acid (HCl). You will then carry out a titration and perform the necessary calculations to determine an unknown concentration of HCl used.	B4	Laboratory CB04.03.510

10.05-11.05	Lunar Battery STEM Design Challenge Ben Newsome from Fizzics Education	Surviving the lunar night is challenging, especially as the Artemis missions seek to establish a permanent base on the moon. We'll examine this in detail as we look at a STEM lesson that combines electrical energy, data & heat exchange all in a design thinking environment, whilst linking the concepts to known NASA shortfalls.	B5	Laboratory CB04.03.520
10.05-11.05	RiskAssess: the new Chemical Inventory & Register! James Crisp from RiskAssess	Easily track your chemicals and meet legal requirements with the new chemical inventory & register built into RiskAssess. The system includes SDS management, QR codes for emergency services, and quick and easy stocktaking from your mobile phone. We'll also cover the legal requirements and explain how to import your current inventory/register data into RiskAssess. Come and see this new feature in action! There will be time for questions/discussion.	B6	Lecture Theatre CB06.03.022
10.05-11.05	Making Room for Safety: Smart Chemical Storage & Segregation in School Labs Ryan Nguyen from Brady Australia Pty Ltd	Managing hazardous chemicals in school labs often means fitting modern compliance into cramped, legacy prep rooms. This practical session unpacks the essential obligations under WHS legislation, Safe Work Australia guidance, and AS/NZS 2243.2:2021 (Safety in laboratories, Part 2: Chemical aspects and storage) to help lab technicians solve complex storage and segregation challenges. You will learn how to navigate high-risk chemical incompatibilities, apply minor storage threshold rules, and utilise space-smart Dangerous Goods (DG) Safety Cabinets (such as Brady solutions) to maximise safety in tight footprints. Most importantly, you will leave with clear, evidence-based compliance arguments to confidently advocate for facility upgrades and compliant equipment with school leadership.	B7	Guthrie Theatre CB06.03.028
11.15-11.45	MORNING TEA			Universal Café L4

11.50-12.40	Keynote address From Arduino to Artificial Intelligence: Accelerating algae innovation to address the climate crisis Professor Peter Ralph Executive Director of the Climate Change Cluster (C3) at the University of Technology Sydney.	Climate change is one of humanity's greatest challenges, but the tools to tackle it have never been more accessible or powerful. Distinguished Professor Peter Ralph will explore how low-cost sensors, maker technologies, artificial intelligence and algae biotechnology are transforming climate innovation. Drawing on examples from UTS's Climate Change Cluster (C3), he will show how algae are being developed for food security, carbon capture, renewable materials and the circular bioeconomy. Automation, robotics and machine learning are accelerating this work, enabling researchers to test ideas and identify breakthroughs faster. The presentation will demonstrate how accessible technologies empower scientists and students to innovate. It will show how curiosity, practical problem-solving and emerging tools can combine to create meaningful climate solutions and inspire the next generation of innovators.		Guthrie theatre CB06.03.028
12.40 - 13.10	ASETNSW AGM and Margaret Croucher Award presentation			
13.15 – 14.05	LUNCH			Universal Café L4
14.15-15.15	SESSION C			
14.15-15.15	Exploring Thermodynamics with Vernier Eric Windsor from Haines	A hands-on session for teachers and lab technicians exploring conduction, convection, and radiation through real-world thermodynamics investigations using Vernier Go Direct sensors, designed to build genuine student understanding with practical, low-barrier classroom activities aligned to ACSPH016.	C1	Classroom CB06.03.051
14.15-15.15	Get Hands-On with 3D Printing for Your Lab! Jeffrey Keck from MTA	Ever wondered what 3D printing could do for you in the lab? This hands-on session is designed for lab techs keen to explore how this simple, powerful tool can save time, cut costs, and provide practical solutions in the lab. Watch a 3D printer in action – see how it works from start to finish Get hands-on with real 3D printed items – from learning resources to clever storage hacks	C2	Classroom CB06.03.052

