

Faculty of Biology

Natural Sciences Tripos
Part II
Biological and Biomedical Sciences
2022-23

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www.biology.cam.ac.uk/undergrads/nst/bbs



1. INTRODUCTION

The aim of Part II Biological and Biomedical Sciences (BBS) is to provide a rigorous and intellectually challenging biological Part II subject, for both third year Natural Scientists and Medical and Veterinary Science students. NST Part II BBS allows students to maintain some flexibility in their study at Part II, allowing them to combine courses from more than one single subject biological Part II and a choice of non-biology subjects. It requires the submission of a dissertation.

Each candidate must take a Major and a Minor subject and a dissertation. The dissertation topic may be proposed by the candidate or chosen from one offered by the relevant Department and should be of up to 6,000 words, on a subject associated with either the Major or Minor subject. The dissertation must be prepared in accordance with the guidelines issued by the Faculty Board.

Additional information about the course is available on the Faculty of Biology website at:

www.biology.cam.ac.uk/undergrads/nst/bbs

2. COURSE AIMS AND LEARNING OUTCOMES

Aims

The course aims to:

- provide an education of the highest calibre in biosciences producing graduates of the quality sought by the professions, the public service, and industry
- to provide an intellectually stimulating and challenging learning environment in which students have the opportunity to develop their skills and enthusiasms to the best of their potential
- to provide flexibility in curriculum by allowing the theory papers of a single subject Part II in approved biology-related subjects to be combined with a paper from an approved list of other biology or non- biology subjects
- to provide training in scientific principles and evaluation of research and to encourage science-writing skills through preparation of a dissertation
- to contribute to the national needs for practitioners and leaders in the sciences, medical and veterinary professions

Learning Outcomes

At the end of the course, students should have:

- an in depth understanding of the core principles, and their experimental basis, of a chosen major subject
- additional advanced understanding in a chosen minor subject
- depending on subject choices, theoretical knowledge of disciplines and techniques useful to scientific research
- experience of independent work, including study of research papers and critical analysis
- developed skills in analysis of arguments and data
- communication skills used for reasoned argument in discussing scientific investigations and texts

3. COURSE MANAGEMENT

NST Part II BBS is managed by the Biological Sciences Committee for the Faculty of Biology, with the overall Course Coordinator being a member of one of the Faculty's departments.

The administration of the course is undertaken by Jess Joseph in the Faculty Board Office, which is located at 17 Mill Lane. If you have any administrative problems with the course, which cannot be solved within a particular department or by your College Director of Studies, please contact the Faculty Office (tel: (7)66899 or FacBiol@admin.cam.ac.uk).

In addition, Departmental Course Organisers are responsible for the detailed arrangements of the individual Major and Minor Subjects. A current list of Departmental Course Organisers, together with their contact details, are available on the Part II BBS website.

You should contact the Course Organiser for the Major/Minor Subject if you need any information about the arrangements of lectures, dissertations or examinations.

Departments will provide the same infrastructure for student support, departmental access, use of facilities, and supervision arrangements as they provide for their single subject students.

4. COURSE STRUCTURE

The course has three main components

A 'Major' Subject, which will typically draw on the core teaching of a single Part II subject, but may draw on modules offered by more than one department.

The 'Major' Subject will involve a minimum of 96 contact hours (excluding supervisions)

A 'Minor' Subject, normally provided by another department, which will involve 24-30 contact hours (excluding supervisions)

A dissertation of up to 6,000 words

5. REGISTRATION PROCEDURE

Registration for NST Part II BBS is through the Part II Allocations Procedure as detailed on the webpage at:

<https://www.natsci.tripos.cam.ac.uk/students/third/ii-subject-allocation>.

You can indicate your preferred choice of major subject directly through an on-line form, specifying that you wish to take the NST Part II BBS (dissertation) route.

Some subjects have requirements or recommendations for previous subjects taken. These can be checked at: www.natsci.tripos.cam.ac.uk/subject-information/part2

The deadline for submission of choices through the online form is 20 May 2022.

6. EXAMINATIONS

The maximum marks allocated for the course components are as follows:

Major Subject:	64
Minor Subject:	16
Dissertation:	20
Total:	100

The papers offered will normally be the same as those for the single Major Subject. For most Minor Subjects, the paper is borrowed from another Tripos. There is a separate class list for NST Part II BBS, which will be published after the single-subject class lists.

