Faculty of Engineering, Health, Science and the Environment
Research Institute of Environment & Livelihoods
School of Environment

21st, 22nd & 23rd October 2013
A National 3 day innovative and interactive program that supports and enhances the Education of Year 9 Territory school students, in the areas of Science, Engineering & Technology through a variety of Seminars, Interactive Presentations, Excursions, Laboratory Investigations and Hands-On Activities

Cameco  Flinders University  RIEL

menzies  science schools foundation

Rotary Club of Litchfield/Palmerston
Rotary Club of Darwin Sunrise
Rotary Club of Darwin

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Charles Darwin University

Faculty of Engineering, Health, Science & Environment
Research Institute for the Environment and Livelihoods – School of Environment
School of Engineering & IT – North Australian Centre for Oil & Gas
School of Primary Industries
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Office of Media, Advancement & Community Engagement

Special Thanks to...
CDU Pro-Vice Chancellors, Heads of Schools, Professors, Associate Professors,
Professionals, Researchers, Team Leaders, Laboratory Technical Officers,
CDU Higher Education Students, CDU Facilities & Volunteers
Welcome from the Pro Vice-Chancellor Professor Sue Carthew

Welcome to the Faculty of Engineering, Health, Science and the Environment. We offer a broad selection of innovative higher education programs that prepare students for a diverse range of career paths through both undergraduate and postgraduate degree levels.

EHSE also hosts research that is internationally recognised and provides opportunities for research training in a range of discipline areas.

The Faculty has over 3,600 students, distributed amongst four schools;
- School of Engineering & Information Technology
- School of Health
- School of Environment
- School of Psychological and Clinical Sciences

We are also host to the Research Institute for the Environment and Livelihoods and three Research Centres:
- North Australian Centre for Oil and Gas
- Centre for Renewable Energy - NT
- Research Centre for Health and Wellbeing

The Faculty seeks to be a leader in teaching and learning amongst universities of a similar kind. We are currently developing exciting new approaches in Engineering, Health, Science & the Environment which will position CDU students to be at the forefront of teaching and learning. These approaches are informed by partnering with professional bodies, government and industry.

Flexible delivery through distance learning and industry training is a common theme in our courses.

Welcome from the Host of the ConocoPhillips Science Experience, Director of RIEL and Head of School, for the School of Environment

The RIEL research team is a remarkable assembly of intellects drawn from diverse disciplines and cultural backgrounds. There is a healthy mix of fast-track early-career scientists, highly influential thought leaders in top form, and a reserve of veteran investigators with a lifetime of insights to share. Every individual is respected in their own right. We look forward to establishing new relationships and building upon those already active.

RIEL is equipped to take a comprehensive approach across the terrestrial, aquatic, coastal and marine ecosystems of the north, and is multidisciplinary in its research across the natural and social sciences. We are scholars, technicians, visionaries, and explorers: we’re passionate about research.

The School of Environment

Science is one of the most versatile areas of study available, opening opportunities across a wide range of disciplines. At CDU you’ll be empowered to tailor your scientific education to suit your future needs and career.

The University’s School of Environment is responsible for teaching and research in the fields of biological science, biomedical science, environmental science, chemical science.
NT Program Overview

In 2007 a commitment made by Professor Chris Austin, Head of School for the Charles Darwin University School of Environment, and Applied Science Discipline Leader Dr Diane Pearson, who took the role of Local Director and Chair of NT Science Experience, positioned CDU to become the 35th University in Australia to host The National Science Experience. The 3 day program showcases Science, Engineering & IT and offers an opportunity for students to experience University, meet Scientist, Engineers & IT Professionals, participate in experiments held in university laboratories; hands on practical activities, attend seminars from high profile professionals with local and relevant studies, field trips to local places of special scientific interest and gather Information about the many careers and study opportunities at CDU.

Results from the Student who participated in our 2009, 2008 & 2007 Science Experience Program

2009 we had 100 students participate in the 3 day program, of these 23 (23%) of students applied for enrolment at CDU, all were accepted or made an offer. Of these of students 17 (17%) are currently enrolled in 2013.