		Learn the whole process – from finding ready-to-go templates online to hitting 'print' Discover how easy it is to learn, with no prior experience required Save money – print your own replacements and storage solutions that fit your space perfectly Learn from each other – those already using 3D printing will be invited to share their experiences, tips, and creative ideas <i>Bringing a laptop or iPad is recommended so you can follow along and explore during the session.</i> A fun, practical intro that will get you thinking about what's possible!		
14.15-15.15	New and Innovative Equipment Jacob Strickling from Tiny Science	In this fun and fascinating hands-on workshop we will be exploring some new and fascinating equipment. Most of it dreamed up and made by Jacob - some of it inspiring - all of it interesting. There'll be laughs and freebies - so try not to miss it!	C3	Classroom CB06.03.053
14.15-15.15	Antidote to Burn-out: Jack's guide to intentional lab organisation and workflow planning, for new and/or stressed Lab Technicians. Make it Jack	Save time and effort by organising yourself, your storage, and your classrooms properly! Topics will include: Time Management, Workflow Tips, Logical Storage, Kit Deployment, Sensible Labelling, Where/when to nap.	C4	Classroom CB06.03.056
14.15-15.15	The best tool for measuring pH since litmus paper! - the pH sensor Doug Bail and Megan Simkin Ciderhouse Tech	A hands-on introduction to the PASCO Wireless pH Sensor, demonstrating its ease of use, large range of applications, storage, and troubleshooting. The Wireless pH Sensor is a must-have for any chemistry, biology, or environmental science course. It enhances countless activities (in both the lab & field), including acid-base titrations, investigations into household chemicals, analyses of chemical reactions, water quality studies, and much more.	C5	Laboratory CB04.03.510
14.15-15.15	Glass bending Samantha Matveev	Laboratory glass tubing is used in many laboratories to connect other items of glassware or equipment and to convey or deliver chemicals, solvents, liquids, gases and other products. Lab glass tubing is normally manufactured from borosilicate glass for the most demanding	C6	Laboratory CB04.03.520

	from Miller Technology High School	applications. As a lab technician within the school system, we need to create S bends and U bends for many experiments. Learn how to create these bends in glass tubing to reduce the cost outlay of buying the tubing already made. This year you can also try making your own glass pipettes! BRING A LARGE FLAT TUPPERWARE and bubble wrap if you would like to take home your glass pieces.		
14.15-15.15	Agarose Gel Electrophoresis – Dye, DNA and Protein Separation Jeanette Tran from STEM reactor	In biotechnology, agarose gel electrophoresis is the cornerstone DNA separation technique. More recently, exciting innovations in the use of agarose gel electrophoresis are now enabling students to also engage with and explore both native and denatured protein separations using the same equipment previously used for DNA separation. This has significant implications for the classroom. This 'nuts and bolts' hands-on workshop explores the fundamental concepts and principles of agarose gel electrophoresis and its basic application in DNA and protein separation, as well as introducing more advanced applications. Participants will be exposed to a range of cost effective equipment, from home-made through to cutting edge and learn how to: - Prepare, set up and manage classroom activities - Prepare and run dye, DNA, RNA and protein samples - Visualise, record and analyse results - Troubleshoot The workshop is structured to allow continuous opportunities for discussion, to enable participants to explore the options that best address their needs. Participants will leave the session with the knowledge, practical skills and confidence to enable them to manage their students' use of the technology in routine DNA and protein separations as well as for experimental investigations. Written resources are provided.	C7	Laboratory CB04.03.430

14.15-15.15	Smart Telescopes - The easiest and best telescope for your school to get into astronomy! Matt Dodds from Science with Mat	Join Matt to learn about the easiest telescopes for schools to use to show students the Moon, Nebulas and even the Sun! The Seestar S30 Pro is a revolutionary new telescope that can be controlled with either a phone or an iPad. You simply set up the telescope using the app and sequence what you want to view that evening	C8	Laboratory CB04.03.551
14.15-15.15	Chemical and Wastewater Disposal – A Brief Guide for Laboratories Haley Bambridge from Sydney Water	What Really Goes Down the Drain? Can it go down the sink? How much? Does treating it first change the answer? And what do Sydney Water's acceptance limits actually mean for school laboratories? A practical session on school laboratory waste, trade wastewater, what can and cannot go down the drain, where to find reliable information, and who to ask when the answer isn't clear. Come along and finally get some straight answers to those <i>"But the book says I can..."</i> questions.	C9	Theatre CB06.03.022

