Effective Mentorship in Research Communication Toolkit

Resources to run a case-based mentorship workshop in research communication at your institution
ABOUT INASP

Founded in 1992, INASP is an international development organization working with a global network of partners in Africa, Latin America and Asia. In line with the vision of research and knowledge at the heart of development, INASP works to support individuals and institutions to produce, share and use research and knowledge, which can transform lives.

INASP’s approaches are based on the core pillars of capacity development, convening, influencing and working in partnership. INASP promotes equity by actively addressing the needs of both men and women across all our work and addressing issues of power within the research and knowledge system. INASP has projects in 28 countries, supporting all aspects of research and knowledge systems, from facilitating the provision of information to researchers to helping parliamentarians and civil servants to use research and evidence in policy making.

INASP designs and runs capacity development activities that cater for both women and men’s interests and needs. We use methods that increase active participation and an inclusive learning environment, adopting attitudes and behaviours that value differential experiences and perspectives and ensuring listening and respect for each other’s experiences and views.

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ABOUT AUTHORAID

AuthorAID is a free, pioneering global network that provides support, mentoring, resources and training for researchers in low- and middle-income countries.

AuthorAID provides support through mentoring, online training and opportunities to network with other researchers. Via the AuthorAID platform, a network of currently 17,000 researchers in low- and middle-income countries can connect with mentors, mentees and collaborators and get support to publish and communicate their work.

AuthorAID also works directly with Southern universities and institutions to build local capacity.

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Facilitation Notes

Introduction to the workshop materials for the trainer/s

Thank you for your interest in the AuthorAID Effective Mentorship in Research Communication Toolkit, designed for established researchers in low- and medium-income countries, who mentor PhD students or junior colleagues in research communication.

For the purposes of this toolkit, we define research communication as the process of interpreting or translating scientific research into a language, format and context that specialists and non-specialists can understand. It involves a network of stakeholders for example researchers, editors, journalists, policymakers, governments generally, user organizations and the public, who are all potential users of research.

At the outset, please go through the toolkit and understand the materials, which have been designed by AuthorAID Associate Dr Barbara Gastel together with the Capacity Development Advisor, Annelise Dennis at INASP. You will then be in a better position to select the modules and materials in the toolkit that are most relevant to your context and audience and in turn, will be able to design an AuthorAID workshop that is fit for purpose.

Please do the following at least one month before your AuthorAID workshop:

- Carefully go through the facilitation notes, referring to the other materials (especially the participant handbook, handouts and trainers’ PowerPoint slides) wherever indicated in the facilitation notes. We strongly recommend that you print this document along with the participant handbook as these documents are somewhat lengthy and call for intensive reading.

After going through the facilitation notes, think about your own AuthorAID workshop:

- How long is your workshop going to be?
- What is the profile of the participants who will attend your workshop? What do they already know about the topic and what would they expect to learn or do during your workshop?
- Which modules would be the most relevant for your workshop? Do you have a good rationale for selecting some modules and leaving out or adding others?
- Would you need to include modules or activities on any other topic not included in these materials? If so, who will develop the materials for these modules or activities and who will facilitate them at the workshop?
- Decide who is going to be part of the workshop team, for example, the workshop administrator (the person in charge of logistics and arrangements), a co-trainer and/or resource person. Share your thoughts with your team and seek their feedback.
- Design a selection process to recruit the right participants for your workshop. Tell the workshop candidates what the workshop is about and what they will be expected to do during the workshop.

Then, at least two weeks before your AuthorAID workshop, please do the following:

1. Draft the agenda (plus intended learning outcomes) for your workshop and share it with your workshop team.
2. Select the participants for your workshop.
3. Share the workshop agenda (plus intended learning outcomes) and pre-workshop information (including any pre-workshop task) with your workshop participants.
4. Put together the materials for your AuthorAID workshop by using or adapting the materials in this toolkit and by developing materials you may need for any new modules or activities you have designed.
Guidance for trainer/s

Background knowledge and skills for trainer/s
Those who are looking to facilitate this workshop should ideally have:

• Authored at least three original research articles that have been published in reputable peer-reviewed journals.

• An awareness of current issues in scholarly publishing.

• Experience in mentorship or developing other people’s skills in research communication.

• A positive attitude towards active learning and an interest in using active learning techniques in the training room.

Organization of workshop

• This is a workshop design for 10-15 people to optimize discussion. However, the workshop can also be reasonably delivered to up to 25 participants.

• This workshop is primarily for established researchers who are or will be mentoring PhD students or junior colleagues. It also may be of use to others, such as education staff who can share content with current or prospective mentors.

• It is strongly recommended that the lead trainer of this workshop is supported by a second resource person or co-trainer who can facilitate group work and write up activity outputs.

• The trainer/s might want to send to participants, in advance of the workshop, a short video clip (lasting 4 mins 27 sec) related to mentoring in research communication (the link is also provided in the participant handbook www.youtube.com/watch?v=qNlCivi46d8. It is recommended that the clip is accompanied by one or two questions for participants to consider, for example, in what ways does the mentor help authors improve their work? in what other ways do and/or will you help your mentees to improve and communicate their research?

• Every participant should receive, at the start of the workshop, a copy of the participant handbook (edited by the trainer/s) and the finalized agenda (plus intended learning outcomes) ideally placed inside a slim ring binder folder (so papers can be removed and new ones added using a hole punch).

• Some example intended learning outcomes for the workshop, might include:

• By the end of the workshop, participants should be able to: a) state guidelines for mentors and mentees to follow, in order to have a constructive mentoring relationship, b) demonstrate sound, up-to-date basic knowledge of aspects of research communication on which they may guide mentees and c) devise valid approaches to guiding mentees on research communication issues.

• The participant handbook consists of resources that will be drawn upon during the modules, for example exercises, guidance notes and templates, and boxed sources of information related to research communication for further investigation by participants.

• The trainer/s can insert relevant photos/images into the PowerPoint slides and, edit or re-format text and content so that it is better tailored to the participant audience.

• It is recommended that if any PowerPoint slides are shared with participants, then this is done after rather than before the workshop (as some outputs from group activities will be added directly to the slides during the course of the workshop).

• The timings are an approximate guide and trainer/s are expected to make adjustments during the course of the workshop.

• The trainer/s need to print out the facilitation notes and the participant handbook to support the preparation of the workshop.

• As good workshop practice dictates, trainer/s need to spend time in advance of the workshop, to study the facilitation notes, training resources and participant handbook. It is also recommended that trainer/s consider how best to format the facilitation notes so that they are easy to use on a day by day basis and that they match the trainer/s’ preferred note format.

• The trainer/s will need to monitor the atmosphere in the training room, and use energizers when a change of pace or in energy levels is required.
The training room

The trainer/s, together with the workshop administrator, need to ensure that a suitable training room and layout is organized in advance of the workshop. If possible, the room layout should be one that facilitates interaction.

It is recommended that, for the smooth and successful delivery of the workshop, the following training room and layout arrangements are made, if possible:

• Small, moveable tables are sourced, comfortably sitting up to four participants (for example if a total of 20 participants, five tables are required).
• Three small extra tables are provided: one to house the laptop and projector and one for the trainer/s’ workshop materials.
• Light, movable chairs are sourced, enough for each participant and three as spare.
• The tables and chairs need to be placed in roughly one half of the training room, and are at least two or three leg strides apart. The remaining half of the space is left free for other workshop activities.
• Find a training room, with lots of wall space on which flipcharts and training resources can be attached.
• Identify a blank wall to act as a screen if no screen for the projector is available at the training venue.
• Remove any raised platform or stage at the head of the room, it is not required.

Workshop stationary and resources

Please make sure the following are available:

• Slim ring binder folders
• Hole punch
• Stapler
• Sticky notes (or post-it notes) - a few sets of large and small notes
• At least two sets of flipchart paper pads and two flipchart stands
• Five sets of colour marker pens
• Projector and screen
• Computer to connect to the projector (in case the trainer/s will not be using their own laptop computer)
• A few flash drives (in case internet connectivity is not available for the activities where the participants might need to share documents with each other)
• Optionally, a whiteboard (in this case, make sure the whiteboard markers are different from the markers used for flipcharts as the latter kind could have permanent ink!)

The active learning approach

The design of all eight modules in this toolkit is based on the active learning approach and trainer/s of this workshop might want to refer to the AuthorAID Training of Trainers Toolkit,¹ which provides more detail on what active learning looks like in practice.

Active learning is an approach, rather than a fixed set of activities. It can include any activity that encourages learners to take an active, engaged part in the learning process, such as: group discussions, participatory presentations, cases, problem-solving and role-play. It involves providing opportunities for learners to meaningfully talk and listen, read, write and reflect on the ideas being studied. This is in contrast to more traditional methods of teaching such as a instructor trying to ‘transmit’ knowledge to learners as they sit and listen.

It concerns itself with “creating an environment where students can take charge of their learning, see relevance in it and engage in it, instead of having information just delivered to them”.²

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¹. www.inasp.info/publications/authoraid-training-trainers-toolkit
From time to time, certain individuals and/or groups of participants, can dominate workshop discussions and activities. It is the trainer/s’ responsibility to be pro-active in managing these types of situations. Strategies can be adopted by trainer/s to ensure that there is equal participation by both women and men, as well as by junior and senior researchers. It is recommended that when trainer/s take questions and/or comments from the full group, that female-first contributions are prioritized, particularly at the start of the workshop. In addition, trainer/s should focus on the whole room, and maintain as much balance as possible, with respect to gender and seniority of the participants posing questions and/or making contributions. Also keeping questions and answers short will allow more questions to be asked during a given question and answer session, allowing a greater balance in the questions asked. For more background and the research behind these strategies, the trainer/s might want to read the Oxfam blog here: www.oxfamblogs.org/fp2p/how-to-stop-men-assembling-all-the-questions-in-seminars-its-really-easy.

Cases to distribute
The document **HO1 cases to distribute.doc** is provided in Word so that trainer/s can modify cases or insert some cases of their own, if desired. There are 25 cases to choose from; trainer/s need to select in advance the most relevant modules of the toolkit to deliver and in turn the cases so that the training is tailored to the needs and profile of the participant audience.

The complete Word file or only the cases selected by the trainer/s for discussion can be distributed to participants at the start of the workshop.

Currently the names used in the cases are mainly American names. The trainer/s may wish to replace them with names more commonly used in the country where the workshop is to be held. However, some trainer/s in the past have noted that the use of such names might be awkward, for example if the names in the cases coincide with those of participants. Of course, if trainer/s feel it is appropriate, they can change the names as they see fit.

Case discussion methods
Throughout the modules, discussion of one or more brief cases are introduced in which the participants advise the mentor and sometimes the mentee on a challenge related to research communication.

In general, the cases do not have a single correct solution. Rather, participants should be encouraged to identify various possibilities and discuss pluses and minuses of each. In general, a brief presentation relating to the subject matter either precedes or follows each case or set of cases.

Trainer/s may choose among various methods for participant discussion of cases. Different methods may suit different stages of the workshop or different settings. It is recommended that the trainer/s vary the methods used throughout the modules. Case discussion methods that may be suitable are noted for ease of delivery, however the trainer/s are encouraged to select alternative methods if more appropriate.

Among methods to consider are the following:

- **Pairs of participants discuss the cases, and then each pair shares their thoughts with another pair (this approach can be especially suitable early in the workshop, as it helps ensure that everyone participates).**

- **Small groups discuss the cases, and then members of different groups present their ideas, avoiding repetition of the same points (this approach makes it easier for quieter members to contribute and can help build their confidence before speaking in front of the full group).**

- **Assign groups different cases, the groups write their ideas on flip charts, and then members of other groups circulate and write additional ideas (this can be particularly effective when time is limited and encourages participants to build on each other’s knowledge and ideas).**

- **Post different cases on the wall in different parts of the room, and then participants write their ideas on sticky notes and post them beneath the case (like above and focuses more on individual rather than group reflection).**

- **Have the full group brainstorm about a case (can work well once all participants are comfortable working with each other and sharing their ideas in front of the full group).**
## Module 1: Welcome and introductions

<table>
<thead>
<tr>
<th>Module 1</th>
<th>Welcome and introductions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of module</td>
<td>Approximately 35 minutes to 1 hour 10 minutes</td>
</tr>
<tr>
<td>Module summary</td>
<td>The purpose of this module is to give us a sense of the ‘geography’ of the workshop, but also to agree on how we want to work together and what we want in the learning environment and from each other to feel ready and free to learn.</td>
</tr>
<tr>
<td>Equipment, visual aids and handouts (on the day)</td>
<td>PowerPoint projector, screen and laptop</td>
</tr>
<tr>
<td></td>
<td>Slim ring binder folders for participants</td>
</tr>
<tr>
<td></td>
<td><strong>1-welcome &amp; intro.pptx</strong></td>
</tr>
<tr>
<td></td>
<td><strong>VA1 reflection questions.docx</strong>: one question per A4 paper printed out, attached to wall in full view of participants, for the duration of the workshop (they are also at the back of the participant handbook.</td>
</tr>
<tr>
<td></td>
<td>Prepared by trainer/s in advance: <strong>participant workshop agenda (+ intended learning outcomes)</strong> one agenda per participant and workshop administrator.</td>
</tr>
<tr>
<td></td>
<td>Edited by trainer/s in advance of workshop: <strong>HO1 cases to distribute.doc</strong></td>
</tr>
<tr>
<td>Guidance to facilitating learning activities</td>
<td>Display <strong>1-welcome &amp; intro.pptx-slide 1</strong> as a holding slide while participants enter the room and get settled. Start off with some gentle banter or informal conversation with participants, to create a relaxed, positive and friendly atmosphere.</td>
</tr>
<tr>
<td></td>
<td><strong>Module summary (2-3 mins)</strong></td>
</tr>
<tr>
<td></td>
<td>Verbally present the module summary above to set the scene. It is important that these points are shared with participants from the outset of the workshop.</td>
</tr>
<tr>
<td></td>
<td><strong>Welcome and general introductions (10-20 mins)</strong></td>
</tr>
<tr>
<td></td>
<td>If the workshop is to be ‘opened’ by a senior administrator, politely request that this person keeps their speech to under 10 minutes if possible.</td>
</tr>
<tr>
<td></td>
<td>Display <strong>slide 2</strong> and quickly run through the agenda for the module. Next invite the participants to introduce themselves and say a little about their background and what they hope to gain from the workshop.</td>
</tr>
<tr>
<td></td>
<td>The trainer/s should note their backgrounds, especially as related to the subject matter of the workshop. Try to project a positive attitude, for example by saying that you are looking forward to exchanging views and experiences during the workshop and noting that it is a chance for all present to learn from each other.</td>
</tr>
<tr>
<td></td>
<td><strong>Warm up activity: Three things in common (10-15 mins)</strong></td>
</tr>
<tr>
<td></td>
<td>Ask participants to pair up. The objective is for the pairs to find three of the least obvious/hidden things they have in common, for example two participants might both be parents of twins. Not obvious things like age, sex or hair colour. It must be three uncommon things. At the end, ask participants how they think this activity relates to mentorship, for example the exercise facilitates a deeper mutual understanding of each other, it helps to establish an equal footing at the start of a mentoring relationship, helps the mentor to have a complete view of the mentee rather than simply their work persona etc.</td>
</tr>
<tr>
<td></td>
<td><strong>Housekeeping (3-5 mins)</strong></td>
</tr>
<tr>
<td></td>
<td>Trainer/s cover basic information participants need to know about the venue, facilities, comfort breaks, refreshments, security of belongings and room etc.</td>
</tr>
</tbody>
</table>
### Guidance to facilitating learning activities (continued)

<table>
<thead>
<tr>
<th>Introduction to workshop (5-15 mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display slide 3 if prompts are needed. Explain that this workshop is intended mainly to increase participants’ ability to mentor PhD students and other junior researchers regarding research communication.</td>
</tr>
<tr>
<td>Secondary aims include increasing participants’ overall mentoring skill, knowledge of research communication, confidence in their mentoring abilities, and motivation to mentor.</td>
</tr>
<tr>
<td>Note that the workshop is based on the active learning approach. This means that the modules contain activities that encourage participants to take an active, engaged part in the learning process, such as: group discussions, participatory presentations, cases, problem-solving and role play. This might be a good time to give each participant a copy of the handout HO1 cases to distribute.doc. Stress that participants will need to keep the handout in their folders, as this will be used throughout the workshop.</td>
</tr>
<tr>
<td>Next do a quick run through the participant workshop agenda (prepared by the trainer/s) together with intended learning outcomes. Explain the purpose of the participant handbook.</td>
</tr>
<tr>
<td>Introduce the four reflection questions (VA1 reflection questions.docx) on the wall which participants will be invited to consider at various intervals during the modules and to make notes on at the back of their handbooks. Participants will be invited to share some of these reflections at the end of the workshop.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning contract (5-10 mins)</th>
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</thead>
<tbody>
<tr>
<td>Explain that the following activity is a way of agreeing how participants and trainer/s want to work together, is a way of setting boundaries and ensuring that everyone has a focus and that the group is productive. Display slide 4 (on animated fade setting) with suggested ways of working, that have proved effective in past workshops.</td>
</tr>
<tr>
<td>Ask participants if they have any questions of clarification, before asking them in pairs to briefly discuss any changes/additions they would like to make and why.</td>
</tr>
<tr>
<td>Wrap up in a full group discussion by inviting participants to volunteer any changes/additions they would like to make. Trainer/s can make the appropriate changes to the learning contract slide (remember that these are for the trainer/s as well so make sure points which are important to the trainer/s are not deleted!).</td>
</tr>
</tbody>
</table>
Module 1: Resources

Effective Mentorship in Research Communication

Introduction

• The workshop
  – Intended mainly to help current and future mentors guide PhD students in research communication
  – Develop mentoring skills, confidence and motivation
  – Also serves as an overview of research communication (to use or share)
  – Active learning and case-based

Module 1:
Welcome and introductions

- Welcome and general introductions
- Warm up activity
- Housekeeping
- Introduction to workshop
- Learning contract

Learning contract

• Arrive on time and keep to time
• Attend all sessions
• Cell phones on silent - calls made on breaks
• Respectful challenge
• Actively participate in activities
• Listen when others are speaking
• Be responsible for our own learning
• Respect confidentiality
• Support the learning of others
## Module 2: What is mentoring and what do mentors do?

<table>
<thead>
<tr>
<th>Module 2</th>
<th>What is mentoring and what do mentors do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of module</td>
<td>Approximately 5 to 6 hours</td>
</tr>
<tr>
<td>Module summary</td>
<td>Module one focuses on mentoring practice in the general sense and how to do it effectively. It looks at some of the terminology associated with mentoring, the different styles and approaches that you can adopt, the skills and qualities of an effective mentor and how you can build rapport and trust with your mentees throughout the mentoring relationship. You are encouraged to draw on your own mentoring-related experiences and the lessons gained from them, during discussions.</td>
</tr>
</tbody>
</table>
| Equipment, visual aids and handouts (on the day) | PowerPoint projector, screen and laptop  
Flipchart paper, pens, sticky notes  
9 pieces of flipchart paper taped together to form one large piece of paper  
2-what is mentoring.pptx  
VA2 rapport and trust.docx  
Trainer/s are encouraged to add to this list: VA3 pitfalls mentors.docx  
HO1 cases to distribute.doc  
HO2 self-assessment.docx |
| Guidance to facilitating learning activities | Morning opening (5-10 mins)  
Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself - get the participants talking!  
Remind participants of the learning contract on 2-what is mentoring.pptx-slide 2 (on animation fade setting) if necessary.  
Throughout the module, trainer/s should refer participants to the four reflection questions on the wall and at the back of their handbooks. Trainer/s should encourage participants to makes notes in response to these four questions, at regular intervals (not just at the end of the module or day).  
Module summary (2-3 mins)  
Display slide 3 (on animation fade setting) and verbally present the module summary above to set the scene. It is important that these points are shared with participants from the outset.  
Think-ink-pair-share: What form of mentoring? (15-20 mins)  
Invite participants to read the text in Resource 1 in the participant handbook and ask if they have any questions of clarification around what they have just read.  
Display slide 4 and ask participants individually to take a few minutes to note down some appropriate responses. Invite participants to turn to a partner (or in groups of three) and share their responses.  
Then take this a step further by next asking participants to find someone in the room who arrived at an answer different from their own and convince their partner to change their view. Participants can then share their answers with the full group for a follow-up discussion.  
There is a lot of debate around terminology, with many different definitions of mentoring and coaching out there. Rather than getting too bogged down with the detail, it is recommended that the trainer/s make the following key points, if not already made by participants:  
- Participants may end up adopting elements from both forms of mentoring but are more likely to favour the ‘development mentoring’ approach which develops the mentee’s confidence and skill. |
Coaching and mentoring use the same skills and approach, for example from giving information to focusing more on the learning and development of the mentee but coaching tends to be short term task-based while mentoring tends to be a longer-term relationship.

Note while there are many different definitions of mentoring to choose from, the two definitions on slide 5 will provide a foundation upon which discussion and thinking during this workshop will be based.

Refer participants to Resource 2 in the participant handbook which unpicks the first definition in more detail, allow participants a couple of minutes to read it. The trainer/s might want to ask a couple of follow-up questions to the full group, for example what does a non-judgmental relationship look like within your mentoring context? what is the impact of not having a ‘non-judgmental relationship’ on the mentor and mentee?

