



Melbourne student is first girl ever selected for Australian Informatics Olympiad team



Belinda Shi, a year 12 student from Methodist Ladies' College in Melbourne, will be the first Australian girl to compete at the International Olympiad in Informatics (IOI).

'I'm excited to be the first female on Australia's International Olympiad in Informatics team,' she says.

Keen to counter the misconception that 'girls can't code', Belinda decided to establish a coding club at school. Her goal is to introduce other girls at her school to informatics, programming and robotics. 'I want to encourage girls to keep an open mind and give programming and technology a go, because learning to code is not only fun and rewarding but it's a skill that's useful in so many fields,' she says.

Belinda will be joined by team mates: Richard Gong, Year 11, Sydney Grammar School, NSW; Jerry Mao, Year 10, Caulfield Grammar School, VIC; and Declan McDonnell, Year 12, Normanhurst Boys High School, NSW. They will travel to Kazan, Russia, to compete in the IOI from 12 to 19 August.



Australia's IOI team from left: Richard Gong, Jerry Mao, Declan McDonnell and Belinda Shi.

Belinda's classmate Michelle Chen has been selected to represent Australia at the International Mathematical Olympiad (IMO). Michelle and fellow IMO team mate, Seyoon Ragavan, were invited to train at the United States Math Olympiad Summer Program, which is running from 7 June to 2 July at Carnegie Mellon University in Pittsburgh, Pennsylvania. This is a high honour for Michelle and Seyoon as the US is the reigning champion in the IMO. These students have been invited due to the Australian team's very strong performances at recent IMOs.

The IMO will be held in Hong Kong from 6 to 16 July, after a training school in the Philippines, where Michelle and Seyoon will join their team mates: Iliya Kucherov, Year 12, Westall Secondary College, VIC; Johnny Lim, Year 12,

Killara High School, NSW; Kevin Xian, Year 12, James Ruse Agricultural High School, NSW; and Wilson Zhao, Year 12, Killara High School, NSW.



Australia's IMO team, top from left: Iliya Kucherov, Johnny Lim, Kevin Xian and Wilson Zhao. Above, Michelle Chen and Seyoon Ragavan.

Apart from Michelle and Seyoon, these Olympians received their Australian team blazers at a team announcement ceremony at Parliament House, Canberra, on Monday 20 June. Media personality and maths whiz Adam Spencer attended the ceremony. 'At a time when we are seeing a declining proportion of students choosing to study advanced maths and science subjects at high school, it is vital to have these national Olympiad programs to nurture and celebrate our science and maths talent,' says Adam Spencer.

He was joined by one of Australia's leading mathematics professors, The University of Sydney's Dr Jacqui Ramagge, and Senator Zed Seselja, Senator for the Australian Capital Territory. Senator Seselja represented the Hon Simon Birmingham, Minister for Education and Training, and presented each of the students with their blazers.

After the formal announcement at Parliament House, the students were treated to lunch and a visit to Questacon. Optiver, official sponsor of the Olympiad program, represented by Martina Carr and Rachel Ding, presented the IOI and IMO team members with a 'goodie' bag of personalised t-shirt, drink bottle and playing cards.

We wish these students the best of luck and look forward to hearing about their achievements. #AusOlympiads2016

Australian Mathematics Competition (AMC)

The [Australian Mathematics Competition \(AMC\)](#) will be held this year on Thursday 28 July. It is not too late to enter and we encourage schools to enter their students in the competition.

The online version of the AMC to date has nearly 25 000 entries, which is very encouraging as it is being offered for the first time this year. We look forward to hearing your feedback on this new development as we anticipate that the numbers seeking to take the online version will increase significantly over the next few years.

Online preparation tools include practice questions and the GetSet AMC courses. The GetSet AMC courses are available for \$6 per student but can be purchased for the discounted price of \$2 per student when schools enter the AMC. Find out more [here](#).

To prepare students for the AMC, the AMT offers a variety of materials for training and practice. Our online [bookshop](#) offers past paper sets and books with 7 years worth of papers and solutions.

Our materials are valuable resources for preparing students for the AMC but are also very beneficial for general classroom activities and discussion.

