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Description automatically generated**

Advanced Training in Clinical EmbryologyLOG BOOK  
Approved byThe European Society of Human Reproduction and Embryology (ESHRE)

Name and surname of trainee (capital letters):

………………………………………………………………………………………………

Dates of beginning and provisional end of the training:

........../........../.......... (D/M/L) - ........../........../.......... (D/M/L).

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| --- | --- | --- | --- | --- |
| Year | Beginning of training  (DD/MM/YY) | End of  training  (DD/MM/YY) | Date of signature | Tutor's signature |
| FOURTH | ........../........../.......... | ........../........../.......... |  |  |
| FIFTH | ........../........../.......... | ........../........../.......... |  |  |
| SIXTH | ........../........../.......... | ........../........../.......... |  |  |
| OPTIONAL | ........../........../.......... | ........../........../.......... |  |  |

Name and address oftraining departments/laboratories:

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| Department / Laboratory | Beginning of  training  (DD/MM/YY) | End of  training  (DD/MM/YY) |
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TO BE COMPLETED AFTER EACH YEAR OF TRAINING AND SENT WITH WITHIN THREE MONTHS  
THEREAFTER TO THE ASSESSMENT COMMITTEE (CERTIFICATION BOARD)

**TARGETS FOR THE FOURTH YEAR OF  
TRAINING**

description by trainer and tutor of what is expected in terms of knowledge, technical skills  
and fulfilment of tasks at the end of this year of training.  
To be completed at the beginning of the year of training.  
Year: 20....... - 20.......

**KNOWLEDGE :  
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**NAME OF THE TUTOR : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE : ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
SIGNATURES : TUTOR : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TRAINEE : ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TARGETS FOR THE FIFTH YEAR OF  
TRAINING**

Description by trainer and tutor of what is expected in terms of knowledge, technical skills  
and fulfilment of tasks at the end of this year of training.  
To be completed at the beginning of the year of training.  
Year: 20....... - 20.......

**KNOWLEDGE :  
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**NAME OF THE TUTOR : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE : ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
SIGNATURES : TUTOR : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TRAINEE : ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TARGETS FOR THE SIXTH YEAR OF  
TRAINING**

Description by trainer and tutor of what is expected in terms of knowledge, technical skills  
and fulfilment of tasks at the end of this year of training.  
To be completed at the beginning of the year of training.  
Year: 20....... – 20.......

**KNOWLEDGE :  
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**NAME OF THE TUTOR : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE : ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
SIGNATURES : TUTOR : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TRAINEE : ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**EVALUATION OF LABORATORY AND  
TECHNICAL SKILLS**

Every target defined in the ESHRE recommendation on training and  
assessment has an expected competence level that must be achieved. The level of  
competence ranges from observation (level 1) to independent practice (level 4 or 5).

***Many of the targets do not require an assessment of every competence level and shaded boxes indicate  
these. Trainees can choose whether or not to tick the shaded boxes as they progress.***

***Certain targets do not require the trainee to be level 5 (Independent). These are identified by a black box.  
The open targets require your tutor or trainer to check your competence and sign you off. When you feel  
ready for this it is your responsibility to organise with your tutor, for these targets to be observed. When  
an entire module is completed (excluding black boxes) request the educational supervisor to sign the  
completed module.***

SCORING SYSTEM:

1 : Passive attendance, assistance  
2 : Needs close supervision  
3 : Able to carry out procedure under some supervision  
4 : Able to carry out procedure without supervision  
5 : Able to supervise and teach the procedure

The general aim is to get at least mark 4.

1. **CELLS, TISSUE AND EMBRYO CRYOBANKING**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Target | Level of competence achieved.  The applicant enters the date when they reach the specific level in the box; the supervisor signs in the same box contemperaneoulsy. | | | | | Tutor to sign when final competence level achieved and related knowledge acquired and verified. | |
|  | 1 | 2 | 3 | 4 | 5 | Name / Sign | Date |
| Testicular tissue cryopreservation and thawing |  |  |  |  |  |  |  |
| Ovarian tissue cryopreservation and thawing \* |  |  |  |  |  |  |  |
| Activities in cryobank (safety, organisation of samples, documentation, quarantine, material transportation, removal of unused material) |  |  |  |  |  |  |  |
| Troubleshooting the cryobank  e.g. what to do if a cryovessel fails, samples are damaged, the wrong embryo is discarded, etc. |  |  |  |  |  |  |  |