Group discussion task: What is your mentoring style? (15-20 mins)

Invite the participants to form groups of three or four and refer them to Resource 3 in the participant handbook. Give them a couple of minutes to read its contents and an opportunity to ask any questions of clarification. Next display slide 6. Ask the groups to discuss the three questions and to select a spokesperson to feed back their main ideas and examples to the full group for discussion.

Brainstorm: Skills and qualities of an effective mentor (10-15 mins)

Ask for a volunteer to draw a life-sized outline of a mentor, using a marker pen, on a very large piece paper (pre-prepared using flipchart paper). Ensure that they draw the features such as mouth, ears, nose, eyes and a wristwatch. Makes sure there is enough space around the body outline to place sticky notes.

Next invite participants, individually or in groups to discuss and write down (one point per sticky note) the different skills and qualities that a mentor should demonstrate to be effective. Encourage participants to go beyond obvious suggestions like friendly, encouraging, patient etc. important as they are!

Invite participants to then place their sticky notes near the appropriate part of the body outline, for example ‘active listener’ would be placed near the ears and ‘uses open questions’ near the mouth etc.

Some of the contributions participants might make include: assertive, uses probing questions, positive thinkers, see themselves as learning, perceptive, gives immediate feedback, realistic, non-judgmental, flexible, seeks feedback, approachable, self-aware, respectful, empathetic, confident, gives time to mentoring, tolerant, challenges and supports, motivated, punctual, genuine interest in people, generous, appreciative of differences and honest.

It is worth the trainer/s noting that none of us are likely to achieve anything like excellence in all of these, but having the ambition to do so counts for a lot. It goes a long way to building rapport and creating trust between the mentor and mentee.

If there is space on the wall, the trainer/s might want to post the outline of an effective mentor on the wall, to act as an aide memoire for the duration of the workshop.

Explain that in the next activity, through examining one example case, we will focus on what we can do to ensure that a new mentoring relationship succeeds.

Case 1: Getting off to a good start (15-20 mins)

First, trainer/s should select their preferred case discussion method for Case 1: Getting off to a good start from the ‘Guidance for trainer/s section’.

One method could be to invite participants in pairs to read through and discuss Case 1 in HO1 cases to distribute.doc and list ways that the mentor and mentee can each help ensure a successful mentoring relationship.
Bring the full group together and elicit suggestions that the pairs have come up with for mentors (making sure that each pair volunteers a new suggestion rather than repeating what has come before). Then do the same for mentees.

Encourage participants to comment and question (respectfully!) each other’s contributions and as trainer/s be sure to provide positive feedback (particularly as this is the first case being discussed).

During the pairs and full group discussion, some participants might discuss their own mentoring-related experiences and lessons gained from them. That’s fine and, in fact, to be encouraged.

Ask participants to add new suggestions to their notes under Case 1 and then invite the full group to compare with some suggestions provided on slides 7 and 8. Check whether participants have any questions of clarification regarding what is on slides 7 and 8, where possible ask another participant in the group to try to answer the question (rather than one of the trainer/s).

Reference Resource 4 a useful checklist and template in the participant handbook which can support a mentor in establishing ways of working with the mentee and in the drafting of a written contract which can frame the mentoring relationship (though not a legal contract!).

Role-play: Rapport and trust (70-80 mins, based on five to six role-plays. N.B. timings will need to be adapted depending on no. of role-plays)

Put participants into groups of three or four (try to ensure that the more confident, or experienced participants in mentoring are spread across the different pairs or groups).

Explain that each group is going to prepare and then role-play, in front of the full group, a short mentoring session between a mentor and mentee. The session will be of five minutes maximum where a mentee has a challenge they need help with.

The trainer/s will give each group a short scenario from VA2 rapport and trust.docx (or the trainer/s might want to give them the option of choosing one). The groups will need to decide what the mentee’s challenge is; this can be any challenge related to work (not personal). The challenge does not have to be related to an aspect of research communication, as this subject is covered in depth in modules four to seven.

Make it clear to participants that the focus of this role-play is not on how well the mentee’s challenge is ‘resolved’ rather on how the mentor is behaving and what impact it is having on the mentee and mentoring relationship.

Explain that groups should not show each other their scenarios, as the full group needs to observe the role plays without any prior knowledge. Give the groups 5-10 minutes to prepare the mini mentoring session. Encourage participants to take their roles seriously and not to simply play for laughs.

Display the first two questions on slide 9, for participants to consider while watching each role-play. Invite each group to conduct their role-play and after each one, run a short full group discussion to elicit the main points (approx. three minutes per role play). Once the groups have completed their role-plays, invite the full group to share their experiences in response to the third bullet point on slide 9 (on animation fade setting).

Explain that in the next activity, through examining one example case, we will focus on how we can provide feedback in a way that will support the learning and development of the mentee.
Guidance to facilitating learning activities (continued)

Case 2: Feedback that facilitates (10-15 mins)
First, trainer/s should select their preferred group discussion method for Case 2 from the ‘Guidance for trainer/s section’.

Due to the previous activity being highly participatory, the trainer/s might want to give participants the option of working individually and/or in pairs for a change of pace.

Invite participants to read through Case 2 in HO1 cases to distribute.doc and to come up with ways that the mentor can provide feedback in a way that will support the learning and positive development of the mentee.

Invite some participants to share their ideas and suggestions for the mentor with the full group, encourage them to comment on and question each other’s contributions.

As trainer/s, be the last to contribute any new additional suggestions (always try to step back and let the participants do the thinking first). However, relevant examples from the trainer/s’ experience or that of other participants can enhance this discussion.

Ask participants to add new suggestions to their notes under Case 2 and then invite the full group to compare with some example suggestions provided on slide 10.

Check whether participants have any questions of clarification regarding what is on slide 10, where possible ask another participant in the group to try to answer the question (rather than one of the trainer/s) Invite participants to critique what is on the slide, for example what are the pros and cons of the ‘criticism sandwich’?

Self-assessment grid: Mentoring behaviours and skills (25-30 mins)
Refer participants to Resource 5, the empty self-assessment grid in the participant handbook. Explain that the participants are a committee of experienced mentors who have been tasked by the university administration to draft a mentoring self-assessment grid. The intention is that the grid will be completed by all staff mentoring, in research communication, across the institution in order that staff can identify their own learning and development needs when it comes to mentoring skills.

Invite participants to form groups of four or five (try to change members of groups around regularly so that participants get to work with different people) and ask the groups to sit in different parts of the room.

Explain that each group needs to discuss and then list the key behaviours and skills (no more than 12) they think an effective mentor should have. Two examples have been provided in the grid already.

Explain that each group will write the criteria on two flipchart papers, in clear writing (as they will be typed up by the trainer/s) and that the other groups will have the opportunity to read each other’s flipcharts and comment. The trainer/s can use the grid in HO2 self-assessment.docx as a template to type up the criteria from the participant groups (by either adding to the existing criteria in the grid or starting afresh).

Once the groups have finished their flipcharts, invite the groups to move around the room and read each other’s contributions. Next ask the full group which criteria were duplicated? ask participants to cross the duplicated criteria off the flipchart. Explain that one of the trainer/s is going to pull all the criteria together and type them up into the self-assessment grid. Participants might want to complete the grid to assess their own mentoring skills or to introduce its use in a mentoring scheme.

Finally distribute HO2 self-assessment.docx to all the participants and explain that these are some suggested criteria, which may introduce new skills or behaviours or miss others identified in the group flipcharts. Allow participants time to read it and ask any questions of clarification.
Guidance to facilitating learning activities (continued)

Short reading task: Questioning and listening in mentoring (10-15 mins)

Invite participants in pairs to briefly discuss what they understand by the terms on slide 11 within the context of being a mentor. Elicit a few suggestions for each term from the full group before inviting participants individually to read Resources 6 and 7 in the participant handbook. Ask whether participants have any questions of clarification or comments they would like to make, before they individually or in pairs complete the task in Resource 7.

The trainer/s might want to note that powerful questions provoke thought. By asking questions the mentor can help the mentee establish more clarity, discover things for themselves often at a more meaningful level, raise self-awareness and stimulate action and change.

Role-play: Using the non-directive approach (75-85 mins, based on five to six role-plays N.B. timings will need to be adapted depending on no. of role-plays)

Invite participants to go back to their original role-play groups of three or four or form new groups of the same sizes if they did not do the earlier role-play activity on how not to build rapport and trust. Depending on the size of each group, explain that there can be one or two mentors, one mentee and one observer to make notes and provide feedback to the mentor/s and mentee at the end of the role-play.

As before, the groups can decide on what challenge the mentee is bringing to the session; it needs to be work-related but not necessarily to do with research communication. The groups have the option of using the same challenge they identified for the previous role-play if they prefer. The groups will role-play their mentoring session at the same time, so they need to be generously spaced around the room.

Explain to the groups that the mentor/s need to adopt a non-directive approach as far as possible, using some of the approaches and questions outlined in Resources 6 and 7 in the participant handbook. The observer is expected to make notes in response to the questions on slide 12 and then feedback to their group for around three minutes. Each group has a maximum of eight minutes for the actual mentoring session.

The point of this activity is for the participants to practice in a supportive and non-intimidating space, where they can feel comfortable with not getting it perfect! Once the observers have given their feedback to the rest of their group, bring the groups back into the full group for a short debrief. The trainer/s can decide what questions to ask. Some examples for discussion might include:

• How did the mentors feel during this session?
• How did the mentees feel during this session and how was it different to the mentee experience in the previous role-play?
• What do you think you might do differently in your mentoring sessions?

Explain that in the next activity, through examining one example case, we will focus on how to end a mentoring relationship when it is the right time.
**Case 25: Ending the mentoring relationship (10-15 mins)**

First, trainer/s should select their preferred group discussion method for Case 25 from the ‘Guidance for trainer/s section’.

Trainer/s could put participants into small groups of three or four to discuss the case and select one participant as spokesperson to take notes and be ready to feed back the main points to the full group.

The trainer/s could form a feedback panel, where the spokespersons form a panel in front of the full group and feed back their main points but in a more relaxed and conversational style.

The trainer/s should make the points below if not already raised during feedback:

- **Maybe ask the participants when is it appropriate to end a mentoring relationship?** For example, when the objectives of the mentoring are met, the mentee is not being challenged enough or is over-reliant on the mentor and reluctant to think for themselves, a mentee or mentor relocates or the relationship just isn’t working for whatever reason.

- Highlight the importance of a review and assessment of how the mentoring impacted on both the mentee and mentor. Display **slides 13 and 14** to support a mini presentation and ask for any additional suggestions from the full group.

- Thinking back to Liz and ending the mentoring relationship with Dr Adams. It is worth the mentor and mentee discussing what next; the relationship may continue but on a different footing for example, on more equal and casual terms or Liz may need a different kind of mentor now and Dr Adams might be able to provide support in finding a new mentor for Liz.

Invite participants to make any notes from the discussions under Case 25 before moving on to the next activity.

**Full group advice clinic: Typical pitfalls and how to avoid them (20-25 mins)**

This concluding activity covers some of the more common pitfalls and problems experienced by mentors.

Ask participants to imagine that they are responsible for a mentoring scheme within their own department. It has come to their attention that some of the mentors are less successful than others and you have heard through the grapevine that some of the mentees are complaining.

Ask participants to go into pairs and give them each one pitfall/problem from **VA3 pitfalls mentors** (there are 10 but the trainer/s are encouraged to add to this list).

Explain that the participants need to stand up and find at least three different pairs so that they can advise each other on how to address their pitfall/problem. Once they have exchanged advice with three different pairs they can sit down. It is recommended that the trainer/s give them a time limit to pick up the pace in case energy is lagging!

With the full group, trainer/s can elicit some of the pitfalls/problems (as many as time and interest permits) and what advice the pairs received from their peers. Some points which may come out for the mentors (in order of the ten pitfalls/problems) include:

- **Be realistic; frequent short meetings (say, 30 minutes) are better than infrequent long ones**

- **It is a development opportunity for the mentor - working just as effectively with people different to them as those like them** (an important life skill in fact!).

- ‘Trust’ in the mentoring relationship is fundamental. Be clear with each other about your contract of confidentiality from the start. When with others (e.g. the supervisor) keep it uppermost in your mind.
Guidance to facilitating learning activities (continued)

- Ensure expectations are discussed at the outset. Review progress.
- Define and agree clear boundaries and responsibilities as part of the contracting process. Think about including the supervisor in the discussion.
- Put yourself in their shoes. What would you need to not feel resentful of the relationship? Ask the supervisor what would help them.
- Discuss how you’ll manage this if it’s a probability. Mentoring by e-mail, telephone, Skype may be an alternative. Too many changes may mean mentoring is just not workable here.
- Be aware of when mentoring is counter-culture. It will feel harder but it is progressive and influencing a change of culture. It just feels slow at times!
- Adopt a ‘small steps–big celebrations’ approach
- Insufficient energy is often as a result of unrealistic expectations

End of day or module reflection (20-30 mins)

Trainer/s can share a summary of the day’s or module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 15 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 2: Resources

Learning contract

- Arrive on time and keep to time
- Attend all sessions
- Cell phones on silent - calls made on breaks
- Respectful challenge
- Actively participate in activities
- Listen when others are speaking
- Be responsible for our own learning
- Respect confidentiality
- Support the learning of others

Module 2:
What is mentoring and what do mentors do?

Definitions of mentoring

“Mentoring is off-line help by one person to another in making significant transitions in knowledge, work and thinking.”

“A mentor is a more experienced individual willing to share knowledge with someone less experienced in a relationship of mutual trust.”

Some suggestions for mentors

- Agree objectives, measurements of success & expectations e.g. ways of working, confidentiality
- Balance flexibility and firmness
- Give mentees room to discover and grow
- Be prepared to learn from the mentee
- Know that no one mentor can provide all
- Be prepared for the relationship to evolve
- What else?

Task:

- What form of mentoring do or will you favour?
- What are the key differences between coaching and mentoring in your view?

Task:

- What do you think is your mentoring style?
- What are the factors that might influence whether you adopt a more or less directive style with a mentee?
- Share one experience where you adopted a non-directive approach in a mentoring or one to one situation and the reasons why.
Some suggestions for mentees
- Agree objectives, measurements of success & expectations e.g. ways of working, confidentiality
- Make the most of meeting time
- Learn from your mentor’s experience
- Be considerate of your mentor
- Be a resource for your mentor
- Be prepared for the relationship to evolve
- Follow up (both short- and long-term)
- What else?

Task:
- In what way is the mentor behaving?
- What effect is the mentor’s behaviour having on the mentee and the mentoring relationship?
- Share any similar experiences you’ve had either as a mentor or mentee. What could have been done differently?

Providing feedback: some suggestions
- Elicit the mentee’s perceptions
- Consider serving a criticism sandwich (praise, then criticism, than praise)
- Express criticisms as perceptions
- Criticize the product, not the person
- Discuss ways to improve
- If feasible, close the feedback loop
- What else?

A mentor should...what do these terms mean to you?
- Raise a mentee’s self-awareness
- Listen for the underlying problem vs. symptoms of the problem
- Avoid leading questions
- Ask questions that help shape the future
- Be present
- Ask permission

Task for the observer:
- What specific questions and approaches is the mentor using which can be associated with the ‘non-directive’ approach to mentoring?
- What effect is the mentor’s behaviour having on the mentee?
- What specific suggestions do you have for the mentor to make the session even more ‘non-directive’?

Ending the mentoring relationship
- How did both parties work together?
- How well were objectives met?
- What did both parties learn?
- What went well (appreciations)
- What could both parties each have done differently (recommendations for change)
- What else?
Assessing the impact

• On the mentee - their productivity, effectiveness, career development etc. How would it have been different if they hadn’t been mentored?
• On the mentor - how has the mentor’s thinking about their approach to their own work changed, esp. about how they go about developing and mentoring others?

End of day or module review

• One thing that you have learned (blue)
• One question that you have, related to what has been covered (lime green)
• One suggestion as to how the training or logistics can be improved (yellow)
### Module 3: Set up and management of a mentoring scheme

<table>
<thead>
<tr>
<th><strong>Module 3</strong></th>
<th>Set up and management of a mentoring scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of module</strong></td>
<td>This module can range from 2 hours 30 minutes to half a day, depending on what stages of the mentoring scheme the trainer/s and participants want to focus on.</td>
</tr>
<tr>
<td><strong>Module summary</strong></td>
<td>This module is primarily for department heads and/or champions who would like to set up and manage a new mentoring scheme within their own department. The module does not take the form of a traditional training, but rather a series of working sessions. Participants will have the opportunity to think through the different stages involved in setting up and managing a mentoring scheme within their own department/s. They can work through the decisions and start to prepare the resources, which are prerequisites for setting up a successful and sustainable mentoring scheme.</td>
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</tbody>
</table>

| **Equipment, visual aids and handouts (on the day)** | PowerPoint projector, screen and laptop  
Flipchart paper, pens  
Put the exit cards up on the wall from the previous day or module (if applicable)  
3-set up scheme.pptx  
Trainer/s are encouraged to add to this list: VA4 pitfalls resp for scheme.docx  
Request participants in advance to bring any draft documents/templates produced that relate to the set up and management of their mentoring scheme, for example adverts for mentors, person specifications, application forms, marketing materials etc. |

| **Guidance to facilitating learning activities** | **Morning review (5-15 mins)**  
Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself – get the participants talking!  
Next stand beside the exit cards on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants.  
Remind participants of the learning contract on slide 2 if necessary.  
**Module summary (2-3 mins)**  
Display slide 3 and verbally present the module summary above to set the scene. It is important that these points are shared with participants from the outset.  
This is an open-ended module so the trainer/s (who will be mainly facilitating rather than training) and participants can decide on what areas they would like to focus on in more depth.  
**Mini-participatory presentation: Mentoring scheme graphic (20-30 mins)**  
A good starting point is for the trainer/s to display slide 4 which provides a simple overview of the key stages involved in the set up and management of a mentoring scheme.  
There is likely to be a smaller group of participants for this module, so trainer/s can hold a full group discussion. Participants and trainer/s will have the opportunity to explore these stages in greater depth later.  
Trainer/s might want to:  
- Ask what do participants understand by each stage and what would fall under each stage, asking for some examples.  
- Reference the earlier activities in module one on what is mentoring when discussing ‘clarity over terminology’ for example will it be sponsorship or developmental mentoring (or a bit of both?), will you promote a non-directive approach within your mentoring scheme? etc. |
Guidance to facilitating learning activities (continued)

- Ask participants what could be the objectives of your mentoring scheme?
- Ask participants to brainstorm the ‘why, how, what, to whom?’ questions under the ‘Communicating the information’ stage.
- Ask participants whether there are any key stages missing in their view. There is a risk that some suggestions might be out of scope so be mindful of this and that a suggestion may be at a detailed level so encourage participants to decide under what stage it might belong.

Full group advice clinic: Typical pitfalls and how to avoid them (20-30 mins)

This activity introduces some of the more common pitfalls and problems experienced by those managing a mentoring scheme within a department or institution.

Ask participants to imagine that they are responsible for a mentoring scheme within their own department. It has come to their attention that some of the mentors are less successful than others and you have heard through the grapevine that some of the mentees are complaining.

Give each participant one or two pitfalls/problems from VA4 pitfalls resp for scheme.docx (there are 13 but the trainer/s are encouraged to add to this list)

Explain that the participants need to stand up and find at least three different people so that they can advise each other on how to address their pitfalls/problems. Once they have exchanged advice with three different people they can sit down.

With the full group trainer/s can elicit some of the pitfalls/problems (as many as time and interest permits) and what advice the participants received from their peers.

Some points which may come out (in order of the 13 pitfalls/problems) include:

- Give potential mentors some information about what it takes to be a mentor and the skills required. Create a culture where learning is encouraged and expected. Provide different ways mentors can choose to learn e.g. refresher training, peer/co-mentoring, support groups etc.
- Give mentors (and mentees) information about the difference between support and challenge; encourage mentors to get feedback from their mentees on how well they get the balance right.
- Emphasize the importance of a non-directive style during mentor’s training. Inform mentors of benefits to them. Explain to mentees why it’s important for them, too (they’ll learn more). Encourage mentors to get feedback from their mentee on how they’re doing.
- Make it clear that what is central to the design and ultimate success of the scheme is that mentoring involves learning on both sides.
- Explain to the mentors/mentees the importance of feedback in the relationship. Provide training; it’s a skill. Establish a review process which gets people talking about ‘how’ they work together and problems such as this can be identified before they become the norm.
- Be aware of when mentoring is counter-culture. It will feel harder but it is progressive and influencing a change of culture. It just feels slow at times!
- Aim for senior management buy-in from the outset. Ask for more support when it’s not there. Sell the benefits that will interest them (e.g. better productivity, greater motivation, more creativity).
- Run events/workshops which give people information about mentoring before they make their decisions.
- Keep rules to a minimum. The more choice you give people, the further they usually go.
Guidance to facilitating learning activities (continued)

- Aim to get influential figures actively involved in the process. Start by working with those who are interested and build from there (early success rather than early failure).

- Ensure a monitoring system is agreed before you begin mentoring. Appoint someone who will take responsibility for it (ideally a mentor).

- Market mentoring as just one of the means of learning and development in your department. It doesn’t suit everyone and it’s not for the elite. If someone doesn’t get on to the mentoring scheme explain the reasons why and make sure you offer something else (e.g. training, resources, peer-learning opportunities).

- Be clear about the behaviours, attitudes and learning & development style you want to move towards in your department and look for people who share the view (they may not be there themselves yet, but they’re working on it).

