



NHS

Blood and Transplant

Undergraduate Biomedical Science degree survey – T2024 Project S2

February 2024

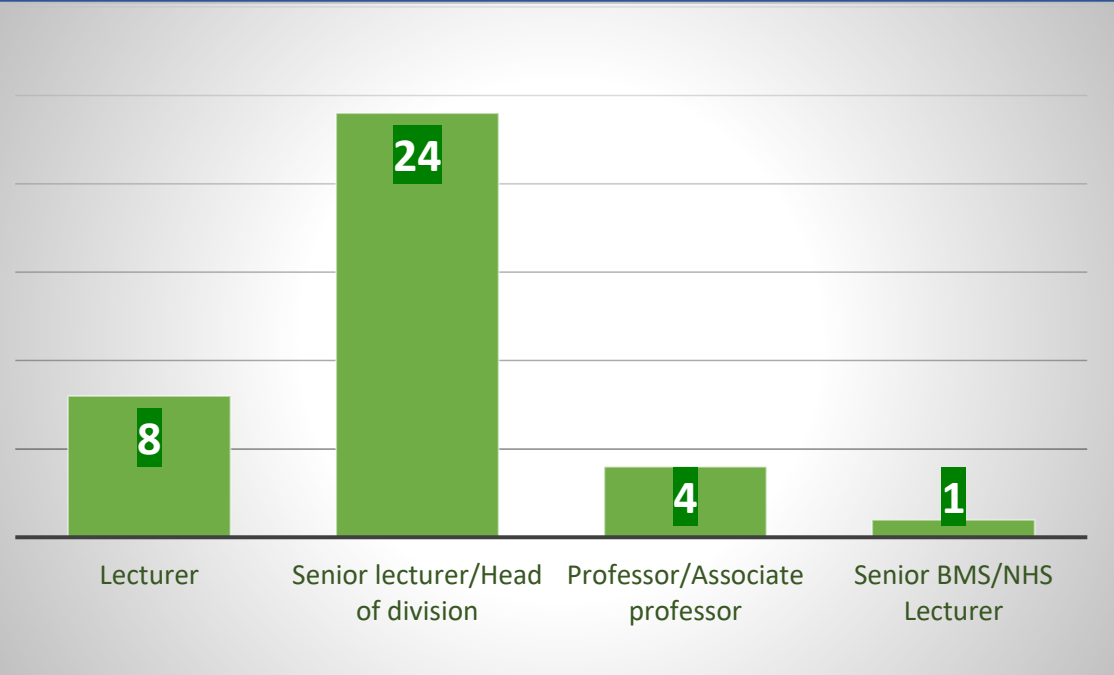
Jill Caulfield

Caring Expert Quality

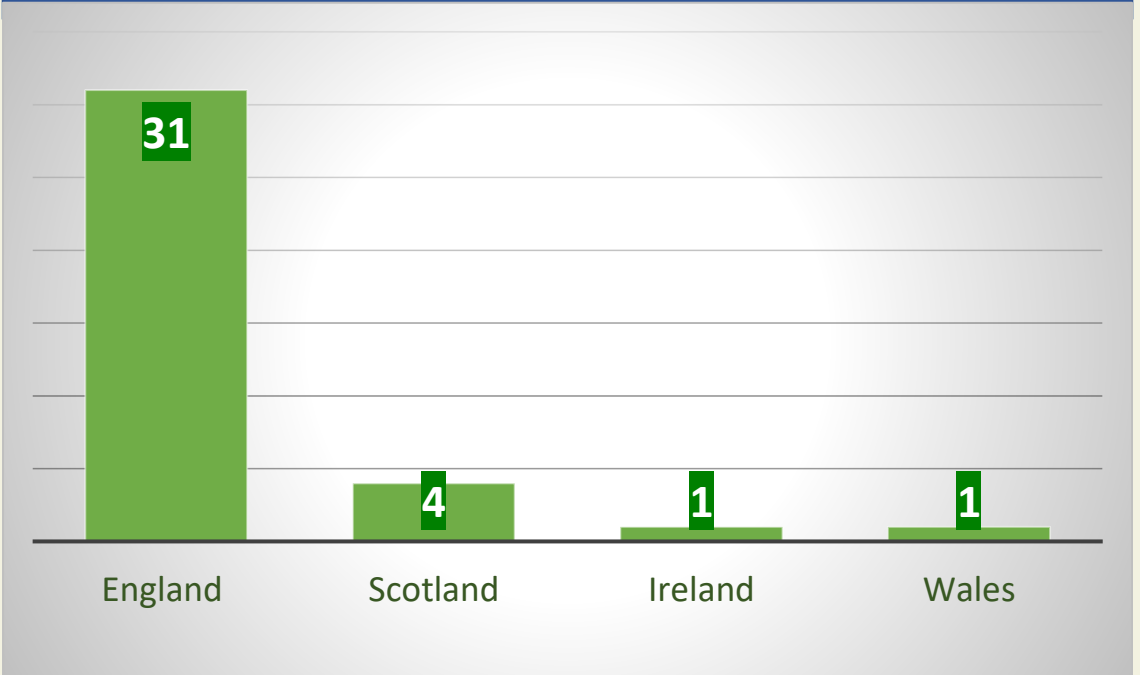


- Survey sent to all IBMS accredited Biomedical Science degree courses via IBMS
- 53 universities contacted
- 37 responded – 70% response rate
- Average time to complete = 12 minutes

Q1. What is your job title?



