Introduction to Laboratory Notebooks

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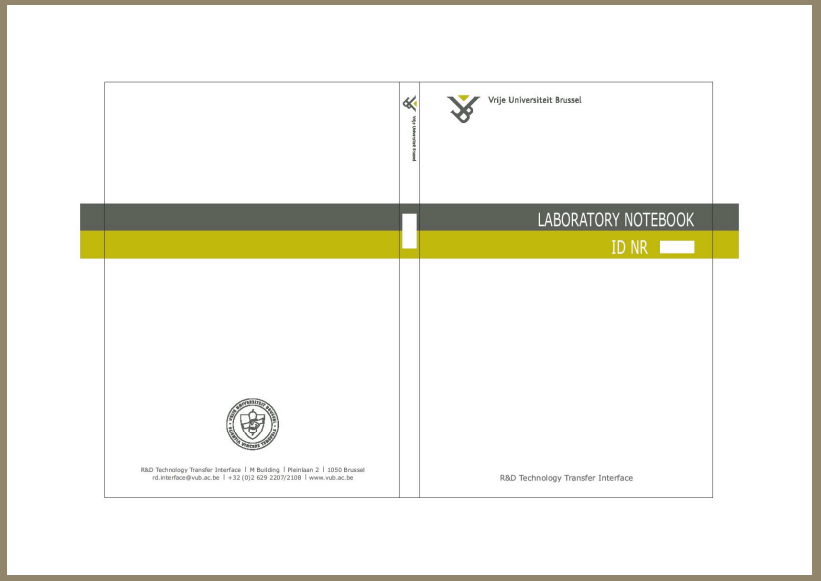
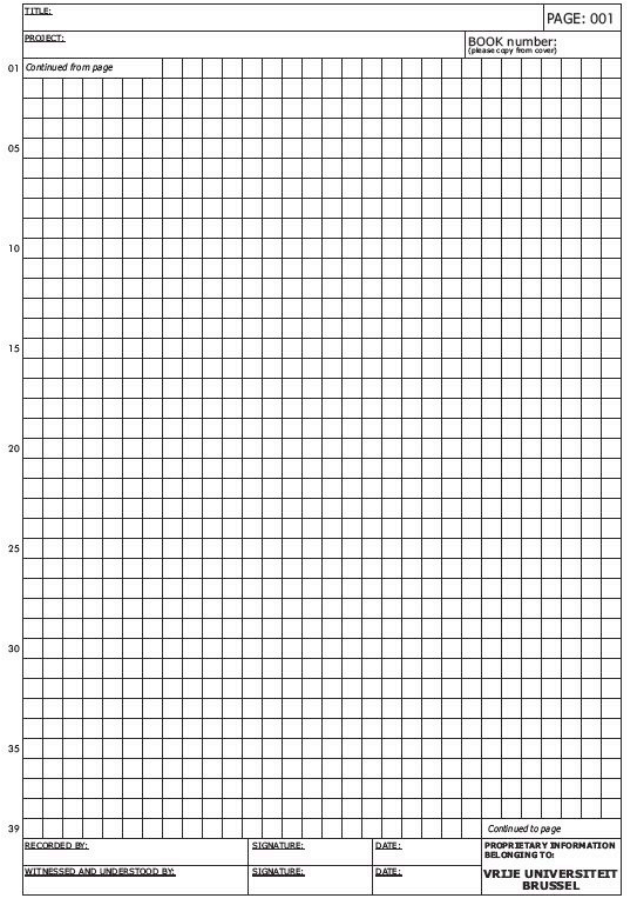
Technology Transfer Interface



Vrije Universiteit Brussel

What?

- Bound book -> no more loose pages!
- Numbered pages
- Attributed to researcher and/or project, equipment -> NOMINATIVE!
- DATED and SIGNED by user, witness



Why?

Research results: traceability

- To pass on research group's knowledge
- Avoid loss of information through loose sheets, departing researchers
- All data comes together in one source of information

  ⇨ simplyfies writing papers/theses/project reports
- To serve as a reference in the case of conflict (e.g. scientific paper, patent, background-foreground)
- To allow for easy monitoring/follow-up by promotor/project coordinator
- Error detection: e.g. in protocols when negative results

Why?