Working sessions: Decisions and documents for mentoring scheme (timing to be decided in advance)

Now that participants have had an overview of the key stages in the set up and management of a mentoring scheme, as well as some of the potential pitfalls and problems they might experience, they can agree on what areas they would like to work on in greater depth.

This might involve producing a departmental plan for the setting up and management of a mentoring scheme, making new or revising decisions within an existing plan or drafting new or revising existing documents. Refer participants to Resource 9 in the participant handbook for the different elements they may choose to work on. Allow time for participants to read Resource 9 and ask participants for any questions of clarification before they proceed.

The trainer/s can also refer participants to Resource 10 which provides examples of a mentor and mentee application form, an example of some of the documents they might like to draft.

The trainer/s and participants should agree on what decisions to be made and/or outputs participants would like to come out with by the end of the module and how they would like to achieve them within the time available. This may require some prioritization.

End of day or module reflection (20-30 mins)

Trainer/s can share a summary of the day’s or module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 5 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 3: Resources

Module 3:
Set up and management of a mentoring scheme

End of day or module review
- One thing that you have learned (blue)
- One question that you have, related to what has been covered (lime green)
- One suggestion as to how the training or logistics can be improved (yellow)
Module 4: Helping a mentee approach a writing project

<table>
<thead>
<tr>
<th>Module 4</th>
<th>Helping a mentee approach a writing project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of module</td>
<td>Approximately 2 hours to 3 hours 30 minutes</td>
</tr>
<tr>
<td>Module summary</td>
<td>This module is the first of two, exploring challenges to mentees within the research communication context. In this module we will start by looking at two cases which will introduce you to helping a mentee approach a writing project. They look at the types of problems that mentees may commonly encounter and that mentors in turn, on occasion, will need to help mentees address. This module will then go on to refresh your knowledge and bolster your confidence in approaching an actual writing project. You are encouraged to draw on your own (mentoring-related) experiences and the lessons gained from them, during discussions.</td>
</tr>
</tbody>
</table>

| Equipment, visual aids and handouts (on the day) | PowerPoint projector, screen and laptop  
Internet connection  
Put the exit cards up on the wall from the previous day or module (if applicable)  
4-help writing project.pptx  
Video clip on AuthorAID mentoring: www.youtube.com/watch?v=gNlCivj46d8 (4 mins 27 sec)  
HO1 cases to distribute.doc  
HO3 principles ethics.docx |
|---|---|

| Guidance tofacilitating learning activities | Morning review (5-15 mins)  
Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself - get the participants talking!  
Next stand beside the exit cards on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants.  
Remind participants of the learning contract on 4-help writing project.pptx-slide 2 (on animation fade setting) if necessary.  
Throughout the module, trainer/s should refer participants to the four reflection questions on the wall and at the back of their handbooks. Trainer/s should encourage participants to makes notes in response to these four questions, at regular intervals (not just at the end of the module or day).  
Video clip: AuthorAID mentoring (10-15 mins)  
The trainer/s may have already sent the link to participants in advance of the workshop. However, they might choose to play the short YouTube clip again (provided above) to set the scene for the forthcoming modules which focus more heavily on mentoring in research communication (the link is also provided in the participant handbook in Resource 11). It is recommended that the clip is accompanied by one or two questions for participants to discuss as a full group, for example in what ways does the mentor in the clip help authors improve their work? in what other ways do and/or will you help your mentees to improve and communicate their research? The trainer/s might want to write the two questions on a flipchart or whiteboard before playing the clip.  
Module summary (2-3 mins)  
Display slide 3 and verbally present the module summary above to set the scene. It is important that these points are shared with participants from the outset. |
Guidance to facilitating learning activities (continued)

Group work: Mentoring others in their writing (20-30 mins)

This activity can help make the transition between considering mentorship in general, as covered in the previous two modules, to focusing on providing mentorship to others in writing.

Invite participants, in groups of three or four, to come up with their top three pieces of advice for the successful mentoring of others in writing specifically.

Next bring the full group back together, elicit the pieces of advice from each group (making sure that each group volunteers a new suggestion rather than repeating what has come before), while one trainer (or participant) types them up on the blank slide - slide 4 or on a flipchart paper. Some suggestions from the groups might include:

- Emphasize writing as a process, not a product
- Emphasize revision
- Offer examples of writing to use as models
- Share some of your experiences, including challenges you faced
- Sometimes review writing line by line with the author present
- Remember to praise as well as criticize
- Join in celebrating the mentee’s successes

Case 3: The mired mentee and Case 4: Too similar (15-25 mins)

First, trainer/s should select their preferred case discussion method/s for Case 3 and Case 4 from the ‘Guidance for trainer/s section’.

If time permits, encourage participants to share any experiences or examples which are relevant to the topics covered in the cases and the trainer/s can do the same.

One method could be for roughly one half of the participants, in small groups of three or four, to discuss Case 3 and the other half, again in small groups, discuss Case 4 (in HO1 cases to distribute.doc).

Then invite two or three of the groups who discussed Case 3 and then Case 4 to feed back their ideas and suggestions (making sure that only new suggestions are contributed rather than repeating what has come before) to the full group.

Encourage participants in the full group discussion to make additional suggestions or comments, contribute relevant real-life examples/experiences and question (respectfully!) the contributions being made.

A major point to draw out from Case 3 (if not raised already) is that perhaps Zeke is getting bogged down in his writing but is afraid to tell his mentor. To stimulate discussion, the trainer/s could ask the group: how would you approach Zeke about this problem? Note that later in this module there will be advice on avoiding and overcoming such ‘writer’s block’ so there is no need to go into great depth here.

A major point to draw from Case 4 is that Beth has plagiarized. To stimulate discussion, the trainer/s could ask the full group: how would you approach Beth about this problem? Note that later in this module the subject of plagiarism will be covered.

Trainer/s might want to note AuthorAID resources, including blog posts and resource-library materials, on avoiding plagiarism, which can be found on their website (refer participants to Box 1 in the participant handbook).

Invite participants to add new suggestions to their notes under Cases 3 and 4 before moving on to the next case.

Display slide 5 and explain to participants, that for the next part of the module, we will be focusing on approaching a writing project and how best mentors can support mentees on the different elements involved.
Guidance to facilitating learning activities (continued)

Small group discussion task: Establishing the mindset (5-10 mins)
A discussion task is presented on slide 6. Invite participants to discuss the questions (in blue) in pairs and/or groups of three. It is intended to encourage participants to think how mentees can make effective use of constructive criticism of their writing.

Invite some pair and/or small-group members (not all) to share their observations with the full group.

If not raised by participants in the discussion, the trainer/s could highlight the following key points, before moving on to the next topic:

• Remember that the author is writing to communicate, not to impress.
• The mentee needs to realize that those reading their work want them to do well, for example journal editors, peer reviewers, professors etc. The purpose of their constructive criticism is to help the author to succeed.

Paired discussion task: Knowing the ethics (15-25 mins)
Invite participants in pairs to discuss the following question (you may want to write this on a flipchart or whiteboard), while displaying slide 7 at the same time: What do you think are the key dos and don’ts related to each of the principles, that you would want to discuss with a mentee?

Invite some participants (not all) to share their key points with the full group. Keep an eye on the time, as this is a topic which can open up a lot of discussion and is better covered in more depth within the context of a wider research writing course or workshop (reference the AuthorAID Research Writing Toolkit3 as an example).

The trainer/s could hand out some key points related to the six principles at the end of this task (see HO3 principles ethics.docx), so participants can note down any new points which came out of discussions.

Mini presentation: Preparing to write (5-10 mins)
Display slide 8. The trainer/s should note the importance of authors obtaining and following journals’ instructions. If appropriate, the trainer/s might ask what style manuals, if any, participants are familiar with.

If time and internet permits, follow the hyperlinks to one or two of the listed style manuals and briefly show the range of content.

Hot seating activity: Doing the writing (10-20 mins)
Explain to the full group that one of the trainer/s is going to adopt the role of a mentee who is suffering from an initial ‘writer’s block’ and is asking their mentor for advice on a) how to improve the way they organize content before writing and b) how to overcome their writer’s block.

The trainer sits in front of the group, explaining their situation and the type of advice required, then invites the participants (who all take the role of mentor) to give concrete advice directly to the mentee.

The suggestions made by the group could be noted on a flipchart, by the second trainer, and posted on the wall for the duration of the workshop.

Some suggestions for preparing to write might include:

• Making lists of points or outlines
• Drawing concept maps
• Using colour coding
• Writing ideas on cards or sticky notes and moving them around to achieve an effective structure
• Stacking papers in the order the mentee plans to cite them

Some suggestions for trying to overcome a writer’s block might include:

- Scheduling specific times to write for example, the mentee could write down their usual weekly schedule and block out times to write or schedule writing for times of day when they function best.

- Starting with whatever part the mentee might find easiest. The trainer/s might want to share the story of the graduate student who had terrible writer’s block and so began by writing the acknowledgments!

- Not interrupting writing to search for small details.

- Realizing that often in writing there is no ‘one right way’ but rather a series of problems with more than one solution.

Individual reflection: Revising your work (10-15 mins)

One of the trainer/s could tell the story of the guest speaker (a researcher known for submitting excellent journal articles) who, when asked whether they revise their manuscripts before submission, replied: “If I’m lucky, only 10 times”.

Ask participants to individually reflect on their experiences of revising their own work. Then ask each participant to note down one of the most important pieces of learning they have taken away from their experiences, which would be useful to share with a mentee.

One example has already been provided on slide 9 for the trainer/s to present first. In conjunction with the first bullet point, the trainer/s could also mention the possibility of seeking an AuthorAID mentor to help with this task. Refer them to the website link in Box 1 in the participant handbook.

Once the participants have had time to reflect, ask them to share their learning points with the full group (not repeating learning points already shared), while one of the trainer/s or participants types up the contributions on the slide or flipchart paper.

Full group discussion task: Questions to consider in revising (5-10 mins)

The trainer/s can share the example questions in Resource 12 in the participant handbook then ask participants in the full group to volunteer and discuss any additional questions that could be added to the list of questions. Allow some time for the participants to note them down in their handbooks.

End of day or module reflection (20-30 mins)

Trainer/s can share a summary of the day’s or module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 10 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 4: Resources

Module 4:
Helping a mentee approach a writing project

Approaching a writing project:
- Establishing the mindset (attitude)
- Knowing the ethics
- Preparing to write
- Doing the writing
- Revising your work

Establishing the mindset (attitude)
- Receiving suggestions to revise one’s work can be upsetting. However, after reflection, we often realize that at least some of the suggestions are useful
- Think of a time that an editor, peer reviewer, or professor suggested some revisions in your writing
- How did you feel at first? How did you feel later, after you had the opportunity to reflect on the suggestions?
- What conclusions can you draw which would be useful for a prospective mentee?

Preparing to write
- Use published items as models
- Obtain and review instructions
- Perhaps consult a style manual - for example:
  – Scientific Style and Format
  – AMA (American Medical Association) Manual of Style
  – Publication Manual of the American Psychological Association
- While you are gathering content, write down ideas that occur to you.
Revising your work - learning points

• Consider finding an editor to help you
• .....

End of day or module review

• One thing that you have learned (blue)
• One question that you have, related to what has been covered (lime green)
• One suggestion as to how the training or logistics can be improved (yellow)
### Module 5: Mentorship and the publication process

<table>
<thead>
<tr>
<th>Module 5</th>
<th>Mentorship and the publication process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-module A</strong></td>
<td>Choosing a target journal and using its instructions to authors</td>
</tr>
<tr>
<td><strong>Length of sub-module</strong></td>
<td>Approximately 2 to 3 hours</td>
</tr>
<tr>
<td><strong>Sub-module summary</strong></td>
<td>This final module, divided into two sub-modules, still relating to the research communication context, provides an overview of the publication process and is framed in terms of guiding mentees through this process. In the first sub-module we will focus on choosing a target journal and using its instructions to authors. You are encouraged to draw on your own (mentoring-related) experiences and the lessons gained from them, during discussions.</td>
</tr>
<tr>
<td><strong>Equipment, visual aids and handouts (on the day)</strong></td>
<td>PowerPoint projector, screen and laptop</td>
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<td>Internet connection</td>
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<td></td>
<td>Flipchart paper, pens, sticky notes</td>
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<td></td>
<td>2 to 3 flipchart stands (depending on size of group)</td>
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<td></td>
<td>4 or 6 pieces of flipchart paper taped together to form one large piece of paper (or an alternative is to use a large whiteboard)</td>
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<tr>
<td></td>
<td>Put the exit cards up on the wall from the previous day or module (if applicable)</td>
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<tr>
<td></td>
<td><strong>5A-publ_target journal.pptx</strong></td>
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<tr>
<td></td>
<td>Video clip: <a href="http://www.thinkchecksubmit.org">www.thinkchecksubmit.org</a> (1 min 57 sec)</td>
</tr>
<tr>
<td></td>
<td><strong>HO1 cases to distribute.doc</strong></td>
</tr>
<tr>
<td><strong>Guidance to facilitating learning activities</strong></td>
<td>Morning review (5-15 mins)</td>
</tr>
<tr>
<td></td>
<td>Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself - get the participants talking!</td>
</tr>
<tr>
<td></td>
<td>Next stand beside the exit cards on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants.</td>
</tr>
<tr>
<td></td>
<td>Remind participants of the learning contract on <strong>5A-publ_target journal.pptx</strong>.</td>
</tr>
<tr>
<td></td>
<td>Throughout the sub-module, trainer/s should refer participants to the four reflection questions on the wall and at the back of their handbooks.</td>
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<tr>
<td></td>
<td>Trainer/s should encourage participants to make notes in response to these four questions, at regular intervals (not just at the end of the sub-module or day).</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-module summary (2-3 mins)</strong></td>
</tr>
<tr>
<td></td>
<td>Display slide 3 and verbally present the sub-module summary above to set the scene. It is important that these points are shared with participants from the outset.</td>
</tr>
<tr>
<td></td>
<td><strong>Case 5: A variety of venues, Case 6: Too good to be true and Case 7: Instruction on instructions (30-40 mins)</strong></td>
</tr>
<tr>
<td></td>
<td>These three cases address various aspects of choosing a journal and using its instructions to authors. The first case is relatively complex, and the latter two cases are simpler.</td>
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<tr>
<td></td>
<td>First, trainer/s should select their preferred case discussion method/s for Cases 5, 6 and 7 from the ‘Guidance for trainer/s section’.</td>
</tr>
</tbody>
</table>
Guidance to facilitating learning activities (continued)

One method could be to divide participants into groups of three (try to change members of groups around regularly so that participants get to work with different people) to discuss all three cases at once (in the HO1 cases to distribute.doc). Make sure that there is an even number rather than odd number of groups.

Then invite the small groups to sit with another small group (to form a group of six) and share their ideas and suggestions with each other. The trainer/s might want to assign a spokesperson for each group to feed back to the full group.

Then bring the participants back to the full group and each spokesperson to feed back their main suggestions and ideas related to Case 5 only.

Case 5 should stimulate discussion around the advantages and disadvantages of submitting papers to different types of journals. It leads into the next section which looks at factors to consider in choosing a journal.

The trainer/s can simply ask one or two other spokespeople to share their main conclusions having read Cases 6 and 7.

For Case 6, participants should identify the journal as a predatory journal and for Case 7, a major point to emphasize is that the mentee should indeed read carefully and follow the journal’s instructions, even if they are long. Note that the next section will touch on identifying and avoiding predatory journals.

Invite participants to make any notes from the discussions, under Cases 5, 6 and 7 before moving on to the next activity.

Mini-participatory presentation: Identifying a target journal (5-10 mins)

Present slide 4 and then ask the full group why is it advisable to identify a target journal (journal to which to submit a paper) before writing the paper?

Points that should emerge include the following:

• Different journals, even in the same field, have somewhat different audiences; knowing the journal and thus the audience can aid in gearing a paper appropriately.

• Different journals have different requirements, for example regarding manuscript format; knowing the target journal allows one to prepare one’s paper appropriately from the start and thus saves time.

The need to stay somewhat flexible should be noted. For example, sometimes as one writes a paper, it becomes clear that a different journal would be more suitable. And sometimes, of course, the first-choice journal does not accept the paper and so one identifies another journal for submission.

Parallel brainstorming: Factors to consider (10-20 mins)

Divide the full group into two groups (or three groups if there are more than 20 participants)

Explain that the next activity will be slightly competitive in nature. The groups will need to read the scenario on slide 5 and then will be given three minutes (no more, no less) to list as many answers on a piece of flipchart paper (flipchart stands are useful here but this can also be done around a table)

Once the time is up, ask groups to move to another group’s flipchart, which they then check and mark against the factors listed on slides 6 and 7 (though not an exhaustive list) The groups can tick them (or not) off the flipcharts.

There may be one or two additional factors which have not been listed on the slides, so these can be read out loud for the full group to consider and decide whether a valid factor or not.
<table>
<thead>
<tr>
<th>Guidance to facilitating learning activities (continued)</th>
<th>Presentation: Factors to consider (20-25 mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Go through <strong>slides 6-8</strong> with the full group. Some points the trainer/s might want to make (if not discussed already), to accompany the factors listed on <strong>slide 6</strong>:</td>
</tr>
<tr>
<td></td>
<td>• Journals’ websites and instructions often indicate aims and scope. Looking at some issues of the journal can aid in this regard.</td>
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<tr>
<td></td>
<td>• Are articles in the journal openly accessible? i.e. are they freely available to all via the Internet, starting at the time of publication? If not, will they become openly available soon after publication, or are they in a journal that the intended readers regularly receive or can easily obtain?</td>
</tr>
<tr>
<td></td>
<td>• Journals that publish papers very quickly may indicate that it is not a valid journal that provides proper review and editing.</td>
</tr>
<tr>
<td></td>
<td>• Given the time needed, it is realistic to expect somewhere from several months to about a year to elapse between submission and final publication.</td>
</tr>
<tr>
<td></td>
<td>• Some journals publish the dates of submission, acceptance, and publication on papers or indicate typical timeframes in their instructions or elsewhere. It should be noted that some journals post papers online once they are accepted; the papers later appear in issues of the journal.</td>
</tr>
<tr>
<td></td>
<td>• Authors often worry about publication costs. Because open access journals do not receive payment for subscriptions, they typically must charge authors to cover costs. Some other journals also have publication fees.</td>
</tr>
<tr>
<td></td>
<td>• Many journals reduce or waive fees for authors from developing countries; if it is not clear from a journal’s website whether the journal does so, an author can contact the journal office to ask. Also, it should be noted that some funding sources allow grant funds to be used for publication fees; researchers may want to keep this fact in mind when preparing the budgets for grant proposals.</td>
</tr>
<tr>
<td></td>
<td>• Finally, authors should consider likelihood of acceptance. For example, it is unrealistic to submit to Nature or Science, a paper reporting findings of interest only in one’s subspecialty. In general, good advice is to aim high but not impossibly high. If one’s paper is not accepted, one can then revise it and submit it to a less competitive journal.</td>
</tr>
<tr>
<td></td>
<td>Points the trainer/s might want to make (if not discussed already), to accompany the factors listed on <strong>slide 7</strong>:</td>
</tr>
<tr>
<td></td>
<td>• A point to emphasize is that although impact factor is correlated somewhat with the prominence of a journal, it is not the only factor to consider.</td>
</tr>
<tr>
<td></td>
<td>• It may be noted that the impact factor was developed not to indicate quality of journals but rather to show which journals are used most and thus may be most worthwhile for libraries to buy.</td>
</tr>
<tr>
<td></td>
<td>• It should be emphasized that other types of impact (listed in the last bulleted item) can be important to consider.</td>
</tr>
<tr>
<td></td>
<td>Points the trainer/s can make to accompany the resources listed on <strong>slide 8</strong>:</td>
</tr>
<tr>
<td></td>
<td>• Links to both resources are provided. If time and Internet permits, the trainer/s might want to show the resources.</td>
</tr>
<tr>
<td></td>
<td>• Note that article-level metrics can be helpful when, for example, researchers are being considered for promotion.</td>
</tr>
<tr>
<td></td>
<td>• Note that the DORA provides recommendations for improving how research output is evaluated.</td>
</tr>
</tbody>
</table>
Guidance to facilitating learning activities (continued)

**Paired discussion task: Predatory journals (5-10 mins)**
Ask participants in pairs for a couple of minutes only to discuss the following two questions: *what do you understand by the term predatory journals and what are the clues that a journal might be “predatory”?* Invite three or four participants only to share their answers with the full group.

Use slide 9 to reveal the bullet points (on animation fade setting):

- Note that such journals often send researchers emails inviting them to submit papers. Advise participants to evaluate such requests carefully, to determine whether they are from valid journals.
- More information on the topic can be obtained by searching the AuthorAID website, using the search term “predatory journals”.
- Also of interest might be Think. Check. Submit. - there is a short video clip on the homepage (see thinkchecksubmit.org) which you might want to play (it lasts around two minutes). More information on Think. Check. Submit. can be found in **Resource 13** in the participant handbook.

**Mini presentation: Using the journal’s instructions (5-10 mins)**
Display slide 10 and reveal bullet point one (on animation fade setting) then add any additional points verbally then reveal bullet points two to four (together) again adding any additional points after the reveal.