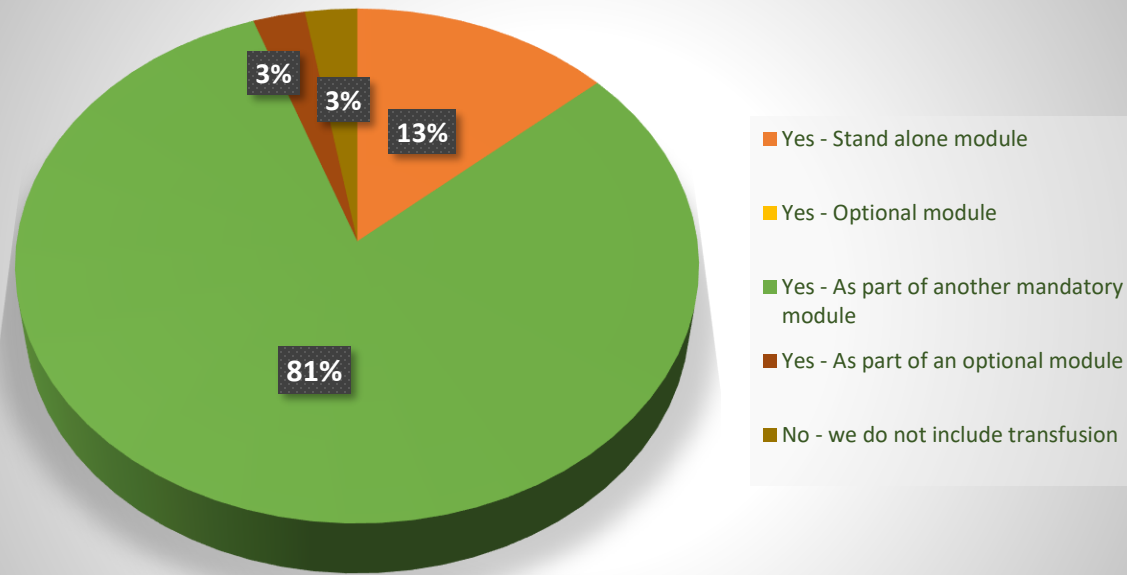
Q2. Which university do you lecture for?



65% of respondents were senior lecturers or head of the division.

England universities were represented the most at 84%, however there were 4 Scottish universities and 1 each from Ireland and Wales.

Q3. Do you have a designated Transfusion Science module in your undergraduate Biomedical Science degree course?

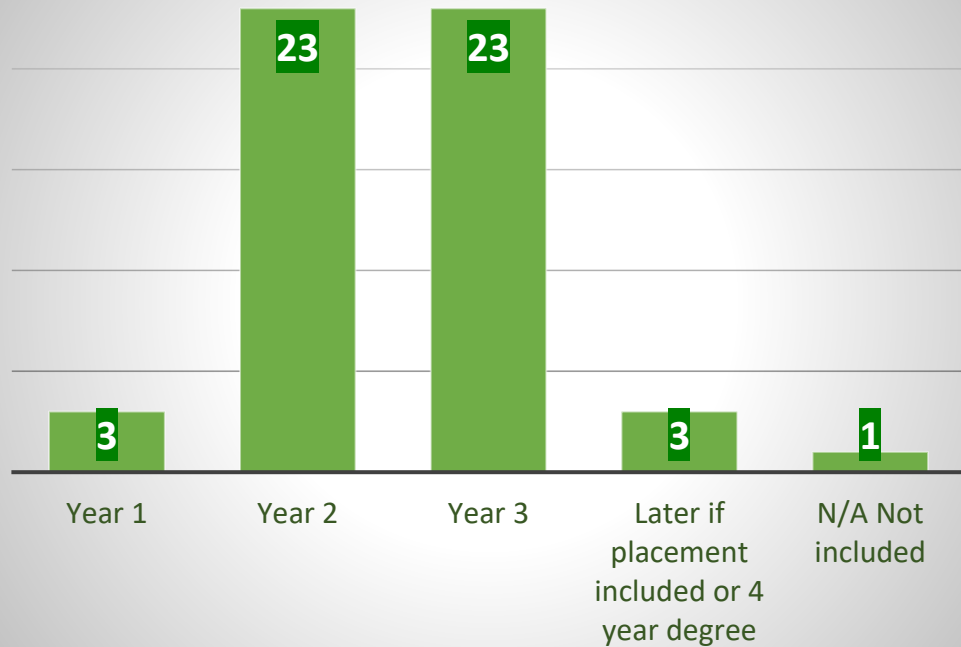


- No university offered transfusion as an optional module, however 1 university offered transfusion as part of an optional module (see comment*)
- **30/37 (81%) teach transfusion as part of another mandatory module (Haem, Immunology)**
- Only **13%** teach transfusion as a standalone module

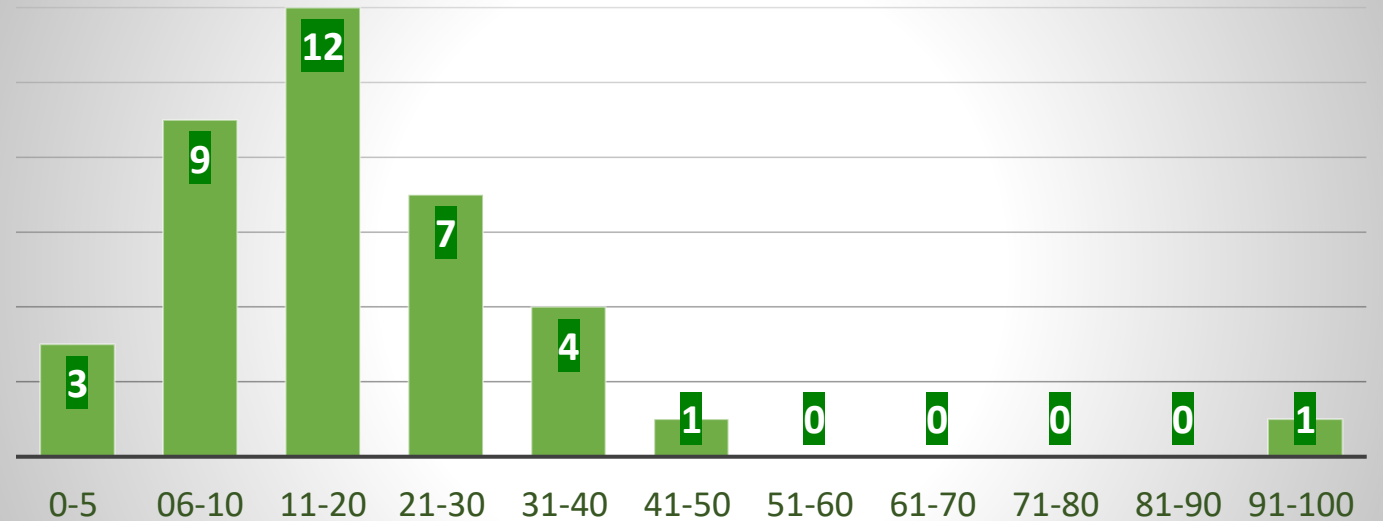
Q4. If 'No' please provide details/other comments

