University of Kent

Bioscience Work Experience Week

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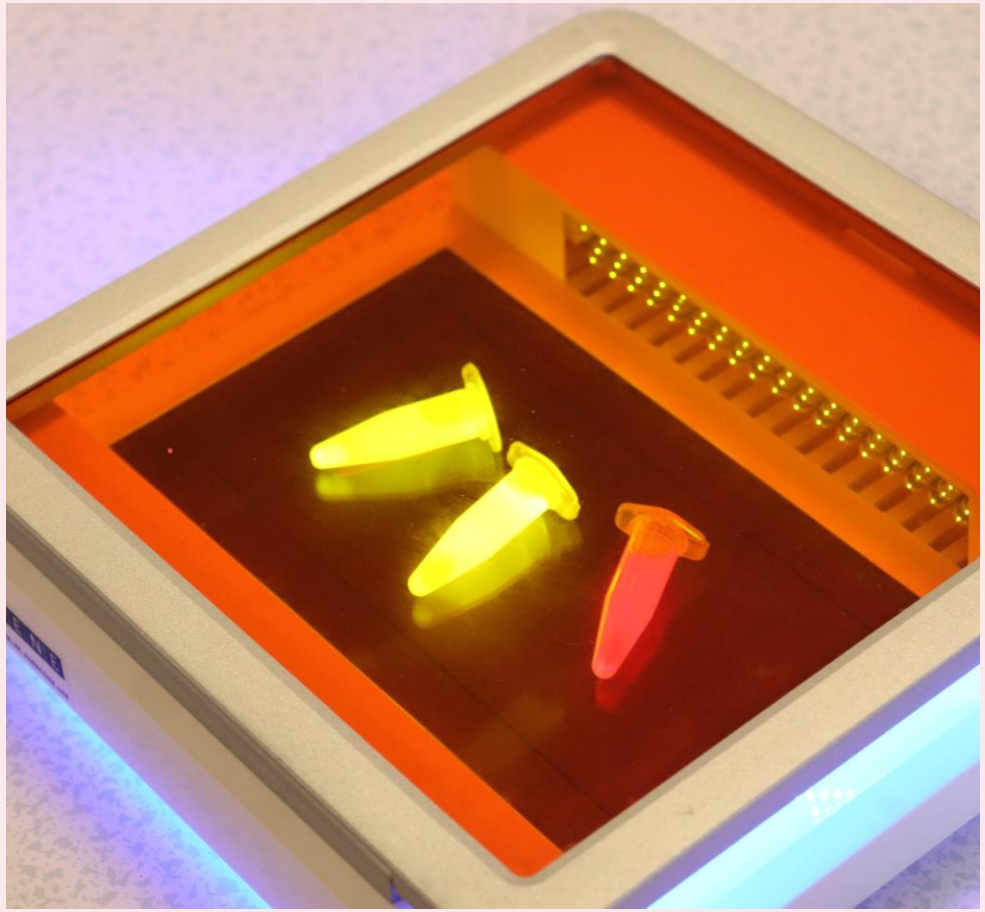
Stand for ambition.
kent.ac.uk

Overview

- Created by bioscience academics
- Delivered annually in August
- Non-residential: 9.30am to 5pm from Monday to Friday
- Individual applications
  WP applicants prioritized
- Open to Year 12 and L3 Year 1 students from the Kent & Medway area
- Emerged in response to frequent work experience requests
- On average 25 students complete the programme
- Of these, 1/3 end up coming to Kent

Lab Work

- Day One: E.Coli transformation with fluorescent plasmids (mGFP, mVenus & mCherry)
- Day Two: Population growth and inducing the cells to produce the fluorescent protein
- Day Three: Purification with affinity chromatography
- Day Four: Analysis of purification through gel electrophoresis, western blot and super-resolution microscopy
- Day Five: Create a research poster documenting their findings

