

**Higher Specialist Diploma - Portfolio Essay Titles for Submission in 2024**

**Regulations**

* Two essays must be included in the portfolio as evidence of experiential learning. If, when you applied to undertake the HSD, you indicated you wanted to submit in 2024 you must choose any two essay titles from either the 2023 or 2024 list of essay titles. If you had initially aimed to submit in 2023 but have had to defer one essay title can come from the 2022 list but the other essay must come from either the 2023 or 2024 list.
* Essays should be 3000 words (±10%) with a font size of at least 12 point. Figures, tables and their respective legends and the reference list are **not** included in the word count of the essay.
* Candidates must use appropriate material from various sources within both essays and these must be referenced in either the Harvard **or** Vancouver format. Guidance on how to reference in either format can be found on the IBMS website here:

<https://www.ibms.org/education/ibms-qualifications-resources/>

* Candidates should note that the essays will be entered into the originality checking software system called Turnitin. This software produces a report that highlights not only how much text is similar to other sources but also where this material is located.

The similarity score that is produced as part of its Turnitin report requires the academic judgement of the examiners and the IBMS Head of Examinations to interpret whether this necessitates any action. Where plagiarism is detected, or if the similarity score is unacceptably high, it will be treated as academic malpractice and may have serious consequences. This could include the failure of the portfolio.

**Important Points to Remember**

The completion of the two essays forms parts of the portfolio requirements for the HSD. These essays help candidates to demonstrate to the examiners that they have a comprehensive understanding of a specific field of biomedical science and knowledge and understanding of current issues and developments which are key learning outcomes of the HSD. At this level, you should be able to demonstrate:

* a systematic understanding of knowledge and a critical awareness of current problems, much of which is at, or informed by, work at the forefront of the academic discipline
* a comprehensive understanding of techniques applicable to their own research
* originality in the application of knowledge
* a conceptual understanding that enables critical evaluation of current research in their discipline

In constructing your essays you should:

* critically evaluate/discuss
* judge the relevance and significance of information
* evaluate claims, inferences, arguments and explanations
* construct clear and coherent arguments
* form well-reasoned judgements and decisions
* integrate and appraise reading and research
* be original in your application of knowledge

**HSD Essay Titles for 2024**

**Cellular Pathology**

Critically appraise the benefits of a digital technology in the reporting of cellular pathology cancer cases.

Discuss and debate the range and scope of biomarkers used as prognostic indicators within cellular pathology.

**Clinical Chemistry**

Critically discuss the role of sex-based reference ranges within Clinical Chemistry taking into consideration transgender and gender diverse patients.

Critically evaluate current and future drugs of abuse testing and the strategies used to identify sample adulteration.

**Cytopathology**

Critically discuss cervical screening in a vaccinated population.

Discuss the role of cytology in non-neoplastic respiratory diseases.

**Haematology**

Critically discuss the relative merits of haematological tests in the diagnosis and treatment monitoring of functional iron deficiency.

Critically evaluate the role of the haematology laboratory and related haematopathology services in the diagnosis, classification and monitoring of lymphoproliferative disorders.

**Immunology**

Critically discuss the role of autoantibodies in the diagnosis of Idiopathic Inflammatory Myopathies (IIM).

Critically discuss the role of CTLA4 in the immune response and how this has been exploited in immunotherapy.

**Leadership and Management**

Pathology is very increasingly becoming an automated and molecular technology focussed group of disciplines. In the light of these developments discuss, using examples, if the changes are taking the ‘science’ out of Biomedical Science and whether it should be changed to Biomedical Technology?

It is a fact that recruitment and retention of staff into Biomedical Science is a current challenge. Compare and contrast the possible approaches you would use to recruit to a major hospital in a multi-hospital city versus recruitment in an island or remote and rural setting. Discuss key points in advertising campaigns and how you would seek to retain staff.

**Medical Microbiology**

Microbiology is moving towards an integrated Infection Service model, discuss the patient benefits of delivering a combined infection service

Discuss the likely climate-sensitive infectious health risks associated with climate change. Both predicted mean temperature rises, and extreme weather events should be considered.

**Transfusion Science**

The UK has faced both red cell and platelet supply shortages in 2022. Discuss the factors that have contributed to the shortages and the plans and initiatives that have been incorporated to alleviate its effects on patients.

Describe, in detail, the various antigens that belong to the Duffy System, how the antibodies react and their clinical significance in terms of both haemolytic transfusion reactions and haemolytic disease of the foetus and new-born.

**Virology**

Critically evaluate the factors which contributed to the global Mpox outbreak in 2022. How could the public health and laboratory response to a sudden rise in incidence of an unusual viral infection be improved in future?

Effective and safe vaccines against poliovirus have been available for almost 70 years, but the disease has still not been fully eradiated. Critically discuss the reasons for this and consider whether it is a realistic aim.