Some points the trainer/s could include to accompany bullet point one:

- Mention that instructions to authors sometimes go under other names, such as information for authors, author guidelines, or submission instructions.
- A lack of instructions on a journal’s website (or inclusion of poorly written instructions on the website) is sometimes a clue that a journal is not of high quality.
- Emphasize that obtaining the journal’s instructions early, and following them from the beginning, can save work later.

Some points the trainer/s could include to accompany bullet points two to four:

- Re-emphasize the value of repeatedly consulting the instructions.
- Suggest underlining or highlighting key points in the instructions.
- Include an anecdote about finding something to correct when checking the instructions, a final time before submitting a paper.
- Note that serious deviations from a journal’s instructions (for example, submitting a longer paper than the journal allows) may result in the journal’s refusal to consider the paper unless it is modified.
- Note that more minor deviations from a journal’s instructions also may make the publication process more difficult for the author and journal and thus delay publication.
- Flag that many submitted papers have significant deviations from the instructions to authors (for example, references in the wrong format).
- Editors sometimes wonder whether some authors even know that the instructions exist. Submitting a paper that follows the instructions can make a good impression from the start.
Brainstorm and grouping: Questions the instructions to authors may answer (15-20 mins)

Tape four or six pieces of flipchart paper together to form one large piece of paper and write the following six headings: article, abstract, figures & tables, references, format and other on the paper with enough space around each heading so that sticky notes can be stuck around each one. An alternative is to use a large whiteboard if available.

Attach the paper to a wall or place it on a table, either way it needs to be visible to the participants. It is a good idea to prepare the paper during the break before.

Invite participants to individually or in pairs write down (clearly) at least two questions (one per sticky note) which they think the instructions to authors may answer related to any of the headings on the flipchart paper. Perhaps provide one example, to start off. This should not take long, so after approximately five minutes, invite participants to stick their questions next to the relevant heading.

The trainer/s can quickly go through the questions with the full group: removing any that are the same, seeking any clarification from the group, inviting participants to challenge or comment on any of the questions they have read and adding any questions the trainer/s think might have been missed (see below).

Some of the questions participants might come up with include:

- What categories of article does the journal publish?
- What is the maximum length of articles?
- What is the maximum length of abstracts?
- Does the journal have a template for articles? If so, how can it be accessed?
- What sections should the article include? What are the guidelines for each?
- What guidelines should be followed regarding writing style?
- How many figures and tables are allowed? What are the requirements for them?
- In what format should references appear? Is there a maximum number of references?
- In what electronic format should the paper be prepared?

End of day or sub-module reflection (20-30 mins)

Trainer/s can share a summary of the day’s or sub-module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or sub-module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 11 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 5A: Resources

Module 5:
Mentorship and the Publication Process

A - Choosing a target journal and using its instructions to authors
B - Publishing a journal article

Scenario:
Your mentee has identified three journals that seem well suited for the paper that they wish to write. Think of as many factors that they should consider in deciding which of the three journals will be their first choice.

Some factors to consider

• Aims and scope (range of content) of journal
• Audience
• Prestige
• Access
• Publication time
• Use of article-based (continuous) publication
• Ability to post supplementary material
• Publication costs, if any
• Likelihood of acceptance

Some factors to consider (cont.)

• Impact
  – Impact Factor (from Science Citation Index - Journal Citation Reports)
    • Indicates how much articles in the journal tend to be cited
    • Does not say how much a given article will be cited
    • Not valid for comparison from field to field
    • Changes over time
  – Other impact—for example, on
    • Practice
    • Policy
    • Teaching
    • Media coverage

Moving beyond impact factor: some resources

• Article-Level Metrics: A SPARC Primer
  – From SPARC (the Scholarly Publishing and Academic Resources Coalition)
  – Discusses indicators of the impact of individual articles (for example, views, downloads, citations, social-media mentions, news coverage)

• San Francisco Declaration on Research Assessment (“DORA”)
Predatory journals

- “Journals” that obtain publication fees but are not valid peer-reviewed scholarly publications
- Some clues that a journal might be predatory (especially if several such items are present):
  - Unrealistically broad scope
  - Unrealistically short stated turnaround times
  - Flashy but poorly crafted, ungrammatical websites
  - Fake metrics
  - Incomplete contact information
- For guidance, see Think Check Submit.

End of day or module review

- One thing that you have learned (blue)
- One question that you have, related to what has been covered (lime green)
- One suggestion as to how the training or logistics can be improved (yellow)

Using the journal’s instructions

1. Obtain the journal’s instructions from its website.
2. Read the instructions to authors before starting to prepare your paper.
3. Consult the instructions while preparing your paper.
4. Check the instructions again before submitting your paper.
| **Module 5** | Mentorship and the publication process |
| **Sub-module B** | Publishing a journal article |
| **Length of sub-module** | Approximately 1 hour and 10 minutes to 1 hour and 40 minutes |
| **Sub-module summary** | In this second sub-module, continuing to provide an overview of the publication process and how to guide mentees through this process, we will now address what happens once a paper is submitted to a journal. You are encouraged to draw on your own (mentoring-related) experiences and the lessons gained from them, during discussions. |
| **Equipment, visual aids and handouts (on the day)** | PowerPoint projector, screen and laptop Internet connection Flipchart paper, pens, sticky notes Put the exit cards up on the wall from the previous day or module (if applicable) 5B-publ_pUBL journal.pptx HO1 cases to distribute.doc |
| **Guidance to facilitating learning activities** | Morning review (5-15 mins) Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself – get the participants talking! Next stand beside the exit cards on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants. Remind participants of the learning contract on 5B-publ_pUBL journal.pptx-slide 2 (on animation fade setting) if necessary. Throughout the sub-module, trainer/s should refer participants to the four reflection questions on the wall and at the back of their handbooks. Trainer/s should encourage participants to makes notes in response to these four questions, at regular intervals (not just at the end of the sub-module or day). Sub-module summary (2-3 mins) Display slide 3 and verbally present the sub-module summary above to set the scene. It is important that these points are shared with participants from the outset. The next three cases in this sub-module address various aspects of publishing an article in a journal. They are relatively simple so discussion time can be kept short and to the point, unless participants have a particular issue to discuss or an experience to share related to the topic. First, trainer/s can select their preferred case discussion method/s for Cases 8, 9 and 10 from the ‘Guidance for trainer/s section’. Case 8: A shortcut or not? (5-10 mins) The trainer/s might want to simply invite participants individually to read Case 8 (in HO1 cases to distribute.doc). Invite participants to volunteer suggestions on how Dr Sloan should proceed, there should be some discussion around avoiding ‘salami science’ as touched upon in the proceeding sub-module when discussing ethics. Invite participants to make any notes from the discussion, under Case 8 before moving on to the presentation. |
Participatory presentation: Submitting the paper (15-30 mins)

Using slides 4-9 the trainer/s can present the key points and ask the questions on the slides to the full group. The questions are in blue and can be asked first before revealing some suggested responses (on animation fade setting).

Refer participants to Resource 14 in the participant handbook for more detail on producing cover letters (slide 5).

The trainer/s might want to note that the initial screening by the journal is done to determine whether the paper should be sent for peer review. If a journal decides not to send a paper for peer review (and thus not to consider it for publication), the author can proceed to submit the paper to another journal (slide 7).

The trainer/s might want to make the following points, when on the subject of peer review (slide 8):

• Some journals invite authors to suggest potential peer reviewers and let authors request that certain individuals not be considered as peer reviewers (for example, because they seem likely to be biased).

• Mentees may well ask mentors for guidance in such regards.

• Proposed reviewers should be individuals who are well qualified to review the research but who do not have conflicts of interest. For example, authors should not propose colleagues at their institution or close friends of theirs.

Case 9: Too great a barrier? (10-15 mins)

The trainer/s might want to invite participants in pairs to read and discuss Case 9 (in HO1 cases to distribute.doc). Invite pairs to volunteer suggestions as to how Dr White should proceed.

Discussion of Case 9 should include at least the following two points:

• When journals accept papers, they normally request some revisions. Authors should not feel discouraged.

• When authors find that a requested revision would introduce an inaccuracy or other major problem, they should propose an alternative revision or explain why the proposed revision is not suitable. Both the author and editor want the paper to be accurate and clear; they should work together to achieve this goal.

Invite participants to make any notes from the discussion, under Case 9 before moving on to the next mini-presentation.

Mini presentation: Revising a paper and answering queries (3-5 mins)

Using slides 10-11 the trainer/s can present the key points and ask the questions on the slides to the full group. The questions are highlighted in blue and can be asked first before revealing some suggested responses (on the animation fade setting).

Case 10: An inconveniently timed absence (10-15 mins)

The trainer/s might want to invite participants individually or in pairs to read and discuss Case 10 (in HO1 cases to distribute.doc). Invite participants to volunteer suggestions as to how Dr Mills should proceed.

In discussing Case 10, it should be noted that Jill could:

• Ask the journal whether the deadline for reviewing the proofs could be extended.

• If the deadline cannot be extended, arrange to have a co-author or other suitable person review the proof (in which case the journal should be informed of this arrangement).

Invite participants to make any notes from the discussion, under Case 10 before moving on to the next mini-presentation.
**Guidance to facilitating learning activities (continued)**

### Mini-participatory presentation: Reviewing proofs (3-5 mins)

Using **slide 12** the trainer/s can present the key points and ask the questions on the slides to the full group. The questions are highlighted in blue and can be asked first before revealing some suggested responses (on animation fade setting).

After presenting the key points, the trainer/s might want to note that a final step is to celebrate the publication of a paper. Mentors should congratulate their mentees on publication of their papers and, if appropriate, to celebrate with them.

### End of day or sub-module reflection (20-30 mins)

Trainer/s can share a summary of the day’s or sub-module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or sub-module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display **slide 13** (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 5B: Resources

Module 5: Mentorship and the Publication Process

A - Choosing a target journal and using its instructions to authors

B - Publishing a journal article

Deciding what (or when) to publish

- Factors to consider: quality of the work, extent of the work, interest to others… What else?
- Suggestions for mentee on what can help them to decide what or when to publish…
  - Seek guidance in this regard from others in your field who are more experienced in publishing journal articles,
  - Present your work orally first. Doing so can help in deciding whether the work is publishable and in shaping the paper.

Submitting the paper

- Electronic submission - now the norm
  - Commonly via an online submission system
  - Sometimes as an email attachment
- Inclusion of a cover letter (conventional or electronic)
- Completion of required forms

Some categories of editors at journals

- Helpful to know because a mentee might interact with each
- What are the main categories and what are they concerned with?
  - Editor-in-chief (and sometimes associate editors etc.) - concerned mainly with content
  - Managing editor(s) - concerned mainly with administration of the journal
  - Manuscript editor(s) - improve the writing and maintain a consistent style

Initial screening by the journal

Screening for what?
- appropriateness of subject matter
- completeness
- compliance with instructions
- overall quality (sometimes)
- importance and breadth of appeal (sometimes)

Peer review

- Evaluation by experts in the field
- What is its purpose?
  - To help the editor decide whether to publish the paper
  - To help the authors improve the paper, whether or not the journal accepts it
The editor’s decision

- Based on the peer reviewers’ advice, the editor’s own evaluation, the amount of space in the journal, other factors

- Options:
  - Accept as is (almost never is it accepted without revision!)
  - Accept if suitably revised
  - Reconsider if revised
  - Reject

Revising a paper

- Revise and resubmit promptly.
- Indicate what revisions were made. How?
  - Include a letter saying what revisions were made. If you received a list of requested revisions, address each in the letter.
  - If requested, show revisions in Track Changes.
- If you disagree with a requested revision, politely explain why in your letter. Try to find a different way to solve the problem that the editor or reviewer identified.

Answering queries

- Queries: questions from the manuscript editor
- What are some potential topics of queries?
  - Inconsistencies
  - Missing information
  - Ambiguities etc.
- Advice: Respond promptly, politely, and completely yet concisely

Reviewing proofs

- Proofs: typeset material to check
- Review the proofs promptly
- What are some of the things to check?
  - Completeness (presence of all components)
  - Accuracy (absence of typographical errors in text and references)
  - Placement of figures and tables
  - Quality of reproduction of figures
- Note: This is not the time to rewrite the paper

End of day or module review

- One thing that you have learned (blue)
- One question that you have, related to what has been covered (lime green)
- One suggestion as to how the training or logistics can be improved (yellow)
**Module 6: Mentorship in preparing scientific papers**

<table>
<thead>
<tr>
<th>Module 6</th>
<th>Mentorship in preparing scientific papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-module A</td>
<td>The structure of a scientific paper</td>
</tr>
<tr>
<td>Length of sub-module</td>
<td>Approximately 1 hour and 10 minutes to 2 hours</td>
</tr>
</tbody>
</table>

**Sub-module summary**

In this next module, divided into two sub-modules, we will focus on mentorship in preparing scientific papers, drilling down to the necessary core research communication skills mentees need to exercise. In this first sub-module we will focus on what the overall structure of a scientific paper looks like, the importance of getting the title of a journal article right and criteria for authorship. You are encouraged to draw on your own (mentoring-related) experiences, and the lessons gained from them, during discussions.

**Equipment, visual aids and handouts (on the day)**

- PowerPoint projector, screen and laptop
- Internet connection
- Flipchart paper, pens, sticky notes
- Put the *exit cards* up on the wall from the previous day or module (if applicable)
- 6A-prep_structure paper.pptx
- HO1 cases to distribute.doc

**Guidance to facilitating learning activities**

**Morning review (5-15 mins)**

Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself – get the participants talking!

Next stand beside the *exit cards* on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants.

Remind participants of the learning contract on 6A-prep_structure paper.pptx-slide 2 (on animation fade setting) if necessary.

Throughout the sub-module, trainer/s should refer participants to the four *reflection questions* on the wall and at the back of their handbooks. Trainer/s should encourage participants to makes notes in response to these four questions, at regular intervals (not just at the end of the sub-module or day).

**Sub-module summary (2-3 mins)**

Display slide 3 and verbally present the sub-module summary above to set the scene. It is important that these points are shared with participants from the outset.

**Mini-participatory presentation: Structure of a scientific paper (10-15 mins)**

Using slides 4-6 the trainer/s can present the key points and ask the questions on the slides to the full group. The questions are highlighted in blue and can be asked first before revealing some suggested responses (on animation fade setting).

The trainer/s might want to spend a couple of minutes asking participants whether a different structure of papers is used for reporting research in their research area for example:

- With the methods section at the end (IRDAM)
- With a combined results and discussion section (IMRADRADRAD...)
- With a conclusions section at the end (IMRADC)
Guidance to facilitating learning activities (continued)

Ask one or two participants in what order they tend to read the sections of a journal article. It is worth emphasizing that the same person may read the sections of different articles in different orders, depending on factors such as how familiar the person is with the topic and what the main type of information the person is seeking from the article.

Ask participants in pairs to discuss briefly the question on slide 6. If the following point doesn’t emerge from the discussion, then make it: a paper should be written such that each part (including each table and figure) is understandable without reading previous parts.

Case 11: Title troubles (5-10 mins)

First, trainer/s can select their preferred case discussion method/s for Case 11 from the ‘Guidance for trainer/s section’.

Case 11 is short and simple and so might best be read individually (in HO1 cases to distribute.doc) and then discussed briefly (this step may not even be necessary) by the full group.

The main point is the definition of a running title. This definition appears in the following mini-presentation.

Invite participants to make any notes from the discussion, under Case 11 before moving on to the next presentation.

Mini-participatory presentation: Title (3-5 mins)

Display slide 7 and ask participants in pairs to briefly discuss the question on the slide in blue (on animation fade setting). Do not reveal the bullet points yet.

Invite participants to share their pieces of advice with the full group before revealing the points of advice (on animation fade setting) on the slide.

The trainer/s might want to emphasize that the title of a journal article is very important, as it can determine whether people access and read the article and note that titles should be straightforward, rather than entertaining, to ensure that they give the correct information about what the article is about and are not confusing.

Case 12: Authorship decision and Case 13 What’s in a name? (5-10 mins)

First, trainer/s can select their preferred group discussion method/s for Cases 12 and 13 from the ‘Guidance for trainer/s section’.

Again, as the cases are short, the trainer/s might want participants to work in pairs, assigning one participant Case 12 and the other participant Case 13 so that they can read them individually at the same time and then share their thoughts and suggestions with each other.

The trainer/s can simply ask the full group what they think is the main point being made in Case 12 i.e. letting someone use a piece of equipment does not qualify one for authorship; this paves the way for the next presentation which addresses criteria for authorship. The author identifier number ORCID mentioned in Case 13 will also be touched upon.

Invite participants to make any notes from the discussions, under Cases 12 and 13 before moving on to the presentation.

Mini-presentation: Authors and authorship (10-15 mins)

Before displaying the first slide, invite participants in pairs to briefly discuss and write down at least two questions they have related to criteria for authorship. Note that they will be expected to share some of their questions to the full group a little later in discussions.

Display slide 8 and go through the points on the slide. The trainer/s may choose to draw on the following points:

- Whether a person qualifies to be an author depends on whether they have made substantial intellectual contributions to the research, not whether they have physically gathered the data.
• Ask participants for some examples of intellectual contributions, for example coming up with the research idea, planning the research, and interpreting the findings.

• Qualifying as an author does not depend on rank. A student or technician who made sufficient intellectual contributions should be listed as an author, and even a department head should not be listed if they have not made sufficient intellectual contributions to the research.

• The International Committee of Medical Journal Editors’ authorship statement, includes authorship criteria. Invite participants to find Resource 15, which lists the four criteria, in their participant handbook and spend a minute or so reading them.

• In addition to listing authors, some journals (especially in medical fields) have a contributor list. The list includes, and states the roles of, all people who contributed to the research, whether or not they meet authorship criteria.

• The trainer/s could ask for some examples from the full group, for example someone who collected data on patients but did not have other roles would not qualify to be an author but would be listed, along as a contributor.

**Mini-presentation: Open Researcher and Contributor ID (ORCID) (3-5 mins)**

Display slide 9 and go through the points on the slide. The trainer/s may choose to draw on the following points:

• Note that ORCID is basically an author identification number that one can use on everything one writes regarding one’s research.

• Note that ORCID can aid especially in distinguishing different researchers who have the same name and making clear that an author is the same person even if the person’s name changes or is presented in a different format (the trainer/s can use some examples to illustrate these points).

• If time and Internet permits it can be worthwhile to show the ORCID website, for which a link is provided, and to have participants register for ORCID if they have not already.

**Q&A session: Criteria for authorship (5-10 mins)**

Before moving on to the next topic, invite participants to share any questions which remain unanswered related to criteria for authorship, following the previous presentation and discussions.

Invite participants to share their questions with the full group and encourage other participants to answer each other’s questions as far as possible. The trainer/s of course may need to step in if there are inaccuracies or if a question is proving a challenge for the participants. There might not be time to cover all the questions, so in this instance the trainer/s can offer to cover the remaining ones, during a later section at the end of the day or start of the next day.

**End of day or sub-module reflection (20-30 mins)**

Trainer/s can share a summary of the day’s or sub-module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or sub-module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 10 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 6A: Resources

Module 6:
Preparing scientific papers (section by section)

A – The structure of a scientific paper
B - Section by section preparation of a scientific paper

Structure of a scientific paper: IMRAD format
What does it stand for?
• Introduction: What was the question?
• Methods: How did you try to answer it?
• Results: What did you find?
• And
• Discussion: What does it mean?

A more complete view
What three sections could sit before IMRD?
• (Title)
• (Authors)
• (Abstract)
• Introduction
• Methods
• Results
• Discussion
• (Acknowledgments)
• (References)
What two sections could sit after IMRD?