- Answered NO - *Transfusion is part of 2 haematology themed modules or modules with haematology content*
- *Please note there are 4 years degrees in Scotland*
- ** To clarify Q3, it is part of core Clinical Haematology and Biochemistry module (year 2) and also optional Transfusion and Transplantation Science module (year 3).*
- *We have a mandatory module, Transplantation, Transfusion and Specialist Biochemistry, which is a 30-credit module, covering topics in transfusion science and transplantation.*

Q5. What year is the Transfusion module taught?

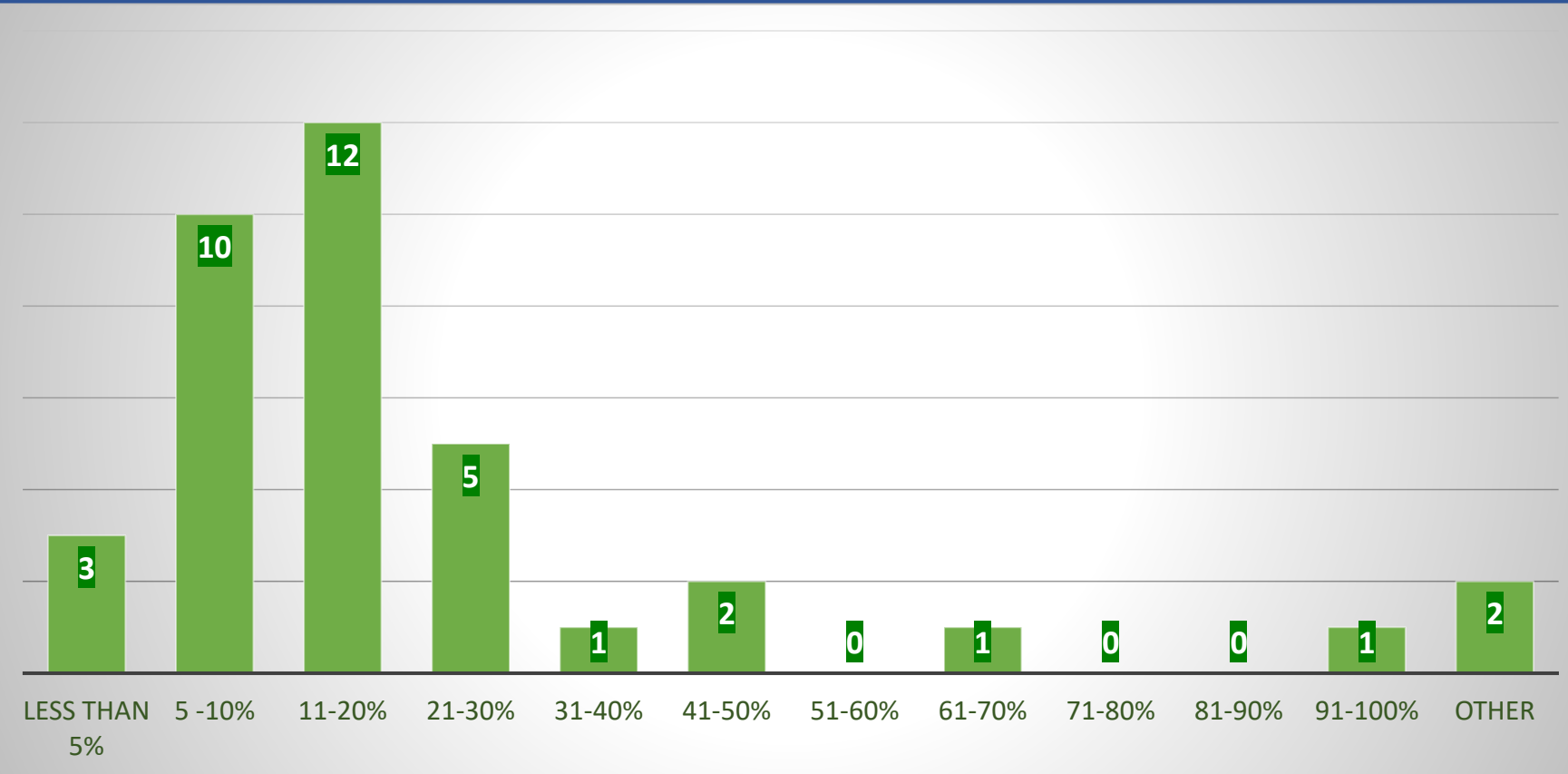


Q6. How many hours of teaching is allocated to Transfusion Science during this degree? (Please answer N/A if not taught)



- Transfusion is mainly featured in year 2 or 3.
- The amount of hours dedicated to teaching transfusion varies from 4 – 100, however the majority are between 11-20 hours (32%).
- The '100 hours' answer is due the module being a standalone module. They also have 30 contact hours.