The Faculty Board's marking criteria are available on the web at: www.biology.cam.ac.uk/exams/AllExams/markings-part-ii-dissertations/markings-diss

7. MAJOR AND MINOR SUBJECTS AND PERMISSIBLE COMBINATIONS

The Major Subjects (Papers 402- 430) and the Minor Subjects (Papers 104- 151) available in 2022-23 are shown on the following tables.

The permissible combinations of Major Subjects and Minor Subjects are also shown. Please note that subjects and combinations offered are subject to change- these will be detailed in the Reporter. A more detailed table of compatible subject combinations is available on the Faculty of Biology website (www.biology.cam.ac.uk/undergrads/nst/bbs/subject-combinations).

You will need to consult the Department or Reporter Lecture List for detailed timetables when they are published.

Major Subjects available in 2022-23:

Paper	Major Subjects	Permissible Minor Subjects
402	Pathology (A&B)	105, 107, 108, 109, 111, 113, 114, 120, 124, 126, 128, 130, 132, 134, 135, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149 and 151
403	Pathology (A&C)	107, 108, 109, 111, 113, 114, 120, 124, 126, 128, 130, 132, 140, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
404	Pathology (A&D)	105, 107, 108, 109, 111, 113, 114, 120, 124, 126, 128, 130, 132, 134, 135, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
405	Pathology (B&C)	104, 107, 108, 109, 111, 113, 114, 120, 124, 126, 128, 130, 132, 138, 140, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
406	Pathology (B&D)	104, 105, 107, 108, 109, 111, 113, 114, 120, 121, 124, 126, 128, 130, 132, 134, 135, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
407	Pathology (C&D)	104, 107, 108, 109, 111, 113, 114, 120, 124, 126, 128, 130, 132, 138, 140, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
408	Pharmacology <i>Max 25 candidates</i>	107, 108, 109, 111, 113, 114, 120, 124, 126, 127, 128, 136, 137*, 142, 143, 144, 146, 147, 149 and 151.

Paper	Major Subjects	Permissible Minor Subjects
409	Psychology <i>Max 20 candidates</i>	107, 128 and 136 - students may choose additional Minor Subjects that do not have lecture clashes with the Psychology modules chosen – please consult the relevant lecture timetables.
411	Biochemistry <i>Max 7 candidates</i>	107, 108, 114, 128 and 136
412	Plant Sciences - Cellular	104, 105, 108, 109, 120, 121, 124, 135, 141, 146, 148 and 151.
413	Plant Sciences - Ecology	104, 105, 107, 108, 109, 111, 114, 121, 135, 138, 139, 140, 142, 143, 145, 147, 149 and 151.
414	Genetics <i>Max 10 candidates</i>	107, 108, 113, 127, 128, 130, 132, 136, 140, 144, 145, 147, 148, 151 – Students to choose a minor subject that does not have lecture clashes with the Genetics modules – please consult the relevant lecture timetables.
415	Physiology, Development & Neuroscience <i>Max 22 candidates</i>	A fifth PDN module can be taken as a Minor Subject. Students may choose Minor Subjects that do not have lecture clashes with the PDN modules chosen – please consult the relevant lecture timetables.
424	Pathology (B&E)	105, 107, 108, 109, 113, 114, 120, 124, 126, 128, 130, 132, 134, 135, 139, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
425	Pathology (C&E)	107, 108, 109, 113, 114, 120, 124, 126, 128, 130, 132, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
426	Pathology (D&E)	105, 107, 108, 109, 113, 114, 120, 124, 126, 128, 130, 132, 134, 135, 139, 142, 143, 144, 145, 146, 147, 148, 149 and 151.
427	Zoology <i>Max 25 candidates</i>	109, 143, 149 and 151 - A fifth Zoology module can be taken as a Minor Subject. Students may choose Minor Subjects that do not have lecture clashes with the Zoology modules chosen – please consult the relevant lecture timetables.
428	Psychology, Neuroscience & Behaviour	142 - Students may choose Minor Subjects that do not have lecture clashes with the PNB modules chosen – please consult the relevant lecture timetables.