1 – Bachelor of Science
1 – Bachelor of Environmental Science
1 – Bachelor of Health Science
2 – Bachelor of Clinical Science
1 – Bachelor of Psychological Science
2 – Bachelor of Engineering
4 – Bachelor of Engineering Co-op
1 – Bachelor of Education

1 – Bachelor of Commerce
2 – Bachelor of Law
1 – Bachelor of Teaching and Learning Early Childhood
1 – Bachelor of Creative Arts (New Media)
1 – Bachelor of Creative Arts (Communication)
2 – Tertiary Enabling Program
1 – Certificate IV in Interactive Digital Media
1 – Certificate III in Music

2008 we had 80 students participate in the 3 day program, of these 18 (22.5%) of students applied for enrolment at CDU, all were accepted or made an offer. Of these 14 (17.5%) of students are currently enrolled in 2012.

3 - Bachelor of Engineering
2 - Bachelor of Engineering (Co-op)
1 - Assoc. Degree in Process Engineering
1 - Diploma of Engineering
2 - Bachelor of Clinical Sciences

1 - Bachelor Teaching and Learning & Bachelor of Arts
1 - Bachelor of Pharmacy
1 - Bachelor of IT
1 - Certificate IV in Interactive Digital Media
1 - Preparation for Tertiary Success (TEP)

2007 we had 52 students participate in the 3 day program, of these 18 (35%) of students applied for enrolment at CDU, all were accepted or made an offer. Of these 13 (25%) of students are currently enrolled in 2011.

2 - Bachelor of Clinical Science
3 - Bachelor of Nursing
4 - Bachelor of Engineering
1 – Applied Science
2 – Bachelor of Laws
1 – Bachelor of Accounting

1 – Bachelor of Pharmacy
1 – Bachelor of Teaching & Learning & Bachelor of Applied Science
1 – Bachelor of Commerce & Bachelor of Laws
1 – Certificate III in Financial Services (Accounts Clerk)
All registered students applied and received a participation scholarship to the value of $110.00 which is paid by their sponsor directly to the National Office. Participating students receive a ConocoPhillips Science Experience T-Shirt, Satchel, Certificate of Participation, morning tea & lunch, the name and contact details of their individual sponsor, and are encouraged to write them a letter of appreciation.

On arrival Students are separated into 4 Groups and named after eminent scientist

Blue Group = Darwin Green Group = Einstein Orange Group = Newton Red Group = Curie

Participating Schools (In alphabetical order)
Darwin Middle School MacKillop Catholic College Ramingining School
Dripstone Middle School Marrara Christian College Rosebery Middle School
Gapuwiyak School Nightcliff Middle School Sattler Christian School
Kormilda College O’Loughlin Catholic College St Johns College
Palmerston Christian School

Number of Students who participated: 100
Number of student who identified as Indigenous or Torres Strait Islander: 21
Student Request for more Career/Course information: 97 Requests

Student Event Evaluation Summary

Prior to participating 33% Student were interested in Science, 13% in Engineering and 8% in IT, 46% of students were interested in learning more about Science, Engineering and IT. 99% of students indicated this event did give them an insight into the many different careers offered through Higher Education. 94% of students found the different learning activities interesting, with 80% of students nominating Exercise Sports Science to be the best. All participants agreed the program should be offered at CDU each year with 94% of students experienced what they had hoped too. 95% of students indicated they are considering studying in Science, Engineering or IT with only 30% aware of the alternative study pathways if they do not receive a high enough ATAR. We received 97 career and course pathway information requests from participants.
Official Opening & Closing Ceremonies

Official Opening; Master of Ceremonies Mrs Karen Glazbrook, CDU Office of Media, Advancement & Community Engagements

Official Speakers
Honourable Mr Peter Styles, Northern Territory Government Minister for Infrastructure, Transport, Multicultural Affairs, Senior and Young Territorians

Mr Gary Richardson, Principal Rotating Equipment Engineer for ConocoPhillips Australia

Professor Andrew Campbell, Director of the Research Institute of Environment and Livelihoods, and Head of School for the School of Environment, Faculty of Engineering, Health, Science and the Environment

Closing Ceremony; Master of Ceremonies Miss Venaska Cheliah, 2013 Flinders University NT Medical Student; 2012 Charles Darwin University Second Year Bachelor of Clinical Science Student, and a 2007 Science Experience participant

Mr Jim Lee CDU Lecturer Exercise and Sport Science, Faculty of Engineering, Health, Science and the Environment

Mr Quan Tien, Technical Officer, CDU School of Environmental, Faculty of Engineering, Health, Science and the Environment

