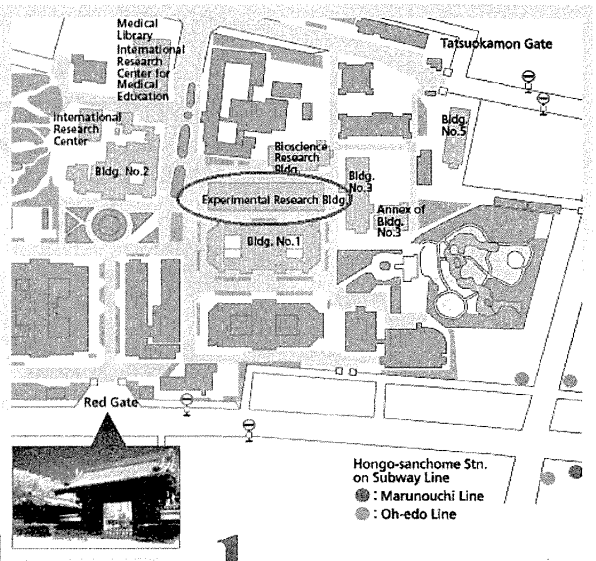
Simul-taneous interpre-tation

Max Audi-ence: 200

Pre-regis-tration only



Symposium on Globalization of Clinical Research and Trials

2015/ Feb/24 TUE 10:00～12:30

Open 9:30 • Free Admission

Tetsumon Hall (14F, Experimental Research Bldg., Faculty of Medicine, the University of Tokyo)

Program

10:00-10:20 Evaluation of E-learning (UMIN) for training on clinical research and trial
Dr. Daisuke Koide, R.Ph.,HIM,Ph.D. (Associ. Prof, the Univ. of Tokyo Hospital)

10:20-11:00 Global Investigator Training Efficiency based on PharmaTrain's CLIC Concept
Dr. Ingrid Klingmann, MD, PhD (President, PharmaTrain Federation)

11:00-11:40 Enhancing Investigator Training Through Blended Learning Methodology
Prof. Jean-Marie Boeynaems MD, PhD (Director, Erasme academic Hospital)

11:40-12:00 Launching ICT in education from the Clinical Research Support Center
Dr.Akiko Kishi Svensson, MD,Ph.D (Assist. Prof. the Univ. of Tokyo Hospital)

12:00-12:30 Discussion

Registration

Send the following information to crtp-secretary@umin.ac.jp (No later than Feb.20)
Name, Organization, Phone number, Email address.

Note: Simultaneous interpretation will be available. Please understand that this symposium will be recorded by a video camera and used for e-learning. We make sure that the audience will not be recorded.

Sponsored by Grant projects of the ministry of Health, labor and welfare in Japan (leaders are Dr. Koide (Univ. of Tokyo)

Global Investigator Training Efficiency Based on PharmaTrain's CLIC Concept

University of Tokyo, February 24, 2015

Ingrid Klingmann, MD, PhD, FFPM, FBCPM
President PharmaTrain Federation

What is Efficiency in Clinial Trial Conduct?

- High recruitment per site
  - to reduce site management costs of the sponsor
  - to maximise profitability of the site
- Optimal protection of patients
- High standardisation of study performance with strict adherence to protocol

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Reality in Clinial Trial Conduct

The Clinical Trials process has proven to be expensive, inefficient and requires an urgent overhaul:

- OECD-GSF: Working Group to Facilitate International Cooperation in Non-Commercial Clinical Trials (2011)
- Institute of Medicine (IOM) of the National Academies, USA: Envisioning a Transformed Clinical Trials Enterprise in the United States: Establishing an Agenda for 2020 (2012)
- European Science Foundation: Implementation of Medical Research in Clinical Practice (2012)

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Sites and Studies by Development Phase (~7,500 trials and ~ 145,000 sites)

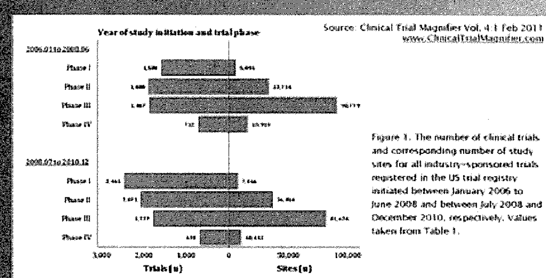

Figure 1. The number of clinical trials and corresponding number of study sites for all industry-sponsored trials registered in the US trial registry initiated between January 2006 to June 2008 and between July 2008 and December 2010, respectively. Values taken from Table 1.

