Welcome to the ETHIQ training information guide

- ETHIQ - Introduction
- ETHIQ - Section A: Specialist H&I Knowledge
- ETHIQ - Section B: General Competences
- ETHIQ - Section C: Specialist H&I Techniques
What is the ETHIQ Diploma?

The European Technical H&I Qualification (ETHIQ Diploma) is an online, Moodle based training course for technologists working in EFI accredited labs.

**ETHIQ - Introduction & process**

**Training info**

The ETHIQ Training comprises four elements:

1. Online ETHIQ Training
2. A summary of individual learning and development events
3. A basic case or validation report
4. Final Assessment
Lab Directors Questionnaire

The Education Committee circulated a questionnaire to EFI Laboratories to gather feedback regarding a number of aspects of the ETHIQ Diploma training.

The main points from the questionnaire are:

- Feedback from questionnaire was positive
- Most laboratories would plan to register eligible candidates gradually
- A webinar for trainees and training supervisors would be welcomed
- Translation of the logbook would be welcome in some countries – cannot determine which from questionnaire?
- The cost of 200-250 euros would be prohibitive for some laboratories
- The need for candidates to be EFI members would be challenging for some laboratories
ETHIQ Diploma Background

Background

The ETHIQ Diploma is managed and administered by the EFI Education Committee. The purpose of the training is to enable technical staff working in H&I to demonstrate knowledge and competence within their workplace. All registrants for the ETHIQ certificate must be EFI members.

Training is aimed at all Technical Staff working in EFI accredited laboratories supporting clinical solid organ and/or haematopoietic stem cell transplantation. The definition of Technical Staff may vary between countries, but it is hoped that the ETHIQ will be an appropriate training scheme for staff that are involved in bench work in H&I labs, but who may not have the responsibility for final reporting of results. Senior staff (e.g. those who are Directors or co-Directors or those who wish to reach this level) are encouraged to develop their learning in order to take the EFI/UEMS ESHI Diploma.

The training is undertaken within the trainee’s laboratory and will be delivered under the supervision of a local training supervisor over the course of 12-36 months. The training supervisor must be an individual who is a Director or Co-Director of an EFI accredited lab, or is a holder of the ESHI Diploma (honorary or by examination). It is also important that the Head of Laboratory (if different to the Training Supervisor) signs the application form (Appendix A) to show they are supportive of the trainee’s application.

- Aimed at technologists involved in bench work in H&I labs but may not have the responsibility for final reporting of results
- Training is undertaken within the trainee’s own lab
- Under supervision of a local training supervisor
- Expected to take 12 – 36 months
For Supervisors

ETHIQ - Introduction & process

Notes for Supervisors

1. The training supervisor must be an individual who is a Director or Co-Director of an EFI accredited lab, or is a holder of the ESHI Diploma (honorary or by examination).

2. The Director of the H&I laboratory must also sign the application form (if different to the trainee supervisor) to show they are supportive of the trainee undertaking the ETHIQ.

3. The Training Supervisor must sign off all training manual evidence provided or delegate to an appropriate individual in the laboratory.

4. The Training Supervisor must sign off the reflective learning activities.

5. The Training Supervisor must sign off the case study/validation report as being satisfactory (use the Assessment of Case Study/Validation report form in Appendix H).
There are two deadlines per year to send in your application:

- 1st January
- 1st July

Per deadline 20 applications will be admitted in order of date of application. In case there are more applications, those applications will be automatically be admitted the next round.
# Application Form

## EFI ETHIQ LOGBOOK

### APPLICATION FOR REGISTRATION

<table>
<thead>
<tr>
<th>Trainee Information</th>
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<tbody>
<tr>
<td>Surname</td>
<td>[Click or tap here to enter text]</td>
</tr>
<tr>
<td>Forename</td>
<td>[Click or tap here to enter text]</td>
</tr>
<tr>
<td>Job title</td>
<td>[Click or tap here to enter text]</td>
</tr>
<tr>
<td>EFI Member</td>
<td>[Click or tap here to enter text]</td>
</tr>
<tr>
<td>Yes, membership number</td>
<td>[Click or tap here to enter text]</td>
</tr>
<tr>
<td>No. 1 will become an EFI member via the website <a href="http://www.efi-web.org">www.efi-web.org</a></td>
<td></td>
</tr>
<tr>
<td>Start date in current lab</td>
<td>[Click or tap here to enter text]</td>
</tr>
</tbody>
</table>

