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Keeping the ship afloat: the changing roles of technical and ancillary staff

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INTRODUCTION

John Graham Kerr (JGK) makes no mention of technical and ancillary staff in his *Gallery of Memories* (this volume), but Agnes Miller in her article on the early days (also this volume) gives a vivid account of two members of the technical staff: J. Brannigan, employed 1902-28 and P. Jamieson, in post over the same period. These two therefore started with JGK's arrival, but retired a few years after the move to the new building (1923). Brannigan ran the teaching laboratory and acted as a buffer between JGK and the students. Jamieson ran the histological laboratory, crucial to the department's research. Here we give an account over the last 50 years or so of the technical and ancillary staff who provide the foundation that allows academic staff and students to do their work. It is worth noting here that the contributions technical staff make to research can be more than simply "support", allowing them to be included as co-authors of the published work.

TECHNICAL STAFF

Training

During the 1960-1980s, most technical staff joined the University as apprentices soon after leaving school. June Freel, who started in 1985, has given us a description of her duties and pattern of work:

- Sign in and out every working day, 8.30 a.m. to 4.30 p.m. Late arrival or early departure would result in a stern talking to from the Chief Technician, Mr Anderson (whose first name, Peter, was unknown and certainly not used by other technicians).
- Attend college every Wednesday to study towards a Higher National Diploma in Biological Sciences. This was a great opportunity for June, who came from a family with no history of higher education.
- Attend each year a six-week summer school: trainees rotated through different laboratories, a week in each, learning new skills and techniques, such as photography, electron microscopy, histology, and fieldwork methods. The school ended with an examination and a report on performance and aptitude. June recalls never being asked back to help with electron microscopy!
- Trainees were mentored by a senior member of the technical staff: in June's case, this was Cathy McLagan, Senior Technician in the Physiological Laboratory. Cathy could reduce June to tears on occasion, but was also a great support and an excellent teacher of key skills.

June helped Cathy run the laboratory, and by 2003 had risen to be Deputy Chief Technician, then Chief in 2004, sadly leaving in 2005 when her family moved south. Margaret Mullin's career path (see Mullin *et al.*, 2024) was similar to June's except that she was invited back to electron microscopy, and is still there! The college/apprenticeship route to an established technical post is now uncommon. Technicians are now more often appointed to grant-aided (and, therefore, time-limited) posts, and are often graduates.

Teaching laboratories

Into the 1980s, the Zoology building had five undergraduate teaching laboratories: the large ground floor laboratory with its preparation room, originally designed for medical students; two smaller ground floor laboratories for advanced students; and two upstairs laboratories used for Level 3 classes. By the late 1990s, all except the large ground floor laboratory had been converted into research laboratories and offices, with many undergraduate classes moved to the Boyd Orr Building. The teaching laboratories were serviced by a team of technicians and laboratory assistants. For many years, the team was led by Liz Denton and her deputy Dave Barnett, helped by Isabel Thompson, Lily Dornan, Irene Leighton and Alister Kirk (Fig. 1). There was a lot to do, since the Zoology courses included a major component of often complex practical work: microscopy, histology, dissections, physiological and behavioural experiments, and museum specimen demonstrations, with chemicals to prepare, apparatus to lay out, test and maintain, then clear away and clean ready for the next set of work. When Liz Denton retired, Pat McLaughlin took over, later replaced by Margaret Packer, who has had the task of overseeing a major laboratory refurbishment (completed in June 2024).

Fig. 1. A group of technical staff enjoying Lily Dornan's retirement event. From the left: Anne Keenan, Cathy McLagan, Pat McLaughlin, Lily Dornan, Isabel Thompson, Liz Denton and Maureen Gardner. (Photo: K. Griffiths)

Outside the teaching terms, once any cleaning and equipment maintenance was completed, teaching technical staff could be deployed into research areas. Liz Denton had an additional role as graphics guru: she curated the Department's stock of Letraset, used to label photographs and to create diagrams and graphical figures in pre-word processor days. She developed graphics skills still employed by academic staff after her retirement.

Animal services

In the 1970s, the basement housed an insect room, marine aquaria, a *Xenopus* frog and axolotl room, and rooms for Tony Barnett's rats and mice, some of the space being for his cold temperature adaptation research. Over the next few decades, the animal-holding facilities were in constant flux as research programmes came and went.