TUESDAY 17/11	Topic and Presenter			
8.30-8.40	Welcome and Housekeeping	ASET Committee		Guthrie Lecture Theatre CB06.03.028
8.45-9.45	SESSION D			
8.45-9.45	Practical investigations of electromagnetic induction & transformers Doug Bail and Megan Simkin from Ciderhouse Tech	A hands-on introduction to electromagnetic induction. Often viewed as "hard" by students, the use of voltage and/or current sensors can bring this topic alive for students, generating a broader, deeper understanding and in much less time and at a lower cost than traditional methods. Even your teachers might understand the topic! We'll look at generating Lenz and Faraday's laws from firsthand data, generators, and transformers.	D1	Classroom CB06.03.051

8.45-9.45	Preventative Maintenance for Microscopes Rod Aggett / Aaron Taplin from Edu Supplies	Learn how to keep your school lab gear in top shape! Join us for a presentation on microscope maintenance and care. Gain invaluable insights and practical tips for general use and troubleshooting issues; as well as a step-by-step guide on how to get your equipment back up and running!	D2	Classroom CB06.03.052
8.45-9.45	STELR STEM Education Equipment - Hands-on curriculum-aligned resources for renewable energy Graham Stock Australian Academy of Technological Sciences and Engineering (ATSE)	In this workshop, laboratory technicians will learn about the hands-on renewable energy equipment from the Australian Academy of Technological Sciences and Engineering (ATSE) and its national education initiative STELR. From solar energy, wind and hydro to electricity and sustainable house design, explore how STELR's robust equipment and spare parts, all supported by education resources for teachers, have been supporting Australian schools to deliver high-impact STEM education for over 15 years.	D3	Classroom CB06.03.053
8.45-9.45	Microbiology for Independent Learning Projects Jeanette Tran from STEM reactor	It is often challenging to design effective independent learning projects within the biology discipline. Microbiology offers a rich array of meaningful student-led learning experiences. This session utilises a combination of discussion and hands-on. We will be exploring the ways you can use microbiology to bring biology practical teaching to life. This session will explore practical components associated with: - Serial Dilutions & Enumeration - Antibiotic Resistance - Bacterial Transformation - Safe investigation and characterising of soil bacteria. - Water quality testing- chromogenic analysis. - Bioremediation by oil eating bacteria.	D4	Classroom CB06.03.056
8.45-9.45	Invisible Worlds: Hands-On Microbiology for the Classroom. Explore the unseen microbial world through safe, hands-on classroom activities. Model bacterial	Microbiology shapes our world in powerful ways—from disease transmission and antibiotic resistance to biotechnology and environmental sustainability—yet it often feels invisible and abstract to students. This practical workshop explores engaging, classroom-ready ways to make the microbial world visible and meaningful through hands-on investigation.	D5	Laboratory CB04.03.520

	growth, trace contamination pathways and simulate outbreak investigations while connecting cutting-edge microbiology concepts to engaging, practical lessons teachers can implement immediately. Stuart Lewis from Scientrific	Participants will experience a series of safe, accessible activities designed to model key microbiology concepts including bacterial growth, contamination pathways, infection transmission and outbreak investigations. Using commonly available classroom resources such as agar plates, sterile swabs, petri dishes and digital microscopes supplied by Scientrific, educators will explore how simple investigations can reveal powerful insights into the behaviour of microbes. The workshop will demonstrate how teachers can guide students to collect evidence, interpret patterns of microbial growth and connect their observations to real-world issues such as hygiene practices, antimicrobial resistance and public health responses. Designed for easy classroom implementation, these activities emphasise inquiry, critical thinking and scientific literacy while supporting key curriculum concepts in biology and health science. Participants will leave with practical strategies, adaptable investigation ideas and confidence to bring the fascinating “invisible world” of microbiology into their classrooms.		
8.45-9.45	Part B: Prepare, Label and Dispose of Chemical Solution Dearne Stephen from John Edmonson High School and Ines Ryde, Bowral HS	Please note that participants MUST complete Session A3: Part A - Basic Chemical Calculations before enrolling into this course. Participants will learn how to prepare, label and dispose of a chemical solution using the chemical calculations from part A. This session will start with participants learning a few basic laboratory techniques for chemical preparation and disposal.	D6	Laboratory CB04.03.551
8.45-9.45	Supporting Those Who Support Science – Join the IEU Shirley Jancetic from Union for Independent Schools	Science educators and students rely on skilled technicians to keep laboratories running safely, efficiently, and effectively—but who supports you? This session explores how the Independent Education Union (IEU) advocates for science educator technicians and strengthens your professional voice. Whether you’re new to the profession or highly experienced, this session will highlight how joining the IEU can provide you with support, protection, and a stronger platform to influence change in your workplace. Walk away with a clearer understanding of your rights, opportunities, and the power of standing together with others in your profession.	D7	Theatre CB06.03.022