... had on average 47 sites per trial
... about 18 sites per trial

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Global Inefficiency in Recruitment for Clinical Trials

>$30,000 spent opening each site	60% of sites recruit 1 or less patients	5 patients per study per site on average
$18 Million spent opening sites that did not recruit a single patient		93% of sites do not deliver what they proposed
	Ineffective Patient Recruitment strategies cause the most costly & major delays across clinical studies	

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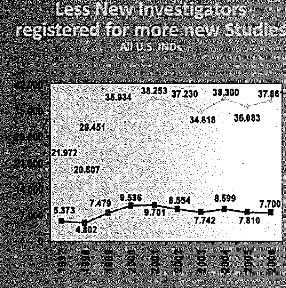
Shortage of Investigators in the USA



Additional Challenges

- ~ 87% of physicians are not involved in clinical trials
  - 38% attribute lack of opportunity as the main reason
  - 32% feel that the time commitment is too much
- 38% of investigators only conduct 1 trial
- 15 – 20% of investigators do not recruit any patients
- Overall number of investigators decreasing

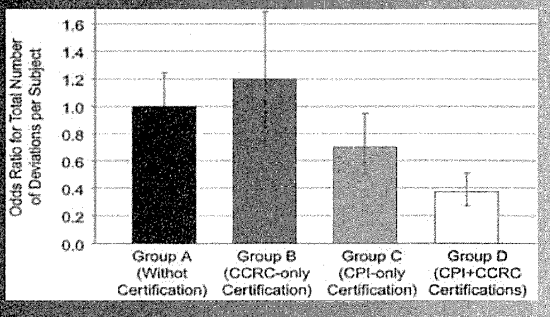
Source: Centerwatch, FDA, Harris Interactive, McKinsey, 2009

Barriers to Efficient Clinical Research (USA)

- Lack of qualified investigators
- Lack of sufficient mentoring
- Academic reward system and career disincentives
- High research costs and lack of funding
- Regulatory burden
- Fragmented infrastructure
- Lack of willing participants in clinical trials
- Incompatible databases between practice and research
- Lack of communication and coordination within and between research centers

Sung, N. et al. (JAMA, 2003); Fang, D. et al (AAMC, 2007); AAMC Task Force II on Clinical Research (2006), Clinical Research: a national call to action (AMA, 1998)

Certification and Improved Clinical Trials Performance



3 Knowledge and practice of good clinical research practice among 122 critical care and neurosciences researchers comprising 55 clinicians, 39 students/junior researchers and 28 researchers

Response to question	Clinician	Student/junior researcher	Researcher	Total
Have read Declaration of Helsinki[1]*	28 (51%)	16 (41%)	13 (46%)	57 (47%)
Have read *National statement on ethical conduct in human research*[2]*	37 (67%)	22 (56%)	21 (75%)	80 (66%)
Have read *Australian code for the responsible conduct of research*[4]*	20 (36%)	13 (33%)	19 (68%)	52 (43%)
Claim to understand good clinical research practice principles†	34 (62%)	21 (54%)	21 (75%)	76 (62%)
Claim to understand informed consent	39 (71%)	27 (69%)	23 (82%)	89 (73%)
Claim to understand confidential data storage	36 (65%)	20 (51%)	20 (71%)	76 (62%)
Claim to understand serious adverse events and their reporting requirements	26 (47%)	8 (21%)	13 (46%)	47 (39%)

Frequently Heard Investigator Position

- No need for training because existing education in medicine is sufficient
- If at all then only required for drug trials
- No time for training because clinical routine and workload don't leave time for this
- No financial means to cover training and travel costs
- The need for an investigator certificate as pre-requisite to perform clinical trials would further increase the administrative hurdles and further decrease the number of trials in Europe

Ethics Committee and Competent Authority Position

- GCP requires demonstrated qualification of all stakeholders and thus investigators have to demonstrate their professionalism and knowledge as well
- GCP course attendance required and documented by certificate, renewal every 2 years
- Detailed description of the required information elements on the certificate (e.g. Germany)
- Detailed list of training topics for investigators, PIs, sponsor-investigators (Swissmedic)

Sponsor Position

- It is sponsor's responsibility to ensure involvement of qualified sites
- Well trained sites recruit more efficiently and provide better data
- We provide a GCP training course and require from each investigator to pass this course --> physicians participating regularly in trials have to do several GCP courses per year, all with somewhat different content

ICH Investigator Qualification Requirements

- ICH GCP does not define specific educational requirements
- "The investigator(s) should be qualified by education, training and experience to assume responsibility for the proper conduct of the trial, and should meet all the qualifications specified by the applicable regulatory requirements"
- "The IRB/IEC should consider the qualifications of the investigator for the proposed trial, as documented by a current curriculum vitae and/or by any other relevant documentation the IRB/IEC requests"
- No overall basis for site accreditation requiring specific training and certification

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Current Training Practice

- Semantic confusion between "GCP Training" and "Clinical Trial Management Training"
- All sort of GCP training courses provided by pharma companies, commercial providers, universities, not-for-profit organisations, as f2f courses or distant learning, covering more or less intensively the ICH GCP elements
- No agreed standard but attempts to establish recognised Investigator Certificate (e.g. ACRP Training)
- TransCelerate initiative to harmonise GCP training content and mutually accept GCP Certificates

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Current Training Practice

- Training over one or two days in GCP enables physicians
  - to better understand how to protect patients in clinical trials
  - how to adhere to regulatory requirements

  but
  - not to perform clinical trials

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Awareness of Need for Improvement of Site Professionalism

- There is a growing awareness of the need for education and training as well as accreditation of sites and certification of the clinical research team in order to leverage performance
- Clinical trial experts agree that physicians and their team interested in performing clinical trials should know more about
  - clinical research science and methodology
  - quality and regulatory requirements
  - efficient clinical trial management

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OECD Recommendation

Develop a concept of Global Core Competencies for clinical research trials

should be developed as a for investigators and other members of the clinical research team, adapted to their different responsibilities and roles.

