# The Computer Laboratory

This document is specifically intended for Assistant Staff, but may contain information useful to others. These notes were originally written as guidelines for reception staff. They have been added to in a rather haphazard manner, and probably include things that seem obvious — for which I apologise. But the University is notorious for assuming that everyone knows about everything without the need to be told, and so I have erred on the side of giving too much information rather than too little. Suggestions for inclusion are welcome.

So in no particular order:

### 1. WHAT AND WHERE?

The Lab was founded in 1937 as the Mathematical Laboratory on the part of the New Museums Site now occupied by the Arup Building. The building was known as Old Pathology and was notorious for its strange smell (formaldehyde, used for preserving bodies) and the extra large lift (for transporting them!). The name was changed to Computer Laboratory in 1969 and the Computing Service was created in 1970 as part of the same department.

Professor Sir Maurice Wilkes was the Head of Department from 1946 until 1980 when he was succeeded by Professor Roger Needham. In 1996, Roger was appointed Pro-Vice Chancellor of the University, and Professor Robin Milner became Head of Department. He stood down in 1999 and was replaced by Professor Ian Leslie.

The Lab is a department of the University and is part of the School of Technology along with Engineering, Chemical Engineering and the Judge Institute of Management. It is independent of any faculty but has strong links with Engineering and Mathematics. Teaching and research are done in Computer Science as an academic subject.

Until January 2001 Teaching & Research and the Computing Service were part of the same department. They then separated to become two departments, the Computer Lab and the Computing Service. In September 2001 The Computer Lab moved to the William Gates Building (WGB) on the University's West Cambridge site.

To help you find you way around the rooms are labelled by:

Floor (ground-G, first-F and second-S)

Corridor (north-N, centre-C, south-S, and east-E)

Number

For example room GC04 is on the ground floor, centre corridor.

The large central entrance corridor is known as The Street. For consistency with the room labelling in the other parts of the building, the public rooms off The Street are labelled in "corridor" W (west).

The Intel Lab in SW11 is a large computer room for undergraduate students, not to be confused with Intel Research.

The Computer Lab occupies the ground and first floors of the William Gates Building.

The second floor is currently occupied by Intel Research (Intel), Cambridge Enterprise Laboratory (CEL), the Laboratory for Communications Engineering (LCE) and the Photonics

Group (Optics). The second floor occupants are arranged as follows:

Intel – The South Corridor – SS rooms CEL – The Centre Corridor – SC rooms LCE – The North Corridor – SN rooms Optics – (access via) The North Corridor – SC and SE rooms

### 2. Who's Who

The **Head of Department is Prof. Ian Leslie.** He is also Professor of Computer Science. The **Deputy Head of Department is Dr. Peter Robinson.** 

#### Professors

Jon Crowcroft	Professor of Communication Systems (Marconi)
Mike Gordon	Professor of Computer Assisted Reasoning
Larry Paulson	Professor of Computational Logic
Andrew Pitts	Professor of Theoretical Computer Science
Glynn Winskel	Professor of Computer Science

#### Readers

Dr Ross Anderson	Reader in Security Engineering
Dr Jean Bacon	Reader in Distributed Systems
Dr Ted Briscoe	Reader in Computational Logistics
Dr Ken Moody	Reader in Distributed Information Management
Dr Alan Mycroft	Reader in Programming Language Implementation
Dr Peter Robinson	Reader in Computer Technology

### **University Senior Lecturers**

Dr Neil Dodgson Dr Frank King Dr Ian Pratt Dr Martin Richards

#### **University Lecturers**

- Dr Gavin Bierman Dr John Daugman Dr Richard Gibbens Dr Timothy Harris Dr Marcus Kuhn Dr Simone Teufel
- Dr Alan Blackwell Dr Anuj Dawar Dr David Greaves Dr Sean Holden Dr Pietro Lio'
- Dr Ann Copestake Dr Marcelo Fiore Dr Steven Hand Dr Mateja Jamnik Dr Simon Moore

There is more information about academic staff in the blue booklet 'The Computer Laboratory: an Introduction'

#### **Computer Officers**

Dr Martyn Johnson is the senior computer officer. His team, Dr Graham Titmus, Dr Piete Brooks, Mr Ian Grant, Mr Chris Hadley, Mr Robin Fairbairns, Mrs Jiang He and Mr Dan

Sheppard are responsible for the computing infrastructure.