Q7. What percentage of the Transfusion module counts towards the final year's mark?
(Please answer N/A if not taught)

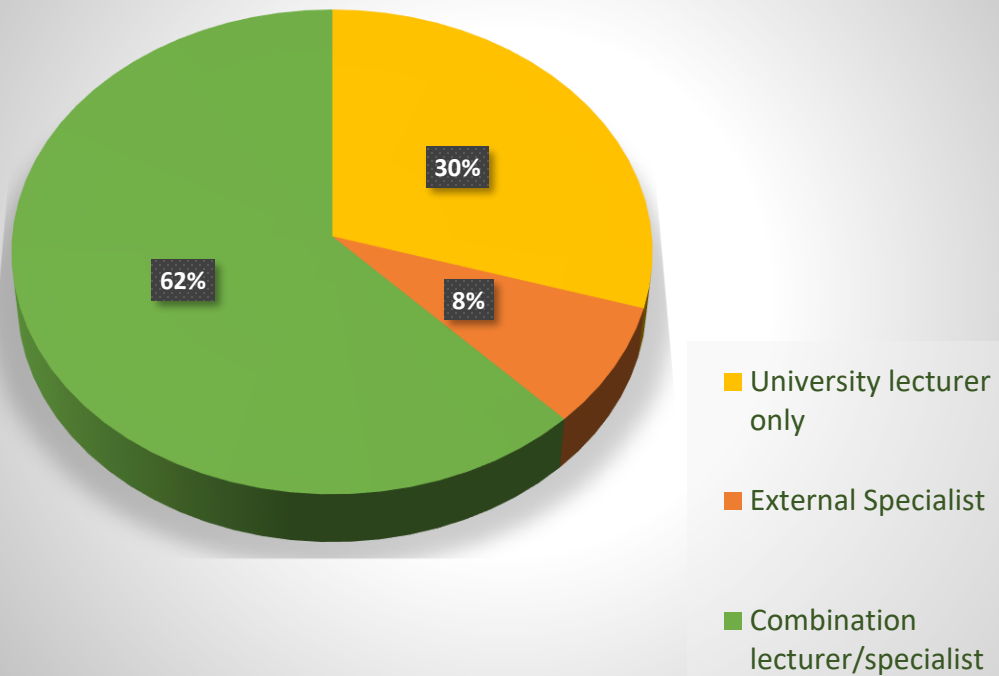


- The percentage of the module for the final mark varies from less than 5% to 100% (standalone module), however it is mainly between 5-20%.
- Only 2 were 50% of the final mark (shared with Haematology).

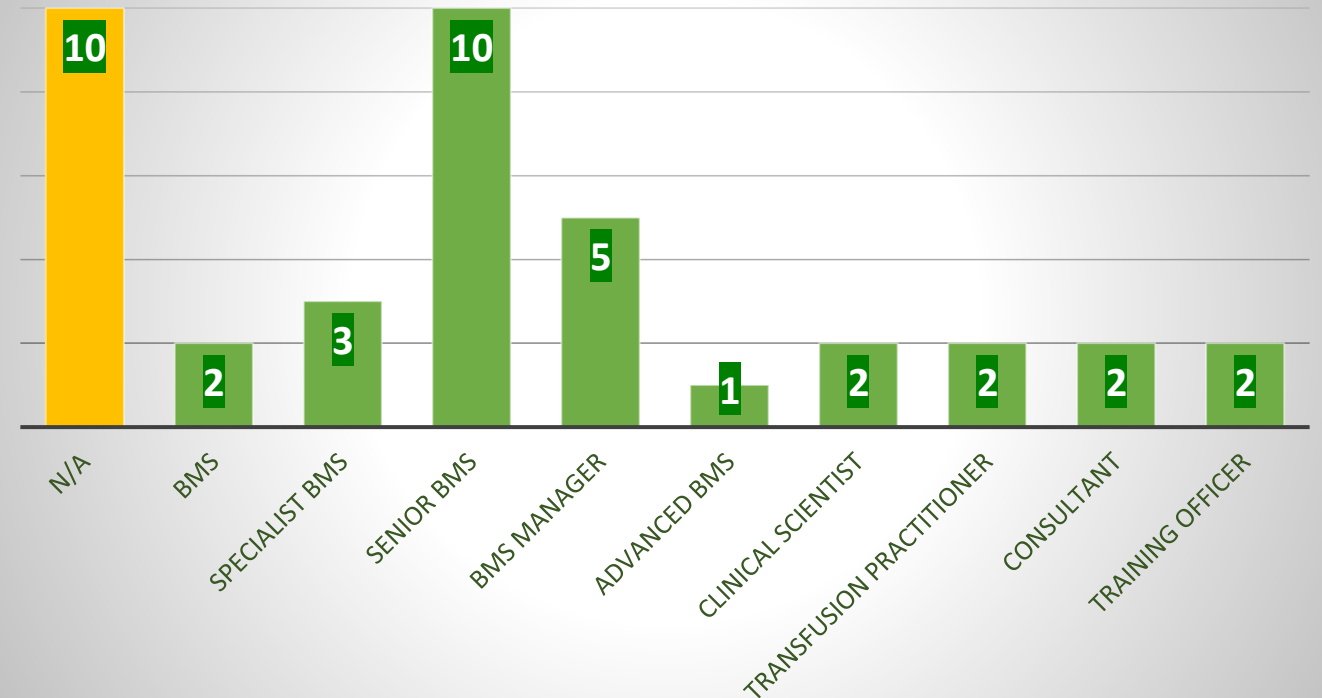
Other comments –

- *'Not significant'*
- *'Impossible to say, taught within integrated modules'*

Q8. Who delivers the transfusion content?

