



***MeSH Translation  
Maintenance System  
(MTMS)  
Management Issues***





# ***Background***

- ✧ MEDLINE/PubMed

- ✧ 16 million Citations

- ✧ 41 Different Languages

- ✧ MeSH

- ✧ Indexing Vocabulary

- ✧ Produced Annually

- ✧ Many Translations



# ***Known Existing Translations***

✧ Variable Updates

Arabic, Chinese, Czech, Dutch, Finnish,  
French, German, Greek, Italian, Japanese,  
Latvian, Polish, Portuguese, Russian,  
Romanian, Thai, Turkish, Slovenian,  
Slovakian, Spanish, Swedish



# ***Why Translations?***

- ✧ The Fundamental Problem of IR
- ✧ Authors Finding Keywords
- ✧ Supporting Additional Indexing
- ✧ Interoperability in UMLS





# ***Difficulties for Translators***

- ✧ Limited Time to Keep Up
- ✧ Can't See Current Work
- ✧ No English Equivalent for a Term



## ***Other Difficulties***

- ✧ Non-synonymous Entry Vocabulary
- ✧ Need to Track Changes
- ✧ Inclusion in UMLS Problematic



# ***The MTMS***

- ✧ Easy Insertion into UMLS
- ✧ Non-English Concepts
- ✧ Maintenance of Currency
- ✧ Web Interface
  - ✧ One Database
  - ✧ Differing Views

# ***Basic Management Approach***

- ✧ No "Official" Translations
  - ✧ Multiple Institutions - e.g., China
- ✧ Translations Voluntary
  - ✧ Incentives with MTMS
    - ✧ Less Overhead
    - ✧ Keeping Current Easier
    - ✧ Distributed Workload





# ***Experiences***

- ✧ Opened in 2003

- ✧ Present Users

  - ✧ Czech, French, German, Italian, Latvian

- ✧ Beginners

  - ✧ Chinese, Japanese, Korean, Polish, Slovenian, Thai, Vietnamese



# ***Training Issues***

- ✧ Understand Concept Orientation
- ✧ Principles of Translation
- ✧ Understand Timing
- ✧ Establish Local Authority
- ✧ Time & Distance



# ***Initialization***

- ✧ Use Electronic Version
  - ✧ Mostly Term by Term Translation
- ✧ Tree Categories
- ✧ New Translations Begin Easily In MTMS



# ***Coordination & Timing***

- ✧ Current Version

- ✧ January to July, In Use

- ✧ Between July and November, Finished Version

- ✧ YEP tasks

- ✧ Inclusion in New UMLS

- ✧ New Version

- ✧ Cutover Dates





# ***Returning Files***

- ❖ Formats Variable

  - ❖ Mainly xml

- ❖ Frequency Annually



# ***Improvements and Additions***

- ✧ Any System Better with Use

- ✧ Extensions

- ✧ Areas of More Local Concern

- ✧ Place Names

- ✧ Traditional Medicine



# ***Translation Results***

- ✧ Support Searching Multiple Databases

  - ✧ JAMAS

  - ✧ IMICAMS

- ✧ Other Language Interfaces to PubMed

  - ✧ Lister Hill Center Efforts (babelmesh)

  - ✧ Health on the Net (HON)