Order of reading and writing sections
• People read the sections of different scientific papers in various orders. Why?
• So what are the implications for when writing the different sections of a paper?
• A convenient order in which to write the sections: Methods, Results, Discussion, Introduction

Title
What five pieces of advice would you share with your mentees for writing the title of their paper?
• Fewest possible words that adequately indicate contents of paper
• Important in literature searching
• Should not include extra words, such as “A Study of” or “Observations on”
• Should be specific enough
• Generally should not include abbreviations
• Running title: short version of title - appears at tops of pages

Authors
• Those with important intellectual contributions to the work
• Often listed largely from greatest contributions to least
• Head of research group often is listed last
• In some fields, listed alphabetically
• Important to list one’s name the same way on every paper – why?
• ICMJE Criteria for Authorship
ORCID Connecting Research and Researchers

- Stands for Open Researcher and Contributor ID
- "ORCID provides a persistent digital identifier that distinguishes you from every other researcher"
- ORCID identifiers can aid in tracking authors of papers, grants, etc.
- See www.orcid.org

End of day or module review

- One thing that you have learned (blue)
- One question that you have, related to what has been covered (lime green)
- One suggestion as to how the training or logistics can be improved (yellow)
<table>
<thead>
<tr>
<th>Module 6</th>
<th>Mentorship in preparing scientific papers</th>
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</thead>
<tbody>
<tr>
<td>Sub-module B</td>
<td>Section by section preparation of a scientific paper</td>
</tr>
<tr>
<td>Length of sub-module</td>
<td>Approximately 3 hours to 4 hours and 40 minutes</td>
</tr>
<tr>
<td>Sub-module summary</td>
<td>In this second sub-module, continuing to focus on mentorship in preparing scientific papers, we will now go on to discuss the sections of a paper individually, largely in an order in which it can work well to write them. You are encouraged to draw on your own (mentoring-related) experiences and the lessons gained from them, during discussions.</td>
</tr>
</tbody>
</table>
| Equipment, visual aids and handouts (on the day) | PowerPoint projector, screen and laptop  
Internet connection  
Flipchart paper, pens, sticky notes  
Put the exit cards up on the wall from the previous day or module (if applicable)  
**6B-prep_sections paper.pptx**  
**HO1 cases to distribute.doc**  
Sourced by trainer/s in advance: a non-technical abstract, for use as an example. |
| Guidance to facilitating learning activities | Morning review (5-15 mins)  
Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself – get the participants talking!  
Next stand beside the exit cards on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants.  
Remind participants of the learning contract on 6B-prep_sections .pptx-slide 2 (on animation fade setting) if necessary.  
Throughout the sub-module, trainer/s should refer participants to the four reflection questions on the wall and at the back of their handbooks. Trainer/s should encourage participants to makes notes in response to these four questions, at regular intervals (not just at the end of the sub-module or day).  
Sub-module summary (2-3 mins)  
Display slide 3 and verbally present the sub-module summary above to set the scene. It is important that these points are shared with participants from the outset.  
Case 14: No madness in the methods, Case 15: Being double sure? and Case 16: Nothing to hide (20-30 mins)  
First, trainer/s should select their preferred case discussion method/s for Case 14, 15 and Case 16 from the ‘Guidance for trainer/s section’.  
To encourage some moving about, one method could be to enlarge and then print out Cases 14, 15 and 16 (in **HO1 cases to distribute.doc**) and stick each one on the top of a blank flipchart paper (so there is plenty of room for writing or sticky notes beneath) This preparation should be done in advance and then each of the cases posted to the wall in different parts of the room.  
Participants are then invited to discuss with each other and write their ideas directly onto the flipchart paper (or on sticky notes) under the case.  
Allow some time for the participants to read and share any questions they might have on each other’s contributions and any comments or thoughts they might have raised for them. Encourage participants in the discussion to contribute any relevant real-life examples/ experiences. |
The major point to make sure is brought out in Case 14 is that how detailed a description of a method should be, depends in part on how well known the method is. Further detail in this regard will be provided next.

Case 15 is relatively straightforward and probably deserves just brief discussion. The main point that should emerge is that the text of a paper should not extensively repeat details from tables and figures. Again, this point will be further expanded upon in the next presentation.

The main point to come out of discussion around Case 16 is that noting limitations of a study is indeed appropriate.

Invite participants to add any new suggestions to their notes under Cases 14, 15 and 16 before moving on to the next topic.

**Group mentoring exercise: Methods, results and discussion sections (65-90 mins)**

The recommended method for organizing the groups for this exercise is:

- Organize participants into groups of three (you can be directive here to save time), then the trainer/s allocate each participant in the group with the letter M, R and D. In the instance where is a remaining one or two participants, they can double up on the letter R or D and join another group of three (to make a group of four).

- Ask participants to remember their group of three (or four) and then instruct all the participants allocated the letter M to sit together, with the letter R to sit together and the letter D to sit together. Make sure the groups are sitting in different parts of the room. This will mean there are now three large groups.

- Each of the three groups will be given a task to discuss and prepare.

- Once the task is completed the participants will return to their original groups of three (or four) and carry out some mentoring.

The task for this exercise is as follows:

- Once the participants are in the three large groups (M, R and D) refer them to **Resource 16** in the participant handbook where they will find slides on the Methods, Results and Discussion sections of a paper.

- Invite group M to concentrate on the Methods section task, group R the results section task and group D the Discussion section task.

- Allow each group around 15-20 mins to discuss and prepare the task. Explain to the groups that after this time, they will be asked to return to their original groups of three (or four) and to carry out some mentoring with the other two (or three) members of their group.

- Participants might be nervous about this, so stress that this is just a chance to practice, it doesn’t have to be perfect. Explain that mentors should take a relaxed, conversational approach with the mentees and that it is not a lecture.

**Full group discussion (20-30 mins)**

Some additional points the trainer/s might want to add related to the methods section:

- Methods sections generally must state the manufacturers of equipment and products used in the research.

- Many journals refuse to publish research on humans or animals if it has not been approved by a committee designed to ensure that ethical standards for research conduct are followed.

- If researchers modify a published method, the methods section must state the modification(s).
Some additional points the trainer/s might want to add related to the results section:

- It is the core of the paper “No results, no paper”.
- If the research has clear, focused findings, the results section may be quite short.
- Findings need to be summarized (for example, by providing summary statistics) or to present representative findings rather than all the data in detail.
- It should be part of the story being told about the research, rather than being only a “data dump” and that detailed data sometimes can be presented in online supplements to journal articles or otherwise posted online.
- There are a couple of sources of information on producing tables and figures in Resource 17 in the participant handbook.

Some additional points the trainer/s might want to add related to the discussion section:

- Starting with a summary of the main findings helps orient readers to what will be discussed, particularly for readers who begin by looking at the discussion.
- The discussion should answer the question(s) posed in the introduction (or if hypotheses were posed, whether the findings support the hypotheses). If the answer still is unclear, the discussion should say so.
- A common problem is a mismatch between what the introduction asks and what the discussion answers. An analogy to consider using is that it’s like asking “How was lunch?” and someone answering, “The weather is good today.” The latter might be true, but it’s not what was asked.
- Reference Case 16 re: mentioning the strengths and limitations of the research. Noting major strengths is not immodest; it’s part of showing the validity of the study. Mentioning significant limitations is part of being truthful and generally works better than having others discover the limitations and think the authors did not know of them.
- The discussion should put findings in their broader context and the broader context should have been presented near the beginning of the introduction.
- While the introduction moves from general to specific, the discussion moves from specific (the research being reported) to somewhat more general (related research) to yet more general (broader implications).
- If an article does not have a conclusions section, the last paragraph tends to serve as a conclusion, summarizing what is to be concluded based on the research.

Invite participants to share some of the action points they identified for mentees related to the methods, results and discussion sections. If not raised, it is worth highlighting that mentees could also look:

- At the methods, results and discussion sections of some papers in their target journal (and/or good journals) and use them as models.
- In the results sections, they could note items such as the: length, organization, inclusion of subheads (or not) and number of tables and figures.
- In the discussion sections, they could note items such as the: length, types of content, organization, phrases commonly used, citation of references.

If time remaining, invite participants to revisit Cases 14-16 and to add any additional suggestions/thoughts which have arisen from this exercise.
**Guidance to facilitating learning activities (continued)**

**Case 17: An amorphous introduction, Case 18: A reference request? and Case 19: Aghast at an abstract (15-25 mins)**

First, trainer/s should select their preferred case discussion method/s for Case 17, 18 and 19 from the ‘Guidance for trainer/s section’.

One method could be to divide participants into groups of three or four (try to change members of groups around so that participants get to work with different people) to discuss all three cases at once (in **HO1 cases to distribute.doc**). Then bring the discussion straight back to the full group to elicit the key points.

The point to make sure is brought out in Case 17 is to identify the appropriate content and structure of a discussion section. This will be expanded upon in the following presentation.

Case 18 is fairly straightforward; the main point that should emerge is that padding a reference list in order to increase someone’s citation count is not appropriate.

For Case 19, participants should not only identify the mentee’s proposed action as inappropriate but also identify the appropriate content and organization of an abstract. This will again be expanded upon in one of the following presentations and it may be helpful for trainer/s to show a relatively non-technical abstract as an example.

Invite participants to add suggestions to their notes under Cases 17, 18 and 19 before moving on to the next presentation.

**Mini-participatory presentation: The introduction (10-20 mins)**

Display **slides 4-8** and go through the points and questions to the full group (in blue).

The trainer/s can add some of the following points and questions for participants to consider and/or to share with their mentees:

- Emphasize the importance of making clear by the end of the introduction what the researchers were trying to find out.
- Mention that articles in the social sciences often have relatively long introductions.
- Keeping the audience in mind especially important in reporting interdisciplinary research. The introduction may need to be geared quite differently depending on whether the research is being reported in a journal in one of the fields, a journal in another of the fields, or a journal that spans the fields and perhaps some other fields too.
- Note that in some journals but not others, the main findings are stated at the end of the introduction. Perhaps ask participants what seems to be the norm in that regard in their fields.
- Ask participants what can mentees do to gain a better understanding of what a good introduction section looks like? for example, look at introductions of some papers in their target journal noting the: length, types of content, organization, citation of references and use them as models.

Invite participants to discuss and pull out the main points related to the introduction section that they would want to share with the mentee Ed in **Case 17**. The trainer/s can elicit some of the points for full group discussion, if participants show a strong interest in this topic.
**Guidance to facilitating learning activities (continued)**

**Participatory presentation: References (20-30 mins)**

Display slides 9-11 and go through the points and questions (in blue and on animation fade setting) to the full group.

The trainer/s can add some of the following points and questions for the full group to consider and/or to share with their mentees:

- What do you think are the consequences of a mentee not citing content accurately?
- Often, authors whose work is cited will be the author’s peer reviewers. Inaccurate references to their work will not impress them favorably.
- To identify potential peer reviewers for a paper, journal editors often look at the paper’s reference list.
- Inaccurate references may cause a reviewer to question whether the authors are careful researchers.
- Ask participants what experience they have in using citation management software. Perhaps have one or more participants briefly describe their experience.
- Emphasize that different journals have different formats both for citing references in text and for presenting references in the reference list.
- Note that journals’ instructions to authors almost always say how to cite and list references.
- As an example, note a mentee who cut and pasted references from the reference lists of several articles in different journals, thus ending up with a list with different references in different formats.

Invite participants in threes to discuss what they have just heard and come up with one pertinent question (related to what they have just heard) for the other participants and/or trainer/s.

Give the groups 2-3 mins to agree on what the question should be. One member from each group then asks their question to the full group. Make sure only new questions are asked, rather than a repetition of what has come before. This is an activity to generate energy and wake participants up so keep the pace going.

Before moving on to discuss the abstract, refer participants to Resource 18 in their handbooks which provides some information on the formats that exist for referencing and citations.

**Mini-presentation: The abstract (3-5 mins)**

Display slide 12 and go through the points. The trainer/s can add some of the following points and questions for the full group to consider and share with their mentees:

- Different authors like to draft the abstract at different times. Some like to draft the abstract before the rest of the paper, to help provide focus and direction. Others like to draft the abstract last, once they know what they are summarizing.
- In any case, the abstract should be revised last, to ensure that it is consistent with the rest of the paper.
- Abstracts often appear without the paper (for example in databases), and so they should be understandable on their own. Thus, they should not normally include items such as references and undefined abbreviations.

**End of day or sub-module reflection (20-30 mins)**

Trainer/s can share a summary of the day’s or sub-module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or sub-module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 13 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 6B: Resources

Module 6:
Preparing scientific papers (section by section)

A – The structure of a scientific paper

B - Section by section preparation of a scientific paper

What purpose does the introduction section serve in the writing of a paper?

- To provide background in order to help:
  - readers understand the paper
  - readers appreciate the importance of the research
- To identify the question(s) the research addressed
  - Sometimes stated as a hypothesis or hypotheses

Length of introduction

- Articles in biomedical journals: tend to have short introductions (a few paragraphs or less)
- Articles in some other journals: tend to have long introductions
- How about introductions to articles in your research area?

Gearing introduction to audience

- Papers in relatively general journals: introduction must provide basic background information.
- Papers in specialized journals: introduction can assume that readers have more knowledge about research topic.

Structure of the introduction

- Funnel-shaped, moving from general to specific
- A common structure:
  - Info. on importance of topic
  - Highlights of relevant previous research
  - Identification of unanswered question(s)
  - Approach used to seek the answer(s)
  - (In some cases, the main findings)

When to write the introduction?

- Sometimes wise to write the introduction last
  - “Until you know what you’re introducing, you can’t introduce it”
- Sometimes useful to write it first, to help provide focus
- After writing all the sections of the paper, revise the paper as a whole (typically several times)
What are some functions of references?

• To give credit to others for their work
• To add credibility to the work by showing use of valid information sources
• To help show how the work is related to previous work
• To help readers find further information

Citation management software

• Examples: EndNote, Reference Manager, RefWorks, Zotero
• Allows you to keep a database of references
• In many cases, provides the citations and references in the proper format for your target journal
• Still proofread the citations and references and correct any errors

Advice on references

• Check each reference against original source.
• Make sure that all information in the citation (e.g. author list, article and journal titles, volume, year, pages) is accurate.
• Use articles in the same journal as models.
• Be sure to use the format that your target journal requests.
  – For citations in the text
  – For the reference list

The abstract

• First to be read but last to be revised
• Important: widely read; also gives editors and reviewers their first impression
• The abstract should:
  - include most important points from the paper.
  - include only material in the paper.
  - be organized like the paper.
  - be structured (standardized headings) if appropriate

End of day or module review

• One thing that you have learned (blue)
• One question that you have, related to what has been covered (lime green)
• One suggestion as to how the training or logistics can be improved (yellow)
### Module 7: Communicating scientific research to specialist and non-specialist audiences

<table>
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<tr>
<th>Module 7</th>
<th>Communicating scientific research to specialist and non-specialist audiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-module A</td>
<td>Preparing oral and poster presentations</td>
</tr>
<tr>
<td>Length of sub-module</td>
<td>Approximately 1 hour and 40 minutes to 2 hours and 30 minutes</td>
</tr>
<tr>
<td>Sub-module summary</td>
<td>This module, divided into two sub-modules, provides an overview of communicating scientific research to specialist and non-specialist audiences such as the interested public and the media. In the first sub-module we will focus on how we can guide mentees in preparation of oral and poster presentations. You are encouraged to draw on your own (mentoring-related) experiences and the lessons gained from them, during discussions.</td>
</tr>
</tbody>
</table>

### Equipment, visual aids and handouts (on the day)
- PowerPoint projector, screen and laptop
- Internet connection
- Flipchart paper, pens, sticky notes
- Put the exit cards up on the wall from the previous day or module (if applicable)
- 7A-com_presentation.pptx
- HO1 cases to distribute.doc
- HO4 tips presentations.docx

### Guidance to facilitating learning activities
**Morning review (5-15 mins)**
Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself – get the participants talking!

Next stand beside the exit cards on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants.

Remind participants of the learning contract on 7A-com_presentation.pptx -slide 2 (on animation fade setting) if necessary.

Throughout the sub-module, trainer/s should refer participants to the four reflection questions on the wall and at the back of their handbooks. Trainer/s should encourage participants to makes notes in response to these four questions, at regular intervals (not just at the end of the sub-module or day).

**Sub-module summary (2-3 mins)**
Display slide 3 and verbally present the sub-module summary above to set the scene. It is important that these points are shared with participants from the outset.

**Case 20: Poster perils and Case 21: Speaking of presentations (15-25 mins)**
First, trainer/s should select their preferred case discussion method/s for Case 20 and 21 from the ‘Guidance for trainer/s section’.

These two cases are intended to elicit advice to give mentees on preparing poster and oral presentations.

One method could be to use the cases as a basis for role play in pairs or groups of four (in HO1 cases to distribute.doc). Ask participants to form pairs (one taking the role of mentor for Case 20 and the other mentee and then swapping roles for Case 21) or groups of four (same arrangement as for pairs but with two participants taking on the role of mentor and mentee).

Invite the participants to role play the mentoring session (approx. five mins per case). The trainer/s should encourage the mentors to use a line of questioning which is supportive that can help the mentee to generate their own ideas and conclusions as to how to proceed (a non-directive approach).

Note that the mentees should be writing the key points of advice under the relevant cases, as this will help them in the next activity. There is no need to elicit the key points in the full group.
**Guidance to facilitating learning activities (continued)**

**Mini-presentation: Tips for both oral and poster presentations (5-10 mins)**

Display slide 4 (on animation fade setting) and go through the points with the full group.

The trainer/s can add some of the following points and questions for participants to consider and to share with their mentees:

- It’s important to follow instructions, for example regarding the size of a poster or the length of a presentation. Otherwise, the poster might not be posted or the researcher might not have time to finish their presentation.

- Consider, for example whether the presentation is for specialists in a particular research area or more generally for researchers in the field. Then gear presentation accordingly.

- A presentation cannot be as detailed as a scientific paper. Indeed, it is more like an abstract.

- A positive attitude is contagious and will help interest others in the presentation.

**Checklists: Tips for mentees in preparing oral and poster presentations (40-50 mins)**

Arrange participants into groups of four or five (maximum) around the room and provide each group with flipchart paper and pens (or they can use their own laptops to type their checklists onto directly).

Assign each group a letter O or P so there is roughly an equal number of groups. Refer them to the task on slide 5.

Once the groups have pulled together their checklists, invite participants to read each other’s posted around the room and to draw or type a star next to three tips they think mentees would find most useful.

Trainer/s can ask the following questions to generate a brief discussion: *were there any tips that you did not agree with, why? what were the top three tips the full group felt mentees would find most useful, why? do you have any real-life examples of when you have observed one of these tips not being followed? What was the impact?*

**Handout: Tips for mentees-oral and poster presentations (15-20 mins)**

Trainer/s can distribute HO4 tips presentations.docx for participants to read and to complete the tasks. Invite any questions or comments that the participants might have on what they have just read and then direct them to Resource 19 in their participant handbook for some suggested resources on putting together a poster.

Display the final tip on slide 6 before concluding the sub-module.

**End of day or sub-module reflection (20-30 mins)**

Trainer/s can share a summary of the day’s or sub-module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or sub-module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 7 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 7A: Resources

Module 7:
Communicating scientific research to key audiences

A – Preparing oral and poster presentations
B – Communicating specialized information to the public

Task:
Groups O: Put together a checklist of useful tips for your mentees to help them prepare an oral presentation (think detail!) You have approx. 10 mins

Groups P: Put together a checklist of useful tips for your mentees to help them prepare a poster presentation (think detail!) You have approx. 10 mins

End of day or module review
• One thing that you have learned (blue)
• One question that you have, related to what has been covered (lime green)
• One suggestion as to how the training or logistics can be improved (yellow)

Tips for both oral & poster presentations
1. Start early
2. Obtain and follow any instructions
3. Consider the audience
4. Condense
5. Get feedback from others (including good proofreaders)
6. Revise
7. Rehearse
8. Be positive

A final tip for both oral and poster presentations
Use the experience to enhance your future presentations, publications and research.
<table>
<thead>
<tr>
<th><strong>Module 7</strong></th>
<th>Communicating scientific research to key audiences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-module B</strong></td>
<td>Communicating specialized information to the public</td>
</tr>
<tr>
<td><strong>Length of sub-module</strong></td>
<td>Approximately 1 hour and 45 minutes to 2 hours and 25 minutes</td>
</tr>
<tr>
<td><strong>Sub-module summary</strong></td>
<td>This second sub-module, continues to provide an overview of communicating scientific research, and will focus on how to guide the mentee in communicating specialized information to non-specialist audiences such as the interested public and the media. You are encouraged to draw on your own (mentoring-related) experiences and the lessons gained from them, during discussions.</td>
</tr>
<tr>
<td><strong>Equipment, visual aids and handouts (on the day)</strong></td>
<td>PowerPoint projector, screen and laptop&lt;br&gt;Internet connection&lt;br&gt;Flipchart paper, pens, sticky notes&lt;br&gt;Put the exit cards up on the wall from the previous day or module (if applicable)&lt;br&gt;7B-com_public.pptx&lt;br&gt;Video clip on writing accessibly about science: <a href="https://www.youtube.com/watch?v=-heFxfi6Kbw">www.youtube.com/watch?v=-heFxfi6Kbw</a> (approx. 27 minutes)&lt;br&gt;HO1 cases to distribute.doc</td>
</tr>
<tr>
<td><strong>Guidance to facilitating learning activities</strong></td>
<td><strong>Morning review (5-15 mins)</strong>&lt;br&gt;Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself – get the participants talking!&lt;br&gt;Next stand beside the exit cards on the wall and make some overall comments on the frequent themes. Say that you won’t have time to respond to all the cards but you will be commenting on the key ones. Invite further comments from the participants.&lt;br&gt;Remind participants of the learning contract on 7B-com_public.pptx-slide 2 (on animation fade setting) if necessary.&lt;br&gt;Throughout the sub-module, trainer/s should refer participants to the four reflection questions on the wall and at the back of their handbooks. Trainer/s should encourage participants to makes notes in response to these four questions, at regular intervals (not just at the end of the sub-module or day).&lt;br&gt;<strong>Sub-module summary (2-3 mins)</strong>&lt;br&gt;Display slide 3 and verbally present the session summary above to set the scene. It is important that these points are shared with participants from the outset.&lt;br&gt;<strong>Case 22: At the science café, Case 23: In the media spotlight and Case 24: Writing for the public too (25-35 mins)</strong>&lt;br&gt;First, trainer/s should select their preferred group discussion method/s for Case 22, 23 and 24 from the ‘Guidance for trainer/s section’. Before going on to read the three cases, invite the full group to volunteer some of the reasons for communicating specialized information to the public. Some participant responses might include:&lt;br&gt;• Of interest and usefulness to public&lt;br&gt;• Chance to foster support of a researcher’s field&lt;br&gt;• Chance to attract people to a researcher’s field&lt;br&gt;• Obligation if work is publicly funded</td>
</tr>
</tbody>
</table>
These three cases introduce the topic of communicating with the public about research. The purpose of these cases is for participants to share tips. Also, Case 24 can help encourage mentors to introduce mentees to other people who can serve as resources.

One method could be to divide the participants into groups of three or four and then assign each group one case each (in [HO1 cases to distribute.doc](#)) to discuss and to make notes so they can feed back to the full group. Bring participants back to the full group, where the groups discussing each case, can feed back their tips and ideas in turn.