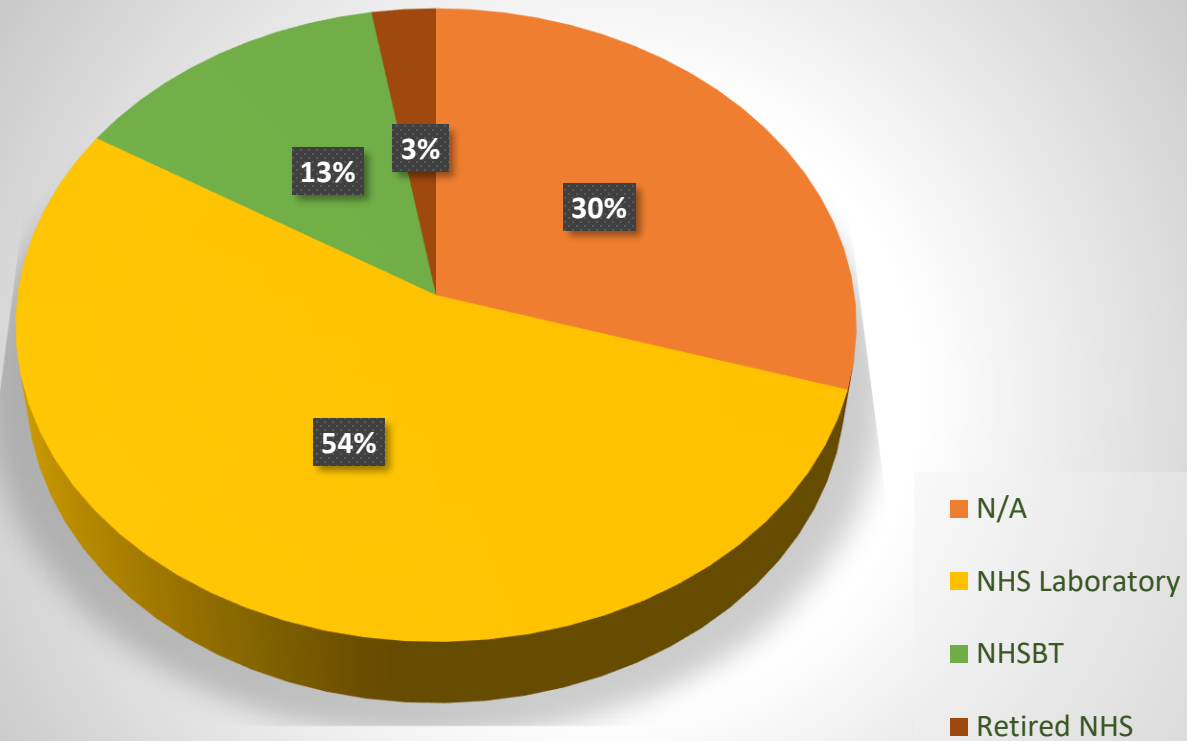


Q9. If an external specialist delivers content on the course, what is their job title/role?



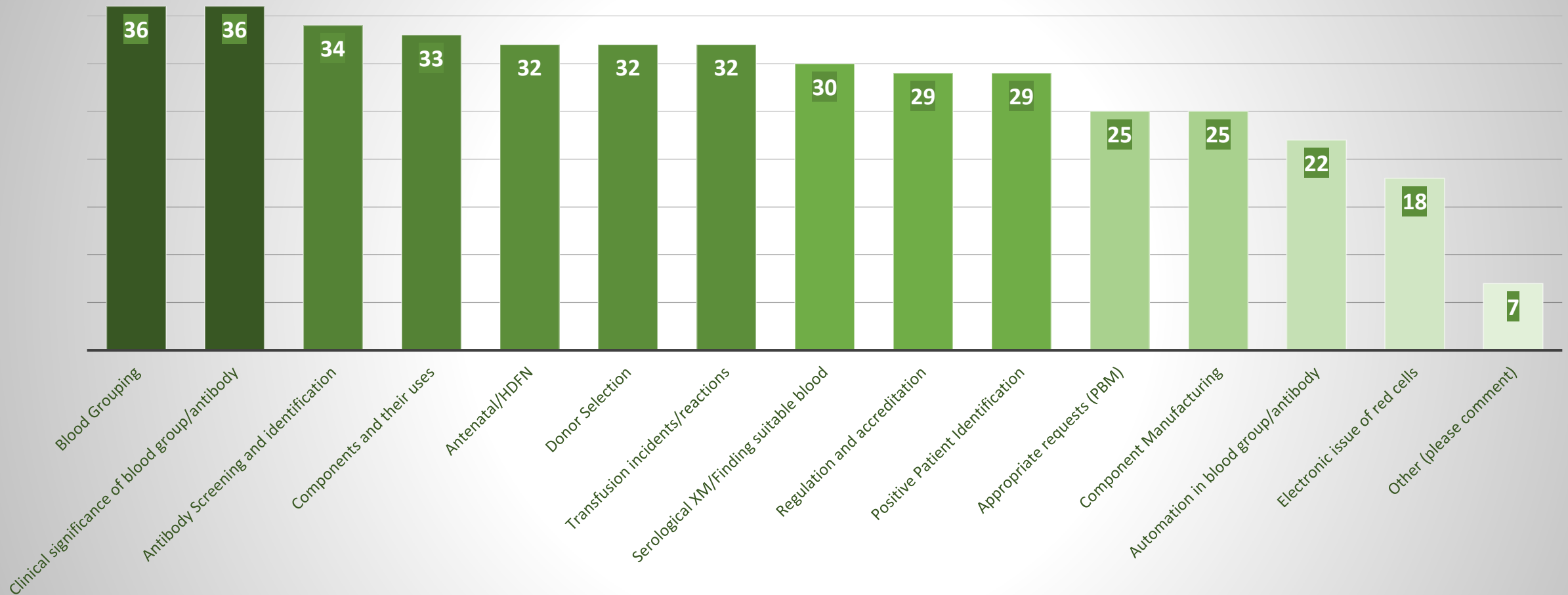
- 62% of transfusion content is delivered as a combination of lecturer and specialist.
- 30% with no external teaching/input.
- The external specialists were mainly senior BMS staff

Q10. If an external specialist delivers content on the course, where is their main/alternate place of employment? (Please answer N/A if not taught)



- 54% of the external specialists work within an NHS laboratory
- 13% work within NHSBT
- 3% are retired NHS staff

Q11. What content is covered? (36 university responses/1 not taught)