Paper	Major Subjects	Permissible Minor Subjects
429	Human Evolution, Ecology and Behaviour	108, 120, 126, 143, 144, 146, 147 and 149 - Students may choose Minor Subjects that do not have lecture clashes with the Human Evolution modules chosen – please consult the relevant lecture timetables.
430	History and Philosophy of Science and Medicine <i>Max 12 candidates</i>	105, 108, 109, 120, 121, 135, 136, 138, 139, 141, 143, 145, 146, 148 and 149. Students may choose Minor Subjects that do not have lecture clashes with the HPS major modules – please consult the relevant lecture timetables.

Further Major Subject information is available at the NST Part II BBS website at: www.biology.cam.ac.uk/undergrads/nst/bbs/MajorSubjects

Detailed information about permissible subject combinations is also available online at: www.biology.cam.ac.uk/undergrads/nst/bbs/subject-combinations

* There may be clashes with optional elements of the major subject – check with the relevant Course Organiser.

Minor Subjects available in 2022-23:

Paper	Minor Subjects
104	Human Evolution (Arch Paper B3) - <i>Max 20 candidates</i>
105	Human Ecology and Behaviour (Arch Paper B2) - <i>Max 20 candidates</i>
107	Philosophy & Ethics of Medicine (HPS) - <i>Max 50 candidates</i>
108	Health, Medicine, and Society (HSPS Paper Soc 13)
109	The Family (PBS 8) - <i>Max 10 candidates</i>
111	Central Mechanisms of Reward, Punishment and Emotion (PDN Module N6) - <i>Max 15 candidates</i>
113	Early Medicine (HPS) - <i>Max 12 candidates</i>
114	Modern Medicine & Biomedical Sciences (HPS) - <i>Max 12 candidates</i>

Paper	Minor Subjects
120	Human Genetics, Genomics & Systems Biology (Genetics Module 2) – <i>Max 10 candidates</i>
121	Evolutionary Genetics & Adaptation (Genetics Module 4, Zoology Module ZL5) – <i>Max 10 candidates</i>
124	Advanced Topics in Social and Applied Psychology (PBS 7) - <i>Max 10 candidates</i>
126	Music Psychology in Practice - <i>Max 3 candidates – candidates must demonstrate some musical knowledge to be permitted to study this option</i>
127	Conservation Science (Zoology Module ZM2)
128	Bioinformatics - <i>Max 46 candidates</i>
130	Vertebrate Evolution (Zoology Module ZM1)
132	Evolution and Comparative Anatomy of Mammals (Zoology Module ZL1)
134	From Genome to Proteome (Biochemistry) – <i>Max 10 candidates</i>
135	Cell Cycle, Signalling and Cancer (Biochemistry) – <i>Max 10 candidates</i>
136	Science Communication (ICE) - <i>Max 20 candidates</i>
137	Surgical and Radiological Anatomy (PDN) - <i>Max 15 candidates</i>
138	Developmental Neurobiology (PDN Module N1) - <i>Max 5 candidates</i>
139	Molecular and Cellular Neuroscience (PDN Module N2) - <i>Max 5 candidates</i>
140	Sensory Transduction (PDN Module N4) - <i>Max 5 candidates</i>
141	Cellular Physiology (PDN Module P1) - <i>Max 5 candidates</i>
142	Development and Stem Cells (PDN Module P2) - <i>Max 5 candidates</i>

Paper	Minor Subjects
143	Systems and Clinical Physiology (PDN Module P8) - <i>Max 5 candidates</i>
144	Plant Signalling Networks in Growth and Development (PI Sci Module PLM1) – <i>Max 3 candidates</i>
145	Microbes: Evolution, Genomes and Lifestyle (PI Sci Module PLM2) – <i>Max 3 candidates</i>
146	Evolution and Ecosystems Dynamics (PI Sci Module PLM3) – <i>Max 3 candidates</i>
147	Plant Genomes and Synthetic Biology (PI Sci Module PLL1) – <i>Max 3 candidates</i>
148	Responses to Global Change (PI Sci PLL2) – <i>Max 3 candidates</i>
149	Exploiting Plant Metabolism (PI Sci PLL3) – <i>Max 3 candidates</i>
151	Comparative Human Biology (Arch Paper B4) – <i>Max 20 candidates</i>

ARCH: Archaeology

ICE: Institute for Continuing Education

HPS: History and Philosophy of Science

PBS: Psychology and Behavioural Sciences

PDN: Physiology, Development and Neuroscience

PHPC: Public Health and Primary Care

PI Sci: Plant Sciences

Further Minor Subject information is available at the NST Part II BBS website at:

www.biology.cam.ac.uk/undergrads/nst/bbs/Minors

8. COURSE DESCRIPTIONS BY DEPARTMENT

Detailed course descriptions are available on the web and in course handbooks: the following brief outline gives a basic introduction to course content for the Major Subjects.