8.45-10.50	SESSION DE			
8.45-10.50	Photosynthesis three ways! Matt Dodds from Science with Mat	Learn a variety of different ways photosynthesis can be demonstrated in the classroom, from the classic spinach disc experiment to using the PASCO Wireless CO2 sensor, all the way to extracting chlorophyll and analysing the transmission and absorbance at different wavelengths.	DE1	Laboratory CB04.03.430
9.50-10.50	SESSION E			Classroom CB06.03.052
9.50-10.50	Photosynthesis in 10 minutes Doug Bail and Megan Simkin from Ciderhouse Tech	Monitor common photosynthesis experiments in a controlled aquatic environment. Understand photosynthesis through direct measurements of oxygen, carbon dioxide, pH, and more, while controlling variables including light, temperature, and nutrient levels.	E1	Classroom CB06.03.051
9.50-10.50	Preparing your chemical waste for collection Nicole Warren and Greg Lawrence from Evoro	Tips on how to manage your chemical storage and waste. How to prepare your waste ready for collection	E2	Classroom CB06.03.052
9.50-10.50	Mineral Identification workshop Joshua Robertson from AusEarthEd	Develop your confidence in identifying and managing minerals commonly found in school laboratory collections. In this practical, hands-on workshop, participants will use properties such as streak, lustre, hardness and cleavage to systematically identify a range of mineral specimens. The session will cover straightforward identification techniques, organising and labelling collections, preparing materials for classroom practical and recognising specimens that may require additional care or investigation. Participants will leave with a practical process for assessing and maintaining their school's mineral collection.	E3	Classroom CB06.03.053
9.50-10.50	PSA - update on your Award and SAO Science Susan Chee Quee and Monique Anderson	Public Service Association, the union that covers non-teaching staff in public schools. Briefing, Award updates and current campaigns.	E4	Classroom CB06.03.056

9.50-10.50	Exploring Thermodynamics with Vernier Eric Windsor from Haines	A hands-on session for teachers and lab technicians exploring conduction, convection, and radiation through real-world thermodynamics investigations using Vernier Go Direct sensors, designed to build genuine student understanding with practical, low-barrier classroom activities aligned to ACSPH016.	E5	Laboratory CB04.03.520
9.50-10.50	Safe storage of chemicals: the law and best practice Phillip and Eva Crisp from RiskAssess; with Paris Demitri from Hunters Hill High	We will consider best practices for storage of chemicals in the chemical store, the prep room and 'in use' in the laboratory. We will highlight particular dangers relating to fires, explosions, spills and associated personal injuries to skin, eyes, lungs and allergic reactions. The storage of chemicals is regulated by law, but the small quantities stored in schools commonly do not meet separation requirements. We will advise on control measures to achieve maximum practical compliance. RiskAssess can help with safe storage!	E6	Lecture Theatre CB06.03.022
10.55-11.30	MORNING TEA			
11.35-12.35	SESSION F			
11.35-12.35	DIY Money Printer: Save your dosh by 3D printing lab equipment and classroom resources in-house. Make it Jack	See how an entry-level 3D printer can save you hundreds of dollars on lab equipment and classroom resources. Each attendee will get to handle and take home useful examples.	F1	Classroom CB06.03.052
11.30-12.30	Tour Of Climate Change Cluster facilities with keynote speaker Professor Peter Ralph	Find out more about the amazing research projects the Climate Change Cluster is working on. Meet at Registration desk in Guthrie Foyer at 11.30am	F2	
11.35-12.35	ASTA's Science Assist Dr Pat Stamford	Learn about how ASTA's Science Assist can help you with your lab safety concerns and how to master Science Assist with this interactive session. Dr Pat Stamford Science Assist Advisor We will cover different aspects of school and classroom laboratory safety including our most popular resources that can help you to prepare for your next	F3	Classroom CB06.03.056

