

The Light Microscopy Section Committee

Techniques covered by the Section include: multi-dimensional imaging of live cells, organs and intact organisms; optical tomography; spectroscopic and functional imaging (e.g. FRET, FLIM etc); development of novel methods such as super resolution imaging, adaptive optics, optical fibres, GRIN lenses; laser-based and solid-state excitation methods; use of multiphoton imaging, confocal and scanning technologies; digital image acquisition, image filtering and analysis; automated and high-throughput imaging systems.

In addition to the overarching aims of the Society, the Section aims to advance optical imaging in the life sciences and physical sciences through education from high-school to advanced academic levels by holding courses, one-day workshops and 2-day specialist scientific meetings.

Sources of help and advice

(Get help with planning and setting up a microscopy facility.)

The confocal listserver, BiolmagingUK listserver and microscopy listserver all provide a useful forum where you can contact other professional microscopists, who may well have the answer(s) that you are seeking.

Hint: set up a separate email account for these listservers – they generate a lot of mail responses.

Local and national networks of imaging professionals can likewise provide help and support. For example, within the UK a list of interested and active microscopy facility managers is maintained on our Facilities Database, in co-operation with BiolmagingUK

Our regular events include;

Light Microscopy Summer School

The LM summer school is an annual, residential course which runs over 3 days and covers the principles of light microscopy as well as training participants in practical issues surrounding light microscopy. After introductory presentations, the course is taught predominantly through hands-on practical sessions. The course is suitable for both novices and more experienced users wanting to gain a greater understanding of the microscope.

UK Light Microscopy Facility Managers Meeting

This meeting is aimed at people running or working in light microscopy facilities. You can expect to find out more on the latest developments in UK Bioimaging and how we can feed into wider international groups that are starting up. We will also discuss some of the basic elements (funding, impact measures) of running a core facility as well as the latest technological and application developments that effect ourselves and our users.

Frontiers in Biolmaging

This is an ideal meeting for both new and established researchers to engage with a broad range of imaging approaches and to make valuable contacts with leading groups in the field.

Getting the most from your Confocal

The course enables students to fully appreciate and utilise the confocal microscope and develop their understanding confocal microscopy background as well as try FRAP, FRET and spectral unmixing. The 2-days consist of short tutorials followed by hands-on practice.

Digital Imaging Processing Workshop

The aim of this one-day workshop is to cover the underlying principles of digital image processing and allow the advanced user of light microscopy to make the very best use of their imaging data. The types of image vary from those of high spatial resolution obtained using confocal microscopy to lower resolution video and multidimensional data obtained using advanced optical techniques (like FRET, FRAP, multiphoton).

Please note that our meetings are aimed at advancing new or under-represented areas of imaging science and technology - They are run "by the members, for the members". Contact us with suggestions for future meetings.

General RMS Science Section Committee Information

- The Society currently has six Science Sections – Light Microscopy, Electron Microscopy, Life Sciences, Engineering & Physical Sciences, Atomic Force Microscopy & Scanning Probe Microscopy, and Flow Cytometry – as well as the Education and Outreach Committee. In theory, all Members of the Society are members of every Section but, needless to say, Members put effort in to where their own interests and skills lie. In addition to the Science Sections, an Early Career Committee has also been set up, and this includes representatives from all of the science sections.
- The Sections help to chart the direction that the Society takes with regards meetings, courses and book titles. The Sections are heavily involved in the planning of the Microscience Microscopy Congress (mmc), helping to identify the emerging subjects that should be covered by the conference.
- Each Section has a Committee who meet three times per year – usually January/February, May/June and October/November and meetings are always full and interesting!
- All Committee Members should be Members of the Society, or representing a Corporate Member of the Society.
- Once a Member has agreed to join a Section Committee they are expected to attend as many of the Committee meetings as possible so should consider whether they will have the time to do so.
- If you are considering becoming Chair of a Section Committee it is very important that you are aware that, if you are elected, you become a Trustee of the Society. This brings with it a number of added responsibilities and time commitments.
- A Committee shall be elected annually at the Section Annual General Meeting from members of the Royal Microscopical Society.

Objectives of the Society's Committees

- Provide guidance to ensure that the Society delivers a balanced annual programme of events.
- Provide expert input to planning of the Society's scientific meetings.
- Consider the training needs of the microscopy community and ensure that the Society's courses meet these needs.
- Inform members of the Society – via Society Publications, Website and Social Media – of developments in the Section's subject area.
- Provide support and input to the activities of Education and Outreach Committee, the Early Career Committee and Infocus magazine.