8.1. PATHOLOGY

The Department of Pathology offers nine Major Subjects (maximum of 20 BBS places in total).

Papers 402- 407 & 424- 426 Pathology

Students are able to take various combinations of two single subject modules:

Module A: Cancer and Genetic Diseases

Module B: Immunology

Module C: Microbiology and Parasitology

Module D: Virology

Module E: Dynamics of Infectious Diseases

Note that the combinations of modules A and E is not possible.

BBS students will have the opportunity to present a paper or project in one or more of their Pathology options

For further information see:

www.path.cam.ac.uk/undergraduate/third_year/NST-PartII-BBS

8.2. PHARMACOLOGY

The Department of Pharmacology offers one Major Subject.

Paper 408 Pharmacology

The course provides students with the concepts and knowledge required to understand developments in pharmacology and drug discovery. Students follow the same lectures as for the single subject. In addition, there is a series of methods and skills lectures and workshops. The course typically covers:

Systems Pharmacology:

Drug Discovery

Cancer

Metabolic diseases

Cardiovascular diseases

Neurotransmission and chronic pain

Molecular and Cellular Pharmacology:

Receptors and ion channels

Cellular signalling

Controlling the cell proteome

BBS students will give a short talk on the topic of their dissertation to the Department at the end of Lent Term.

For further information see: www.phar.cam.ac.uk/undergrads/bbs

8.3. PSYCHOLOGY

The Department of Psychology offers one Major Subject.

Paper 409 Psychology

Students take the same lectures and exam papers as for the single subject. The course provides students with the conceptual tools and background knowledge required to understand developments in the sciences of mind and brain, including appreciation of the range of behavioural and physiological sources of evidence and multiple levels of theoretical analysis.

The examination format is as follows:

Paper 1: Methods of Enquiry

Paper 2: Cognitive and Experimental Psychology

Paper 3: Behavioural and Cognitive Neuroscience

Paper 4: Social Psychology, Developmental Psychology and Individual Differences.
Choose one module from PBS 6, PBS 7 and PBS 8.

Papers 2, 3 and 4 contain several 8-lecture courses, with all lectures taking place in the Michaelmas and Lent terms only.

Students must have taken MVST Part IB or NST Part IB Experimental Psychology to take this Major Subject.

For further information see:

www.psychol.cam.ac.uk/undergrads/ug/nst-ii/info

8.4 BIOCHEMISTRY

The Department of Biochemistry offers one Major Subject.

Paper 411 Biochemistry

The course is grouped into four 24 lecture modules, one of which has a branched structure to provide internal choice. In addition there is a series of methods and skills sessions and students are expected to attend the Departmental Research Seminar Series.

Module A: Structural and Chemical Biology

Module B: From Genome to Proteome

Module C: Stem- The Dynamic Cell

plus either:

Branch 1- Bioenergy OR

Branch 2- Molecular Microbiology of Infectious Disease

Module D: Cell Cycle, Signalling and Cancer

Essential Methods and Skills: These feature key methods such as bioinformatics. Also included are data handling classes using past examination papers as core material to study approaches to data analysis and interpretation. Teaching of transferable laboratory and communication skills (such as graphic illustration, record keeping, data analysis, database searching and essay and report writing) are embedded in the course. BBS students will take part in bioinformatics sessions and group supervisions where they will give presentations on their dissertation, present analysis of data and scientific papers and take part in Journal Club sessions, so developing oral presentation skills and skills in questioning others on their presentations and developing a critical approach to scientific literature.

For more information see:

www.bioc.cam.ac.uk/teaching/third-year/biochemistry/part-ii-biochemistry

8.5. PLANT SCIENCES

The Department of Plant Sciences offers two Major Subjects.