For many years, the animal services technical team was led by Raymond Stoddart, later by John Laurie (who went on to become Chief Technician) and then by Graham Law. Graham had been an innovative keeper of carnivores at Glasgow Zoo and brought valuable expertise which was incorporated into the Masters course in Animal Welfare Science, Ethics and Law (AWSEL), until his untimely early death from cancer in 2020. As a memorial, the AWSEL course includes the Graham Law Enrichment Challenge (6th iteration in 2024), where students work in small groups during the final session of the course at SCENE to devise a way of enriching the lives of members of a species identified as having welfare problems when kept in captivity. Graham's role as animal services manager in the GKB was taken by Ross Phillips. Animal services staff are now managed by a separate department, Biological Services.

Histology

Histology had been a crucial technique for the zoologists of JGK's time who were interested in comparative anatomy, physiology and embryological development. In the 1970s, the parquet-floored histology laboratory (Fig. 2) was located up a short stair at the north end of the Museum and was run by a highly-talented histologist, Cathie Morrison. When the Developmental Biology unit was opened at Horselethill in the early 1970s, Cathie moved to be Technician in Charge and she was replaced in Zoology by Pauline Hannah. The laboratory was demolished along with the entomology wing below in the 1990s, and replaced by the new Central Research Facility, below, with office and lab space, above. Kate Orr (later Griffiths) was now Histology Technician, recruited from the health service, looking after the histology slide collection, helping with PhD and undergraduate student projects and undergraduate histology practical classes. Histology moved to the new bespoke histology laboratory in the roof facility created to replace that lost to the fire. In the late 1990s, histology moved along the roof laboratory corridor, to make way for a molecular laboratory (see Mable *et al.*, 2024). Kate spent half of her time working in histology and half of her time in the new molecular laboratory. Histology was

Fig. 2. The original histology laboratory in 1990. (Photo: K. Griffiths)

now playing a less important role in Zoology teaching and research. As part of the rationalisations accompanying the formation of the Institute of Biomedical and Life Sciences (IBLS), histology facilities were eventually centralised in the Anatomy Department, and Kate's responsibilities changed.

Photography

Photography has long been an important means for zoologists to record their observations. JGK was a keen and expert photographer and has left a substantial archive of plates and prints. For several decades, the basement housed a photographic suite with darkroom and developing/printing facilities. From 1961 until his retirement, the departmental photographer was Peter Rickus. Photography and other imaging activities were centralised by IBLS and the photographic suite space redeployed. The wide availability of digital photography has revolutionised how zoologists record their findings.

Molecular ecology

As described in Mable *et al.* (2024), by the mid-1990s, molecular techniques including DNA sequencing were becoming an affordable tool for use in zoological research. A molecular laboratory was set up in the refurbished roof facility by Richard Griffiths in 1996, by conversion of the histology and parasitology laboratories, aided by Bob Dawson whom Richard had met on a beach in Norfolk, where both were birdwatching. Richard remarked that he was seeking a good post-doc and Bob was looking for a job: thus began a long-term working relationship and friendship. After

histology facilities had moved to the Anatomy Department, Kate worked full time providing technical services for the new molecular laboratory. The molecular laboratory initially supplied a service for bird conservation and research work, an example being sex identification of chicks during the re-introduction of red kites and white-tailed eagles to Scotland. In 2007, a "pop-up" set of molecular laboratories was introduced to our Walney fieldwork site. This enabled identification of lesser black-backed gull (*Larus fuscus*) chick sex from DNA extracted from tiny blood samples taken on the same day.

Physiological laboratories

The physiological laboratory on the roof provided facilities for the mainly marine-based research carried out by J.D. Robertson, Peter Spencer-Davies and Alan Taylor. Cathy McLagan was Technician in Charge for many years, assisted by June Freel latterly. The electrophysiology laboratory was originally in the yard, but moved to a better space created by cutting a thick slice off the Museum in the 1960s. The Technician in Charge was Don Little, with special expertise provided by Don McFarlane as Research Technologist. Graham (Toby) Tobasnick was Junior Technician there but also helped with parasitological research and moved fully to that area later. Graham Adam also assisted in this field both for teaching and research.