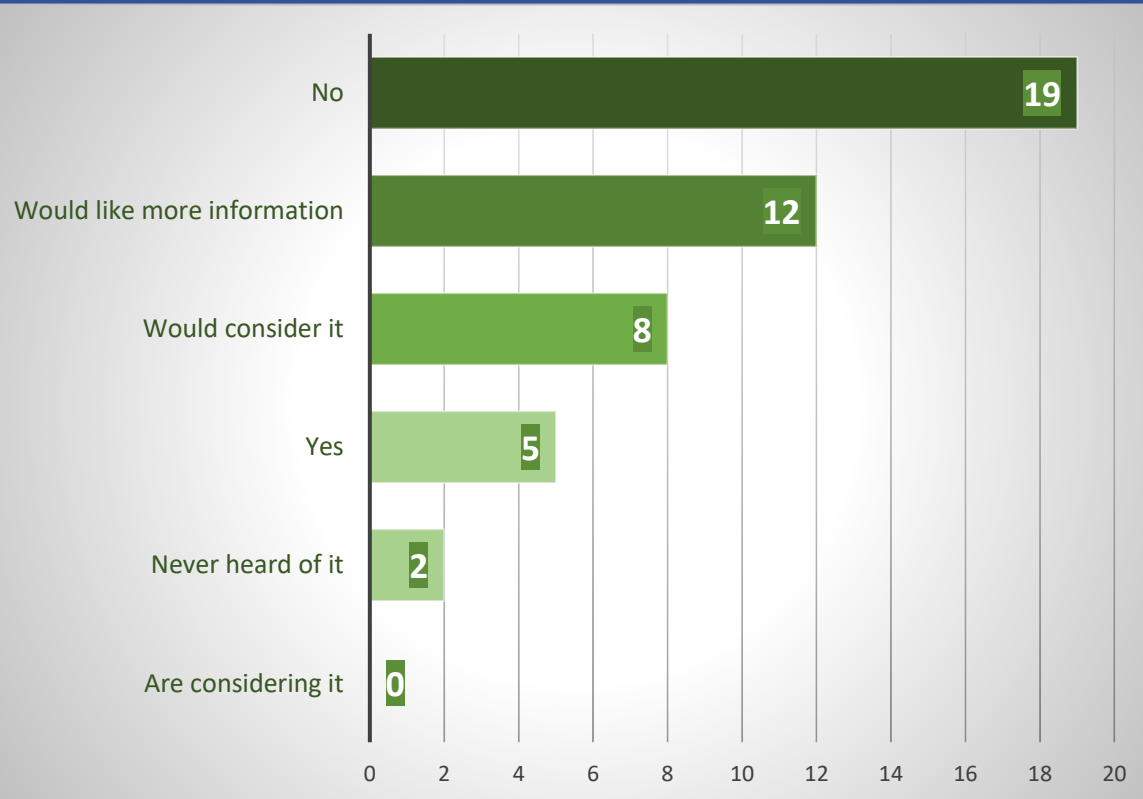


- All modules include blood grouping and antibody screening/identification.
- Most subjects are covered; however automation and electronic issue are only covered in half of courses.

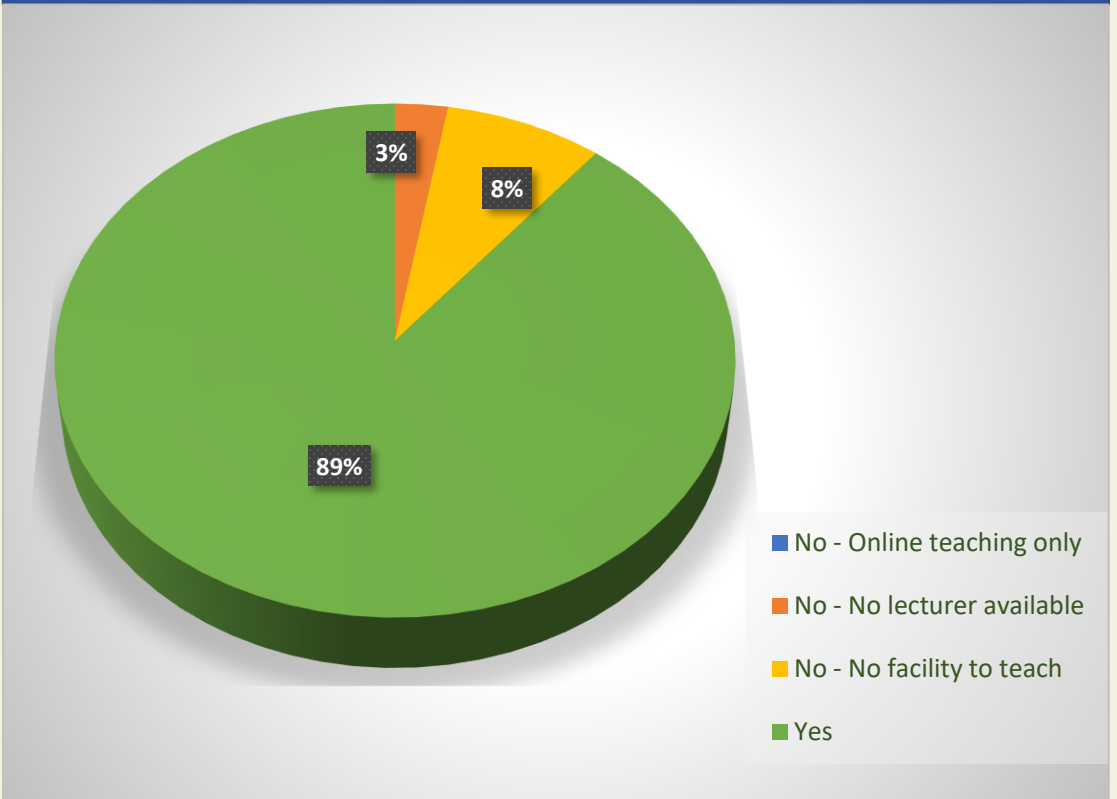
Q12. If you answered 'Other' to Q11 please provide information