### Laboratory / Institution Details

- Name of lab / institution: [Click or tap here to enter text]
- Postal / Zip code: [Click or tap here to enter text]
- City: [Click or tap here to enter text]
- Country: [Click or tap here to enter text]
- Telephone: [Click or tap here to enter text]
- Email: [Click or tap here to enter text]
- Signature of Trainee: [Click or tap here to enter text]
- Date: [Click or tap here to enter text]

### Proposed H&I Training Supervisor

Note: The training supervisor must be a Director or Co-Director of an EFI accredited lab, and/or a holder of the ESHI Diploma (honorary or by examination).

- Name: [Click or tap here to enter text]
- Current grade: [Click or tap here to enter text]
- Signature of Trainee Supervisor: [Click or tap here to enter text]
- Date: [Click or tap here to enter text]

### Indication of the planning to complete the ETHIQ logbook in 1, 2 or 3 years

- Training start date: [Click or tap here to enter text]
- Proposed completion date: [Click or tap here to enter text]
- Completion in: Click or tap here to enter text Years

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## Section A - Specialist H&I Knowledge

(A1-A2-A3 Mandatory; A4 Optional)

### A1 - Basic Immunology

- A1.a licens Immune responses
- A1.b Adaptive immune responses

### A2 - The HLA System

- A2.a HLA genes
- A2.b HLA molecules
- A2.c HLA nomenclature and polymorphism
- A2.d Clinical relevance of the HLA System

### A3 - Transplant Immunology

- A3.a Allorecognition
- A3.b Rejection responses
- A3.c Graft versus Host Disease (GVHD)

### A4 - H&I laboratory role in transfusion

- Optional
- 1.5
At the last page of the registration form you have to tick the checkboxes of your specialization. At least 50% of the boxes should be ticked.
The Process – 2: Payment

Accept application

- EFI Office informs member by email and sending Appendix B

- Member returns Appendix B to EFI Office

- EFI Office sends invoice including Mollie payment link

Payment received?

Decline application

- EDC informs member by email with reason

Appendix B

Invoice
BANK INFORMATION FORM

for payment of

EFI Technical H&I Qualification (ETHIQ) training

The total cost of registration is paid annually over the period of training. The minimum term of registration is 12 months and the maximum 36 months.

The registration fee covers the cost of the Training Manual and all the administrative costs of the Trainee’s assessments.

PLEASE PROVIDE FULL DETAILS OF THE INDIVIDUAL TO WHOM THE INVOICES FOR REGISTRATION CHARGES SHOULD BE SENT

<table>
<thead>
<tr>
<th>INFORMATION INVOICES</th>
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<tbody>
<tr>
<td>Invoice’s surname</td>
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<tr>
<td>Name institution</td>
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<td>Invoice’s full postal address</td>
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<td>Telephone</td>
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<tr>
<th>INFORMATION INVOICE ETHIQ TRAINING</th>
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<tbody>
<tr>
<td>Purchase order</td>
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<tr>
<td>Trainee name</td>
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Payment:
Please use the link or pay the above amount in full. Please note MoMedia (Stichting MoMedia Payments) is the payment partner of European Federation for Immunogenetics.

Use this data only for the completion of this particular payment. Please make sure that you fill in all the details correctly.
After your registration and deadline date you will receive your login details in order to get access to the moodle based programme.
After you have logged in you enter the dashboard with your logbook.
Online training logbook

**Online Training**

The Training Manual describes the competences required of technical staff working in the H&I laboratory and is split into 3 sections:

1. **Section A - Specialist H&I Knowledge**
   
   Section A contains the Specialist H&I knowledge the candidate is expected to understand. For Section A parts 1-3 are mandatory and part 4 may be completed if relevant to the candidates experience.

2. **Section B - General competences**
   
   Section B of the manual contains the competences which are required of candidates in whichever part of the laboratory they are working. All areas of this section must be completed.