Miss Christine Northeast maintains teaching information such as syllabus booklets and the timetables published in Reporter. She also oversees the examination procedure, and does extra-departmental teaching.

#### Website

The Lab's web pages are managed by a webmaster (MAJ) and two pagemasters (CHN and NAD).

#### **Departmental Secretary**

The Secretary is Mrs Margaret Levitt. She is responsible for departmental administration, including undergraduate teaching, graduate students, personnel, and room allocation. She is the secretary of the Appointments Committee (dealing with the appointment of University Officers in the Computer Laboratory), the Degree Committee (dealing with graduate students) and the Computer Science Syndicate (departmental and teaching administration).

#### **Departmental Secretary for Finance**

Carol Speed can advise on all matters relating to finance including research grants, studentships, payroll queries and travel claims.

### **Assistant Staff**

Chief Secretary and PA to the Head of Department Mrs Caroline Matthews

The Assistant Librarian in charge

Mr Lewis Tiffany

Lewis maintains the catalogue of Technical Reports, and can advise on inter-library loans, the use of the Union Catalogue, membership of the University Library etc.

Senior Student Administration Clerk Mrs Lise Gough Lise will advise on all matters pertaining to postgraduate admissions and courses.

Student Administration Clerk

Ms Fiona Billingsley Fiona holds stocks of the syllabus, the timetable and the reading lists, and can advise on all matters pertaining to undergraduate admissions and course enquiries.

Senior Secretary

Secretaries

Mrs Kate Ellis

Mrs Lucy Heptonstall Mrs Amanda Hughes

They assist Caroline in the provision of a general secretarial service and run the reception office.

Teaching Technician Mr Nick Batterham Nick helps to run the undergraduate hardware laboratory and provides practical help to the Computer Officers.

Building Services Manager Mr Archie Brown

The graduate students' *Help* poster that is displayed around the department gives additional names.

# Visitors

At any one time there will be a number of visitors of varying status in the department. They can be academics from other universities, senior staff from companies sponsoring research here, or students from overseas universities doing part of their studies abroad. Margaret and Caroline generally know who they are and where they can be found. Enquiries about academic visits to the department should be referred to the Head of Department. Visitors can obtain helpful information from the Society for Visiting Scholars (details in the University phone book and on the University website).

# 3. TEACHING COMPUTER SCIENCE

### Undergraduates

Information about undergraduate admissions is given in the Cambridge University Prospectus, and on the Lab's website.

Undergraduates are admitted by one of over 30 Colleges. Subjects are not allocated to specific Colleges so our students come from many different ones. Each College has a Director of Studies in Computer Science and s/he is responsible for the academic studies of all Computer Science students at that College. D of Ss organise supervisions (small tutorial groups), and give help and advice generally.

Undergraduate teaching in the department is administered by the Computer Science Syndicate that reports to the General Board, part of the University's central administration known as the Old Schools.

The undergraduate course is known as the **Computer Science Tripos**. It takes 3 years and at the end a successful candidate is awarded the degree of Bachelor of Arts - one would expect it to be Bachelor of Science (BSc) but all first degrees at Cambridge are Bachelor of Arts (BA). Degree results are given in Classes:

First	1st
Upper Second	2:1
Lower Second	2:2
Third	3rd
Pass	

The Computer Science Tripos is an Honours course but a Pass does not merit Honours.

The degrees are conferred at a ceremony known as General Admissions which takes place in the Senate House during two days in June. This is followed by a series of celebrations held in the colleges, known as the May Balls (held in June...)