Fieldwork and field station

Fieldwork carried out by Zoology researchers has been supported by several members of the technical staff, much of it remote from Glasgow and sometimes involving remote residence. Pat McLaughlin assisted with Peter Meadows' Clyde estuary work, carrying back many buckets of sediment. Kenny Ensor, Darren Evans and Kate Griffiths have helped ornithological fieldwork in several ways and at many locations, such as Walney Island, Ailsa Craig, Bass Rock and Foula. The Rowardennan Field Station (now SCENE) combines being a residential location for field-courses with being a centre for freshwater and terrestrial field and laboratory research. This requires technical and ancillary support that is complex and demanding. For many years, the residential facility was managed by Rona Brennan who developed a deserved reputation for catering excellence. During the fund-raising campaign for the new buildings in the early 2000s, Rona wrote a recipe book - *The Soup SCENE* (Fig. 3) - which sold well. The original Rowardennan field station included a cottage for a caretaker/boatman/handyman. Joe Twaddle was the original incumbent, later replaced for many years by Rab McMath. The cottage was demolished to make way for the SCENE buildings. Hannele Honkanen is now Research Support Manager, assisted by research Technician Phoebe Kaiser-Wilks.

Stores

The basement housed the departmental stores of chemicals, glassware, stationery and all sorts of other useful items. From 1965, the genial storekeeper was Mr Flett who had an amazing memory of the range of items he stocked. He was latterly assisted by Willie Orr. When

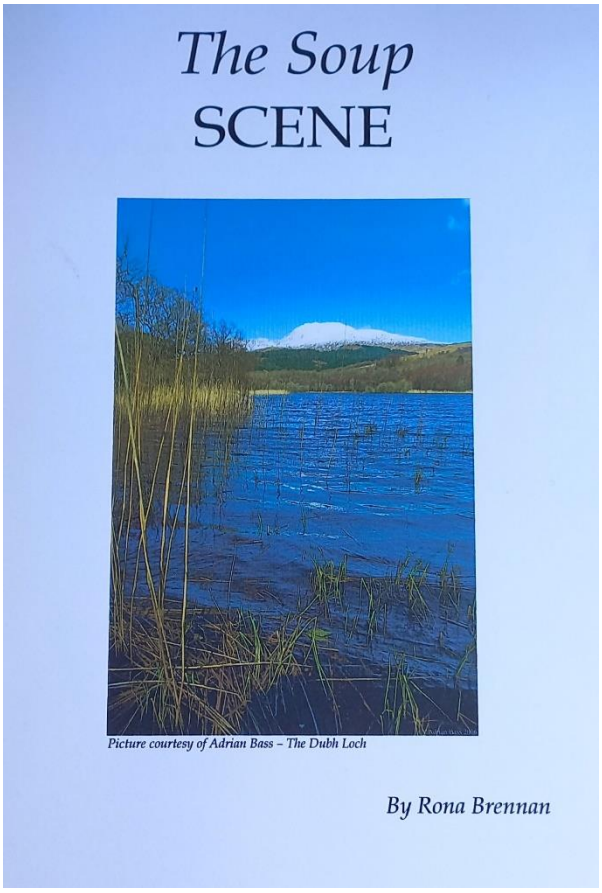

Fig. 3. Cover of *The Soup SCENE*. (Photo: L. Kennedy)

IBLS formed, Zoology stores were consolidated into the Davidson Building and Willie had to move there: stores were never the same after that.

Workshops and Electron Microscope Unit

The basement also housed two workshops. The Mechanical Workshop was presided over for several decades by Alan McGregor (Fig. 4) who seemed able to construct anything zoological researchers needed out of metal, wood, glass and Perspex. This workshop later moved to the West Medical Building as part of the IBLS streamlining process. The activities and staff of the Bioelectronic Workshop and of the Electron Microscope Unit are described in Mullin *et al.* (2024).

SECRETARIAL AND ADMINISTRATIVE STAFF

When Roger Downie joined the academic staff in 1970, those staff were supported by a team of secretaries: Mary McDill was Senior Secretary, working for the Head of Department; she was assisted by Clarice Swann and Theresa Emerson, with Susan Hughes working in the basement primarily on accounts. It was the norm then for academic staff to have their hand-written notes (for teaching or research documents) typed up by the secretaries, or even for the secretaries to take short-hand by dictation. Clarice was very short-sighted, but had an eagle-eye for poor grammar and could be very firm on the standard of writing she expected from academics. Lecture and laboratory hand-outs were typed onto Roneo machine stencils from which many copies could be run off in black and white. Clarice stored the stencils

Fig. 4. A mid-1990s celebration in the Museum. From the left: Nosrat Mirzai, John Laurie, Alan McGregor and Martin Burns. (Photo: K. Griffiths)

and these could have minor revisions made and used in subsequent years. For coloured diagrams, a Banda copier was available. The outstations had their own secretarial staff.