3. **Section C - Specialist H&I Techniques**
   
   Section C contains specialist H&I competences which may or may not be pertinent to the role of the candidate. The candidate does not have to complete all of Section C if gaining sufficient experience is not possible in their laboratory. However, as a minimum, at least 50% of one of the sections must be completed.
How to complete and document training

You can complete all documents in your own language.

Evidence of training

In order to complete the Training Manual, evidence must be provided. Signing off competences and knowledge can be delegated by the training supervisor to other senior staff in the laboratory. Note: all forms can be completed in English or in the local language of the candidate’s laboratory. Appropriate assessment methods are:

1. Written (W)
   The candidate has written a summary to show their understanding of the section. Use the Written Evidence form in Appendix C.

2. Observed (Obs)
   The candidate has been observed competently performing the process on at least two occasions. Use the Observed Competency Evidence form in Appendix D.

3. Oral (O)
   The supervisor (or delegated individual) and the candidate have discussed the section. Make a record of the discussion using the Oral Discussion Evidence form in Appendix E.

<table>
<thead>
<tr>
<th>WRITTEN EVIDENCE FORM</th>
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<tbody>
<tr>
<td>Section A - Specialist H&amp;I Knowledge</td>
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<tr>
<td>Summary of topic in candidate’s own words (note: in English or language local to the laboratory):</td>
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<tr>
<td>Sources of Information</td>
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<tr>
<td>Assessment method</td>
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<tr>
<td>Trainee Supervisor signature</td>
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</table>
ETHIQ Training Section A – Specialist H&I Knowledge

This section of the manual contains the specialist H&I knowledge which is required of all candidates.
A1.b - Adaptive immune responses

Understands:

- the cells involved in the adaptive immune response
- the role of antigen presenting cells
- T cell subsets and their roles
- MHC restriction for T cell activation
- T cell activation via class I and class II antigen presentation
- B cell activation and antibody production
- antibody classes and subclasses

A1.b - ETHIQ Written evidence form (Appendix C)
ETHIQ Training Section B – General Competences

<table>
<thead>
<tr>
<th>General</th>
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<tbody>
<tr>
<td>B1 - General laboratory practice</td>
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<tr>
<td>B2 - Safe working practices in the clinical HLA laboratory</td>
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<tr>
<td>B3 - Quality management</td>
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<tr>
<td>B4 - Data handling</td>
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<tr>
<td>B5 - Stock maintenance</td>
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<tr>
<td>B6 - Specimen reception and handling</td>
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</tbody>
</table>

This section of the manual contains the competences which are required of all candidates.
B2.b Dealing with potential hazards in the laboratory

Aware of:

- potential chemical and biological laboratory hazards
- methods for dealing with spillages
- why and when working surfaces and floors need to be decontaminated or disinfected
- reporting procedures for potential / hazardous faults
- the need for safe storage of hazardous materials
- the dangers of liquid nitrogen
- the local waste disposal policy

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B2.b - ETHIQ - Oral discussion evidence form (Appendix E)
Specialist techniques

This section contains specialist competences which may be pertinent to the role of the candidate. All competences relevant to the candidate’s laboratory should be completed. Where a candidate contributes to a technique but does not perform all of it they can be assessed for their contribution, provided this is made clear in the evidence form submitted. The candidate does not have to complete all of Section C, if gaining sufficient experience is not possible in their laboratory. However, as a minimum, at least 50% of one of the sections must be completed.
C2.c - Antibody identification and definition by solid phase assays

Understands:

- the basic principles of antibody detection/definition
- problems that may be encountered in solid phase assays for antibody detection
- the need for quality control samples in solid phase assays for antibody detection

Competently:

- follows the local procedures for antibody detection/definition using solid phase assays
- analyses / interprets the results of the assay seeking advice as necessary

C2.c - ETHIQ Written evidence form (Appendix C)

C2.c - ETHIQ Observed Competency evidence form (Appendix D)
Individual learning and development events

Candidates must submit a summary of individual learning and development events. It would be expected that candidates attend a minimum of 3 learning events (seminars, presentations, conferences, local meetings) per year of their training period.

Please use the REFLECTIVE LEARNING ACTIVITY RECORD FORM (Appendix F) for each event.

