Portfolio Evidence – The Good, the Bad and the Ugly!
Evidence of Achievement - Registration

**EVIDENCE OF ACHIEVEMENT**

This section requires the internal assessor to sign that the trainee has successfully achieved fitness to practice. The trainee should collect and prepare supporting evidence as a separate portfolio and cross-reference the following statements to this.

i) Observed by trainer to work in accordance with HPC standard 1a.8.
   - **Date of completion:**
   - **Assessed by (signature) Print name Position:**
   - Cross-referenced to ................................
   - **Trainee’s signature:** ................................

ii) Answered questions and/or completed a set piece of work set by trainer related to the competency statement.
   - **Date of completion:**
   - **Assessed by (signature) Print name Position:**
   - Cross-referenced to ................................
   - **Trainee’s signature:** ................................
   - And/or

iii) Answered questions and/or completed a set piece of work set by academic tutor related to the competency statement.
   - **Date of completion:**
   - **Assessed by (signature) Print name Position:**
   - Cross-referenced to ................................
   - **Trainee’s signature:** ................................

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**Suggested examples of evidence:**

- Show how an area of your training can illustrate how a biomedical scientist can maintain fitness to practice.
- Describe how the laboratory Health and Safety policy helps to protect your personal wellbeing and fitness to practice.
- What is the purpose of the European Working Time Directive? What are the maximum hours per week that may be worked?
- Show how you take responsibility for self-directed learning (e.g. reflective practice sheet).

**Portfolio and evidence of competence for this standard verified and passed by:**

<table>
<thead>
<tr>
<th>External Verifier’s Signature:</th>
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<tbody>
<tr>
<td>External Verifier’s Name:</td>
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<td>Date:</td>
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</table>
Evidence of Achievement – Specialist

EVIDENCE OF ACHIEVEMENT

This section requires the trainer to sign that the specialist trainee has successfully achieved fitness to practice as a biomedical scientist at the specialist level. The specialist trainee is required to present the supporting evidence indicated below as a separate specialist portfolio of evidence.

Assessed by trainer to work in accordance with standard laboratory procedures.
Date of completion:
Trainer’s name:
Trainer’s signature:

Answered questions set by trainer on the principles and practice of named procedure.
Date of completion:
Trainer’s name:
Trainer’s signature:

One other piece of evidence chosen by the candidate as an example of their fitness to practice in performing the named procedure.
Date of completion:
Trainer’s name:
Trainer’s signature:

Evidence of competence for this standard has been assessed and passed by the internal person who has checked that the requirements in the Evidence of Achievement section have been met.
Internal Assessor’s signature:
Internal Assessor’s name:
Date:
‘Assessed by trainer….’

- Registration – Additional evidence required
- Specialist - You do NOT need any additional evidence for this. Signature alone is sufficient
- This can often be signed in conjunction with in house competency documents
Answered Questions and/or set piece of work (Registration Portfolio)

- Suggested examples in portfolio
- Relates to the competency statements
‘Answered questions set by trainer…’
(Specialist Portfolio)

- This ensures the candidates knowledge has been assessed at a specialist level
- What evidence?
  - Written questions and answers (not essays)
  - Verbal questions and answers (great practice for the examination)
  - MCQs/Quizzes
‘One other piece of Evidence…’ (Specialist Portfolio)

• To be selected by the candidate and justified in reflective log
• It should demonstrate application of knowledge and skill at a specialist level
• One piece of evidence will not cover the entire standard, so don’t bother trying!
Assessors Signature

- Registration – signed by verifier

- Specialist – signed by trainer. This is NOT signed by the examiner. This should be used by the trainer when reviewing each standard. It is a way of ensuring each standards has been reviewed as a whole and completed to the necessary level.
What counts as Evidence?

Bear in mind

- Is it appropriate to the standard?
- Is it at the right level? (registration vs specialist)

Examples

- In house assessments
- Annotated results
- Case study
- Reflective logs
Witness Statements

Objective observations that relate to a specific task or action that are independently written and verified by trainer

OR

Self witness statement written by trainee and signed and authorised by trainer
Reflective Logs

A brief description of a process, incident or event undertaken by or involving the trainee that related to the standard. Should be accompanied by the personal thoughts of what has been learned and how this might be applied in the future to their benefit and that of their service users.
All of the evidence on the following slides has been anonymised - all evidence that you assess should be signed and dated.
GOOD EVIDENCE

Carbon Monoxide Tutorial

- Assessed and dated
- Explanation of CO formation
- Comment on result
- Analyser
- Explanation of co-oximetry
GOOD EVIDENCE

Suitable for Registration rather than Specialist Portfolio due to more generic nature of content

Levey Jennings Tutorial

- spurious result
- no rule violated
- Warning to observe subsequent results
- violation - reject run

GOOD EVIDENCE
Suitable for Registration rather than Specialist Portfolio due to more generic nature of content

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GOOD EVIDENCE
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Levey Jennings Tutorial

- spurious result
- no rule violated
- Warning to observe subsequent results
- violation - reject run
Liver Function Tutorial

- Function of metabolites
- Principles of technique
- Liver profiles
- Significance of results
- Evidence of marking and feedback
GOOD EVIDENCE
Suitable for Registration rather than Specialist Portfolio due to more generic nature of content

Practical Quiz
Annotated to show important features:

- packaging
- significance of code
- significance of category B
- Significance of transport standards
6.2 HEALTH AND SAFETY

Be able to understand and apply health and safety requirements.