Paper 412 Plant Sciences- Cellular

This comprises the following modules:

PLM1: Plant Signalling Networks

PLM2: Microbes: Evolution, Genomes and Lifestyle

PLL1: Plant Genomes and Synthetic Biology

PLL3: Exploiting Plant Metabolism

Paper 413 Plant Sciences- Ecological

This comprises modules from Plant Sciences and Zoology:

PLM3: Evolution and Ecosystem Dynamics

ZM2: Conservation Science (Zoology)

PLL2: Responses to Global Change

ZL4: Applied Ecology (Zoology)

BBS students will conduct a short presentation during Lent Term.

For further information see: www.plantsci.cam.ac.uk/teaching/plants

8.6. GENETICS

The Department of Genetics offers one Major Subject.

Paper 414 Genetics

Students take all four modules offered for the single subject:

Module 1: Genomes, Chromosomes and the Cell Cycle

Module 2: Human Genetics, Genomics and Systems Biology

Module 3: Developmental Genetics

Module 4: Evolutionary Genetics and Adaptation

Modules 2 and 4 are offered as Minor Subjects to students who are not taking Major Subject Genetics.

BBS students will give a short oral presentation on their BBS dissertation subject to the rest of the Part II class at the end of the Lent Term.

For further information see:

www.gen.cam.ac.uk/undergraduate/nst2-genetics-overview

8.7. PHYSIOLOGY, DEVELOPMENT AND NEUROSCIENCE

The Department of PDN offers one Major Subject.

Paper 415 Physiology, Development and Neuroscience

Choose any four modules from:

Michaelmas:

- N1: Developmental Neurobiology
- N2: Molecular and Cellular Neuroscience
- N4: Sensory Transduction
- N7: Neural Circuits and Behaviour
- P1: Cellular Physiology
- P3: Fetal & Placental Physiology
- P4: Development: Patterning the Embryo
- P9: Cell Assembly and Interactions

Lent:

- N6: Central Mechanisms of Reward, Punishment and Emotion
- N9: Neuronal Plasticity, Modulation and Behaviour
- P2: Development and Stem Cells
- P5: Bioinformatics
- P6: Development: Cell Differentiation & Organogenesis
- P7: Pathophysiology of Cancer
- P8: Systems and Clinical Physiology

Students must specify to the department which 4 modules they intend to take.

A module taken as part of a Major Subject cannot be taken as a Minor Subject.

BBS students are able to sign up to the neuroscience workshops (in which students make presentations) and participate in the journal clubs in many of the PDN modules.

For further information see:

www.pdn.cam.ac.uk/undergraduate-1/part-ii-courses

8.8. ZOOLOGY

The Department of Zoology offers a single Major Subject made up of modules offered in the single subject, and some modules offered by Plant Sciences, Genetics, PDN and Biochemistry.

Paper 427 Zoology

Two modules from:

Module ZM1:	Vertebrate Evolution
Module ZM2:	Conservation Science
Module ZM5:	Evolution and Behaviour: Genes and Individuals
Module ZM6:	Cell Assembly and Interactions
Module ZM7:	From Genome to Proteome
Module ZM8:	Development: Patterning the Embryo
Module ZM9:	Developmental Neurobiology
Plant Sciences PLM3:	Evolution and Ecosystem Dynamics [Borrowed paper]

and two from:

Module ZL1:	Evolution and Comparative Anatomy of Mammals
Module ZL2:	Responses to Global Change
Module ZL3:	Evolution and Behaviour: Populations and Societies
Module ZL4:	Applied Ecology
Module ZL5:	Evolutionary Genetics and Adaptation
Module ZL6:	Development: Cell Differentiation and Organogenesis
Module ZL7:	Cell Cycle, Signalling and Cancer
Borrowed paper:	Bioinformatics

A module taken as part of a Major Subject cannot be taken as a Minor Subject.
A limited number of module combinations are not possible. Please check the timetable and see further information at:

www.zoo.cam.ac.uk/study/NST-II-Zoology

8.9. PSYCHOLOGY, NEUROSCIENCE AND BEHAVIOUR

The course offers a single Major Subject made up of modules offered by Psychology, PDN and Zoology.