Invite participants to add any new suggestions to their notes under Cases 22, 23 and 24 before moving on to the presentation.

**Presentation: Tips for presenting specialized information (10-15 mins)**

If necessary, trainer/s can show slides 4-6 during or just after the full group discussion around the three cases. These slides provide basic tips on presenting specialized information to general audiences, both directly and through interviews by reporters. Participants should be encouraged to elaborate on these tips and share their own experiences.

**Video clip: Writing accessibly about science (40-50 mins)**

If time, the trainer/s might want to play the video clip on 'Writing Accessibly about Science' where Dr Barbara Gastel explains techniques on writing to communicate scientific topics to any audience. The link is at the start of the facilitation notes and also in **Resource 20** in the participant handbook and lasts approximately 27 minutes.

It is recommended that the clip is accompanied by one to three reflection questions for participants to discuss as a full group. The trainer/s can decide which questions they might be, considering the specific learning and development needs of the participant group. One example could be *how do you think communicating to the public differs to communicating with a more specialist, academic audience (and/or to policymakers)?* The trainer/s might want to write the questions on a flipchart or whiteboard before playing the clip.

**End of day or sub-module reflection (20-30 mins)**

Trainer/s can share a summary of the day’s or sub-module’s activities and the highlights for them as trainer/s. Then invite participants to share their reflections on the day’s or sub-module’s work and impressions of the workshop.

Finish by asking participants to individually fill out exit cards. Display slide 7 (on animation fade setting) with the instructions. Make sure the colours of the sticky notes or cards correspond with those named on the slide. They can be of any colour, as long as they are of three different colours, and preferably not white.
Module 7B: Resources

Module 7:
Communicating scientific research to key audiences
A – Preparing oral and poster presentations
B – Communicating specialized information to the public

Presenting specialized information to the public
• Analyze the audience
• Use mainly simple, familiar language
• Define unfamiliar terms
• Relate unfamiliar items to familiar ones
• Include people
• Include narrative (tell stories)
• Consider the visual aspect
• Check with the audience

Working with the media
• Find out the reporter’s
  – Background
  – Task
  – Deadline
• If possible, provide some written information
• Present information in a way directly understandable by the public

Working with the media (cont.)
• Consider the visual aspect
• Check the reporter’s understanding
• If there’s a main point you want to make, find a way to make it
• Offer to review a draft for accuracy
• Provide feedback after the item is published, posted, or broadcast

End of day or module review
• One thing that you have learned (blue)
• One question that you have, related to what has been covered (lime green)
• One suggestion as to how the training or logistics can be improved (yellow)
### Module 8: General resources and closing of workshop

<table>
<thead>
<tr>
<th>Module 8</th>
<th>General resources and closing of workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of module</strong></td>
<td>Approximately 1 hour to 1 hour and 30 minutes</td>
</tr>
<tr>
<td><strong>Module summary</strong></td>
<td>The final module is about bringing effective closure to the workshop. It is a time to recap on the highlights of what happened, reinforce learning, exchange recommendations for useful resources, celebrate one another’s efforts and reflect on how we will turn the learning into action in our future mentorship in research communication.</td>
</tr>
</tbody>
</table>
| **Equipment, visual aids and handouts (on the day)** | PowerPoint projector, screen and laptop  
Internet connection  
**8-closing.pptx**  
Prepared by trainer/s in advance: **evaluation form**  
Prepared by workshop administrator in advance: **certificates of completion** |
| **Guidance to facilitating learning activities** | **Morning opening (5-10 mins)**  
Start off with some banter about what you or the participants did the previous evening, for example. Don’t make it about yourself – get the participants talking! As this is the closing module, there will be no review of exit cards nor the usual reminders.  
**Module summary (2-3 mins)**  
Display **8-closing.pptx-slide 2** and verbally present the module summary above to set the scene. It is important that these points are shared with participants from the outset.  
**Resources: Internet review of resources (10-20 mins)**  
Refer participants to the general resources section (**Box 2**) in the participant handbook where there are some suggestions and links to resources that can help mentees with different aspects of research communication.  
If time and internet permits, it can be good to show some of these resources (the trainer/s can copy the links to slides) or give participants time to explore them, themselves using their computers or mobile phones.  
To conclude this section on resources, the trainer/s can ask the participants in the full group to suggest other resources, from their experience, that mentees (and mentors) might want to use to further their learning in research communication.  
**Small group discussion: Review of reflection questions (10-15 mins)**  
Invite participants to form groups of three or four and ask them to discuss what they noted down in response to the four reflection questions at the back of their participant handbooks. Allow groups around five or so minutes to discuss the questions, before bringing the participants back to the full group. Invite participants to share any points, from their discussions, that they are comfortable sharing with the full group.  
**Evaluation (3-5 mins)**  
If relevant, the trainer should have the participants complete a workshop evaluation. |
**Guidance to facilitating learning activities (continued)**

<table>
<thead>
<tr>
<th><strong>Closing circle (20-30 mins)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Invite participants to sit in a circle then ask each participant:</td>
</tr>
<tr>
<td>• to set an achievable challenge for the person sitting to the left of them, that will benefit their mentoring in research communication practice and/or</td>
</tr>
<tr>
<td>• to say one thing, they have appreciated about the person sitting to the right of them</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Closing remarks (3-5 mins)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>If the module/s or workshop is part of a wider series of learning and professional development initiatives, then the trainer/s should note what is upcoming.</td>
</tr>
<tr>
<td>Trainer/s should express the hope that the workshop was helpful and wish participants success in their mentoring practice and otherwise.</td>
</tr>
<tr>
<td>If applicable, offer to be available for future support and perhaps encourage participants to share their learning points and resources from the module/s or workshop with others.</td>
</tr>
</tbody>
</table>

| **Presentation of certificates (10-15 mins)** |
Module 8: Resources

Module 8:
General resources and closing of workshop
- General resources
- Reflection activity
- Workshop evaluation
- Closing circle
- Presentation of certificates
Effective Mentorship in Research Communication
Participant Handbook

This handbook is for you to keep. Please feel free to write anywhere on it.

NB. Please print on A4 paper and insert the handbook into a ring binder folder (so papers can be removed and new ones added using a hole punch)
Module 2 resources

Resource 1: What is mentoring?

The word mentor comes from the Greek myth of the king who asked Mentor, who was older and wiser, to look after his son during the king’s absence. Pure mentoring still has this implication and is how the word is most often used.

In practice, there are two distinctly different forms of mentoring. One is best described as sponsorship mentoring. This means being a career friend, someone who knows the organization, is extremely senior and influential and can act as patron. The implication is that the mentor takes a keen interest in the career of the mentee, passes on useful hints and tips and, when the time comes, may influence promotion decisions on behalf of the mentee. The other form of mentoring is development mentoring. Here, the mentor may or may not be in the same organization, though probably is in the same sector, and may be only a little older or more senior. The aim is different: to develop the mentee’s confidence and skill. Formal mentoring schemes in organizations can be powerful ways of developing the next generation. This depends in practice on investing significant time and money in training the mentors and in running the scheme, conditions that, sadly, often seem to be lacking, with many organizations grossly underestimating the skill and effort needed to make it a success.

In practice, mentoring does have the overtones of implying that the older and wiser person will be passing on advice. Where this is so, mentoring is a different activity from coaching. Where coaching principles apply, mentoring and coaching are synonyms for the same process. In practice mentoring is coming to seem like an older-fashioned word for coaching.

Resource 2: A definition of mentoring

“Mentoring is off-line help by one person to another in making significant transitions in knowledge, work and thinking.” This definition is endorsed by many because of the emphasis it places on mentoring being off-line. In this context it means that the mentor and mentee relationship is non-judgemental.

A line manager’s or supervisor’s relationship with the ‘mentee’, or any relationship where there is direct or indirect responsibility for the mentee’s performance, for example involved in the formal assessment or appraisal of the mentee’s performance, must by its very nature have judgment within it.

Off-line mentoring is non-judgemental and as such makes a fundamental difference to how the mentor and mentee are able to work together. It brings unique qualities and makes the relationship special. When any direct or indirect line responsibility exists between mentor and mentee those special qualities are lost.

You can still apply your learning and the skills you develop during this workshop to other forms of mentoring but in terms of definition, this is the one that this workshop endorses and upon which our work and thinking are based.3

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**Resource 3: Mentoring styles**

The Leadership Continuum Theory is a leadership theory which shows the relationship between the level of freedom that a manager chooses to give to a team, and the level of authority used by the manager. The principles that underlie this theory can equally be applied to different styles of mentoring, as illustrated in the model below.

**Emphasis on directive style**

- Talks
- Puts information in
- Makes suggestions
- “If I were you...”
- “What I notice about you is...”
- “I suggest...”
- Uses skills as expert to direct
- More controlling
- Quite rigid

**Issues**

- Identified by mentor
- Resolutions come from mentor
- Mentor chooses problem-solving process

**Objectives**

- Strongly influenced by mentor

**Emphasis on directive style**

- Listens
- Draws information out
- Asks questions
- “What are your options?”
- “What does this tell you about you?”
- “What ideas have you got?”
- Uses questioning skills to draw out
- Empowering
- Flexible

**Issues**

- Identified by mentee
- Resolutions come from mentee
- Process chosen by the mentee

**Objectives**

- Proposed by mentee and explored together

---

Resource 4: Ways of working checklist and mentoring agreement

Notes:
The next pages provide a checklist for mentors agreeing ways of working with their mentees, which is typically done during the first session, and an example of a written agreement a mentor and mentee could enter into. The objective of the agreement is primarily to provide the mentor and mentee with a record of what they discussed and agreed in relation to how they will work together, the learning contract they agree to follow and their expectations of one another.

It can be helpful to have this in writing and have something to refer back to but agreements don’t have to be in writing. Indeed, some might feel that a written agreement can make it feel too much like a legal contract – and it isn’t!

When writing an agreement, use a style of wording that feels appropriate and reflects the right tone for you. In the absence of any institutional or departmental policy that you may be obliged to follow, it is up to the two parties to decide what’s going to work best for them.

Every agreement will be different; what works for one relationship may not work for another. At the end of the day, the important thing is to adopt an approach and style that works for both the mentee and mentor.
Resource 4 (cont.): A checklist for mentors agreeing ways of working with their mentees

<table>
<thead>
<tr>
<th>Topic</th>
<th>Notes / agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mentee’s objectives</strong> must (be):</td>
<td></td>
</tr>
<tr>
<td>• Clear</td>
<td></td>
</tr>
<tr>
<td>• Measurable; what will success look like?</td>
<td></td>
</tr>
<tr>
<td>• Supports departmental objectives.</td>
<td></td>
</tr>
<tr>
<td><strong>Mentor’s objectives</strong> (secondary to the mentees’)</td>
<td></td>
</tr>
<tr>
<td>• What does the mentor want to learn from being a mentor?</td>
<td></td>
</tr>
<tr>
<td><strong>Confidentiality</strong></td>
<td></td>
</tr>
<tr>
<td>• Our expectations of one another.</td>
<td></td>
</tr>
<tr>
<td><strong>The mentee’s supervisor</strong></td>
<td></td>
</tr>
<tr>
<td>• To what extent does the mentee want to involve their supervisor?</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluating our progress</strong></td>
<td></td>
</tr>
<tr>
<td>• What will we do to ensure we are on track?</td>
<td></td>
</tr>
<tr>
<td><strong>Feedback</strong></td>
<td></td>
</tr>
<tr>
<td>• How? Formal, informal, frequency?</td>
<td></td>
</tr>
<tr>
<td><strong>Note taking during meetings</strong></td>
<td></td>
</tr>
<tr>
<td>• How does this help, may hinder?</td>
<td></td>
</tr>
<tr>
<td>• Extent of note taking really needed</td>
<td></td>
</tr>
<tr>
<td><strong>Venue for meetings</strong></td>
<td></td>
</tr>
<tr>
<td>• Private, uninterrupted</td>
<td></td>
</tr>
<tr>
<td><strong>Frequency of meetings</strong></td>
<td></td>
</tr>
<tr>
<td>Recommendations; not more than one per fortnight, not less than one per two months</td>
<td></td>
</tr>
<tr>
<td><strong>Length of meetings</strong></td>
<td></td>
</tr>
<tr>
<td>Recommendations; min. 40 mins and max. 90 mins</td>
<td></td>
</tr>
<tr>
<td><strong>Contact between meetings?</strong></td>
<td></td>
</tr>
<tr>
<td>• What do we agree is / isn’t appropriate?</td>
<td></td>
</tr>
<tr>
<td><strong>Cancelling meetings</strong></td>
<td></td>
</tr>
<tr>
<td>• Mutual expectations.</td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>Notes / agreement</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Similarities / differences</strong></td>
<td></td>
</tr>
<tr>
<td>• How are we the same / different?</td>
<td></td>
</tr>
<tr>
<td>• How might this help / hinder us?</td>
<td></td>
</tr>
<tr>
<td>• So, we need to look out for..........</td>
<td></td>
</tr>
<tr>
<td><strong>Concerns either of us have</strong></td>
<td></td>
</tr>
<tr>
<td>• .....and how we overcome them.</td>
<td></td>
</tr>
</tbody>
</table>

Add below any topics important to you not previously covered
Resource 4 (cont.): Example mentoring agreement

Mentee
Name: Contact details:
Job title/Department/Faculty:

Mentor
Name: Contact details:
Job title/Department/Faculty:

Goals
Agreed goals for the mentoring relationship:

Mentee’s evidence - what will I be seeing, hearing, feeling that will demonstrate the goal has been achieved?

External evidence - what will others be seeing, hearing, feeling that will demonstrate success?

Agreement
The mentor and mentee agree that:

1. The first meeting is to agree their contract for working together. This may include frequency of meetings, venue, confidentiality, review meetings, how is the mentee’s supervisor involved, if at all.

2. This relationship is predominantly mentee-driven. The mentee will be committed to the process and will fully participate in each session and to commitments they make for actions between sessions. Topics for conversation will primarily be dictated by the mentee. This reflects the spirit of this scheme, which is to give responsibility to individual mentees for their own learning and development.

3. The mentor and mentee will both contribute to an open and honest relationship. If there is anything either feels unhappy about they won’t sit on things but will talk to each other soon.

4. Both will participate in a process of feedback between one another as and when that is agreed to be timely and appropriate.

5. Both agree to be on time for appointments. If either one cannot make an appointment, unless in extreme emergency, they promise to give at least 24 hours’ notice to the other. Both parties promise to respect this relationship and dedicate the time to it that it deserves.
6. Both may choose to discontinue the mentoring prematurely but promise that in such an event they will meet with their mentor/mentee to explain the reason for their decision. Neither will terminate the relationship without first having consulted the scheme supervisor (if applicable).

7. Both agree to refer to the scheme’s supervisor (if applicable) in the event of any relationship issue arising and to seek reconciliation before a decision is made to end the relationship on either side.

8. All the information and communication that passes between mentee and mentor will be confidential to the two of them unless agreed otherwise. It is understood that should either party divulge to the other information that constitutes criminal or other illegal activities going on which may represent a threat to individuals or the organization, in that event either party may divulge that information to an appropriate authority.

9. The mentee may contact the mentor between sessions for short ad hoc conversions but the spirit of this relationship is that their work will predominantly take place within the pre-arranged mentoring sessions.

10. It is agreed that this relationship shall continue for a minimum period of X months. The mentee and mentor agree to meet at least once every X weeks for a minimum period of 1 hour.

Signed by

Mentee

Mentor

Scheme Supervisor (if applicable)
Resource 5: Mentoring self-assessment

<table>
<thead>
<tr>
<th>Mentoring behaviours and skills</th>
<th>This is one of my strengths</th>
<th>I (would) sometimes do this</th>
<th>This is a development need for me</th>
</tr>
</thead>
<tbody>
<tr>
<td>I ask probing, challenging questions which get people thinking for themselves.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get the balance between listening and talking in mentoring sessions right.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Resource 6: Questioning and listening in mentoring

Listen for

- Information, data, history
- Emotions: hopes, wishes, concerns, fears
- What is said, what isn’t said
- Non-verbal cues
- The underlying problem v. symptoms of the problem
- ...Really listen. That means being present; you can’t listen and think of your next question at the same time

Questioning

Open questions

- ‘Tell me (what, when, where, how, who, why) ...’
- Avoid leading questions. Work off their agenda not yours
- ‘What are your options?’ is better than, ‘You could do X, Y or Z. Which do you prefer?’

Challenging questions which promote reflection, honest self-assessment, objectivity

- ‘If you were to change some aspect of your own behaviour that would improve the situation, what would it be?’ (The challenge in the question is, how might you be part of the problem)
- ‘If they were here now listening to this, what do you think they’d say?’ (The challenge here is, put yourself in the other person’s shoes, see it through their eyes)

Work predominantly with the mentee rather than the problem

- See the presenting problem as the learning vehicle. Help the mentee develop their transferable skills, their independence. For example, how they respond to negative feedback, their communication style.

Be conscious of when your questions are actually giving advice

- ‘Wouldn’t it be a good idea if...?’
- ‘Have you tried...?’

Help mentees develop a script and ask questions that help influence the future

- ‘How do you want them to experience you in this meeting or presentation?’ You might follow up with questions like:
  - ‘So, what do you need to say? How do you need to say it?’
  - ‘If, when this is over, you were to look back on how you’ve handled this situation and you felt proud of yourself, what would you be looking at?’
**Keep it manageable**

- ‘It sounds like there are three issues here, A, B and C. Which one do you want to work on first?’

**Keep it practical, test ideas out**

- ‘So, what do you think their reaction would be to you saying or doing this?’
- ‘What’s the risk you run?’

**Assess motivation**

- ‘On a scale of 1-10, how much does this matter to you?’
- ‘What are the risks? What are the benefits? Is it worth it?’

**Working with tangible, specific issues**

- ‘You say they were antagonistic towards you. Give me an example of that and tell me what happened.’
- Ensure that what emerges is clear. If necessary, follow up with questions that confirm what they actually said, what they didn’t say.

**Verifying questions**

Sometimes these questions sound like statements:

- ‘So, you’re going to be more honest with them?’
- ‘So, in the future you’re going to give your team feedback sooner rather than later?’
Resource 7: Powerful mentoring questions

Task: Read through the questions and add two of your own to each set of questions.

- What do you value most in your relationships with others?
- Where do you usually get stuck?
- How do you usually get unstuck?
- How are you about doing what you say you’ll do?
- What do you want from me as your mentor?
- ...
- ...

- What do others value you for?
- What does this tell you about yourself?
- If you came out of this feeling really proud of yourself, what would you have done/done differently/said?
- What are you avoiding?
- ...
- ...

- What might happen?
- What if it doesn’t work?
- What’s your plan B?
- If it were to go wrong, how do you think it would go wrong?
- What’s your best guess?
- ...
- ...

- Do you want some feedback?
- Do you want a different view?
- Can we explore this some more?
- Can we look at alternatives?
- Can I challenge that?
- ...
- ...

- What sense do you make of this?
- How do you see it?
- ...
- ...

- What are the strengths you have that you can draw from?
- What will you need to know that you don’t know now?
- Who can help you?
- ...
- ...
Module 3 resources

Resource 8: Set up and management of a mentoring scheme

Key Stages

- Clarity over terminology
- Objectives
- Evaluation
- Train & develop your mentors
- Get things off the ground
- Find mentors & mentees
- Communicating the information - why, how, what, to whom?
Resource 9: What to consider when setting up and managing a mentoring scheme

**Clarity over terminology**
- What do we mean by mentoring?
- What form and style of mentoring are we promoting?

**Objectives**
Be clear about your objectives for the mentoring scheme:
- Why are we doing this?
- What will success look like?
- If successful, what will be different from now? How will we measure the objectives?
- Relate objectives to those of the department or institution.

**Get things off the ground**
- Start small and keep it simple, pilot the scheme within a single department before rolling out to other departments.
- Establish a clear division of responsibilities for the mentoring scheme (overall and for the different elements).
- Ensure there are physical spaces available for the mentoring sessions to take place.
- Identify the target groups (for both mentees and mentors).
- Secure senior management buy-in and encourage their active involvement from the outset.
- Involve from the start the key people who will influence and/or be affected by the establishment of the new mentoring scheme in particular, supervisors.
- Identify what ongoing support the mentors will need following training and how it will be provided.
- Promote a ‘learning on both sides’ approach.

**Communicating the information – why, how, what, to whom?**
- Posters, leaflets, email, website, adverts, news letters
- What the mentoring is and what it isn’t
- Objectives of the scheme, how they will be measured and evaluated
- Who ‘drives’ the scheme and why
- Benefits/risks/ expectations of mentors and mentees, for example that significant commitment is required by mentors in terms of time and effort
- What information for precluded groups?
- What is the eligibility, the screening process and commitment required?
- Outline of selection criteria (for mentors and mentees)
- Explanation of the ‘learning on both sides’ approach
- What ongoing support and training the mentors will be given
- Practical issues e.g. dates for applications, interviews, when the scheme starts
- Details of the scheme administration team for example who they are, their roles, responsibilities, contact details
See the example application forms in the participant handbook for mentors and mentees (see Resource 10).

