ΔL SS = T PRESENTS

// SPACE & STEM
STUDENT
EXPERIENCE

MEET

**LEARN** 

**DESIGN** 

**LAUNCH** 

TEAM-UP WITH STEVE SWANSON - ASTRONAUT & ISS COMMANDER AND LAUNCH YOUR IDEAS INTO SPACE!











"I can say without doubt that Mission Discovery is the best thing I have ever taken part in."

> Riya Khan Student

# WELCOME TO MISSION DISCOVERY AN OPPORTUNITY FOR ORDINARY STUDENTS TO DO SOMETHING EXTRAORDINARY

**MEET** 

LEARN

**DESIGN** 

LAUNCH

# YOUR MISSION

SPEND 5 DAYS AT GRIFFITH UNIVERSITY WORKING WITH A NASA ASTRONAUT, RENOWNED SCIENTISTS AND NASA LEADERS, IN AUSTRALIA'S MOST EXCITING STEM PROGRAM!

- Take on the role of a research scientist and work with your team on a science project. Your mission is to create an experiment which will be carried out in space and to present your idea to our board of esteemed judges
- The judges will pick one winning team, whose experiment will be built by NASA, launched to the International Space Station (ISS) and carried out in space by the astronauts
- Sign-up for the 1<sup>st</sup> annual Mission Discovery Program at Griffith University, enhance your CV and STEM knowledge and join the forefront of human space exploration!

Are you Australia's next astronaut or STEM leader?



"It was great to learn from such inspirational astronauts and experts through Mission Discovery. I had a fantastic time"

> **Emily Yeomans** Student





# LEARN HOW TO ....

- Work successfully in a team
- Plan the execution of a project
- Achieve a goal
- Follow efficiently and lead effectively

- Deliver a persuasive presentation
- Confidently speak in public
- Make your CV stand out!

Mission Discovery focuses on Science, Technology, Engineering and Maths...

THE FUTURE OF STEM STARTS WITH YOU!

# // MISSION AGENDA



# SUNDAY 14TH APRIL 2019

- NASA team building NASA presentation
- Mission Patch Team Challenge
- The Journey to Mars NASA presentation
- Mars Lander Team Challenge
- The Best Science Experiment NASA presentation



# MONDAY 15TH APRIL 2019

- Becoming an Astronaut and The Story of a Space Mission – NASA presentation
- Headline Story Team Challenge
- How to design a space experiment
   NASA presentation
- Presentation from a guest university professor or lecturer



# TUESDAY 16TH APRIL 2019

- Budgeting and Planning Skills NASA presentation
- The International Space Station Environment,
   Experiments and an Expedition NASA presentation
- Work on experiments
- Space Experiments NASA presentation



# WEDNESDAY 17TH APRIL 2019

- Improve Your Presentation Skills NASA presentation
- Work on experiments and presentation
- The Earth From Space NASA presentation



# THURSDAY 18TH APRIL 2019

- Presentation preparation
- First round presentations
- Finalists selected
- Final presentations
- Campus tour or visit to research lab at Griffith University
- Winners announced





<sup>\*</sup> Itinerary subject to change

# THE MISSION TEAM

# 2019 BRISBANE MISSION DISCOVERY PROGRAM TEAM MEMBERS

Mission Discovery introduces you to the highest level of NASA Leadership, Space Exploration and Scientific Research



# STEVE SWANSON NASA ASTRONAUT & ISS COMMANDER

Space Shuttle flights STS-117, STS-119, and Expedition 39 to the ISS aboard the Soyuz. Steve has also served as a CAPCOM for ISS and Space Shuttle missions. He has logged 643 hours in space and completed four spacewalks, totalling 26 hours and 14 minutes. Steve is a recipient of the NASA Exceptional Achievement Medal



# **SARAH MURRAY**NASA'S DEPUTY OF ORION VEHICLE SYSTEMS PERFORMANCE AND ANALYSIS

Sarah is in the Orion Vehicle Integration Office, which is responsible for integrating all the vehicles: the Orion, the European Service Module being built in Germany, the abort system being built in Virginia, which all sits on top of the rocket, the Space Launch System (SLS) being built in Alabama. She has served on NASA's Mission Support Council as well as Assistant Division Chief for EVA, Robotics and Crew Systems, where she was responsible for the Neutral Buoyancy Laboratory Space Walking training facility. She has held roles in Astronaut Training and Mission Control. She has also been Deputy Chief of Space Flight Training Management, where she was the Chair of the International Training Control Board, responsible for training astronauts and cosmonauts.