Competency a
Locate relevant health and safety procedures, guidelines and documents in the laboratory.

Evidence
Health and safety handbook
SPOL presentation

Reference
Question 3
Question 5
Competency c

How have you applied your training to your current role?
I am able to locate the health and safety handbook on Qualsys. As the system is computerised, it is easily accessible. I have used it to look up the waste disposal policy.

How will you apply the learning to your future work?
I know where to find certain information so if there is a problem or a question, I know where to look for the answer and I can show others.

Future development possibilities.
As Qualsys is a new system, I was only aware of the printed health and safety handbook located in the manager’s office. There could be a note on the cover raising awareness of the electronic version and the fact that it is not just SOPs on Qualsys.
BAD EVIDENCE

Reads like it has been taken from a textbook rather than candidates own words. Not applied to the context of the lab.

6.2 HEALTH AND SAFETY

Be able to understand and apply health and safety requirements.

1. Describe the current safety legislation relevant to the laboratory including the USDAW "six pack".

The USDAW "six pack" can be found at www.usdaw.org.uk. In January 1993 six health and safety at work regulations were introduced to give more detail on what an employer should do to comply with the 1974 health and safety at work act.
- Management of health and safety at work regulations: Applies to all workplaces and hazards.
- Display screen equipment and regulations: Working with visual display units (VDU).
- Workplace health, safety and welfare regulations.
- Provision and use of work equipment regulations.
- Personal protective equipment (PPE) regulations: Relevant to health and safety issues.

Evidence: USDAW "six pack."

Reporting of injuries, diseases and dangerous occurrences (RIDDOR) 1995 can be found at www.riddor.co.uk. It is a legal requirement to report work related:
- Deaths
- Major injuries
- More than 3 day injuries
- Diseases
- Dangerous or near miss occurrences

To the incident contact centre (ICC).

Evidence: RIDDOR

2. What are the responsibilities of the employer and employee defined in the health and safety at work act?

The health and safety at work act can be found at www.hse.gov.uk. It ensures health, safety and welfare at work as far as is reasonably practicable.

<table>
<thead>
<tr>
<th>Employee</th>
<th>Employer</th>
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</thead>
<tbody>
<tr>
<td>Make workplace safe and without risks to health.</td>
<td>Take care of your own and others health and safety.</td>
</tr>
<tr>
<td>Ensure machines are safe.</td>
<td>Cooperate with employer.</td>
</tr>
<tr>
<td>Ensure substances are used, moved and stored safely.</td>
<td>Use PPE and work items correctly.</td>
</tr>
<tr>
<td>Provide welfare facilities.</td>
<td>Not misuse health and safety equipment.</td>
</tr>
<tr>
<td>Give any information, training and supervision necessary.</td>
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</tbody>
</table>

Evidence: Health and safety at work act.
SATISFACTORY EVIDENCE

Suitable for Registration Portfolio due to the level of subject matter

<table>
<thead>
<tr>
<th>Reflective Log - Health &amp; Safety</th>
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</thead>
<tbody>
<tr>
<td>1. Safety lectures/course attended.</td>
</tr>
<tr>
<td>Sypos presentation</td>
</tr>
<tr>
<td>Spill kit training session</td>
</tr>
<tr>
<td>H&amp;S review</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration of training.</th>
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<tbody>
<tr>
<td>From Aug 2010</td>
</tr>
<tr>
<td>To March 2011</td>
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</tbody>
</table>

2. How have you applied your training to your current role?
I have attended a Sypos presentation. This database has taken over from the old COSHH sheets. The idea is that it uses a live website so the information is always current. I have used it several times for myself and colleagues, mainly to look up the specific PPE needed. The spill kit training session was very useful as I had never used one before; I would not have known that the chemical spill would turn to jelly with the granules

3. How will you apply the learning in your future work?
I will be able to continue to use Sypos to ensure myself and others are working safely. If the need ever arises I will be comfortable using a spill kit for all the different types and sizes of spills

4. Future development possibilities
I found the H&S review difficult to follow as the notes were full of the exact legislation. I feel that it isn't necessary to know the exact wording of the law, just what we need to do to comply with it. This should make the next review shorter, simpler and hopefully people will pay more attention.
GOOD EVIDENCE

Excellent way of evidencing an oral tutorial / Q&A session

Oral Assessment on Transfusion Knowledge

• Questions with expected answers
• Answers ticked off

This is the oral examination I sat with the transfusion specialist practitioner to prove my knowledge in this area. This enabled my competencies to be signed off and is now evidence for my portfolio of Transfusion Oral Assessment.