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| **Trainee signature to confirm completion of the module: Name and signature of the tutor:**   **Clinic: Date:** |

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\*this module is expected for trainees trained in MAR centres where ovarian tissue cryopreservation is practiced

1. **REPRODUCTIVE CELLS AND TISSUE MATURATION *IN VITRO* (IVM) - optional**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Target | Level of competence achieved.  The applicant enters the date when they reach the specific level in the box; the supervisor signs in the same box contemperaneoulsy. | | | | | Tutor to sign when final competence level achieved and related knowledge acquired and verified. | |
|  | 1 | 2 | 3 | 4 | 5 | Name / Sign | Date |
| IVM cycles - oocytes before trigger\* |  |  |  |  |  |  |  |
| IVM cycles - oocytes after trigger |  |  |  |  |  |  |  |
| IVM of testicular sperm |  |  |  |  |  |  |  |
| Troubleshooting IVM |  |  |  |  |  |  |  |

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| **Trainee signature to confirm completion of the module: Name and signature of the tutor:**   **Clinic: Date:** |

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\*this module is expected for trainees trained in MAR centres where IVM is practiced

1. **MICROMANIPULATION ON EMBRYOS (BIOPSY) AND GENETIC ANALYSIS – optional\***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Target | Level of competence achieved.  The applicant enters the date when they reach the specific level in the box; the supervisor signs in the same box contemperaneoulsy. | | | | | | Tutor to sign when final competence level achieved and related knowledge acquired and verified. | |
|  | 1 | 2 | 3 | 4 | 5 | Name / Sign | | Date |
| Biopsy or other micromanipulation interventions on embryos |  |  |  |  |  |  | |  |
| Troubleshooting in biopsy |  |  |  |  |  |  | |  |
| Preparation of biopsied cells for genetic analysis /tubing |  |  |  |  |  |  | |  |
| Troubleshooting in tubing |  |  |  |  |  |  | |  |
| Cytogenetic analysis of (karyotyping, FISH) |  |  |  |  |  |  | |  |
| Molecular genetic analysis of biopsied cells (RT-PCR, array CGH, NGS) |  |  |  |  |  |  | |  |

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| **Trainee signature to confirm completion of the module: Name and signature of the tutor:**   **Clinic: Date:** |

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\*this module is expected for trainees trained in MAR centres where embryo biopsy for PGT is practiced

1. **SETTING UP A NEW LABORATORY**

**(entire duration of training)  
(PARTICIPATION IN SETTING-UP OR RENOVATION OF ART LABORATORY)\***

**\*EXAMPLE:** Participation with know-how in setting-up of new ART laboratory:"InVitroLive", Lisbone, Portugal, April – June 2020.

**The number is not limited**

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1. **PREPARATION OF LABORATORY RESULTS AND COUNSELLING**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Target | Level of competence achieved.  The applicant enters the date when they reach the specific level in the box; the supervisor signs in the same box contemperaneoulsy. | | | | | Tutor to sign when final competence level achieved and related knowledge acquired and verified. | |
|  | 1 | 2 | 3 | 4 | 5 | Name / Sign | Date |
| Writing, interpreting and communicating ART laboratory reports with other specialists (e.g. oncologists, endocrinologists, urologists) |  |  |  |  |  |  |  |
| Understanding reports from hormonal, serological, microbiological, cyto-histological laboratories |  |  |  |  |  |  |  |
| Communicating ART lab reports with patients |  |  |  |  |  |  |  |
| Communicating with auditors / national regulators |  |  |  |  |  |  |  |

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| **Trainee signature to confirm completion of the module: Name and signature of the tutor:**   **Clinic: Date:** |

1. **MANAGING ART LABORATORY AND CRYOBANK**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Target | Level of competence achieved.  The applicant enters the date when they reach the specific level in the box; the supervisor signs in the same box contemperaneoulsy. | | | | | Tutor to sign when final competence level achieved and related knowledge acquired and verified. | |
|  | 1 | 2 | 3 | 4 | 5 | Name / Sign | Date |
| Organisation of work in the lab |  |  |  |  |  |  |  |
| Leadership of an IVF lab (including managing different personalities) |  |  |  |  |  |  |  |
| Working according to standards and guidelines |  |  |  |  |  |  |  |
| Managing budgets |  |  |  |  |  |  |  |
| Method validation |  |  |  |  |  |  |  |
| Equipment validation |  |  |  |  |  |  |  |
| Lab environment control |  |  |  |  |  |  |  |
| Managing of nonconformities |  |  |  |  |  |  |  |
| Risk management |  |  |  |  |  |  |  |
| Managing database of lab and clinical data |  |  |  |  |  |  |  |
| Controlling lab KPIs |  |  |  |  |  |  |  |
| Managing registers (donors, cryobank, MAR cycles) |  |  |  |  |  |  |  |
| Continuous quality improvement |  |  |  |  |  |  |  |