This year a new award will be introduced in the AMC called 'Best in School'. It is an award for the student with the highest AMC score in a school (after statistical calibration), based on a minimum AMC entries of 50 (secondary) or 30 (primary) and the minimum of a Distinction award. This award will be in addition to the Distinction or higher award gained by the student.

Prize winners from this year's competition will be given free entry to the Australian Intermediate Mathematics Olympiad (AIMO) to be held on Tuesday 6 September. The AIMO is one of the competitions used to determine which students are selected for the invitation-only events. To find out more visit www.amt.edu.au/mathematics/mcya/

Visit our [Facebook](#) page to test yourself with the weekly AMC problem.

Mathematics Challenge for Young Australians (MCYA)

This year has seen an encouraging increase in both MCYA Challenge and Enrichment entry numbers. Challenge has increased by 6.4% from last year and so far Enrichment has increased by 3.2%.

Students who entered MCYA Challenge or Enrichment may like to enter the final stage of MCYA, the Australian Intermediate Mathematics Olympiad (AIMO).

The AIMO is a four-hour examination for talented students up to Year 10 level, and is appropriate for those who have completed Gauss or Noether in the Enrichment stage. It is also suitable for high achievers in the AMC and students who have acquired knowledge of Olympiad

problem solving. It gives talented students an opportunity to be recognised and to participate in activities which will enhance their enjoyment and knowledge of mathematics.

Prize winners in the AMC will be given free entry to the AIMO and schools will be notified of prize-winning students by email.

The AIMO is conducted in schools under exam conditions. Students work on their own and may not use calculators, electronic devices or other aids.

To find out more, including sample papers and how to enter visit www.amt.edu.au/mathematics/mcya/#aimo

Program Director opportunity

The Australian Mathematics Trust (AMT) and Australian Science Innovations (ASI) jointly deliver a national program to inspire and challenge 54 high achieving girls in years 8 and 9 in science, technology, engineering and maths.

The purpose of the program is to identify talented students from under-represented groups and promote their interest in pursuing STEM pathways. The students will participate in a December residential program with a follow-up session

in July, supported by a one-on-one mentoring in the period between the residential schools.

The Program Director will lead the program and manage and coordinate its operation. Reporting to the Executive Directors of AMT and ASI, you will be responsible for managing your team of staff, organising a teaching curriculum for the residential components of the program, and working with the mentoring consultant to establish a six-month mentoring program for each of the girls. You will be supported by a program manager who will work closely with you and manage all the logistics and administration associated with the program. Funding is currently available to run the program for two more years: 2016/2017 and 2017/2018. The successful applicant will be appointed on a part-time basis (equivalent to a 0.20% of a FTE) for a two-year period.

To apply for the position or find out more visit www.amt.edu.au/program-director-opportunity/

AMT and Social Media

This year our social media presence has increased due to the creation of a new Marketing and Communications position. This position has been filled by Will Wright who has done a wonderful job of maintaining our [Facebook](#) and [Twitter](#) accounts. We are very excited to engage with maths

teachers, students and parents to open up the world of mathematics, the foundation of all sciences.

If you haven't visited either page, please take a moment to view them. We hope you will be surprised by what and who you find there—and don't forget to like us!

Executive Director Mike Clapper to step down

Australian Mathematics Trust Executive Director, Adj Prof Mike Clapper has announced that at the end of 2016 he will step down. After four years at the helm, Mike and wife Jo will move back to Melbourne.

Mike says, 'It has been a great privilege and opportunity to serve in this position and I have particularly enjoyed both teacher and student workshops and my role in the various problem committees. I hope to be able to continue some of this work after Jo and I return home to Melbourne, and take this opportunity to thank all the volunteers for their support of me and the AMT over the last four years.'

Mike has introduced significant changes at the Trust, including online versions of the CAT and AMC. He has also conducted many workshops for teachers and students, which have been highly successful. To see an example of Mike in action, visit our [Facebook](#) page to watch him explain the solution to the AMC weekly problem.

The search is underway for a new Executive Director and we will feature that appointment in a future edition of *Maths Matters*.

Subscription

Do you know any Maths or Informatics teachers who would benefit from receiving *Maths Matters* newsletter? They can sign up through the AMT website at www.amt.edu.au and simply fill in their name and email address. *Maths Matters* is emailed six times throughout the year (Feb, Apr, Jun, Aug, Oct and Dec).