Our fantastic Volunteer Student Group Supervisors

Other Student Group Supervisors missing from this photo: Green Group: Ronaq & Louise, Red Group: Richard, Pam & Anthony
'Careers in Science'

CDU School of Environment Associate Head Learning & Teaching Environmental Science, Dr Penny Wurm is an ecologist with research interests in the ecology and management of monsoonal wetlands and invasive plant species, and a teaching practice in environmental science. Her PhD research into the population ecology of native rice has led to projects investigating exotic grass invasion of floodplains and the potential of wild rice as a wild harvest “bush tucker” product. Penny is currently involved in supervising PhD projects focussing principally on wetland and invasive species ecology and management, and coursework Master students in a range of project areas including ecology, sustainability and livelihoods.

Senior Research Fellow Dr Tom Rayner - a freshwater fish ecologist. His research focusses on understanding the factors that drive freshwater fish populations, including river flows, the availability of habitat and food resources, and alien species. He currently holds the position of Research Leader in the Northern Research Futures Collaborative Research Network – a $5 million program which unites biophysical and social sciences across CDU, James Cook University, the Australian National University and the Australian Institute of Marine Science. Tom is a member of the Research Institute for Environment & Livelihoods, but has an office in The Northern Institute. Beyond leading a broad research portfolio, his responsibilities include: facilitating multi-disciplinary research; strategic business administration; postgraduate mentorship; and, creative community engagement.

PhD Student Ben McGowan - I was working on a large agricultural project in Western Victoria that was trying to bring environmental outcomes into large scale agriculture through ideas like sustainable forestry, biodiversity and carbon credits, ecological restoration, and trading water rights. My interest in environmental governance came through some of my master's study in PNG that looked at Forestry Stewardship Council (FSC) certification - another market based tool for promoting sustainable resource management - in a development setting. Conservation works is changing with new revenue streams and more civil society and private enterprise. I’ll be having a look at some of the ways this is playing out in Australia’s National Reserve System. I’ll be picking case studies from both the national park system and private conservation zones to compare how their objectives, processes and outcomes differ, what's driving the growth in private conservation, and what the social perceptions on private conservation are.

PhD Student Stewart Pittard - I received a Bachelor of Environmental Science with Honor’s from the University of Canberra (UC) in 2011. For my honors project I investigated the genetic population structure of the flatback turtle across its Northern Australian range, gaining insights into the spatial population dynamics and evolution of this vulnerable Australian species. Following my studies I became a research technician for the Wildlife Genetics Laboratory at the Institute for Applied Ecology at UC working on marine turtle and crocodile population genetics, while tutoring in statistics, research methods, evolution and bio-diversity. During this period I also worked as a statistician, analysing the social networks of an educational online learning interface. After doing a bit of saving I headed of overseas for 7 months before coming back to reality and a PhD in Darwin at CDU and RIEL. My project will investigate the spatial and temporal impacts from feral buffalo and pig populations in Kakadu National Park, using a mixture of traditional applied ecological methods and novel remote sensing GPS linked technologies.
PhD student Amanda Lilleyman - completed a Bachelor of Science (biology major) at the University of Newcastle and did my honours on behavioural responses of migratory shorebirds to disturbances at Charles Darwin University. I have just started my PhD at CDU on the ecology of migratory shorebirds. Through my research I will investigate the factors that constrain population size of shorebirds in Darwin Harbour. Over the next three years I will observe and track shorebirds to understand their local-scale movement and their daily activities. I will make management recommendations to the Northern Territory Government so any potential impacts to shorebirds from planning and development can be minimized.

NAMRA (North Australia Marine Research Alliance) Postdoctoral Fellow, Dr Heidi Luter - Originally from Colorado (USA), I received my Bachelor of Science in Zoology from Colorado State University. At this stage of my life I was seriously considering attending veterinary school, so to gain more experience in the field I worked as a veterinary technician for two years. I moved to Australia to chase another passion – marine biology and diving on the Great Barrier Reef. I received my Master of Applied Science and Doctor of Philosophy in Marine Microbiology from James Cook University, Townsville. My PhD focused on disease and environmental stress in a common marine sponge. My current postdoctoral research is investigating the impacts of water quality in Darwin Harbour on the sponge holobiont (sponge host & microbial associates), with a particular focus on the role of sponge-microbes in the nitrogen cycle.