**Find mentors & mentees**

- Ask them – what support do they want and in what form?
- Follow-up training
- Recommended reading
- Shadowing, live observation (with all parties’ consent)
- Peer/ co-mentoring and support groups
- Mentee feedback questionnaires
- Self-assessment questionnaires (see HO2 self-assessment and the assessment grid generated by participants in module 2)
- Learning journals (ask mentors, what would make them useful to use?)
- Support from a member of the mentoring scheme administration team
- Keep support processes simple
- Encourage mentors to treat their learning seriously
- Emphasize learning on both sides

**Train & develop your mentors**

- Ongoing evaluation; focus on ongoing improvement (which links with ‘train and develop your mentors)
- Final evaluation; objectives achieved, what have we learnt?
- To get top level support the scheme needs to show benefits to the department and/or institution
- Have the original objectives of the scheme been met?
- What problems, unexpected issues have been identified through evaluation?
- What’s working well, what do we need to change or do differently?
- Methods can include:
  - Interviews - mentors, mentees, supervisors etc.
  - Self-assessment questionnaires
  - Feedback – mentee/ mentor
  - Group reviews
  - Measurement – number of publishable papers, number of conference-presentation abstracts submitted and accepted, increased knowledge of the publication process etc.

**Evaluation**

- Confidentiality:
  - Respect for individual relationships
  - Be aware of the possible need to measure individual performance, mentor/ mentee

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Resource 10: Examples of a mentor and mentee application form

Example mentor application form

Name:

Job title: Department:

Location: Contact details:

Line-manager and contact details:

How did you hear about the mentoring scheme?

What makes you particularly interested in being a mentor?

What do you feel you would bring to a mentoring relationship, your key strengths as a potential mentor and what do you feel you might need to work on? Be as specific as you can.
Have you ever been mentored? If so briefly write about your experience.

How do you feel being a mentor might serve your personal and professional development?

How do you see mentoring developing you beyond being a mentor?

What professional learning and development opportunities have you benefitted from within the last (x) years?
Resource 10 (cont.): Example mentee application form

Example mentor application form

Name:

Job title: Department:

Location: Contact details:

Supervisor and contact details:

How did you hear about the mentoring scheme?

What makes you particularly interested in mentoring being part of your development as opposed to other options, e.g. training or self-study?

What do you see as your development goal, what do you want to work on and why?

How will you know when you have achieved your goal? What will success look like?
How do you see mentoring helping you achieve your goals?

What learning and development opportunities have you benefitted from within the last (x) years?

What do you feel you would bring to a mentoring relationship?

What do you want to learn about yourself as a result of being mentored?
Module 4 resources

Resource 11: Matt Hodgkinson on AuthorAID mentoring

Matt Hodgkinson oversees publication ethics at Hindawi, an Open Access journal publisher, working with a research integrity team. He was previously a Senior Editor at Public Library of Science (PLOS) and BioMed Central (BMC), and he has been an AuthorAID mentor since 2010.

Watch this clip: www.youtube.com/watch?v=qNICij46d8

Reflection points:

• In what ways does the mentor in the clip help authors improve their work?
• In what other ways do and/or will you help your mentees to improve and communicate their research?
Resource 12: Questions to consider in revising a manuscript

Task: what additional questions can you add to this list?

• Does the manuscript contain everything it should/anything it shouldn’t?
• Is all the information accurate?
• Is the content consistent throughout?
• Is everything logically organized and clearly worded?
• Are points stated briefly, simply and directly?
• Are grammar, spelling, punctuation and word use correct throughout?
• Are all figures and tables well designed?
• Does the manuscript comply with the instructions?
Module 5 resources

Resource 13: Finding journals you can trust

‘Think. Check. Submit.’ is a campaign to help researchers identify trusted journals and help researchers stay away from suspicious journals. INASP is one of the organizations behind this campaign. Note that this website does not contain any list of ‘approved’ or ‘suspicious’ journals. It is meant to help you think [www.thinkchecksubmit.org](http://www.thinkchecksubmit.org)

How to target a journal that’s right for your research. This article covers the impact factor and the existence of fake impact factors, the open-access model, predatory journals, etc. [www.scidev.net/global/publishing/practical-guide/target-journal-right-research-communicate-publish.html](http://www.scidev.net/global/publishing/practical-guide/target-journal-right-research-communicate-publish.html)

Note:

Jeffrey Beall’s popular but controversial list of predatory journals suddenly disappeared in January 2017. It seems unlikely that this website will be back online.
Resource 14: Producing cover letters (letters accompanying manuscript submissions)

Some journals require cover letters but others obtain the needed information through, for example, online sets of questions.

In the case of cover letters, they may do some or all of the following:

• Identify the article (by title and authors)
• Note that journal requirements are followed
• State the article category or intended journal section
• Provide context, for example, previous presentation of the work at a conference
• Describe importance
• Explain suitability for the journal
• Recommend reviewers
• Request exclusion of certain potential reviewers

Resources to support mentee authors in producing cover letters can include for example:

• A sample letter
• A set of pointers
• A video
• An editorial
• Some templates
Module 6 resources

Resource 15: International Committee of Medical Journal Editors (ICMJE) criteria for authorship

See www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html

The ICMJE recommends that authorship be based on the following four criteria:

• Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND

• Drafting the work or revising it critically for important intellectual content; AND

• Final approval of the version to be published; AND

• Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.
Resource 16: The methods, results and discussions sections of a scientific paper

Methods section instructions for Group M:
You are Dr Stone, mentoring two or three PhD researchers. You have noticed that the methods sections in their papers are not yet up to standard. You believe they would benefit from mentoring in what a good methods section looks like.

In your group, prepare an eight-minute session to conduct with the mentees based on the four slides below. The use of slides is not required. Adopt an engaging and non-directive approach to discuss content (not simply presenting like a lecture) and at least one action point the mentees can implement to understand better what a strong methods section looks like.

Slide 1

**Purposes of the methods section**
- To allow others to replicate what you did
  - In order to test it
  - In order to do further research
- To allow others to evaluate what you did
  - To determine whether the conclusions seem valid
  - To determine whether the findings seem applicable to other situations

Slide 2

**Methods: Basic information to include**
- In most cases, overview of study design
- Identification of (if applicable)
  - Equipment, reagents, organisms, etc. used (and sources thereof)
  - Approval of human or animal research by an appropriate committee
  - Statistical methods

Slide 3

**Methods: Amount of detail to use**
- For well-known methods: name of method, citation of reference
- For methods previously described but not well known: brief description of method, citation of reference
- For methods that you yourself devise: relatively detailed description

Slide 4

**Methods: The words and more**
- Should be written in past tense
- In some journals, may include subheads
- May include tables and figures-for example:
  - Flowcharts
  - Diagrams of apparatus
  - Tables of experimental conditions
Results section instructions for Group R:

You are Dr Wells, mentoring two or three PhD researchers. You have noticed that the results sections in their papers are not yet up to standard. You believe they would benefit from mentoring in what a good results section looks like.

In your group, prepare an eight-minute session to conduct with the mentees based on the five slides below. The use of slides is not required. Adopt an engaging and non-directive approach to discuss content (not simply presenting like a lecture) and at least one action point the mentees can implement to understand better what a strong results section looks like.

Slide 1

The results section

• Core of the paper—verb tense for section: past
• Often includes tables, figures, or both
• Summarize findings rather than providing data in great detail
• Present results but not commenting on them (former is for the discussion)
• Note: some journals, however, combine the results and the discussion

Slide 2

Results sections with tables or figures

• How much should the information in the text overlap with that in the tables and figures?
  – Not extensive overlap
  – In general, text should present only the main points from the tables and figures
  – Perhaps also include a few of the most important data
• Remember to mention each table or figure. Do so as soon as readers might want to see it.

Slide 3

Tables and figures: Some writing advice

• In citing tables and figures, emphasize the finding, not the table or figure.
  – Not so good: Table 3 shows that researchers who attended the workshop published twice as many papers per year.
  – Better: Researchers who attended the workshop published twice as many papers per year (Table 3).

Slide 4

Tables: Some guidance

• Use tables only if text will not suffice.
• Design tables to be understandable without the text.
• Organize each table in a logical way.
• If a paper includes a series of tables, use the same format for each.
• Be sure to follow the instructions to authors.

Slide 5

Figures: Some guidance

• Use figures (graphs, diagrams, maps, photographs, etc.) only if they will help convey your information.
• Avoid including too much information in one figure.
• Make sure any lettering will be large enough once published.
• Follow the journal’s instructions.
Discussion section instructions for Group D:

You are Dr Hill mentoring two or three PhD researchers. You have noticed that the discussion sections in their papers are not yet up to standard. You believe they would benefit from mentoring in what a good discussion section looks like.

In your group, prepare an eight-minute session to conduct with the mentees based on the five slides below. The use of slides is not required. Adopt an engaging and non-directive approach to discuss content (not simply presenting like a lecture) and at least one action point the mentees can implement to understand better what a strong discussion section looks like.

---

**Slide 1**

The discussion section

- One of the more difficult parts to write, because have more choice of what to say
- Often should begin with a brief summary of the main findings
- Should answer the question(s) stated in the introduction (or address the hypothesis or hypotheses stated in the introduction)

**Slide 2**

The discussion: Some possible content

- Strengths of the study
  - For example, superior methods, extensive data
- Limitations of the study
  - For example: small sample size, short follow-up, incomplete data, possible sources of bias, problems with experimental procedures
  - Better to mention limitations than for peer reviewers and readers to think that you’re unaware of them
  - If the limitations seem unlikely to affect the conclusions, can explain why

**Slide 3**

The discussion: Possible content (cont.)

- Relationship to findings of other previous research, for example:
  - Similarities to previous findings (your own, others’, or both)
  - Differences from previous findings
  - Possible reasons for similarities and differences

**Slide 4**

The discussion: Possible content (cont.)

- Applications and implications, for example:
  - Possible uses of the findings (in industry, environmental policy, health care, etc.)
  - Relationship of the findings to theories or models:
    - Do the findings support them?
    - Do they refute them?
    - Do they suggest modifications?

**Slide 5**

The discussion: Possible content (cont.)

- Other research needed, for example:
  - To address questions still unanswered (only if relevant) or new questions raised by the findings
- Typically section should move from specific to general, rather like an inverted funnel (opposite of introduction)
- In some journals, may be followed by a conclusions section
- In some short papers, is called “Comment” rather than “Discussion”
Resource 17: Further information on preparing tables and figures

“Almost Everything You Wanted to Know About Making Tables and Figures,” Department of Biology, Bates College (abacus.bates.edu/~ganderso/biology/resources/writing/HTWtablefigs.html)

Writing and Publishing Scientific Papers, Part 2 (from China Medical Board course), at www.authoraid.info/en/resources/details/1065
Different journals have different formats both for citing references in text and for presenting references in the reference list. In addition, different fields of research sometimes have different conventions (traditions) in this regard.

Various formats exist for citation in text, for example:
• Accuracy of references is important (Gastel and Day, 2016).
• Accuracy of references is important.¹

Various formats exist for items in reference lists, for example:

Be sure to use the format that your target journal requests:
• For the citations in the text
• For the reference list

These are examples of ambiguous citations:
• This compound has been found in humans, dogs, rabbits, and squirrels (Tuda and Gastel, 1997; Xie and Lozano, 2008; Flores, 2002).
• This compound has been found in humans, dogs, rabbits, and squirrels.¹⁴⁷

These are examples of clear citations:
• This compound has been found in humans (Tuda and Gastel, 1997), dogs (Xie and Lozano, 2008), and rabbits and squirrels (Flores, 2002).
• This compound has been found in humans,¹ dogs,⁴ rabbits,⁷ and squirrels.⁷
Module 7 resources

Resource 19: Resources to help in developing posters

“Designing Scientific Posters” by Colin Purrington posted at colinpurrington.com/tips/academic/posterdesign

“Better Posters: A Resource for Improving Poster Presentations” blog at betterposters.blogspot.com

Resource 20: Writing accessibly about science

Dr Barbara Gastel explains techniques for writing to communicate scientific topics to any audience.
The video lasts approximately 27 minutes.

Watch this clip: Presentation on Writing Accessibly about Science
General resources to help mentees with research communication

BOX 1: AUTHORAID
Visit the website: www.authoraid.info

AuthorAID is an INASP project to help authors in low- and medium-income countries to publish and communicate their work.

AuthorAID offers:
- A free resource library
- An online mentoring and collaboration scheme
- Discussion, funding and collaboration forums
- Regular news
- Expert blogs written by AuthorAID mentors (on subjects such as plagiarism, dealing with peer review, communicating research to policymakers and the public, best sources of information about scholarly, peer-reviewed journals etc.).
- Links to some of the expert blogs are provided here:
  - How to avoid plagiarism
  - How to avoid predatory journals (part 1) and How to avoid predatory journals (part 2)
  - Dealing with peer review
  - Peer review: What to remember when reading reviewers’ critiques
  - Tips on communicating research to policymakers and the public
  - The best sources of information about scholarly, peer-reviewed journals
- Free online courses in research and proposal writing
BOX 2: GENERAL RESOURCES

On Being a Scientist: A Guide to Responsible Conduct in Research
www.nap.edu/catalog.php?record_id=12192
- A book on ethics in research and publication
- From the US National Academies
- Available online
- Intended mainly for early-career researchers
- Relevant to scholars other than scientists

Doing Global Science, A Guide to Responsible Conduct in the Global Research Enterprise (InterAcademy Partnership)
This introductory guide explains the values that should inform the responsible conduct of scientific research in today’s global setting. Featuring discussions and real-world scenarios, Doing Global Science covers proper conduct, fraud and bias, the researcher’s responsibilities to society, communication with the public, and more.

The book places special emphasis on the international and highly networked environment in which modern research is done, presenting science as an enterprise that is being transformed by globalization, interdisciplinary research projects, team science, and information technologies.

Grammar Girl
www.quickanddirtytips.com/grammar-girl
Grammar Girl provides short, friendly tips to improve writing. Covering the grammar rules and word choice guidelines that can confound even the best of writers. Grammar Girl tries to make complex grammar questions simple with memory tricks to help you recall and apply grammar rules. Mignon Fogarty is the creator and host of Grammar Girl.

OneLook Dictionary Search
www.onelook.com
This website is basically a search engine for words and phrases. It can define and find words.

Academic Phrasebank
www.phrasebank.manchester.ac.uk
The Academic Phrasebank is a general resource for academic writers. It aims to provide examples of some of the phraseological ‘nuts and bolts’ of writing organized according to the main sections of a research paper or dissertation. The resource should be particularly useful for writers who need to report their research work and is designed primarily for academic and scientific writers who are non-native speakers of English. This site was created by John Morley.
Reflection questions

1. What do I bring to the mentoring role that I think helps or will help potential mentees?

2. Based on self-awareness of my style and way of working with others as well as subject knowledge, what do I need to work on, in order to improve my effectiveness as a mentor in research communication?

3. How do I see being a mentor helping me in my professional and personal development?

4. What concerns do I have about this role?
Handouts
**Case 1: Getting off to a good start**

Ann is a new PhD student, and young faculty member Dr Mary Brown will be her mentor. Ann and Dr Brown look forward to the mentoring relationship and are eager to make it work well. However, in the past each has had some not-so-good experiences related to mentoring. What can Ann, the mentee and Dr Brown - the mentor, each do to help ensure that this new mentoring relationship succeeds? Make notes in the columns below.

<table>
<thead>
<tr>
<th>Mentor</th>
<th>Mentee</th>
</tr>
</thead>
</table>

**Case 2: Feedback that facilitates**

Looking back to her own years as a PhD student, Dr Mary Brown recalls receiving feedback on her writing from her mentor, Dr Priscilla Potts. Dr Potts often made brilliant changes in Mary’s writing. But after receiving the feedback, Mary would feel so demoralized that she could hardly write for the next week. Now that she is a mentor herself, she feels determined to provide feedback in a more supportive way. What would you recommend to the new mentor, Dr Brown? Make notes in the space below.
Case 3: The mired mentee

Zeke, a PhD student, finished some research a month ago and is writing a paper about it. He is to meet weekly with his mentor, Dr Kevin Yates, to discuss his progress. However, 3 weeks ago he missed the appointment because he had a cold, last week he missed it because he was behind on grading, and this week he missed it in order to pick up his child at school. Dr Yates wonders what is happening and what he could do to help. What do you think? Make notes in the space below.

Case 4: Too similar

Beth, a PhD student, has drafted a paper and given it to her mentor, Dr Robert Jones, for review. Reading the discussion section, Dr Jones notices a paragraph that seems strangely familiar. On checking, he finds that, except for a word or two per sentence, the paragraph is the same as one in a paper that he has published. How do you suggest that the mentor Dr Jones proceed? Make notes in the space below.
Case 5: A variety of venues

Craig, a PhD student, has completed an epidemiologic study in his home region. When he presents it at a department seminar, the attendees urge him to submit a paper. A classmate suggests sending it to Science or Nature. The associate editor of the university journal encourages Craig to submit it there, noting likelihood of publication in the next issue. Someone else says to obtain a list of journal impact factors and decide accordingly. Craig seeks advice on the matter from his mentor, Dr Linda Moore. How do you suggest that Dr Moore the mentor proceeds? Make notes in the space below.

Case 6: Too good to be true

After her paper is rejected by a top journal, Liz, a PhD student, is trying to decide where to submit it next. She receives email from a journal seeking submissions. According to the email, this open-access journal (The Consolidated Journal of Sciences and Humanities) has a publication fee of only $99, completes peer review within 2 weeks, and then posts accepted papers within 1 week. When Liz looks at the journal’s website, she notes that the editorial board contains many famous scientists, including Marie Curie and Jonas Salk. Liz excitedly tells her mentor, Dr Arthur Adams, about this journal. How should Dr Adams the mentor proceed? Make notes in the space below.
Case 7: Instructions on instructions

Don, a PhD student, wants to submit a paper to a journal published by a prestigious society in his field. On looking at the instructions to authors from the journal, he is surprised to find that they are almost 20 pages long. “No one would pay attention to such long instructions,” Don says to his advisor, Dr Peter Clark. “I’m sure the copy editors at the journal will correct any problems once my paper is accepted.” How should the mentor, Dr Clark proceed? Make notes in the space below.

Case 8: A shortcut or not?

June, a PhD student eager to graduate, obtains two interesting results from a study. When she next meets with her mentor, Dr Lucy Sloan, June says she would like to write a paper about one of the results and another paper about the other, thus completing the two-paper requirement for graduation. How should the mentor, Dr Sloan proceed? Make notes in the space below.
**Case 9: Too great a barrier?**

Fred, a PhD student, submits a paper to a good peer-reviewed journal. When the paper is accepted contingent on revision, Fred feels discouraged. However, his mentor, Dr Susan White, explains that revisions usually are required, and Fred starts working on the revisions. Fred finds that in general the proposed revisions improve the paper or at least do not harm it. However, he finds that one of the proposed revisions would introduce a major inaccuracy. Alarmed, Fred tells Dr White that he wants to withdraw the paper and submit it to another journal. How should the mentor, Dr White proceed? Make notes in the space below.

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**Case 10: An inconveniently timed absence**

Jill, a PhD student, is first author of a paper that has been accepted by a journal. Jill receives from the journal an email message stating that she will receive page proofs electronically next Wednesday and then will have 48 hours to review them and inform the journal of any errors. However, Jill has long been scheduled to do field work all next week in a region without internet access. Jill asks her mentor, Dr Rita Mills, what she should do. How should the mentor Dr Mills proceed? Make notes in the space below.
Case 11: Title troubles

Meg, a PhD student, is about to submit a paper to a journal. On rereading the instructions to authors, she notices that she must submit a running title. Puzzled, Meg calls her mentor, Dr Pam Woods, for advice. How should the mentor Dr Woods proceed? Make notes in the space below.

Case 12: An authorship decision

Mike, a PhD student, is about to submit a paper about some of his research. Department member Dr Ronald Tracy allowed Mike to use some equipment in his lab in the research, and he now asks to be listed as an author. Mike approaches his mentor, Dr Ellen Curtis, for advice. How should the mentor, Dr Curtis proceed? Make notes in the space below.
Case 13: What's in a name?
Sarah Smith, a PhD student, is writing a paper. She worries that she will be confused with some other researchers with the same name, including one in a closely related field. During a meeting with her mentor, Dr Hildegarde Lukaszewski-Benedetti, she expresses this concern. How should the mentor, Dr Hildegarde Lukaszewski-Benedetti proceed? Make notes in the space below.

Case 14: No madness in the methods
Tess, a PhD student, is writing a paper on some research that used a variety of methods. Some methods that she used are very well known in her discipline. Some others are not well known, but have been described in detail in the literature; and one method was newly developed by Tess herself. Tess asks her mentor, Dr Sally Stone, how detailed her methods section should be. How should the mentor, Dr Stone proceed? Make notes in the space below.
Case 15: Being doubly sure?
Dr Willard Wells, a mentor and highly respected clinician, is preparing a paper on a series of noteworthy clinical cases. He shares a draft with his mentee, Ruth, and points out proudly that extensive data on each patient appears in both the text and an accompanying table. “You just can’t be too thorough” he says. Ruth isn’t so sure, though, about repeating so much information. How should the mentee Ruth proceed? Make notes in the space below.