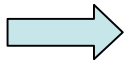
Intellectual Property (IP) issues

= any product of human intellect that is unique and un-obvious with some value in the market place

- Patent: gives the right to exclude others from commercialising a technical invention
- Trademark: identifies a unique source of goods and services
- Copyright: protects from copying original works
- Trade secret: protection by virtue of secrecy
- Models and designs
- Plant breeders' right

Why? Patenting…

Research results can lead to a technical invention with commercial value

 File patent application (before you publish!!)

Europe: patent rights belong to first to file

US: first to invent!

Why? Patenting…

Lab notebook assists in:

- Defining the inventors
- Defining the patent assignee
- Proving date of invention

-> provide evidence of the date of *conception* of an invention and proof of *diligence* in its *reduction to practice*

- reduction to practice: e.g. succesful testing of compound, building of prototype, synthesis of chemical compound, …
- diligence: intent and conscious effort to make a working embodiment.

Why? Contracts & Projects

Before signing a contract on a certain date it is important to be able to define precisely the state of the *background knowledge*

background knowledge = all *know how* and IP present before a certain date

know how = technical and scientific information which is substantial, kept secret and clearly identified

During a certain project it is important to define precisely the *foreground knowledge* developed and to make the distinction with *foreground knowledge* developed in other projects

foreground knowledge = all know how and IP developed during the project

⇨ Lab notebook provides legal evidence for ownership of background/foreground knowledge

Who?

- Researchers
- Students
- PhD’s
- Post-doc’s
- ZAP
- Engineers, technicians

How to use it?

DO

- Indicate your project/subject in title space
- Write with ink/ballpoint
- Record all your work as you progress and give a complete and detailed account of your experiments and results, including your observations and any concepts or ideas you may have
- Sign and date daily your entries

DO NOT

- Take your notebook outside the university
- Write with pencil
- Remove or add pages
- Erase incorrect entries or use liquid paper
- Treat your notebook as a freely available publication

How to use it?