Paper 428 Psychology, Neuroscience and Behaviour

Choose any four modules from the list below, which will be offered by the Departments of Psychology, PDN and Zoology:

- N2: Molecular and Cellular Neuroscience (PDN)
- N6: Central Mechanisms of Reward, Punishment and Emotion (PDN)
- N7: Neural Circuits and Behaviour (PDN)
- N9: Neuronal Plasticity, Modulation and Behaviour (PDN)
- PS2: Memory (Psychology)
- PS3: Emotional Regulation and Motivation (Psychology)
- ZL3: Evolution and Behaviour: Populations and Societies (Zoology)
- ZM5: Evolution and Behaviour: Genes and Individuals (Zoology)

Students must choose modules from at least two departments. A module taken as part of a Major Subject cannot be taken as a Minor Subject.

In the Lent Term, a PNB Symposium takes place, during which all students present a poster of their project or dissertation to their peers and the general neuroscience community.

For further information see: www.psychol.cam.ac.uk/undergrads/ug/nst-ii/info

8.10. BIOLOGICAL ANTHROPOLOGY

The Department of Archaeology offers one Major Subject:

Paper 429 Human Evolution, Ecology and Behaviour

Students choose two papers from the following list:

B2: Human Ecology and Behaviour

B3: Human Evolution

B4: Comparative Human Biology

In addition, students choose further two papers from the following list:

B11: The Human Species: Evolution, Dispersals and Diversity. One term paper.

B13: Culture Evolves. One term paper. Likely 2 hour exam planned.

B14: A Technologically Dependent Lineage. One term paper.

B15: Human Sociality: Evolutionary Perspectives on Cooperation, Culture and Cognition. One term paper.

B17 Our Extended Family: Primate Biology and Behaviour. One term paper.

BBS students will give a talk on the topic of their dissertation, followed by questions, during Lent term

For further information see: www.bioanth.cam.ac.uk

8.11. HISTORY AND PHILOSOPHY OF SCIENCE AND MEDICINE

The Department of History and Philosophy of Science offers one Major Subject:
Paper 430 History and Philosophy of Science and Medicine

Students take the following four papers:

Early Medicine

Modern Medicine and Biomedical Sciences

Philosophy of Science and Medicine

Ethics of Medicine

Some of the HPS modules are offered as Minor Subjects, but only to students who are not taking Major Subject History and Philosophy of Science and Medicine. BBS students will give a talk on the topic of their dissertation, followed by questions, during Lent term.

For further information see: www.hps.cam.ac.uk/study/undergraduate/bbs

9. DISSERTATIONS

You will be required to write a dissertation on a topic related to either your Major or Minor Subject, of up to 6,000 words excluding appendices, tables, figures, footnotes and bibliography. You will be required to submit your title (chosen from a list offered by the Departmental Course Organiser or suggested by you) by Division of Michaelmas Full Term. Your title is approved by your Supervisor, the Departmental Course Organiser, and then returned to the Faculty Office for final approval by the BBS Course Coordinator, who will also establish that all students taking the course have submitted an appropriate title. Your dissertations must be submitted to the Departmental Course Organiser by the first Friday of the Easter Full Term.

The purpose of the dissertation is to give you an opportunity to produce a substantial piece of original work. It should be an extended account of a topic or question that lies broadly within the field of either your Major or Minor Subject. In producing your dissertation, you will be expected to show skills in researching primary literature, critically evaluating published information, and marshalling arguments to produce a structured critical assessment of a defined topic. Detailed guidance for both students and supervisors is available on the BBS website.

You can expect to receive a maximum of four supervisions with your Dissertation Supervisor to provide guidance on your dissertation.

10. EXAMPLE DISSERTATION TITLES

Below are examples of past dissertation titles:

- The potential uses and limitation of phage therapy (Biochemistry)
- Transcriptional signature matching strategies in computational drug discovery and repositioning. (Bioinformatics)
- How can medication adherence among patients with schizophrenia be improved? (General Practice and Primary Care Research (now Applied Clinical Research))
- A comparison of incidence of cancer in South Asian (Bangladeshi, Indian and Pakistani) populations in the UK and South Asia (Genetics)
- Medicalisation and violence against women: implications for the medical encounter (Health, Medicine and Society)
- The evolutionary origins of human female aggression (Human Evolution, Ecology and Behaviour)
- Exploring mechanisms linking the gut microbiota to depression (Pathology)
- Personalised medicine in the clinic – fantasy or reality? (Pharmacology)
- Winds of change: lessons from Clyde River in decolonisation and climate (Philosophy and Ethics of Medicine)
- What are the implications of maternal obesity on the placenta in determining pregnancy outcomes? (PDN)
- Micro-plastics in freshwater – should we care? (Plant Sciences)
- Is anorexia an obsessive compulsive disorder? (Psychology)
- Evidence for the role of immune ageing in the development of inflammatory depression (PNB)
- Outcomes after pulmonary endarterectomy: a meta-analysis (Surgical and Radiological Anatomy)
- Psychological well-being in intended parents involved in surrogacy arrangements (The Family)
- The likely impacts of predicted climate change on the biodiversity of UK rivers (Zoology)