		science lesson. The session will explore examples of real-life questions on chemical management, handling, storage and disposal that have been answered by our expert science advisory team and how Science Assist can help you to make science education safer and more enjoyable.		
11.35-12.35	Overview of Flame testing Darryl Hearsch	The 1 hour session introduces a flame testing experiment used in many science laboratories. Participants will carry out and learn how different substances produce different flame colours, how to observe and identify those colours, and how a simple handheld instrument called a spectroscope can help confirm results. The session also covers safe laboratory practices and practical preparation techniques to ensure the experiment is carried out safely and accurately. Several methods of doing flame testing will also be demonstrated.	F4	Laboratory CB04.03.430
11.35-12.35	Glass bending Samantha Matveev from Miller Technology High School	Laboratory glass tubing is used in many laboratories to connect other items of glassware or equipment and to convey or deliver chemicals, solvents, liquids, gases and other products. Lab glass tubing is normally manufactured from borosilicate glass for the most demanding applications. As a lab technician within the school system, we need to create S bends and U bends for many experiments. Learn how to create these bends in glass tubing to reduce the cost outlay of buying the tubing already made. This year you can also try making your own glass pipettes! BRING A LARGE FLAT TUPPERWARE and bubble wrap if you would like to take home your glass pieces.	F5	Laboratory CB04.03.520
11.35-12.35	A Healthy Land – Measuring the environment with Vernier dataloggers Stuart Lewis from Scientrific	The natural world is made-up of many complex systems that connect together. This workshop will look at using datalogging to measure various environmental conditions in plants, the soil and water. • Looking at chlorophyll in plants • Investigating plant photosynthesis • Investigating respiration • Abiotic conditions • Water analysis	F6	Classroom CB06.03.053

11.35-12.35	Years in the Lab: Tricks, Tips & Things Nobody Tells You Jasmina Hazrolaj and Anjelina Taouk from Wenona School	After ??? years in school science labs, I've collected quite a few shortcuts, "<i>how do I do this?</i>" tricks, people worth following, people perhaps not worth listening to and plenty of things nobody ever puts in the manual. We'll tackle how to slow down moisture absorption in troublesome chemicals, a few waste-treatment tricks, why denture tablets have earned a permanent place in my cleaning aisle, how to make bromine water without creating unnecessary excitement, and other labbie wisdom learned through trial, error and the occasional "<i>well... we won't do THAT again.</i>" And because you asked for them, Ticker Timers and the vacuum jar are coming too. No grand theories. No death by PowerPoint. Just practical ideas, useful tricks, a few laughs, and whatever else we can cram into one hour. And yes, I've never repeated the same presentation twice, so even I'm not entirely sure where we'll end up!	F7	Laboratory CB04.03.551
11.35-12.35	Fundamentals of radioactivity and radiation safety for science teachers and laboratory technicians Bridget Murphy from ANSTO	ANSTO has 70 years of experience in nuclear science and operates Australia's only nuclear reactor. The ANSTO Discovery Centre develops free education resources for schools, runs tours of our Lucas Heights campus, and delivers professional development for teachers. In this workshop, we will explain fundamental concepts of nuclear science, including radioactive decay, half-life, measuring radiation and radiation safety. We will also do some demonstrations using radioactive sources and scintillation counters. We will also provide information about how to manage school radioactive sources and contact details for disposal.	F8	Lecture Theatre CB06.03.022
12.40 - 13.40	LUNCH			Universal Café L4