# **DR. JULIE KEEBLE**LECTURER OF PHARMACOLOGY AND ISSET'S CHIEF SCIENTIST

Dr. Julie Keeble is a lecturer at the Institute of Pharmaceutical Science at King's College, London and is jointly affiliated with the Centre for Human & Aerospace Physiological Sciences. Her research focuses on the role of sensory nerves, pain, inflammation and thermoregulation. Dr Keeble is also ISSET's Chief Scientist and is responsible for ensuring that all winning Mission Discovery experiments are launched to the International Space Station.









# **EXPERT SPEAKER**

**GRIFFITH UNIVERSITY** 

Griffith University will invite a professor, or lecturer, expert in a field aligned with the Mission Discovery program, possibly in a subject area such as Astrophysics, or similar, to speak to the student cohort during the program.

Further specific details about the selected expert speaker will be provided as soon as it becomes available, closer to the date of the Mission Discovery program.



### **CHRIS BARBER**

FOUNDER & DIRECTOR OF ISSET

The International Space School Educational Trust (ISSET) is a registered UK charity, founded in 1998, that works in partnership with some of the world's leading space organisations, to deliver unique learning opportunities for people of all ages.



### **MENTORS**

Team mentors will consist of senior Science and Engineering students from Griffith University and pre-service teachers.

\* Team members subject to change





The International Space School Educational Trust (ISSET) works in partnership with some of the world's leading space organisations to deliver unique learning opportunities for students of all ages.

Each of our programs offer something unique, whether it be on an international excursion learning from some of the greatest minds in the world, or our unique Mission Discovery challenge where you can send your experiment into space. Through close working relationships with different aerospace organisations, ISSET lets you team up with astronauts, rocket scientists and leading business professionals at the highest level.

At ISSET we categorise all participants as students, undertaking programs from which they can gather new knowledge. ISSET is a registered UK charity founded in 1998.

### **ISSET'S GOALS**

- Inspire and motivate young people through STEM and space exploration
- Give ordinary people the opportunity to achieve something extraordinary
- Recognising what humans can achieve
- Instilling the NASA 'you can do it' spirit!



Latitude Group Travel offers custom designed, curriculum linked, educational tours and programs unlike any other organisation. In fact, we are completely unique in our approach.

All our programs and tours include experiential learning activities to engage students and engender real educational outcomes. We are thought leaders, providing cutting edge programs that reflect the innovation and change occuring in education and educational institutions.

Our itineraries, programs, service and delivery are world class. The research and focus on experiential learning that underpins everything we do, ensures that each itinerary is unique. We actually understand what you teach and the electives/strands you have chosen for your subject/s and focus our efforts on delivering a tour that is truly linked to the curriculum you teach. Our range of 5 day programs, which includes Mission Discovery, are intended as a real adjunct to classroom education, by providing experiential learning that is so essential to student development.

In short – what we do and how we do it really matters to us. All of us at Latitude Group Travel genuinely care about delivering the best possible service and the most engaging, life-changing programs and tours. We genuinely want to ensure that we positively impact student learning and that our partner schools are investing in authentic educational programs of tangible merit.

# GRIFFITH UNIVERSITY



**Strive for and celebrate the Remarkable.** 

Established in 1971, Griffith is a relatively young university. In just four decades, we've grown from one campus and 451 students to become a comprehensive, multi-campus institution, with 50,000 students and over 200,000 graduates.

Today, we are known for our high impact research, outstanding student experience, commitment to social justice and welcoming environment, and rank among the top two per cent of universities worldwide\*.