11. STUDENT SUPPORT

The department in which you are taking your Major Subject will be designated as your “home” department. If your Major Subject comprises modules offered by more than one department, one of these departments will be assigned as your “home”; this will usually be the department in which you are doing your dissertation. As an NST Part II BBS student you will have access to the same resources and support in your home department as single subject NST Part II students.

Introducing Biological Sciences Libraries support for BBS students

During your studies you will be supported by your dedicated Biological Sciences Libraries Team. Our Team can be found in different libraries across Cambridge and you can discover more about [where to find us on our website](#).

We can help you with a lot of things including getting access to resources to support your work such as books, articles, databases and much more. We can chat about your work through 1-2-1 meetings as well as in [our teaching sessions](#) where we will help you develop many of the skills you’ll need for working at Part II. We also look after the [dedicated BBS Dissertation Digital Collection](#) where you can look at previous work to guide your own current research.

We look forward to working with you during your studies and you can get in touch with any questions you might have: sbslibraries@lib.cam.ac.uk.

12. GORDON WIGAN PRIZE

The Gordon Wigan Prize for Biological and Biomedical Sciences shall be awarded to the candidate who is at the top of the class list for NST Part II BBS, and achieves a First Class mark. The prize is a book token for a value of £100.

13. WHAT OUR STUDENTS SAY

Rachel, BBS 2017-18

Major Physiology, Development and Neuroscience

Minor Subject: General Practice and Primary Care Research (renamed to Applied Clinical Practice from 2020)

"For my third year I did the BBS course with major in Physiology, Development and Neuroscience (PDN) and minor in GP and Primary care research offered at the Primary Care unit. I really enjoyed the BBS course! Doing both major and minor subjects allows you greater breadth. My major, PDN, was very cutting edge, scientific and theoretical. But as a medic, I really appreciated the pragmatism and clinical relevance of my minor subject. BBS allowed me to do these very contrasting subjects in parallel! With BBS you write a dissertation, as opposed to a lab based project. Though your departments usually offer a notional list of titles you have the freedom and flexibility to approach essentially anyone in your department with any question and they can make it happen. For instance, I concocted a question based on a single paper which really piqued my interest and was able to approach its author to supervise me. I appreciated this freedom as I felt I was committing my time to something I really was interested in.

My minor subject in GP and primary care research was a particular highlight of my part II. In Michaelmas, we were taught by the senior academics in the Primary Care Institute in the methods used in primary care research and taught how to critique it. Then in Lent, we were placed with one of the research teams and through supervisions were able to explore many of the particular research issues in their field. Our lecturers and supervisors were approachable and enthusiastic. It opened my eyes to areas of research and careers paths within medicine I didn't know existed. And as a final bonus- there were only 4 people on the course in my year! We got to know each other really well, did multiple formals and keep up with each other now in Clinical school."

Lauren, BBS 2017-18

Major Subject: Biochemistry

Minor Subject: EnterpriseTECH

"After studying a range of topics during the first two years of Natural Sciences, BBS was a great way to specialise (studying a Biochemistry major) while studying another subject I love and want to pursue in the future (EnterpriseTECH as minor). There's many options of topics and ways to study, so BBS subjects are definitely worth looking into when deciding on third year.

The courses are well organised timetable, logistics and assessment wise. Even though you're studying two subjects, the workload doesn't seem more than students just studying a single. In most BBS major subjects, you'll do a dissertation as coursework instead of a lab project, which also makes Easter/Lent term less stressful! Being a member of two departments is also great, and you get to work with and know a lot more students and staff. Loved my time as a BBS student, how the course let me study and has fuelled my passion for multiple topics, and how it's opened many doors for future study and careers."

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