Research Associate Michelle Franklin - Natural Resources-based Livelihoods – Born in Brisbane I completed my Bachelor of Applied Science (Animal Studies), at University of Queensland, specialising in wildlife biology. I started working at Crocodylus Park with both fresh and salt water crocodiles. During field work we would locate crocodile nests, record their temperature, dig them up, measure and weigh the eggs and re-bury them, this would occur daily over several months. Our studies would further develop our farming and conservation efforts. I also worked with the Hawksbill Sea Turtles, raising captive turtles in an effort to study their breeding methods and learning how to house them successfully. I did some time at the Territory Wildlife Park as a Zoo Keeper, mainly looking after the Wallaby’s, but also the Birds of Prey. The last 6 years I have been working with the University of Sydney in the NT studying cane toads, we are hoping to learn enough about the species to be able to manipulate their breeding activities to be able to develop effective control methods. One day I can be ankle deep in mud catching them and the next day in the air-conditioning in front of the computer.

Doctor of Philosophy, Dr Yean Yeow Tan – Dr Yean Yeow Tan is a Senior lecturer and unit coordinator in Pharmacology and Therapeutics, Pharmacy Discipline, School of Environmental and Life Sciences (SELS), Charles Darwin University. Research interests - Regulation of receptors and intracellular signal transduction mechanisms during disease states, Techniques used for research include in vitro organ bath set up, receptor binding experiment and receptor/protein autoradiography and immunohistochemistry.

'Recombinant proteins for vaccine and diagnosis of parasitic diseases' Senior Lecturer Dr Rama Jayaraj and Researcher Mr Jagtar Singh, School of Psychological & Clinical Sciences

CDU Senior Lecturer in Clinical Science Dr Rama Jayaraj provided a short presentation on the importance of recombinant proteins for vaccine and diagnosis of parasitic diseases. Such as liver fluke, the field of biotechnology owes a great deal to the ability to produce recombinant proteins, which can be made in far greater abundance than some native proteins, and are more easily, quality controlled. This session is aimed to explain the importance of recombinant proteins in medical and veterinary research. CDU Clinical Science Researcher Mr Jagtar Singh gave a short presentation on his current research on Head and neck cancer squamous cell carcinoma (HNSCC), have high local recurrence rates when tumour resection is incomplete. The choice of management if a margin is positive or close is wider surgical resection. We postulate that genetic changes precede gross histological alterations; hence use of molecular markers (eIF4E and p53) to establish surgical margins may decrease the local recurrence and improve clinical outcomes.
'Experimenting with CO2'
CDU Senior Engineering Lecturers Micah Thorbjornsen and Dr Daria Surovtseva, CDU Northern Australia Centre for Oil & Gas, School of Engineering & IT

Theoretical background, followed by experiments: Carbon dioxide, a substance whose dangerous impact on the environment is being rigorously discussed, has a wide practical application in one of its states commonly known as dry ice. There are few properties of this solid that make it different compared to the majority of other compounds, these will be demonstrated in the following experiments. 1) Extremely low temperature at which dry ice exists at atmospheric pressure promote condensation of moisture from the air, so the ‘vapour’ can be seen by eye; 2) Dry ice sublimates, that is it converts from solid into vapour phase without passing through liquid state; 3) Sublimation process can be accelerated if dry ice is put into a medium with higher thermal conductivity;

'Why should we be interested in the Environment & what can we do at CDU’
Director CDU Research Institute for the Environment and Livelihoods and Head of School to the School of Environment Professor Andrew Campbell

Why study Environmental Science? The world faces major environmental challenges such as, Climate Change, Energy, Water and Food. How we meet environmental challenges will determine the future of human civilisation, the future is not some place we are going to, but one we are creating — paths to it are made, not found.

'Investigating infectious diseases'
Senior research fellow, Global and Tropical Health Division; Business manager, Centre for Research Excellence in Respiratory Health of Aboriginal and Torres Strait Islander Children Dr Deborah Holt

Biography: Dr Deborah Holt is a molecular biologist with a particular interest in infectious diseases. Having begun her career in malaria research, she has worked on scabies for the past 10 years, focusing on molecular aspects of mite biology. She is currently involved in collaborative projects aimed at scabies mite transcript analysis as well as working towards full genome sequencing. Deborah has other research interests involving parasites and skin pathogens of significance to Indigenous people in the Top End, including genomic analysis of a novel type of Staphylococcus aureus, first identified as causing skin infections in remote Indigenous communities.