9th Jan 2008

1. What are the two major Blood Group Systems? AB0 and RH
2. Up to how many days can a sample be tested for a Blood Group and Antibody Screen? 7 days
3. What is the optimum temperature for AB0 antibodies? Room Temperature 16 degC
4. What structure are AB0 antibodies? IgM
5. What is the optimum temperature for Rh antibodies? 37 degC
6. What structure are Rh antibodies? IgG
7. How can you demonstrate IgG antibodies? Using the ICT technique. Adding albumin/macromolecular to Rh antibody relations
8. What tests would you do to test for haemolytic disease of the newborn? DCT
9. If the baby had a positive DCT but the mother had a negative antibody screen, what would that suggest? AB0 incompatibility
10. How would you test for AB0 incompatibility? Haemolyser
11. What is a feature in the blood film of babies with AB0 incompatibility? Spherocytes
12. What temperature is blood stored at? 4 degC +/- 2 degrees
13. What temperature are platelets stored at? 22 degC +/- 2 degrees
14. When FFP is thawed, what is the expiry time if it is stored in the Blood Bank - or at room temperature? 24 hrs in the Blood Bank 4 hours at room temperature
15. What is the expiry time of Cryo Precipitate when thawed? 4 hours
GOOD EVIDENCE
Evidence of marking and feedback from Trainer

Multiple choice questions
Written Questions and Answers

- Comments from training officers
- Responses from candidate

VERY GOOD EVIDENCE

Evidence of marking and feedback
What supravital stains do we use in haematology? Explain the principals and practice of staining blood cells by Romanowsky staining. Discuss the cellular component stained by the constituents of the Romanowsky stain and the impact of pH on the appearance of the red cells and the white cells.

The multiple stains are based on the Romanowsky stain is use in laboratory. Romanowsky used a mixture of old methylene blue and eosin to stain the nucleus of a malarial parasite purple and the cytoplasm blue. Subsequently, Giemsa modified the stain, combining methylene azure and eosin. The stain most commonly used in the UK is a combination of Giemsa’s stain with May Grunwald stain, it is therefore designated the May-Grunwald-Giemsa (MGG) stain. The essential components of a Romanowsky-type stain are: (i) a basic or cationic dye, such as azure B, which conveys a blue violet or blue colour to nucleic acids (binding to the phosphate groups of DNA and RNA) and to nucleoprotein, to the granules of basophils and weakly, to the granules of neutrophils and (ii) an acidic or anionic dye, such as eosin, which conveys a red or orange colour to haemoglobin and eosinophil granules and also binds to cationic nuclear protein, thus contributing to the colour of the stained nucleus. A stain containing azure B and eosin provides a satisfactory Romanowsky stain as does a mixture of azure B, methylene blue and eosin. Staining must be performed at the correct pH. If the pH is too low, basophilic components for not stain well. Leucocytes are generally pale, with eosinophil granules a brilliant vermillion. If the pH is too high, uptake of the basic dye may be excessive leading to general over staining, it comes difficult to distinguish between normal and polychromatic red cells, eosinophil granules are deep blue or dark grey, and the granules of normal neutrophils are heavily stained, simulating toxic granulation.
Candidates must put evidence into their own words.

The answer in the previous slide has been copied from a textbook.

Plagiarism is not acceptable.

The candidate’s training officer should pick this up.
Describe the internal and external quality assurance procedures for the measurement of red cell folate.

Internal QC performed every 24 hours. Which cover at least one level of controls. Quality control results that do not fall within acceptable ranges may indicate invalid test results. For that reason there are 2 types of ranges been setup if the QC fall in yellow ranges (i.e. 2 standard deviation from the main). Re calibrates the analyser and than re run the QC. And if QC>30 from mean. Also needs to documents as well.

For external QC laboratory participates in NEQAS. Results can be submitted online. And than NEQAS will send us a copy of reports, which can be stored on Q-Plus. Previous NEQAS report attached.
GOOD EVIDENCE

Good annotations that demonstrate that the candidate knows what they are looking at and what it means.
GOOD EVIDENCE

Good annotations. Even better than evidence in the previous slide as the candidate has used arrows to mark up and demonstrate their understanding of each part of the image.
GOOD EVIDENCE

Good annotations.

Good demonstration of candidate’s understanding.
BAD EVIDENCE

No annotation.

No demonstration of candidate’s understanding of the section they have underlined.