There are many different routes for an undergraduate to follow, but broadly speaking our students follow this path:

### Year 1

This is known as the Computer Science Tripos Part IA. Students can take one of two options; either 50% or 25% computer science, with a mixture of maths and other science subjects to make up the total. The 50% is recommended for students intending to continue with Computer Science in year 2.

Some students reading the Maths Tripos can take a first year option of Maths with Computer Science Part IA. These students take the same computer science courses as our students taking the 25% option.

### Year 2

The Computer Science Tripos Part IB is 100% computer science.

Year 3

The Computer Science Tripos Part II is 100% computer science.

It is possible to read Computer Science for one year only, having read some other subject for the first two years. This final year course is the Computer Science Tripos Part II (General). It is a restricted entry course so potential candidates need to discuss admission with their Colleges to ensure that their names are included on the list sent to the Old Schools in May. Attendance at the 2-week Long Vac course is compulsory; information about this is published in *Reporter* (the University's official publication).

# **Graduate Students**

There are two groups of graduate students on one-year taught courses:

# The Diploma Course in Computer Science

This is a conversion course for people whose first degree was in a subject other than Computer Science, generally Maths, Physics or Engineering. It is *not* a Masters course - we don't have one - so is not suitable for people who have already done a degree in computer science. The course covers one academical year, from October to August, although attendance at the Long Vacation Course in the previous July is recommended. Application is made on forms obtained from the Board of Graduate Studies in Mill Lane. Copies of the syllabus are available from Fiona. The course director is Ken Moody.

# The MPhil in Computer Speech and Language Processing

This is taught jointly by the Computer Lab and the Engineering Department but it is administered by the Computer Lab. The course director is Ted Briscoe. Lise Gough can advise on application for this course, and lots of information is given on the course web site.

### 4. THE ACADEMICAL YEAR

The teaching year starts in October and is divided into 4 Terms, three of which contain an 8week period in the middle known as Full Term. Lectures are given on weekdays and Saturdays during this period. The 3 main Terms are Michaelmas (1 October to 19 December), Lent (5 January to 24 or 25 March), and Easter (10 or 17 April to 18 or 25 June depending on the date of Easter). There is also a Long Vacation Term in July during which short courses such as the preparatory course for CST Part II (General) are given.

The formal teaching for the Tripos is given by series of lectures given in the mornings, Monday to Saturday. Ours are usually held in lecture theatres in the William Gates Building, the New Museums Site: the Rayleigh, the Hopkinson, the Heycock, the Cockcroft and the Arts School. The timetable is published annually in *Reporter*, but a condensed version, prepared by Frank King, is distributed at the start of the Michaelmas Term to Directors of Studies, Senior Tutors and students. The syllabus is printed annually in a series of small booklets. Copies of the timetable and the syllabus are available from Fiona. Lectures are often supported by printed notes that are supplied free of charge to all students taking the course, and to staff and supervisors. Students obtain their copies at the first lecture of each course; others should be referred to Fiona.

As part of their examination work students do a number of Assessed Exercises, and in Part II and the Diploma, a project written up as a dissertation. There is lots of information - syllabus, timetable, lecture notes, past exam papers etc - on the lab's website.

### 5. **RESEARCH IN COMPUTER SCIENCE**

The Lab is a world-famous 5\* "Centre of Excellence" for research in Computer Science. Details of our current research are given in the Blue Booklet and on the web site http://www.cl.cam.ac.uk/#Research

Most academic staff have at least one research project sponsored by an external body such as the European Commission in Brussels, or the Engineering and Physical Sciences Research Council (EPSRC). A number of projects are financed by industry or commerce, or by government bodies such as the Defence Research Agency. The money supporting the project pays for special equipment and for specific personnel known as Research Assistants (post graduate level) or Research Associates (post doctoral), who are appointed on fixed term contracts for all or part of the duration of the project.

The Lab has a number of research students reading for the Degree of Doctor of Philosophy (PhD). They are all graduates, mostly with first class honours degrees or the equivalent overseas qualification in Computer Science. Some come here straight from their first degree course, others have done a Masters course or have spent a number of years in employment. There is no upper age limit!