- Bone marrow and stem cell processing and transplant
- Transfusion Transmitted Infections and TTI testing
- Alternatives to transfusion and AIHA. We mention appropriate transfusion requests in haematology in relation to iron deficiency anaemia & warfarin reversal but not other scenarios.
- Previous scandals, HEP B, HIV, CJD etc Patient choice and beliefs e.g. religion- Jehovah's Witness Whilst both are part of some of the above criteria, we debate the ethics of such issues too
- Transfusion Reactions SHOT Cold Chain Blood Tracking Temperature Monitoring
- Transfusion alternatives, hazards/complications of transfusion, SHOT
- Bone marrow stem cell and solid organ transplantation from a transfusion perspective also taught in Year 4

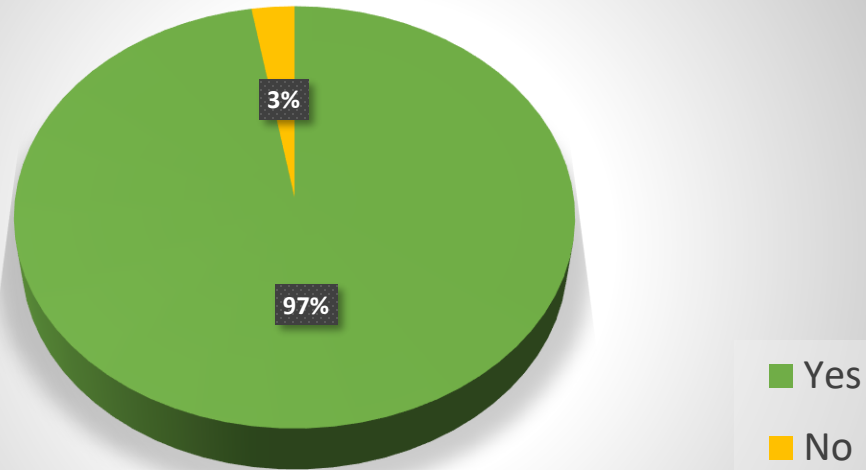
Q13. Do you use any external transfusion training programmes eg: NEQAS 'TACT' Training?



Q14. Does the transfusion module include any practical laboratory sessions?



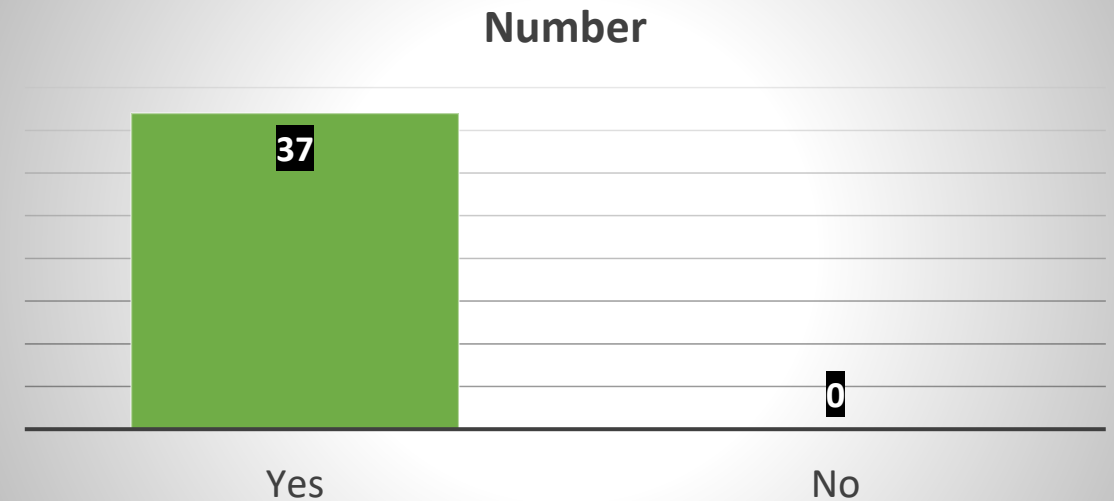
Q15. If NHSBT were to provide an online session for lecturers on up-to-date training requirements for Biomedical Scientists, would you be interested?



Q16. If you answered 'No' please provide details

- I currently work in a blood transfusion lab as a senior BMS in transfusion and therefore already take part in NHSBT training courses e.g. STSP and advanced masterclasses and am currently completing my BBTS and masters.*
- Yes - but I was a BT manager and keep up to date. It would be nice to have this information just ensure content is up to date.*

Q17. If NHSBT were to provide a slide deck on Transfusion topics relevant to working as a Biomedical Scientist would you find this a useful teaching aid?