Every year, millions of people around the world die from infectious diseases. Successful treatment relies on correctly identifying the disease. We will investigate a case of an infectious disease, see how laboratory tests and clinical information, can ultimately lead to discovering the cause.
Interactive Activities

"If I was a Medical Student, what kind of things would I learn?"
Flinders University NT Community Engagement Officer Ms Kelly-Anne Browne, Ms Lila Loveard and Ms Alysha Hewitt
Flinders University – NT Medical Program

The School of Medicine prepares students to practice medicine in diverse locations as clinicians, researchers or administrators. Understanding the physical, social and behavioural sciences collectively with the application of clinical skills underpins the program. Students participate in various activities including a body part identification race; monitor oxygen levels and heart rates and were shown how good their hand washing was, and how it is not such a simple thing to do properly.

Exercise and Sports Science
CDU Lecturer Exercise and Sport Science Mr Jim Lee & Technical Officer Nikeeta Sullivan

Exercise and Sport Scientists are experts in understanding how human bodies respond to exercise and how to make a difference to the quality of life for all people. Exercise and Sport Scientists use exercise as an intervention to improve health and fitness, enhance physical performance and prevent and rehabilitate injury in both healthy and physically challenged populations. In this activity students will participate in physiological tests designed to test their speed, reaction time and power in both individual and team environments.

Pharmacy
CDU School of Clinical Science Senior Lecturer in Pharmacology Dr Yean Yeow, Lecturer Pharmacy Practice Mrs Mary Bushell & Technical Officer Ms Lynette Lowe

Pharmacists use their expertise in medicines to optimise health outcomes and minimise medication misadventure. The practice of pharmacy includes the custody, preparation, dispensing and provision of medicines, together with systems and information to assure quality of use. Participate in our dose administration aid packing activity – you can take yours home and the medications you pack are extra yummy (please note: adverse effects may include, weight gain & hyperglycaemia).
Horticulture and Aquaculture
CDU School of Primary Industries Ms Kathy Kellam, Aquaculture VET Lecturer & Assessor Mr Chadd Mumme

Students visited the Horticulture & Aquaculture Facilities were shown the propagation shade houses and were taken through the functions of our nursery water recycling system. Students were shown and sampled the many variety edible plants, trees, and fresh herbs. Students toured the aquaculture complex and were explained the special features of the animals under culture, these included Barramundi, Fresh Water Crayfish, Flat back Sea Turtles, Clown fish and our beautiful Coral Display. Students had an opportunity to hold a variety of species and hand feed the large Barramundi.

Engineering
CDU School of Engineering & IT, Senior Lecturer Engineering Mr Micah Thorbjornsen

Engineers makes things happen. Engineering offers a world of excitement, challenges and interesting career opportunities. Engineering converts science and technology into successful innovation, providing the conditions for civilized living. The work of engineers can be seen everywhere - in health, in our cities, in the country, in food supply and distribution, in medicine and in aerospace. In this experiment we will explain the mathematical methods used to calculate how much bungie cord will be need to ensure the rubber chicken does not bump it's head on the ground, when launched from the 3rd Floor of the Engineering Building. Students will attempt to complete the calculations and test their results.

Darwin LNG Plant Tour – ConocoPhillips Australia
Mr Steve Thatcher and Mr Patrick Hastwell

Student were transported to the Darwin LNG Plant and provided an overview of plant operations and toured the facilities.
Information & Technology
CDU School of Engineering & IT Senior Lecturer in IT Mr Charles Yeo

‘Developing Android Applications’ – for non-programmers. In this activity, students using online technologies, where were explained the basic principals’ applied and were guided through the development of android applications used on android phones.