Application for admission as a graduate student is done through the Board of Graduate Studies; see the Board's web site for details.

Research students undertake an individual research project in which they are supervised by a member of staff, and which culminates after 3 or 4 years in a written thesis or dissertation. The student undergoes a viva or oral examination at which s/he is questioned by 2 examiners, generally one person from within the Lab (but not the supervisor), plus another senior person from a university or other reputable body. The degree is conferred at a Congregation at the Senate House and the candidate is then entitled to be called Doctor. The whole procedure of admission, research, submission and examination is monitored by the Degree Committee reporting to the Board of Graduate Studies. Margaret Levitt is the Secretary of the Degree Committee for the Computer Laboratory.

### 6. DEALING WITH ENQUIRIES

Please try to differentiate between the sort of courses that the Computer Lab give (ie. the undergraduate course, the Diploma course and PhDs), those given by the Computing Service (ie. courses for computer users) and those given by Chris Northeast and Frank King (ie extra curricular teaching to other departments). Enquiries should be referred to Fiona.

### "I'm interested in doing a course here"

Determine if it's at undergraduate or graduate level. School leavers will be interested in the Tripos; graduates will either want a course (ie. the Diploma or the MPhil) or they will want to do research. The appropriate information is available from Fiona.

Sometimes, especially during the summer, we get enquiries from foreigners who want to do a course here. Often they are looking for a short word-processing or programming course, or a part-time course, in which case we can't help them. We only have full time courses for properly registered students who are members of a Cambridge College and who are paying fees to the University. It is sometimes difficult to convince them of this!

### "I want to do research in X"

If we do research in "X" it will be mentioned on the WWW. We don't do research in every aspect of computer science. Discourage enquirers from trying to contact individual members of staff; point them to our Web site and to the Board of Graduate Studies (which also has a Web site). We will call them for interview if we want to talk to them.

# "Can I have the application forms?"

We don't have application forms for undergraduate entry. The admissions procedure is described in the University Prospectus and on the University website. Forms are available from the Admissions Office of any College.

Application for admission as a graduate student is made on CIGAS Form, available from the Board of Graduate Studies in Mill Lane who can also provide copies of the Graduate Studies Prospectus.

### "Can I talk to someone?" or "Can I look round the department?"

Obviously we prefer to have advance notice of visitors but in the summer especially, tourists and overseas students have a tendency to call in on spec. We try to be helpful and generally allow access to the Street for sightseeing. Sometimes Fiona can spare the time to talk to potential students or to arrange whistle-stop tours. Tell them about the entry on the Web. The URL for the Lab is

### http://www.cl.cam.ac.uk

6th-formers often turn up on College Open Days. Tell them about our Open Day that is held annually on the afternoon of the first Friday in July. No advance booking is required, they should just turn up at 14.00 on the day and follow the signs. We don't generally publish a programme but the event usually includes a mixture of demonstrations, displays and talk.

# 7. LAB PUBLICATIONS

The Blue Booklet	Officially called The Computer Laboratory: an Introduction it
	describes current research, lists academic staff, their interests and
	their e-mail addresses and/or Web sites.

The Syllabus The syllabus and booklist for the three Parts of the Computer Science Tripos, for the final year course Computer Science Part II (General) and the Diploma in Computer Science, are published as separate booklets.

Copies of the above are available from Fiona in GC04. The Lab also publishes a large number of Technical Reports which are available on the Web.

### 8. USEFUL THINGS TO KNOW!

#### **Postal services**

University Messenger Service (to other departments and the colleges) Out-going post: Please mark envelopes "UMS" in the top right-hand corner, and put them in the 'UMS TRAY' wire basket in the GC corridor. There are two collections and deliveries each working day.

#### External post

Business post should be put in the 'POST TRAY' wire basket in the GC corridor. Private post should carry stamps for the correct value and may also be put in 'POST TRAY'. A daily collection is made at 17.00 from Reception.