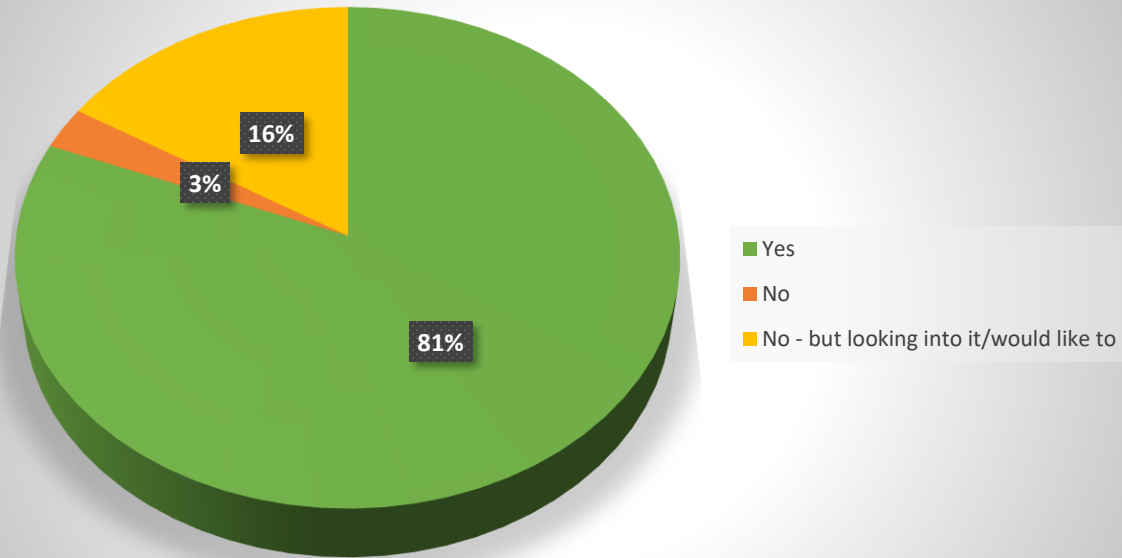
Q18. If no, please comment

100% of respondents would like the option of a slide deck from NHSBT.

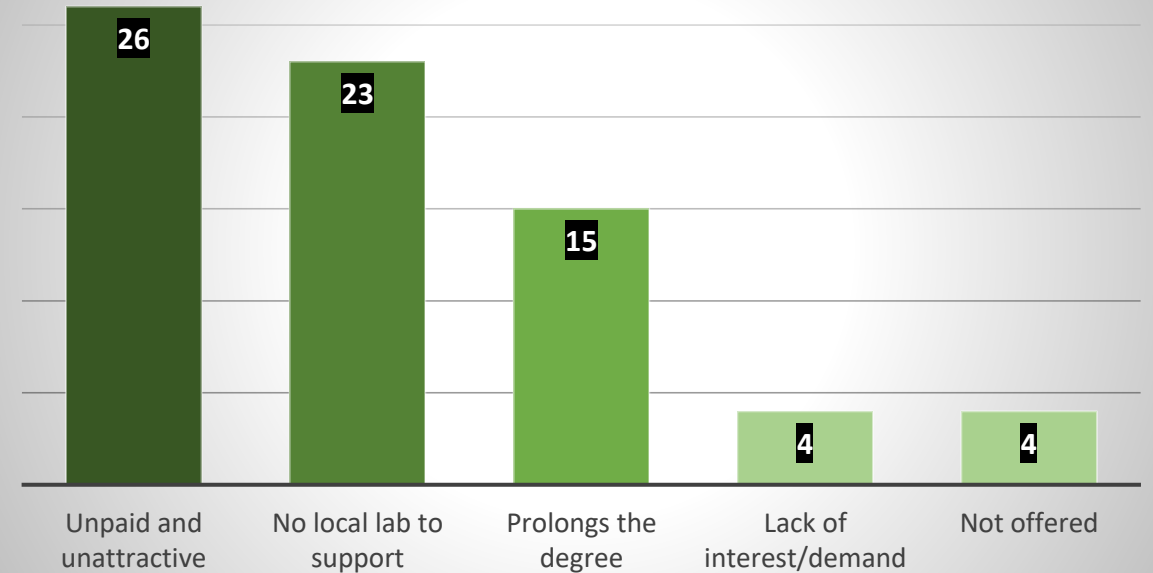
Q19. If you would like to discuss this further provide an email

31/37 (84%) have provided an email address.

Q20. Do you offer a placement year for students with an NHS/private laboratory?



Q21. What do you think the barriers are for students wishing to carry out a years placement?



- 81% of courses offer a placement year.
- Barriers for students are mainly due to the year being unpaid (70%) or there are no local labs to support a placement (62%).
- 40% is attributed to the degree qualification being prolonged.



Q22. Thank you. Please add any comments.



Blood and Transplant

I try very hard to equip students with the information and skills they need to work in a transfusion lab but I have a cohort of 150+ students and only a couple each year decide to pursue haematology/transfusion after graduation.

Biomedical Sciences students do take up placements, but very few seem to be in haematology labs, in part due to lack of availability but also a sense from the students that it is largely automated, so they develop fewer lab skills.

We have a HCPC registered lecturer and transfusion specialist on the module and would benefit from any collaboration offered by IBMS or laboratories in our training.

I'm worried that by discussing regulation such as MHRA and adverse reactions and events can put students off - why go into transfusion science when you can work in another discipline that doesn't work shifts and is less stressful/urgent/risky?

Development of online video freely available (creative Commons License) content from clinical practice demonstrating Transfusion techniques would greatly benefit students understanding and application of theoretical content at UG and PG level.

Many students are interested in the full-year placement, but limited positions are available.

We have two practicals in the Haematology and Transfusion Science module, both are on aspects of Haematology rather than Transfusion Science. Practical 1 is preparation of a blood film (staining, examination, reporting) Practical 2 is electrophoresis of haemoglobin variants. In the future, we may consider changing the second practical to make it more relevant to Transfusion Science.

I am really keen to improve and develop the transfusion content delivered as part of our course - particularly in terms of enhancing the laboratory practical elements. If I can help in any way or support this initiative, I would be very happy to be involved.

I can't get any local BT labs to support placement students because they are so overwhelmed and understaffed (despite being an ex-colleague!).

In Ireland there is payment for the placement year but it is very low and students are unhappy it so low. In Ireland students graduate with degree in Biomedical Science after 4 years but require an is service year for placement to practice and register.



- Discuss the inclusion of Transfusion as a standalone module in all accredited Biomedical Science degree courses with IBMS.
- Work alongside IBMS to promote the inclusion of payments for a placement students. (Placement students benefit from experience – often find employment easier in lab)
- Discuss the provision of a tutorial for all lecturers together with a proposed slide deck.
- Include ideas for ‘practical’ sessions – case studies to work through?
- Discuss the use of VR headsets for transfusion training in Uni’s.
- Contact NEQAS/TACT to discuss the interest raised via the survey.
- Send thank you and summary of results to lecturers who responded.
- Signpost universities to useful resources.