Nominations and Terms of office for a Science Section Committee Member

- The Sections have up to ten elected members (including the Chair and Deputy Chair) who are elected at the Section's Annual General Meeting. These Committee Members are augmented by up to four co-opted members who may be former Committee Members or people who have been invited with a view to them becoming elected in the future. The immediate Past Chair shall be an ex-officio member of the Committee and will have the title Vice-Chair for one year. An Early Career representative will also be invited to join the committee, and will represent the Section Committee on the Early Career Committee.
- Nominations for election to the Section Committee must be received by the Chief Executive of the Society in writing at least 28 days before the Section Annual General Meeting and must be supported by at least two members of the Society. The consent of the nominee must be obtained.
- In the event of there being more nominations than vacancies on the Committee, a vote shall be taken at the meeting, or via email, and vacancies shall be filled by the nominees obtaining the greatest number of votes.

Royal Microscopical Society Section Committees

- Members are elected at the Section's Annual General Meeting (AGM) which usually take place during a Scientific meeting, such as mmc, Frontiers in BioImaging, the SPM meeting or FlowCytometryUK.
- Ordinary members of the Committee may be re-elected at the Section Annual General Meeting until they have served for four years, after which they shall not be eligible for nominations to the Committee for a further two years unless elected Chair or Deputy Chair. During this two year period, they are eligible to be co-opted to the Committee.
- The Deputy Chair shall be elected annually at the Section Annual General Meeting and is eligible for re-election, but must retire after serving three consecutive years. The Section Deputy Chair will represent the Chair at times when the Chair is unavailable to attend Section or Council Meetings.
- The Chair shall be elected annually at the Section Annual General Meeting and is eligible for re-election, but must retire after serving for three consecutive years and shall then serve on the Committee, ex-officio for one year after relinquishing office as Chair. The Chair shall be a member of the Council and serve as a Trustee of the Royal Microscopical Society (by-law 41).
- Members of the Executive Committee or the Royal Microscopical Society are ex-officio members of the Section Committee.
- Others may be invited to attend committee meetings due to the organisation of a specific upcoming event, or where they represent another relevant organisation.

Responsibilities and expectations for a Science Section Committee member

- Each Section is responsible for maintaining a watching brief on its specific subject area and is expected to seek new opportunities to ensure that the meetings and courses offered by the Society remain fresh and are meeting the needs of the community.
- Unless otherwise stated by Council, each Committee should have significant involvement in the organisation of at least one meeting per year.
- A Section Committee can vote to support a non-Society event. In some cases, this will involve financial support. There are sponsorship limits for individual awards and for the total of awards in any financial year, these are set by the Honorary Treasurer. Requests for support outside of these limits should be submitted to the Executive Committee. Such requests will be considered, and recommendations will be made to Council. Council's decision is final. In addition, when planning Society events, Committee members must seek to identify other organisations that might provide financial support from other societies and bodies but should not include exhibiting companies who will be approached automatically by the Society for sponsorship.
- A Section Medal is presented every other year, with the winner giving an invited talk during a major meeting such as mmc. The Section Committee will judge and decide on the winner of this award.
- There are three meetings held per year and three members of a Committee attending a meeting (one of whom must be the Chair or the Deputy Chair) shall constitute a quorum at a Committee meeting.
- Section Committee Members cannot receive payment or other benefits for their role, but out-of-pocket expenses are reimbursed.
- The Chairs of all Sections meet immediately before each meeting of Council for a Section Chairs Meeting. This is attended by members of the Executive Committee with the purpose being to encourage close and complementary working between the Sections. These meetings are chaired alternately by the two Honorary Secretaries Science. This flow of information is invaluable to Council and it is essential if the Society is to serve the broad range of subjects covered by microscopy.
- The Sections act in the best interests of the Society, but do not act on behalf of the Society. Therefore, they cannot enter into discussions or contracts that commit the Society in any way. Each Section Committee considers matters relevant to the specific section committee subject area and the findings are fed to Council for it to consider and take action if appropriate. Providing that a Section Committee Member adheres to the above, there are no liabilities attached to being a member of a Section Committee.

Science Section Annual General Meeting

- a. Whenever possible the Section Annual General Meeting shall be held within 10-14 months of the last Section Annual General Meeting with advanced notice of at least three months before the meeting is due to take place. The notice shall also include a statement to the effect that nominations for the committee are invited.
- b. The Chair of the Section shall present an Annual Report at the Section Annual General Meeting and a summary of this Annual Report will be made available to all members.
- c. Ten members of the Society shall constitute a quorum at the Section Annual General Meeting.
- d. Those entitled to vote at the Section Annual General Meetings shall be restricted to all members of the Royal Microscopical Society.