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| **Trainee signature to confirm completion of the module: Name and signature of the tutor:**   **Clinic: Date:** |

1. **RESEARCH, STATISTICS AND AUDIT**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Target | | Level of competence achieved.  The applicant enters the date when they reach the specific level in the box; the supervisor signs in the same box contemperaneoulsy. | | | | | Tutor to sign when final competence level achieved and related knowledge acquired and verified. | |
|  | 1 | | 2 | 3 | 4 | 5 | Name / Sign | Date |
| Conducting research |  | |  |  |  |  |  |  |
| Statistical analysis |  | |  |  |  |  |  |  |
| Conducting clinical laboratory audit |  | |  |  |  |  |  |  |

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| **Trainee signature to confirm completion of the module: Name and signature of the tutor:**   **Clinic: Date:** |

**XVIII. TEACHING**

**(entire duration of training)  
(TEACHING AND TRAINING OF ART PROCEDURES)\***

**\*EXAMPLES:**

P. Smith: »New technique for ovarian tissue cryopreservation« lecture for colleagues, 12. 3. 2020.

P. Smith: training in ART and mentoring L. Johnson, embryologist from »LiveInVitro, Lisbone, Portugal (1. 3. 2019 – 1. 3. 2020).

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**XIX. ETHICAL AND LEGAL ASPECT**

**(entire duration of training)  
(PREPARED DOCUMENTS RELATED TO THE ETHICAL OR LEGAL ASPECT)\***

**\*EXAMPLES:**

P. Smith: »Annual report for 2019 for the national authority about reproductive cells, tissue and embryos« 1. 3. 2020

P. Smith: »Annual report for 2019 for the national authority about adverse events and reactions« 1. 3. 2020

P. Smith: Application for appraisal of planned research »Is there any benefit of assisted hatching on vitrified/warmed embryos on live birth rate?« by the Ethical Committee including consent form for patients participating in the study. 1. 3. 2020

**The number is not limited**

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**XX. CONTINUING PROFESSIONAL DEVELOPMENT (CPD)**

**(BY USING ESHRE CPD PLATFORM WHERE ALL CPD ACTIVITIES DURING ADVANCED TRAINING SHOULD BE INCLUDED)\***

**NUMBER OF PROCEDURES PERFORMED DURING THE TRAINING**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PROCEDURES | YEAR  4 | YEAR  5 | YEAR  6 | TOTAL |
| Basic semen analysis *(min 50 per year)* |  |  |  |  |
| Extended semen analysis (DNA fragmentation, HBA, etc.) |  |  |  |  |
| Ejaculated sperm preparation *(min 50 per year)* |  |  |  |  |
| Preparation of frozen / thawed sperm *(min 10 per year)* |  |  |  |  |
| Preparation of viral-positive semen |  |  |  |  |
| Preparation of retrograde ejaculation sample |  |  |  |  |
| Preparation of totally immotile sperm (including viability testing, e g. HOS) |  |  |  |  |
| Preparation of epidydimal / testicular sperm for ART *(min 5 per year)* |  |  |  |  |
| Conventional IVF *(min 20 per year)* |  |  |  |  |
| ICSI with ejaculated sperm *(min 30 per year)* |  |  |  |  |
| ICSI with testicular / epidydimal sperm *(min 5 per year)* |  |  |  |  |
| ICSI with artificial oocyte activation |  |  |  |  |
| Cycles with evaluated oocyte fertilization *(min 50 per year)* |  |  |  |  |
| Cycles with evaluated embryo morphology *(min 50 per year)* |  |  |  |  |
| Embryo transfer *(min 30 per year)* |  |  |  |  |
| Sperm cryopreservation *(min 10 per year)* |  |  |  |  |
| Sperm thawing |  |  |  |  |
| Oocyte vitrification |  |  |  |  |
| Embryo cryopreservation – vitrification *(min 30 per year)* |  |  |  |  |
| Oocyte, embryo thawing / warming *(min 20 per year)* |  |  |  |  |
| Testicular tissue cryopreservation *(min 5 per year)* |  |  |  |  |
| Testicular tissue thawing |  |  |  |  |
| Ovarian tissue cryopreservation |  |  |  |  |
| Ovarian tissue thawing |  |  |  |  |
| Preparation of frozen material for transportation |  |  |  |  |
| Cycles with assisted hatching |  |  |  |  |
| Cycles with embryo / blastocyst biopsy |  |  |  |  |
| Cycles with artificial collapsing of blastocysts before vitrification |  |  |  |  |
| IVM cycles - oocytes before hCG |  |  |  |  |
| IVM cycles - oocytes after hCG |  |  |  |  |
| IVM of testicular sperm |  |  |  |  |
| Active participation in the consultation between infertility specialist and patients about the quality and number of embryos for ET or cryo |  |  |  |  |
| Written or rewritten SOPs |  |  |  |  |
| Lab KPIs reports |  |  |  |  |
| Conduction or participation in ART laboratory audit |  |  |  |  |