13.45 – 14.45	SESSION G			
13.45 – 14.45	Practical Skills, Funded Pathways: Supporting Science Technicians in Schools Sonja Jovanovic, NSW State Manager ABC Training	Cut through the complexity of funding and learn how to turn available pathways into real outcomes for your school laboratory technicians. This session highlights how ABC Training delivers practical, industry-aligned programs with minimal disruption, while maintaining the highest standards of quality and compliance. Walk away with a clear understanding of funding options, a simple approach to implementation, and confidence in strengthening your lab's capability through meaningful, hands-on training.	G1	Classroom CB06.03.051
13.45 – 14.45	Micro:bits in Science: Turning Data into Discovery Jeffrey Keck from MTA	This hands-on workshop takes science teaching to the next level by putting real-world data collection right into students' hands. Using Micro:bits, participants will explore 10 engaging science stations covering physics, biology, chemistry, and environmental science — from measuring light levels and tracking heart rates to detecting magnetic fields and monitoring soil moisture. Teachers will learn how to integrate Micro:bit sensors into experiments, collect and graph data, and design inquiry-based investigations that spark curiosity. By the end of the session, they'll walk away with ready-to-use activities, code snippets, and practical tips to transform any science lesson into a mini research lab powered by Micro:bits.	G2	Classroom CB06.03.052
13.45 – 14.45	Learn practical, low-cost Stage 4–5 science activities with resources that build scientific skills and strengthen connections with local First Nations communities Shelley Wilson from Questacon	This workshop will share: - practical, hands-on and engaging, low-cost Stage 4&5 science activities, that develop students content knowledge and their skills in working scientifically; - Resources to help schools connect with local First Nations communities to support student learning - Resources to help schools connect syllabus content with relevant science research and diverse STEM careers.	G3	Classroom CB06.03.053

13.45 – 14.45	Laboratory Design & Safety Compliance in Schools Josh Aldridge	In many schools, the functional, logistical, and WHS requirements of science laboratories are often overlooked or misunderstood by school leadership. As a result, it frequently falls to Science teachers and lab technicians to advocate for the resources and design features essential to safe and effective lab operations. This practical workshop is designed to equip you with the knowledge, tools, and confidence to: • Advocate for better and safer lab design and infrastructure • Communicate the “why and how” of laboratory design requirements • Highlight the critical role of WHS compliance in lab environments Whether you're planning a new build, a renovation, or just looking to improve your current setup, this session will be a good source of information.	G4	Classroom CB06.03.056
13.45 – 14.45	Using Toys to teach Science Jacob Strickling from Tiny Science	This is a hands-on practical workshop where participants use a wide variety of toys to investigate how they can be used to teach many Scientific principles in the classroom. A number of the toys are available from Kmart, some from Aliexpress and others from Tiny Science Lab. It's bound to be a fun workshop with lots of freebies!	G5	Laboratory CB04.03.520
13.45 – 14.45	Plant Biotechnology Jeanette Tran from STEM Reactor	Get ready to play nature's architect! In this hands-on session, you will unlock the superpower of plant cloning. Together, we will learn how a single leaf clipping can transform into a completely new plant. You will step into the shoes of a biologist—mastering sterile laboratory techniques, handling precision tools, and mixing the hormone cocktails that jumpstart cellular growth. You will take home the materials to continue the journey back at your own school. You will learn:	G6	Laboratory CB04.03.430

		- Aseptic technique for sterilising explants. - Preparing medium to grow plants - How to prepare plant stem cells and induce them to grow roots and shoots		
13.45 – 14.45	Slides, Slides, Slides. Matt Dodds from Science with Mat	Come along and view a range of different slides that Matt has imported from the USA. Amazing chromosomes visible during mitosis, red blood cells, stomata, and intestinal villi. There may even be some surprises in store!	G7	Laboratory CB04.03.551
14.55 – 15.05	Evaluations and return lanyards			Guthrie theatre CB06.03.028
15.05 – 15.20	Lucky Door Prize draw			Guthrie theatre CB06.03.028
15.30	Conference Close			