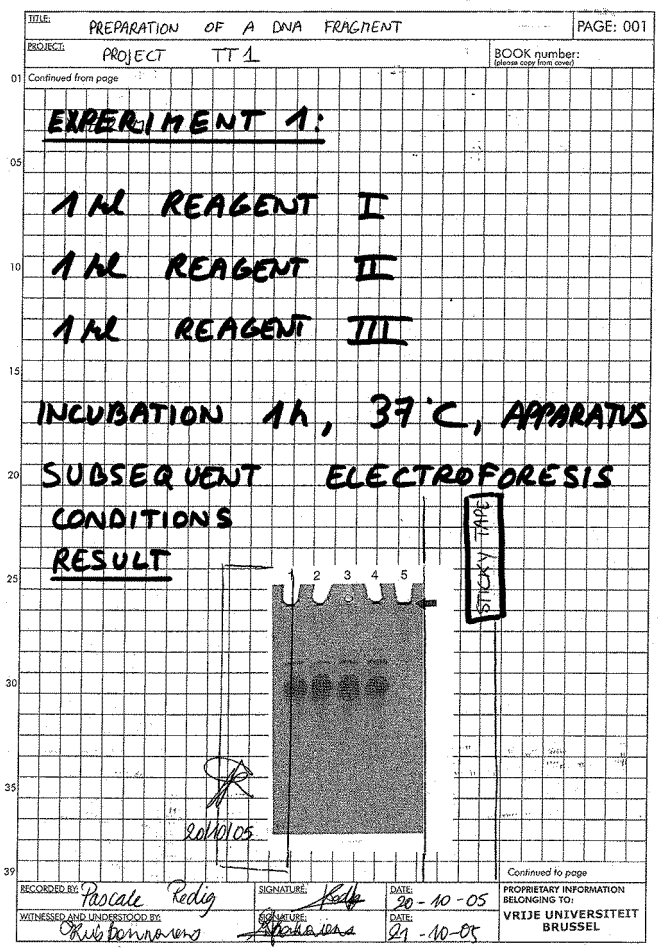
DO

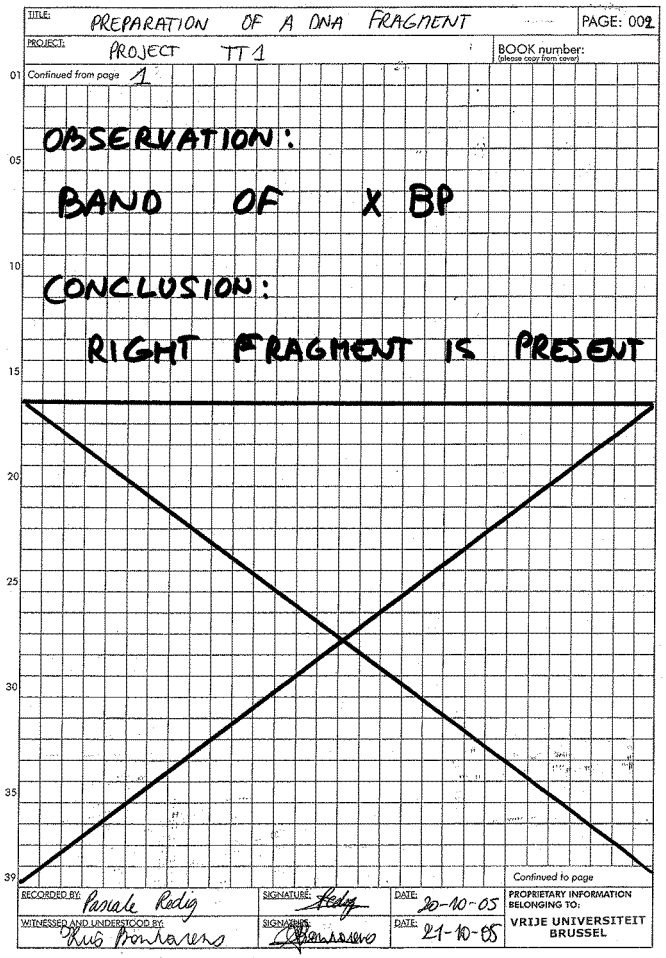
- Draw a line through unused space, blank pages and incorrect entries so as to delete them
- Initial and date separately corrections
- Record your work in such a manner that a co-worker can continue from where you stop
- Attach add-on pages or photographs or diagrams, etc with tape and initial and date over the tape and the notebook page
- Have your entries witnessed

DO NOT

- Change or enlarge entries at a later date
- Make notes on loose paper

How to use it?

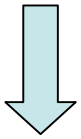

TITLE: PREPARATION OF A DNA FRAGMENT PAGE: 001
PROJECT: PROJECT TT1 BOOK number: (please copy from cover)
Continued from page
EXPERIMENT 1:
1 ML REAGENT I
1 ML REAGENT II
1 ML REAGENT III
INCUBATION 1h, 37°C, APPARATUS
SUBSEQUENT ELECTROFORESIS CONDITIONS
RESULT
1 2 3 4 5
STICKY TAPE
20/10/05
Continued to page
RECORDED BY: Pascale Redig SIGNATURE: DATE: 20-10-05
WITNESSED AND UNDERSTOOD BY: SIGNATURE: DATE: 21-10-05
PROPRIETARY INFORMATION BELONGING TO: VRIJE UNIVERSITEIT BRUSSEL


TITLE: PREPARATION OF A DNA FRAGMENT PAGE: 002
PROJECT: PROJECT TT1 BOOK number: (please copy from cover)
Continued from page 1
OBSERVATION:
BAND OF X BP
CONCLUSION:
RIGHT FRAGMENT IS PRESENT
Continued to page
RECORDED BY: Pascale Redig SIGNATURE: DATE: 20-10-05
WITNESSED AND UNDERSTOOD BY: SIGNATURE: DATE: 21-10-05
PROPRIETARY INFORMATION BELONGING TO: VRIJE UNIVERSITEIT BRUSSEL

How to use it?

Secondary sources?

May be too large or inappropiate to attach directly to your notebook



Keep separate folder especially for these records and refer in the notebook to this folder, describe the record (date, apparatus, peaks, bands, …) and note down in detail the conclusions from this record

Conclusions – Advantages

- Simplifies your work / researchers memory: writing papers/thesis
- Lab's memory: avoid loss of information
- Research management: follow-up, coordination, …
- Good lab practice: professional approach
- IPR: definition of background/foreground knowledge
- Reporting
- Legal aspects: ownership, invention, conflicts, …

How and where to get it?

All lab notebooks are numbered and need to be registered by TTI !!

To get a copy:

- please contact: Monique Peeters (2207), monique.peeters@vub.ac.be
- fill in the registration form (sent to you by Monique)
- send/give it to Monique
- after receiving a notebook, please confirm this by sending a confirmation message to Monique Peeters.

For more information about intellectual property issues:

please contact: Hugo Loosvelt (3865), hugo.loosvelt@vub.ac.be