Case 16: Nothing to hide
Jane, a PhD student, has drafted the discussion section of a paper. Her mentor, Dr Laura Hill, says the draft is good overall but advises Jane to add a section on strengths and limitations of the research. Jane respectfully expresses concern that noting strengths would seem immodest and that calling attention to limitations would increase the likelihood of the paper’s being rejected. How should the mentor, Dr Hill proceed? Make notes in the space below.
Case 17: An amorphous introduction
Ed, a PhD student, proudly shows his mentor, Dr Rachel Reed, the introduction he has drafted for his paper. Dr Reed perceives that this introduction includes some good content but that it is at least twice the appropriate length for the target journal and that it has no discernible structure. How should the mentor, Dr Reed proceed? Make notes in the space below.

Case 18: A reference request
Gail is a PhD student, and Dr Clifford Miller is her mentor. Dr Herman Nelson, another faculty member, has a lab down the hall, and does related research. Dr Nelson hears that Gail is writing some papers and asks her to cite a few of his articles as references, so he will have a higher citation count when considered for promotion. Gail doesn’t think the references are very relevant, and she wonders whether she should discuss the situation with her mentor. What would you advise? Make notes in the space below.
Case 19: Aghast at an abstract

Ken, a PhD student, is about to submit a paper to a journal but obtains an additional result from his study. “It’s too much trouble to rewrite the paper” Ken says to his mentor, Dr Betty Logan. “I’ll just add the new result to the abstract.” How should the mentor, Dr Logan proceed? Make notes in the space below.

Case 20: Poster perils

Vince, a PhD student, has submitted an abstract for a poster presentation, and it has been accepted. “I’m really busy finishing my dissertation,” Vince tells his mentor, Dr Richard Lee, “but there’s not much to a poster. I’m sure I can do mine the day before the conference.” What should Dr Lee say to Vince? What main guidance about poster presentations might he provide? Make notes in the space below.
Case 21: Speaking of presentations

Hong, a PhD student, has submitted an abstract for an oral presentation at a conference, and it has been accepted. She admits to her mentor that she worries about presenting, as her native language is not English. Her mentor, Dr Lupita Hernandez, reassures her, noting that she herself is a non-native speaker and has given many successful talks at conferences. Dr Hernandez says she will give Hong some general advice on presenting at conferences and some advice especially for non-native speakers of English. What main points should Dr Hernandez include? Make notes in the space below.

Case 22: At the science café

Lynn, a PhD student, has become known as an excellent lecturer, and she is invited to speak at the local science café, a monthly event that members of the public attend to learn about science. Lynn asks her mentor, Dr David Black, for advice on speaking in such a venue. How do you suggest that Dr Black proceed? Make notes in the space below.
Case 23: In the media spotlight
Craig (from Case 5) ends up publishing his study in a leading journal in his specialty. His university disseminates a news release about it, and a radio reporter, a television reporter, and two newspaper reporters ask to interview him. Craig has not been interviewed for the popular media before, and so he seeks advice from his mentor, Dr Linda Moore, who has been interviewed many times. How should Dr Moore proceed? What suggestions should she make? Make notes in the space below.

Case 24: Writing for the public too
Zeke (from Case 3) overcomes his writer’s block and finds that he likes writing, both for peers and for the public. He tweets a lot and has a relatively popular blog. Now a magazine has invited him to submit an article about his research field. Zeke approaches his mentor, Dr Kevin Yates, for advice. Dr Yates has not written for popular magazines but recalls that his colleague Dr Laura Hill has done so. How might Dr Yates proceed? What advice should one or both the mentors provide? Make notes in the space below.
Case 25: Ending the mentoring relationship

Liz - a PhD student - is about to graduate. She has appreciated the guidance and support in research communication (as well as in other realms) from her mentor Dr Adams. She is very reluctant to end the mentoring relationship and wants to continue meeting Dr Adams for both technical and emotional support. Dr Adams feels that Liz has become too dependent on him and that now that the objectives she set have been met, the mentoring relationship can end. How should Dr Adams the mentor approach their final session? Make notes in the space below.
# HO2: Sample mentoring self-assessment grid

<table>
<thead>
<tr>
<th>Mentoring behaviours and skills</th>
<th>This is one of my strengths</th>
<th>I (would) sometimes do this</th>
<th>This is a development need for me</th>
</tr>
</thead>
<tbody>
<tr>
<td>I ask probing, challenging questions which get people thinking for themselves</td>
<td></td>
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<tr>
<td>The majority of the questions I ask are open</td>
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<tr>
<td>I’m effective at distinguishing problems from symptoms; helping mentees pick up the real issues</td>
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<tr>
<td>I listen well and frequently summarize</td>
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<tr>
<td>I respect time committed in my diary to mentoring someone; I don’t allow other things to take over</td>
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<tr>
<td>I’m good at seeing when a mentee needs help, not leaving them to struggle unnecessarily</td>
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<tr>
<td>I build my mentee’s confidence in themselves</td>
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<tr>
<td>I regularly give balanced feedback, so mentees are clear about their strengths &amp; development needs</td>
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<tr>
<td>I actively ask for feedback from my mentee about my effectiveness as their mentor</td>
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<tr>
<td>I’m effective at standing back from the task and focusing attention on the mentee’s learning</td>
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<tr>
<td>I get the balance between listening and talking in mentoring sessions right</td>
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<tr>
<td>I talk to my mentee about what I find difficult when I think it’s appropriate</td>
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<tr>
<td>I remain aware of my own preferences/prejudices so that they don’t influence me inappropriately</td>
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<tr>
<td>I have a wide range of mentoring styles - challenging, supporting, drawing out, probing, proposing, etc.</td>
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<tr>
<td>I talk about my own experiences and performance – both positive and negative when that helps my mentee.</td>
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<tr>
<td>I’m effective at changing my mentoring style to suit the needs of each mentee.</td>
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<tr>
<td>I don’t try to solve problems for my mentees. Instead I focus on developing their own problem-solving skills.</td>
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<tr>
<td>I’m good at understanding things from somebody else’s point of view</td>
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<tr>
<td>I don’t see my position as a mentor as having to know all the answers. It’s more about having the questions.</td>
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<tr>
<td>I leave mentees with a positive, ‘can-do’ feeling after mentoring sessions</td>
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</table>
**HO3: Guidance for mentees – knowing the ethics**

**Authenticity:**
- Research that is reported must actually have been done. In other words, it cannot be fabricated.
- Fabrication is a very serious offence and is likely to end the perpetrator's scientific career.

**Accuracy:**
- Researchers must accurately report findings - falsification must be avoided.
- Some aspects include: providing complete data (not only those supporting one's hypothesis), avoiding inappropriate manipulation of images and using appropriate statistical procedures (as using unsuitable ones can yield the wrong conclusions)
- Mentees can be encouraged to consult statisticians early in the research planning process, to ensure that they have appropriate data for analysis.

**Originality:**
- A research article in a journal must report new, original findings.
- Not republishing the same findings (except under special circumstances, with permission and original source cited)
- Not submitting the same manuscript to two or more journals at once
- Not dividing one small research project into many tiny papers (“salami science” or “cucumber science”)
- Normally acceptable to publish findings that have been presented orally and is a common and useful practice.
- Findings may be republished if in translation. However, permission from the source must be obtained, and the version in the new language clearly labelled a translation.
- A researcher should not try to get as many papers as possible out of a large research project. Splitting up findings into many papers does not serve readers well. Also, those assessing researchers do not merely count papers, and often would rather see one substantial paper in a major journal than two or more small papers in minor journals.

**Credit:**
- Citing sources of information and ideas increases credibility and helps readers who want to find out more.
- Avoid excessive use of others’ words – the mentee can avoid this by becoming very familiar with their source material, and then writing a first draft without looking at it. Before revising the draft, the mentee can check it against the source material for accuracy.
- Researchers must observe copyright, and they typically must obtain permission if they want to reprint figures or quote extensive amounts of text.
- In some fields, quoting is common. However, in the sciences, it is not common for papers to include quotations.
Ethical treatment of humans and animals (and documentation thereof):

• Many journals won’t publish papers on human and animal research without evidence of this permission - researchers should obtain such permission before doing the research.

• Such permission commonly is noted in the methods section of a journal article. It’s worth recommending that the mentee reads one or more articles’ statements in this regard.

Disclosure of conflicts of interest:

• Some possible examples to mention are: doing research on a product made by a company in which one has stock, doing research on a product made by a company to which one is a consultant, and serving as a peer reviewer of a paper by a friend.

• Some journals require authors to report conflicts of interest when they submit their papers. Also, some of these journals publish this information with the paper (if the paper is accepted) and others just keep the information for their own use.

• The existence of a conflict of interest does not preclude publication of a paper but it may result in the paper being examined carefully for possible bias.
HO4: Tips for mentees – oral and poster presentations

Tips for mentees-oral presentations

Task:
Read through the tips below
• Highlight or mark the ones on this handout not identified in the group checklists
• Add any top-rated tips identified in the group checklists which you feel are missing here

1. Structure talk as a story (IMRAD format - basically a narrative): For example, say how you became interested in your research topic, how you addressed it, what you found, and what the findings seem to mean.

2. Consider building up to the most important content: In the results section of a scientific paper, one often puts the most important finding first. In presentations, however, some good speakers like to begin with the less important findings and build up to the most important one.

3. Include much less detail than in a journal article: In particular do not describe the methods in great detail. Listeners want to know the overall methods you used, not the details of your protocols.

4. Begin and end strongly: Listeners especially notice the beginning and end. Attract listener’s attention with a strong beginning. And end with a strong “take-home message”.

5. Remember: people must understand what you say as you say it: In a written article, people can look back if they don’t understand or remember something. They can’t do so in a talk. Thus, the talk must be clear throughout.

6. Avoid unfamiliar abbreviations and acronyms: Talks with many acronyms tend to be confusing. And once readers are confused, they tend to stop listening.

7. Beware of using too many slides: (about 1 slide per minute is the very limit)

8. Keep slides simple and uncrowded: (a guideline for text: no more than 7 lines of 7 words each).

9. Generally, use bullet points, not paragraphs (OK to use phrases rather than sentences): Bullet points tend to be easier to read.

10. Make sure all lettering is legible (for main text, beware of using less than 28 point): Also, use a sans serif typeface (such as Arial, Helvetica, or Calibri).

11. Time the presentation carefully when you rehearse: Remember, at many conferences you will not be allowed to speak for more than the assigned time.

12. Arrive early, and make sure audiovisuals are working: This way, you are less likely to feel hassled and to have technical problems. Also, some conferences have “speaker-ready rooms” where speakers can practice their presentations beforehand, using the type of equipment being used at the conference.
13. **Speak slowly and clearly:** Remember, although you are very familiar with your content, audience members will need time to digest it. Also, listeners who are not native speakers of the language that you are speaking are likely to appreciate the extra time. If you are a non-native speaker, consider checking pronunciations in an online dictionary that has pronunciations to which you can listen.

14. **Look at the audience:** Eye contact helps engage the audience.

15. **Show enthusiasm:** Showing that you are interested in the content helps generate interest among listeners.

16. **Avoid distracting habits:** Avoid habits such as saying “um, um, um”, fidgeting with your hair or any kind of repetitive movement. One way to identify these habits is to video yourself rehearsing.

17. **Briefly repeat each question:** Audience members might not hear the questions that you are asked. Therefore, briefly repeat each question. Doing so also gives you more time to think of your answer.

18. **Answer each question briefly:** If more detail is wanted, people can ask you later.

19. **If you don’t know an answer, don’t fake it:** It’s better to say that you don’t know. In some instances, you can say how to find the answer, ask whether anyone present has the answer, or arrange to answer the question later.

20. ....

21. ....

22. ....

23. ....

24. ....

25. ....

Etc.
**Tips for mentees-poster presentations**

**Task:**
Read through the tips below

• Highlight or mark the ones on this handout not identified in the group checklists
• Add any top-rated tips identified in the group checklists which you feel are missing here

1. **If you can, base the poster on images that present key messages and attract viewers:** Posters basically are a visual medium. Thus, it’s ideal to base them largely on images.

2. **Plan to include little text (a general guideline: 500-1000 words):** In other words, the amount of text in a poster generally should be only twice to four times the amount in a typical abstract.

3. **Plan to make the poster understandable on its own:** People should be able to understand the poster even if they view it when you aren’t present. Therefore, for example, be sure to label the images.

4. **Organize the poster logically:** For example, use the IMRAD format (introduction, methods, results, discussion).

5. **Place the text in vertical columns:** Doing so makes the text easier to read. (otherwise, the lines of text are too long to read easily.) For example, a landscape-format poster may contain three to five columns, and a portrait style poster may contain two columns or so.

6. **Include plenty of white space:** White space is an important design element. If a poster is too crowded, it looks oppressive and is hard to read.

7. **Unless required, don’t include an abstract:** A poster is little more than an extended, illustrated abstract. Including an abstract is redundant and takes up precious space.

8. **Use large enough type for the title (72 point or more):** The title should be large enough for people walking by it to read easily.

9. **Don’t write the title in all capital letters:** Using all capital letters takes more space. It also makes the title harder to read, as capital letters are less varied in shape than lowercase letters are, for example TITLE OF YOUR POSTER vs Title of Your Poster

10. **Choose images that both attract and inform (photos, flow charts, graphs, etc.):** Ideally, the images will help both present content and attract viewers.

11. **Keep images simple, so they are quick to understand:** People reading a poster do not have the time and patience to understand complex images.

12. **If feasible, use graphs rather than tables:** In general, graphs are quicker to understand than tables are.

13. **Make images large enough:** Make images large enough to understand easily. A poster with many small images tends to be hard to understand and unattractive.

14. **Remember to label each image:** As mentioned, label each image, especially as you might not always be available to explain the images.

15. **Keep each section of text relatively brief:** People reading posters generally don’t have patience to read long blocks of text.
16. Make the text large enough to read easily (at least 18 points): Even 18 points is rather small for a poster. One experienced editor of scientific posters suggests using 30-point text.

17. Where feasible, use bulleted or numbered lists (not paragraphs): such lists tend to be quicker and easier to read than paragraphs.

18. If paragraphs are used, keep them short (also do not right-justify): dividing text into short paragraphs makes it easier to read. Also, text with an unjustified ("ragged") right margin tends to be easier to read and to have more even spacing between words.

19. Include your contact information: In case someone reading the poster wants to contact you, include at least your email address.

20. Prepare accompanying oral presentations of various lengths (for example: 1, 3, and 5 minutes): that way, you’ll be ready to discuss your work with people who want a quick overview, a relatively detailed summary, or something in between.

21. Think ahead about questions you might be asked: consider possible questions, and think of how you would answer them.

22. Perhaps have handout material available (copies of the poster, reprints of papers, CVs, business cards): another option is to have a sign-up sheet for people who want items emailed.

23. ....

24. ....

25. ....

26. ....

Etc.
VA1: Reflection questions

N.B. enlarge (so each question fits on one page of A4 landscape) and print each question for Module 1

Welcome and introductions.

1. What do I bring to the mentoring role that I think will help potential mentees?

2. Based on self-awareness of my style and way of working with others, as well as subject knowledge, what do I need to work on in order to improve my effectiveness as a mentor in research communication?

3. How do I see being a mentor helping me in my professional and personal development?

4. What concerns do I have about this role?
VA2: Rapport and trust

N.B. enlarge, print out and cut each scenario for the Module 2 Role-play: Rapport and trust.

1. FEAR

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentor fears not being good enough and fear floods their internal system. Extreme self-consciousness then prevents the mentor from managing the rapport at a conscious and unconscious level. There may be some rapport, but unfortunately it will consist of the mentee leading the mentor most of the time, rather than a more equal exchange that happens when there is genuine rapport.

2. OVERWHELMING NEED FOR THE MENTEE TO LIKE YOU

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

We all need to like and be liked, but if the wish to be liked gets out of hand, it will prevent the mentor challenging appropriately. This feeling comes from fear and lack of self-confidence. ‘If I challenge, my mentee won’t like me’ A mentor often has to disagree, but disagreement comes from the security of knowing that when it is done respectfully it will be totally acceptable to the mentee and the mentor will maintain rapport.

3. BELIEVING THAT YOU ALREADY KNOW

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentee starts their account of a situation and the mentor immediately jumps to the conclusion that they already know the answer. ‘I’ve heard all this before’, or ‘I know what they should do’. As soon as this thought kicks in, the mentor stops listening and starts talking at the mentee.
4. JUDGEMENT

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentor cannot suspend judgement about some perceived aspect of the mentee - maybe their subject area, their gender, their clothing, their ethnicity, religion or their personality. The sort of disapproval that originates in prejudice will leak out in all kinds of ways and is usually perfectly apparent to the mentee.

5. THE MENTOR IS NOT THAT INTERESTED IN PEOPLE

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentor is more interested in the technical aspects of research communication as opposed to spending time getting to know the mentee and developing the mentoring relationship. This imposes restrictive conditions on the mentee so that the mentee feels, ‘I am only valued when I ask questions related to the technical aspects of research communication’, or ‘This mentor hates it when I show any emotion’, or ‘I feel I have to hide my frustrations and problems - that’s what they seem to respond to’. Forcing the mentee to humour the mentor in this way is one sure way to damage the mentoring process.

6. COMPULSIVE EXPLAINING

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentor loves to offer the mentee little box and arrow diagrams which encapsulate their pet theories; interrupts the mentee, in order to offer endless potted versions of their favourite text books on research communication.
7. THE WISH TO REFORM THE MENTEE

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentor thinks that the mentee has certain unhealthy or undesirable habits such as over-eating, working too hard, not exercising enough and so on – and cannot refrain from offering suggestions about people who might help, or offering new wonder-methods of controlling the pesky habit.

8. PREOCCUPATION ON THE MENTOR’S PART

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentor has so many issues going on in their own professional life (for example, writing their own journal articles) that it is impossible to concentrate on the mentee.

9. UNAWARENESS ON THE PART OF THE MENTOR

Prepare and perform a short role-play, a maximum of five minutes, between a mentor and mentee based on the paragraph below. You will need to decide the mentee’s challenge which should be related to work (it does not have to be related to research communication). Do not introduce the role-play, nor read the paragraph below out to the full group. Try to play your roles as realistically as possible and not simply for laughs.

The mentor does not know that they are fixed to particular ways of talking and communicating. For instance, the mentor mismatches the mentee’s pace: the mentee is laid back in style, but the mentor is energetic - or vice versa. Another example is that the mentee has an unusually quiet voice, but the mentor remains loud.7

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7. The nine scenarios are adapted from extracts from J. Rogers, Coaching Skills, The definitive guide to being a coach (Maidenhead: McGraw-Hill Education, 2016).
### VA3: Typical pitfalls and problems for mentors

N.B. trainer/s can add any new pitfalls and problems to the list that they might have observed or experienced. Then print them out and cut them into separate pieces of paper to hand out to participant pairs for the Module 2 Full group advice clinic: Typical pitfalls and how to avoid them.

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Mentor underestimating the time it takes</td>
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<tr>
<td>2.</td>
<td>Mentor working with differences ineffectively wanting the mentee to be like them</td>
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<tr>
<td>3.</td>
<td>Mentor breaking confidentiality</td>
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<tr>
<td>4.</td>
<td>Expectations of the mentee and mentor not clarified</td>
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<tr>
<td>5.</td>
<td>Mentor contradicting what the mentee’s supervisor is saying</td>
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<tr>
<td>6.</td>
<td>Resentment from the mentee’s supervisor, not being involved, consulted, respected</td>
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<td>7.</td>
<td>Disruption of frequent location changes for either mentee or mentor</td>
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<tr>
<td>8.</td>
<td>Departmental culture, e.g. lack of trust, people used to direction not empowerment</td>
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<tr>
<td>9.</td>
<td>Unrealistic expectations on both sides</td>
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<tr>
<td>10.</td>
<td>Insufficient energy on part of mentor, mentee or both (typically, not meeting frequently enough)</td>
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</tbody>
</table>

Etc.
**VA4: Typical pitfalls and problems for persons responsible for the mentoring scheme**

N.B. trainer/s can add any new pitfalls and problems to the list that they might have observed or experienced. Then print them out and cut them into separate pieces of paper to hand out to participants for the Module 3 Full group advice clinic: Typical pitfalls and how to avoid them.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1.</td>
<td>Mentor not appreciating the skills they need; not getting or asking for help</td>
</tr>
<tr>
<td>2.</td>
<td>Mentor demonstrating an imbalance between support and challenge</td>
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<td>3.</td>
<td>Mentor taking over; too much control, giving advice, always doing the problem-solving</td>
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<td>4.</td>
<td>Mentor doesn’t see themselves as learning too, results in teacher/pupil relationship</td>
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<td>5.</td>
<td>Mentor and/or mentee unwilling to give/receive feedback or doing so ineffectively</td>
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<tr>
<td>6.</td>
<td>Departmental culture, e.g. lack of trust, people used to direction not empowerment</td>
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<tr>
<td>7.</td>
<td>Time required for mentoring not respected, e.g. by senior management</td>
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<tr>
<td>8.</td>
<td>Decisions about setting up mentoring based on inadequate knowledge/understanding</td>
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<tr>
<td>9.</td>
<td>Insufficient freedom for mentor and mentee to work in their own way – too many rules</td>
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<tr>
<td>10.</td>
<td>Lack of commitment – from the top, the mentor, mentee, the mentee’s supervisor</td>
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<tr>
<td>11.</td>
<td>No monitoring system to pick up problems with the scheme early on</td>
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<tr>
<td>12.</td>
<td>Poor selection processes for getting on to the scheme e.g. lack of openness, people thinking it’s for a special few when they get rejected</td>
</tr>
<tr>
<td>13.</td>
<td>Inappropriate mentors who encourage old behaviours no longer wanted in the department</td>
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Etc.