**ASSESSMENT OF KNOWLEDGE, ATTITUDES AND  
FULFILLMENT OF TASKS**

Scoring system :

A = Excellent  
B = Sufficient  
C = Weak  
D = Unacceptable  
E = Not applicable

Assessment of fulfillment of the targets defined on pages 3 – 9

|  |  |  |  |
| --- | --- | --- | --- |
| **YEAR** | **4** | **5** | **6** |
| INTEGRATED KNOWLEDGE |  |  |  |
| REACHING OF APPROPRIATE DECISIONS; COLLECTION AND INTERPRETATION OF DATA |  |  |  |
| MOTIVATION, SENSE OF DUTY, DISCIPLINE, PUNCTUALITY |  |  |  |
| TECHNICAL SKILLS |  |  |  |
| ORGANISATORY SKILLS |  |  |  |
| ADMINISTRATIVE TASKS (MEDICAL FILES, CORRESPONDENCE, ETC.) |  |  |  |
| ETHICS |  |  |  |
| COMMUNICATIONS WITH PATIENTS |  |  |  |
| COMMUNICATIONS WITH MEDICAL AND OTHER STAFF |  |  |  |
| ATTENDANCE AND ACTIVE PARTICIPATION IN STAFF MEETINGS |  |  |  |
| ATTENDANCE AND ACTIVE PARTICIPATION IN ANNUAL SENIOR MANAGEMENT REVIEW |  |  |  |
| SCIENTIFIC INTEREST |  |  |  |
| SCIENTIFIC ACTIVITY |  |  |  |

Date : ......./....../....... (day/ mo / yr)

|  |  |
| --- | --- |
| Signature of Trainee:  ……………………………….. | Signature of Tutor : ……………..……………………… |

**CUMULATIVE LIST OF SCIENTIFIC MEETINGS  
AND COURSES ATTENDED BY THE TRAINEE  
(entire duration of training; to be up-dated yearly)\***

**example:** Joint ESHRE Annual Meeting, Paris, France, 27th – 30th June 2021.

**The number is not limited**

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**\* Certificate of attendance has to be provided**

**CUMULATIVE LIST OF ABSTRACTS PRESENTED AT SCIENTIFIC MEETINGS  
(entire duration of training; to be up-dated yearly)  
(A MINIMUM OF 1 AS 1ST AUTHOR IS REQUIRED)6**

**EXAMPLE:** R. LEGAS : "Severe auto-immune dermatologic complications during pregnancy." Poster. Symposium "Pregnancy and the immune system", Besançon, France, 17-18.06.2000.

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**\* Abstracts has to be provided**

**CUMULATIVE LIST OF PEER REVIEWED  
PUBLISHED PAPERS IN INTERNATIONAL  
JOURNALS  
(entire duration of training; to be up-dated yearly)  
(AT LEAST 1 AS AUTHOR OR CO-AUTHOR IS REQUIRED)\***

**The number is not limited**

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**\* Published manuscript should be provided**

**CUMULATIVE LIST OF PEER REVIEWED  
PUBLISHED PAPERS IN NATIONAL JOURNALS  
(entire duration of training; to be up-dated yearly)\***

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* **Published manuscript should be provided**