The information technology revolution of the 1980s progressively swept all this away. Photocopying became cheap and replaced the Roneo machines. Word-processing made it easier for even slow typers among the academic staff to produce their own manuscripts. The changes in departmental structures centralised some services: for example, Susan Hughes's successor Brenda McPherson began in the Zoology basement, moved to the West Medical Building when IBLS formed, and ended up in the Medical School as part of the College's accounts team.

The roles of departmental secretaries have changed and expanded. For example, Lorna Kennedy, who joined in 2000, now has two main roles: first, Personal Assistant to the School's Director of Research, with tasks such as diary management, meetings arrangement, and travel organisation; second, Local Resource Coordinator, which involves managing the processes and procedures relating to staff recruitment. Those are her official duties, but, as Dan Haydon (Director of the Institute of Biodiversity, Animal Health & Comparative Medicine – IBAHCM - for 12 years) has commented, she is also "fixer of all things", a role not easily defined in standard job descriptions. Her pattern of working has also been altered as a result of the COVID-19 pandemic; she now works in hybrid format, partly from home and partly from the office. Lorna succeeded Irene McLaren as Principal Secretary, and initially had Patricia Johnson and Florence McGarrity as assistants, now succeeded by Nathan Miller and Kotryna Ula Kiliulyte.

As part of the College/School structure, there are now administrative staff in charge of particular functions, mostly not based in the Graham Kerr Building. The Undergraduate School manages the major task of administering all the undergraduate courses; the Graduate School administers post-graduates, with separate staff for research students and taught Masters courses. Research and research assessment are administered by a separate team. Building maintenance and development involves liaison with the University's Estates department and this is handled by Chief Technician Kate Griffiths and a senior administrator, Deputy Head of Professional Services, Jennifer Crawford.

JGK makes clear in *Gallery of Memories* that he regarded public engagement as an important part of his role, and this remains important for any university these days. It is worth mentioning two Zoology graduates with key roles in this area, although neither is based in the Graham Kerr Building: Debbie McNeill manages the annual Glasgow Science Festival each June, and is also engagement manager for the College; and Zara Gladman is Public and Community Engagement Manager for the University's Research Services department.

ANCILLARY STAFF

A building like the GKB houses a large number of staff, but also has a shifting population of students attending lectures and laboratory classes, and also hosts occasional visitors like the general public visiting the museum. This all creates a need for cleaners, reception staff and others. As the independent Department of Zoology, we generally had a regular team of cleaners who got to know the building and its inhabitants well, and who often worked many years (Fig. 5). The same was true of the janitors who staffed the reception office in the building's foyer. On some occasions, we had "janitors" who performed multiple functions such as driving the minibus and carrying out handyman duties. This included David Boyd who went on to be Head of Janitorial Services for the University, and Davie Watson, happy to transport students and staff to many diverse and unusual destinations, often outside of the Glasgow area. Unfortunately, the University centrally took against having ancillary staff assigned long-term to particular buildings, and these personal links have been largely lost, although we have enjoyed the extended deployment of Mark Johnstone and Stephen Monaghan to the building.

Fig. 5. Retirement event for cleaner Margaret Moyers (Mags) who worked in the Graham Kerr building for 17 years. She is seen here behind a hamper of gifts, with a good turn-out of staff in the Museum, August 2022. (Photo: N. Metcalfe)

CONCLUSION

There have been some bumpy times for technical and administrative staff. Possibilities for promotion are very rare and are hard won. However, the help and support provided by some excellent Heads of Department, including Felicity Huntingford, Roger Downie, Neil Metcalfe and Dan Haydon have largely smoothed over the cracks. During the period when Zoology was principally contained within one building, there was a strong feeling of congeniality and many opportunities to participate in social events. Weekly seminars were of general interest to all research groups within the building, and all members of staff were encouraged to attend. There were annual summer post examination barbecues for students and staff, and an end of session Christmas lecture and ceilidh. Technical and support staff are unlikely to become extinct as a species, and hopefully the University of Glasgow will continue to recognise the much-needed contributions to research and teaching provided by these staff members.

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