Diversity of Life
CDU School of Environment Associate Head Learning & Teaching Environmental Science Dr Penny Wurm, Senior Lecturer in Plant Science Dr Sean Bellairs, Research Associate/Postdoctoral Fellow Mrs Natalie Rossiter – Rachor, Lecturer - Biology Dr Mick Guinea & Technical Officer Mr Quan Tien

This activity will looks at biodiversity, and the amazing variety of small creatures living in simple everyday environments. Student will collect samples from simple environments such as pond water and decomposing flora waste, and under microscopes examine the different life forms present, and in a variety of other environment samples pre-collected. Students have an opportunity use the resources provided to find out more, ask questions and participate in discussion.
**2013 ConocoPhillips Science Experience Student Evaluation**

1. Have you heard of the 3 day CDU Science Experience before?  
   - Yes 19%  
   - No 81%

2. When you first came, what area were you interested in learning about the most?  
   - Science 33%  
   - Engineering 13%  
   - Technology 8%  
   - All of them 46%

3. Did the event give you a better understanding of the many Careers available by studying at CDU?  
   - Yes 99%  
   - No 1%

4. Did the program provide you the variety of experiences you had hoped for?  
   - Yes 96%  
   - No 4%

<table>
<thead>
<tr>
<th>Please rate the learning experiences</th>
<th>Excellent</th>
<th>Good</th>
<th>Needs Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ConocoPhillips Darwin LNG Plant Presentation</td>
<td>30%</td>
<td>61%</td>
<td>9%</td>
</tr>
<tr>
<td>Seminar: Research Institute of Environment &amp; Livelihoods</td>
<td>30%</td>
<td>68%</td>
<td>2%</td>
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<tr>
<td>Interactive Seminar: North Australia Centre for Oil &amp; Gas 'Experimenting with CO2'</td>
<td>62%</td>
<td>37%</td>
<td>1%</td>
</tr>
<tr>
<td>The importance of recombinant proteins and diagnosis of parasitic diseases</td>
<td>24%</td>
<td>59%</td>
<td>17%</td>
</tr>
<tr>
<td>Interactive Seminar: School of Environmental Science – Careers</td>
<td>33%</td>
<td>63%</td>
<td>4%</td>
</tr>
<tr>
<td>Menzies School of Health Research - &quot;Investigating infectious diseases&quot;</td>
<td>68%</td>
<td>28%</td>
<td>4%</td>
</tr>
<tr>
<td>Exercise Sports Science</td>
<td>80%</td>
<td>20%</td>
<td>Nil</td>
</tr>
<tr>
<td>Horticulture/Aquaculture</td>
<td>62%</td>
<td>37%</td>
<td>1%</td>
</tr>
<tr>
<td>School of Environment - Diversity of Life</td>
<td>52%</td>
<td>45%</td>
<td>3%</td>
</tr>
<tr>
<td>ConocoPhillips LNG Gas Plant Tour</td>
<td>36%</td>
<td>47%</td>
<td>17%</td>
</tr>
<tr>
<td>Flinders University - NT Medical Program</td>
<td>43%</td>
<td>44%</td>
<td>8%</td>
</tr>
<tr>
<td>Pharmacy - Simple pharmaceutical preparation</td>
<td>58%</td>
<td>38%</td>
<td>4%</td>
</tr>
<tr>
<td>Information &amp; Technology - Developing Android Applications</td>
<td>47%</td>
<td>46%</td>
<td>7%</td>
</tr>
<tr>
<td>Engineering - mathematical methods &amp; field test</td>
<td>70%</td>
<td>30%</td>
<td>Nil</td>
</tr>
</tbody>
</table>

6. Do you feel this program should be offered at Charles Darwin University every year?  
   - Yes 100%  
   - No Nil

7. After Year 12 do you want to continue study in the Science, Engineering and/or Technology fields?  
   - Yes 47%  
   - No 5%  
   - Maybe 48%

8. Did you know that if you do not get an Australian Tertiary Admissions Rank (ATAR) with your Yr. 12 you could to the Tertiary Enabling Program (TEP) for free at CDU once you are 18yrs or older, or use the VET to Higher Education Pathways to a Diploma and most Degrees?  
   - Yes 30%  
   - No 70%

**A small portion of Student Feedback**

*John*

"Science Experience I enjoyed all the activities and the tour. I think it is important to know what CDU can teach us and what the university is like."

*Valerie Garsuwuca*

"Hi, my name is Valerie Garsuwuca, I’m in year 10 and I go to Rum Jungle Catholic School. I like playing sports with my friends. My favorite science experience is Aquaculture and seeing the barramundi and freshwater crafts. We collect these roach and mark them. Thank you for sponsoring me at the Science Experience."
Thank you for a great learning time at CDU.
Science Experience
I learnt many new and interesting things,
I really liked the practical activity to help others
in the future taught study
of CDU because I know what it is like.
Thank you.