Incoming post is sorted by reception into the pigeonholes in the GC corridor, individual ones for members of staff and shared ones for research students and visitors.

Internal post for people within the Computer Lab may be left in their pigeonholes.

#### **Telephone services**

Telephones in offices are barred in various ways according to the status of the occupant/s. Those in multi-occupancy offices generally have local dialling only. Calls related to work are free. It is understood that brief private calls are sometimes necessary, but lengthy or overseas private calls are unacceptable.

Calls made by direct dialling are monitored by the Finance Division of the Old Schools and monthly printouts are sent to the department.

International business calls can be made through reception for those who do not have access to dial direct.

# Coffee breaks

Staff are entitled to two breaks totalling 25 minutes per working day, split between the morning and the afternoon (but not combined to make one long break!). Please do not leave the premises during these breaks. Refreshments are available from the café located at GW24. Hot drinks are available from a machine in the common room kitchen located at FC35. Snacking in offices, especially those with public or semi-public access is discouraged.

### Your working environment

We try to supply each member of staff with a decent desk and chair, plus filing cabinets and bookshelves as appropriate. Things like wrist rests, foot rests, monitor stands, document holders, desk lamps, fans and heaters have to be requested! Wrist and foot rests and monitor stands are readily available; other items have to be purchased individually and there may not always be funds available.

The Department Safety Officer is Piete Brookes in room GC16. He will answer queries on this subject or information on safety policies can be found on the website.

The Computer Laboratory is a no smoking area; this includes all parts of the building – courtyards, toilets and staircases as well as all the rooms.

### Access to the building

People with allocated office space in the building are given keys to the relevant office. We do not keep spares in stock and replacements take weeks to order. Having said that, if you do get locked out then don't panic, as reception, the building services manager and computer officers have access to master keys.

Cotag cards are issued routinely and give access to those parts of the department that are relevant, even out of normal hours.

### 9. PERSONNEL MATTERS: ASSISTANT STAFF

Margaret Levitt is responsible for personnel matters. Once again most information about polices and procedures can be found on the University website.

Each member of staff has a line manager with responsibility for overseeing work allocation and quality checking, time keeping, holiday arrangements, and appraisals. Occasionally these duties will be shared between more than one person. The structure of the arrangement for assistant staff is shown on the job description, a copy of which is supplied on appointment.

The usual hours of work for assistant staff are between 8.00 and 17.30 Monday to Friday with an hour off for lunch. Lunch breaks may be staggered to give cover in essential areas.

Overtime is only worked when really necessary and must be authorised by the Departmental Secretary beforehand.

Assistant staff are paid at calendar month intervals in arrears by credit transfer to a bank or building society. Pay day is the last Friday before the last Saturday in the month. Pay slips are normally sent to mail pigeonholes on Wednesday but receipt of the pay slip is not a guarantee that the money has been credited; pay day is officially Friday.

The leave year runs from January to December. Supervisors should be consulted in good time about proposed holiday dates. Leave has to be approved by them and the workload of the department has to be taken into account so there may be some restrictions on when holidays can be taken.

Departmental practice regarding absence through sickness is as follows.

Inform Caroline Bean as soon as is practicable, but preferably early on the first day, the reason for absence. If Caroline is unavailable then messages may be left by phone or email with Margaret Levitt or Reception. Caroline should also be informed of any medical or other appointments that need to be attended. These must first be cleared by the appropriate line manager.

# Appraisals

Appraisals are carried out bi-annually, generally between the end of the Easter Term and the beginning of the pre-Michaelmas rush. Staff are usually appraised by their line manager but can request an alternative. Appraisals are intended to be helpful, and if not exactly enjoyable then at least constructive! They are a way of checking that all is well, that you are coping with your work, that you are not bored or over-worked, that the appropriate training is being or has been given, and of giving you an opportunity to look at ways of developing your job. Your job description can form the basis for discussion, and can and should be changed if changes can be demonstrated.

Finally, if you can think of any other information that could usefully be included in this booklet, please tell Margaret!