Our STEM degrees span a vast range of disciplines but are all informed by our cutting-edge research and focused on preparing our students to address the challenges of the future. When you study STEM at Griffith you'll learn from award-winning teachers and benefit from our close ties with industry.

griffith.edu.au/griffith-sciences





# PROGRAM INFORMATION

# **LOCATION**

The program will be held at Griffith University, Nathan campus, Brisbane. Room details to be confirmed.

## REGISTRATION

Daily registration will occur in the entrance to the building and is as easy as providing your name.

The program will run daily from 9.30am to 4.30pm. Please arrive by 8.45am on the 14th April and by 9.15am other days, to ensure a prompt start at 9:30am.

# WHAT TO BRING

- Your lunch, all snacks and a refillable drink bottle
- A notepad and pen to take notes during the program
- Students who have their own iPad or laptop would benefit by bringing it to the program each day. It will not be required on day 1.

# CONDUCT

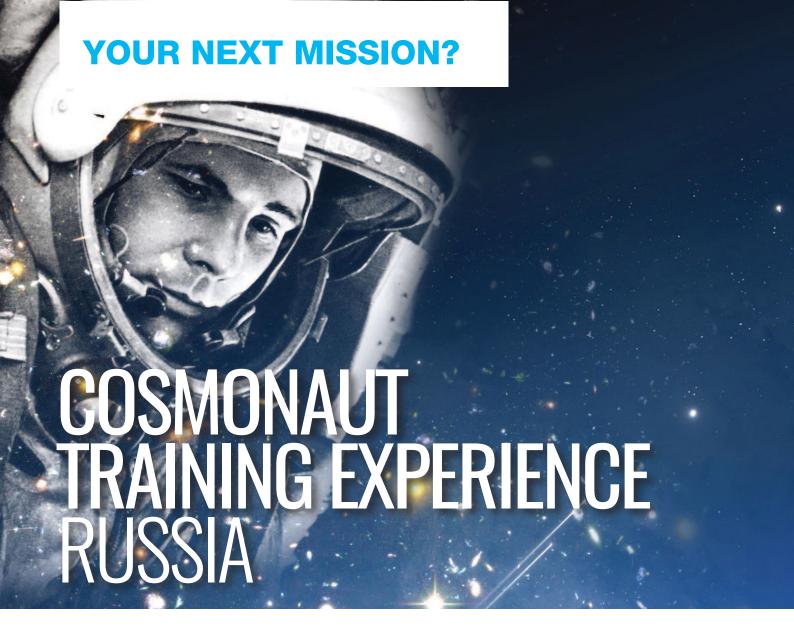
- You will be in a professional environment, with some of the world's elite in the fields of space and science
- You will be expected to behave in an appropriate manner politely, attentively and with tolerance towards everyone
- There will be photo opportunities, so dress smart-casual
- Consumption of alcohol, drugs and cigarettes is not permitted
- Parents will be contacted if their child has failed to register before 9.30am each day, without giving prior notice







"Mission Discovery is the most complete and exciting educational program I have worked with. I'm always excited to see where the students imagination takes them and watch them develop throughout the week. When I was young, I would have loved the chance to have an experiment flown in space"



A unique opportunity to train like the real cosmonauts and astronauts, on the same equipment and facilities at the Yuri Gagarin Cosmonaut Training Centre, in Star City, near Moscow.

- > Stay in Star City, the world training centre for cosmonauts and astronauts who are about to venture into space.
- > Develop the exceptional team building and communication skills acquired by astronauts, using the same scenarios, equipment and challenges that enable human space flight.
- > Mir training: Learn how to operate the Mir Space Station
- > Undertake wilderness survival training Russian style
- > See the sights of Moscow, including Red Square and the extraordinary Kremlin

CONTACT LATITUDE
GROUP TRAVEL
TO FIND OUT MORE
ABOUT THIS AND ALL
OUR OTHER TOURS
AND PROGRAMS!





FROM ALL THE TEAM AT LATITUDE GROUP TRAVEL AND ISSET. WE HOPE YOU ENJOY THE BRISBANE MISSION **DISCOVERY PROGRAM HOSTED BY OUR EDUCATION PARTNER,** GRIFFITH UNIVERSITY.



Call +61 3 9646 4200 www.latitudegrouptravel.com.au

