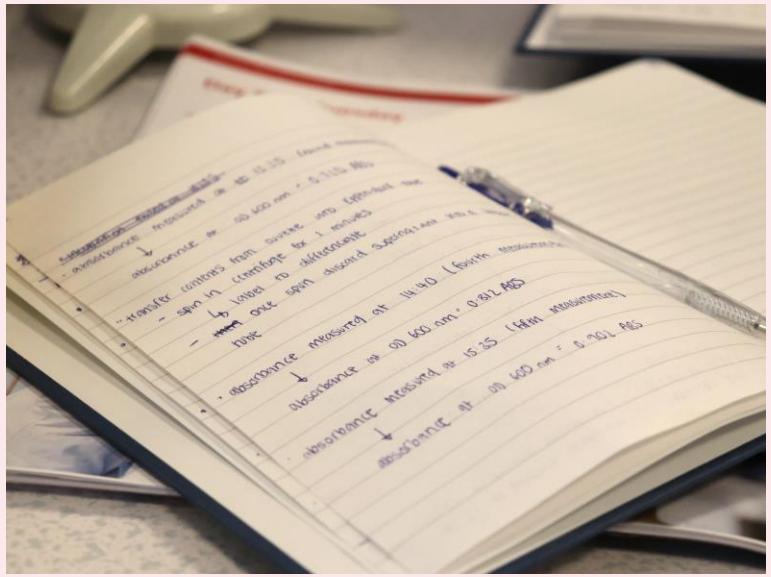


Outside of the Lab

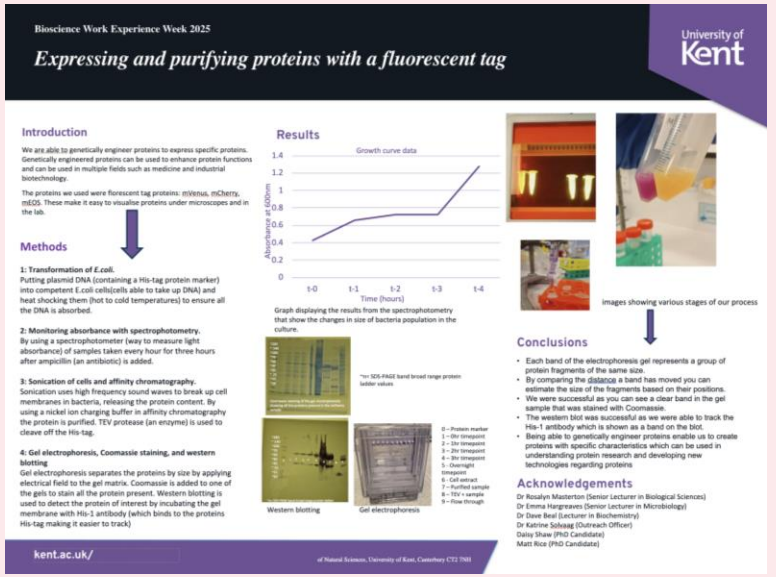
- Tour of bioscience department
- Tour of the university campus
- Talk on how to apply to university
- A variety of lectures from academics and PhD candidates
- An established breakroom with snacks, drinks and a kitchenette nearby
- Celebration event with family and friends are invited

Prize Categories

Best Lab Book



Best Research Poster



Best Agar Art

Best Science Photo

Timeline

- March: refine application form
- April: publish application form
- May: applications close, review applications and notify applicants of results
- June & July: gather additional information, finalise timetable, secure catering, prepare science consumables, pack goodie bags
- August: programme delivery
- September & October: evaluate surveys and feedback, write up programme report

Staffing & Costs

- Staffing:
  - *1 x outreach staff*
  - *2 x ambassadors*
  - *3 x academics*
- Costs:
  - *Demonstrators / Student Ambassadors*
  - *Catering*
  - *Science Consumables*
  - *Merchandise*
  - *Travel Support*
  - *Prizes*

Evaluation

- Pre & Post Programme Survey
- Adaption of a validated student STEM identity scale published in 2023
- Key statements with positive change:
  - *I can use tools and equipment proficiently in lab classes*
  - *I know how to apply to university*
  - *I feel comfortable when talking to people who work in STEM-related fields*
  - *I am willing to show competence in math and science subjects in front of others*
  - *I believe I can solve complex STEM-related problems*

Participant Feedback

- ‘The fact that you really get to do stuff and get a lot of help while still being able to take control and understand what you’re doing and why you’re doing it.’
- ‘You get to learn more about biology as a whole. I got to spend a week at the university I want to go to. The instructors are lovely and very helpful.’
- ‘Evolve passion for biology outside of a stressful school environment.’
- ‘Learning different lab techniques to prepare yourself for university.’

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Thank you.