Thank you for paying for
My university trip
I had an amazing time
at Science Experience
I like all the activities
and would like to do more.

Thank you for my sponsorship, I enjoyed
Science Experience every
day. I could not come if you did not help me. All
kids in the bush should come
in year 9 to learn some
Science.

I thank you to all our sponsors who made
this awesome science experience possible, it has been
extremely fun so far and our visit to the conoco Phillips
gas plant was exciting as was expected.

All the volunteers that help with this programme are
fun and are a great help in most areas.

On my behalf I think it is great to see
large companies taking part of the education
system in the NT, it gives us an inside view
of what has been achieved throughout the
Northern Territory. I hope other companies will
Do the same.

I wish your sponsorship, I wouldn’t have learnt half of
this cool stuff that I’ve learnt in these three days.
I learnt engineering which was very rewarding but
also helped in life, pharmacy which was quite intersting
material that I’m probably going to use in the future
information technology where I learnt how to make my own
outcome app which was really cool and loads more!

Thank you for allowing me to participate in such a wonderful opportunity. It has been wicked and I have enjoyed my time. I hope it continues over the years. Thank you, my mind has been opened and many options are now available, prepare to see
in the future Dr Joyce Kuparaquanda. Thanks XOXO

Your contribution towards my education and my future career
choice means a great deal to me. Without your efforts
and generosity I wouldn’t have experienced anything
close to what I’ve been doing the past few
days. Ultimately, this Science Experience has persuaded
me to pursue a career in science and has
sealed my destiny. I still feel like my best years are
still yet to come and thanks to your kindness,
generosity and interest in my future, you have made
these years even closer and have earned my eternal
gratitude.

Thank you very much for sponsoring me in the
ConocoPhillips Science Experience. I have enjoyed
my time at the Charles Darwin University and have
reaped a valuable experience of which I hope to put to
good use. Thank you again.

Wish you all the best!
A Special Thank you to all who supported the delivery of the 2013 event

Mrs Marissa Briston
Mrs Karen Glazbrook
Ms Natasha Lawrence
Ms Rebecca Fauntleroy
Ms Tricia Murray
Ms Liz Lycett
Ms Hayley Richmond
Dr Penny Wurm
Dr Tom Rayner
Ms Amanda Lilleyman
Mr Ben McGowan
Mr Stewart Pittard
Ms Heidi Luter
Ms Michelle Franklin
Mr Neil Ludvigsen
Miss Veneska Cheliah
Prof Andrew Campbell
Mr Micah Thorbjornsen
Dr Daria Surovtseva
Mr Jim Lee
Mrs Nikeeta O’Sullivan

Mrs Kelly-Anne Browne
Ms Lila Loveard
Ms Alysha Hewitt
Ms Kathy Kellam
Mr Chadd Mumme
Mrs Mary Bushell
Dr Yean Yeow Tan
Ms Lynette Lowe
Dr Rama Jayaraj
Mr Jagtar Singh
Mr Charles Yeo
Dr Penny Wurm
Dr Sean Bellairs
Mrs Natalie Rossiter - Rachor
Dr Mick Guinea
Mr Quan Tien
Dr Deborah Holt
Mr Gary Richardson
Mr Steven Thatcher
Mr Patrick Hastwell

Student Group Leaders

Blue Group = Darwin
Darcy Grant
Daneyal Babar

Green Group = Einstein
Taytae Teerakaew
Ronaq Varma
Pam Jaenke
Tanya Weatherstone

Orange Group = Newton
Marissa Briston
Sibo Zhao
Sierra Bath

Red Group = Curie
Karen Glazbrook
Richard Rivera
Louise Errington
Anthony Ifeajika
Secondary School to Higher Education Pathway Chart

Important Websites

North Australia Centre for Oil & Gas: http://www.cdu.edu.au/oilandgas
School of Primary Industries: http://www.cdu.edu.au/cdu-vet/primary-industries
Flinders University NT: http://www.flinders.edu.au/medicine/sites/nt-clinical-school/contact-us/
Menzies School of Health Research: http://www.menzies.edu.au/

Event Organiser: Trisha Mellow, School Segments, Office of Media, Advancement & Community Engagement
Student Evaluations, Report & Student Requests for more Information compiled by: Trisha Mellow