F. Reflective Learning Activity Record Form
Completion of a Case Study or Validation report

Case Study / Validation Report

Candidates must prepare and submit one of the following:

1. A basic case study from within the candidates experience or
2. A validation report (e.g. new assay / reagent validation)

This must be completed using the candidate's own format (minimum 500-maximum 1,000 words). This can be completed in English or in the local language of the candidate's laboratory.

G. Assessment of Case Study / Validation report by Training Supervisor Form

<table>
<thead>
<tr>
<th>Assessment method</th>
<th>Date</th>
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<tbody>
<tr>
<td>Trainee Supervisor signature</td>
<td>Trainee signature</td>
</tr>
</tbody>
</table>
The process – 4: Application for final assessment

Trainee sends Appendix H to EFI Office

EFI Office notifies EDC that ETHIQ Logbook and appendices C-G are available for review and approval

Approved

EFI Office to provide access code to ETHIQ Assessment

Declined

EDC to inform Trainee with reason of decline

Trainee undertakes the ETHIQ Assessment
The Final Assessment

Final Assessment

At the end of the training period the Training Manual and associated evidence is sent to the EFI Education Committee and is assessed to ensure there is evidence of appropriate understanding and training in H&I (use the Training Manual Application for Final assessment form in Appendix H).

If sufficient evidence is provided the candidate is then invited to undertake a short online assessment which must be passed for the candidate to be awarded the ETHIQ Diploma. It will be possible to omit some questions if training has not been received in these areas. If there are deficiencies in the training then the candidate will be asked to remedy these deficiencies before re-submission for assessment.

H. Training Manual Application For Final Assessment Form

<table>
<thead>
<tr>
<th>Assessment method</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Trainee Supervisor signature</td>
<td>Trainee signature</td>
</tr>
</tbody>
</table>
The ETHIQ Diploma is managed and administered by the EFI Education Committee. The purpose of the training is to enable technical staff working in H&I to demonstrate knowledge and competence within their workplace.

Following the successful assessment by the EFI Education Committee of your Training Manual and associated evidence, you have been invited to undertake a short online assessment which must be passed to enable the award of the ETHIQ Diploma.

You will be given 60 minutes to complete 30 multiple choice questions relating to topics contained in the ETHIQ syllabus. Candidates need to answer 75% of questions correctly to pass this assessment. If the outcome of the assessment indicates deficiencies in training that need to rectified, then the candidate will be asked to remedy these deficiencies before resubmission.
The Process – 5: Completion

Succeeded

- EFI Office to provide certificate
- EFI Office ask for feedback
- EFI Office to list successful Trainees for EFI Newsletter

Failed

- Certificate
- Feedback form
Congratulations!!!!!!

ETHIQ DIPLOMA

is awarded to

Name candidate

for successfully passing the Training Manual and Online Assessment of the
EFI Technical H&I Qualification (ETHIQ)
for Technical Staff Working in EFI Accredited Laboratories

Date

[Signatures]

Ann-Margaret Little
President

Dave Roelen
Secretary

Deborah Sage
Chair Education Committee
ETHIQ Training Programme Costs

- Following feedback from EFI labs, the following proposal regarding cost and the requirement to be an EFI member has been approved by the EC.

- Keep the cost at 200 euros for registration but to include EFI membership for the period while the candidate is undertaking the EThIQ Diploma training.
Experience pilot in France

A pilot was held in France with four applicants. Two from Lyon, one from Grenoble and one from St. Etienne. All four are technical supervisors and completed the programme in 15 months.

The pilot laboratories set up the ETHIQ diploma program with the following organization:

- One candidate ↔ One supervisor
- Time for both parties to provide proofs and evaluate the knowledge
- Planning of regular short interviews between candidate and supervisor to validate the progress, take care of difficulties and maintain confidence
- Fundamentals would need to be updated: provide adequate training courses to the candidate

During the pilot the candidates and supervisors noticed that:

- Both the candidate and the supervisor should be motivated to enter the program and finalise it in the dedicated time
- Time consuming: need to work at home for e-learning courses
- Supervisor must provide adequate supervision, recommendations, and advice

After completion of the ETHIQ diploma programme the candidates experienced the following benefits:

- *Improvement and update of immunological and technical knowledge*
- *Valorization of personal work*
- *Recognition of lab position or a step-up to a more valuable position*
Questions ????

Send your question to Ingrid Abelman: education@efi-web.org