The medical training platform
Why Xerpa?

Xerpa / Sherpa is an ethnic group native to the most mountainous regions of Nepal and the Himalayas.

They are highly regarded as elite mountaineers and experts in their local area, for their hardiness, expertise, and experience at very high altitudes.

Nowadays, the term is used to refer to almost any guide or climbing supporter hired for mountaineering expeditions in the Himalayas.

Because of this usage, the term has become a byword for a guide or mentor in other situations.

We are creating a medical resident's Xerpa.
Our purpose

Create a unified European platform for medical doctors

Collection of standardized data in a user-friendly and simple way
Enable real-time monitoring, evaluation and improvement of medical training

European, National, Regional and Hospital levels
More than an e-portfolio, a platform:

- **Training / Educational material** (lessons, surgical videos, slides, recommended readings, ...)
- **Powerful tool to share information** (email/push-notifications) – Events, Congresses, Courses, News, ...
- **Build a strong network** – increase bonds, collaborative multicentric work, ...
- **Tools**: calculators, checklists, protocols, ...

And also:

- Apply the same concept to **Universities and medical students**
The Solution

Cloud based (SaaS) – always accessible through browser, no need to install on local machines

Web and Mobile – accessible in all devices – pc, tablet, mobile

GDPR compliance – privacy by default and by design, data minimisation ...

Safety - HTTPS protocol; certified datacenters; encrypted storage
- User permissions managed by certified third party: Auth0

De-identified data - Xerpa is not an Electronic Medical Record
- Registration of standardized data to enable monitoring, evaluation and improvement
e-portfolio (already developed, in a pilot phase)

- Clinical (surgeries, special techniques, ...) Specific for each specialty

- Scientific (publications, communications) Very similar across specialties

- Training (courses, conferences, ...) Very similar across specialties
Clinical (surgeries, special techniques, ...)

- Standard Templates of defined options
  
  - **Where**: Year of residency, type of Internship/Rotation; hospital
  
  - **Who**: Sex, Age, ASA Score, ... (anonymous patient data)
  
  - **What**: Anatomical region; Diagnosis
  
  - **How**:
    
    - Elective/Emergency; Minimally invasive/Traditional/Robotic; ...
    
    - Surgical Procedure(s);
    
    - Autonomy (Surgeon/Helper/Observer)
  
  - **How well**:
    
    - Evaluation (assistant <-> resident
    
    - Complications (Clavien-Dindo, ...)

Example of Breast surgery procedure registry (part)
Clinical (surgeries, special techniques, ...)

Autonomy:

Possibility to add other users to a log (as surgeon/helper)

- Automatic push notification / email to these users
- Possible actions: Evaluation of activity; addition to their own logbooks

Other possibilities:

- Add a video / image to a log ...
Scientific (publications, communications)

Publications

- How relevant?
  - Indexation; Peer-reviewing, Impact factor ...
  - Auto-filling through DOI number (Pubmed API)
- When and where?
- Author / coauthor
- File upload
• Scientific(publications, communications)

Communications

• Type of communication (Oral, Poster, Video, ...)
• How relevant? (Prizes/Awards; ...)
• When and where?
• Author / coauthor
• File upload
• Training (courses, conferences, ...)

  • Type of course
  • Topic (life-support, per anatomic region, research, ...)
  • Certification (CME points, ...)

  • Where and when
  • Certificate of approval
Data, Statistics, Reports

• For Residents:
  • Compare with group of peers (quartiles) – “How am I doing in numbers?”
  • Manage own data – filter, export detailed data (.csv), create tables, charts, graphs, ...
  • Possibility to integrate with data from other residents -> multicentric studies, ...

• For Tutors / Hospitals / Boards
  • Periodic reports of resident’s activity (email/app)
  • Definition of thresholds and automatic alerts
  • Timely intervention on underperformers
  • Evaluation and comparison of programs
  • …
Our proposal and challenge

Join us, and shape Xerpa together!
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