- Standardised as well as mutually and internationally recognised should also be defined.

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Investigator Certification Requirements

- A few countries (China, Brazil, Russia, Japan, Korea) have certification programmes for investigators and/or accreditation of study sites which are administered by the regulatory authorities
- No formal certification initiatives in North America
- Few site accreditation initiatives in Brazil
- Only UK, Sweden, Lithuania and Switzerland have legal requirements for GCP training
- In countries like Germany and Italy ethics committees require a 1-2 days GCP certificate as proof of investigator suitability

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CLIC Objectives

There is a need to develop a strategy for investigator training in Europe that

- stimulates the need awareness and broad willingness to improve the situation
- can be applied in all countries to fulfil the existing national clinical regulatory and ethics committee requirements
- ensures academic recognition of the investigator role
- fulfils pharmaceutical industry's quality expectations

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CLIC Objectives (cont.)

There is a need to develop a strategy for investigator training in Europe that

- follows a syllabus that covers the full spectrum of investigator activities (sub-investigator, principal investigator, sponsor-investigator, (Phase 1 investigator ?) not just the GCP basics
- does not create a new hurdle to clinical research

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CLIC Objectives (cont.)

There is a need to develop a strategy for investigator training in Europe that

- can be integrated into the investigators' work schedule
- can be performed without undue investment of the investigators' time
- is financially affordable
- is provided by demonstrably qualified training organisations
- ensures demonstration of achieved learning outcomes

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3-Level Training Concept

- Training concept for 3 Levels
  - Study site staff / study coordinators / junior investigators
  - (Principal) Investigators
  - Sponsor-investigators
- Syllabus and learning outcomes adapted to the three levels

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3-Level Training Concept (cont.)

The 3-Level approach fits well with approaches from

- APPI (training programme for physicians: level 1 for sub-investigators, level 2 for investigators, level 3 for highly experienced trial-initiating investigators)
- Swissmedic (sub-investigator, investigator, sponsor-investigator)
- ACRP (partly fitting: Clin. Res. Coordinators, Clin Res. Associates, Investigators)
- Recommendations from CTU Basel, KKS Netzwerk Germany and Semmelweis University, Hungary: Level 1 to be kept focussed on local trial environment including local legislation and language

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3-Level Training Concept (cont.)

- Incremental content building:
  - Level 1 (basic): 16 hours of training content, 1 ECTS
  - Level 2 (intermediate): 40 hours of training content, 2 ECTS
  - Level 3 (advanced): 64 hours of training content, 3 ECTS
- eCLIC has built-in modules that mirror/assist levels 1 and 2 for blended learning
- Trainees decide on learning modus and number of learning hours to be able to pass the examination
- Mandatory for all 3 levels: one day of f2f for passing the MCQ examination

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Examination Process

- One obligatory examination day
- Development of a pool of in total at least 500 MCQs for the 3 different Levels, subject to continuous improvement process and sensitivity analyses
- MCQs per examination:
  - 50 for Level 1, 60 for Level 2, 80 for Level 3
  - 5 possible wright or wrong answers to consider per question
  - 80% of questions from central pool, up to 20% on national legislation provided by national examination providers
  - Levels 1 and 2 in national language, if required
- Passing rule: at least 66%

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Examination Process (cont.)

- „Drivers licence approach": pool of questions is publicly available
- Course organisers will apply to PharmaTrain Central Office for list of at least 80% of the required number of questions which will be randomly assigned. This will be associated with a fee per examination.
- Answers will be entered on a computerised sheet and automatically centrally evaluated through the PharmaTrain Central Office to ensure objectivity and to maintain standards and comparability of training.

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Certification of Trainees

- Certificate will be issued preferably by national university, and if this is not achievable in a country, by national physicians association or nation-wide academic Clinical Trial Unit organisation. The certificates will contain the respective label
- Certificates will have PharmaTrain label
- Certificates will be issued by course providers and contain their labels
- PharmaTrain database on individual candidates and certificates

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Accreditation

- Establishment of a "CLIC Course Provider Network"
- Establishment of "PharmaTrain Course Recognition" award for those courses fulfilling the PharmaTrain quality and content criteria
- "PharmaTrain" accredited courses will be offered all over Europe
- PharmaTrain Central Office reviews new courses and decides on "PharmaTrain Course Recognition". This will be associated with a fee
- These courses will be added to the PharmaTrain Platform and thus "on-course" database

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How Can PharmaTrain Achieve Acceptance?

- Broad consensus seeking on the „Position Paper" that delineates concept and solutions in form of
  - ✓ an overall strategy
  - ✓ the required infrastructure, resources and QMS
  - ✓ the content elements like syllabus, curriculum, learning outcomes, examination process
  - ✓ development of a strategy for training course accreditation
  - ✓ development of a strategy for investigator certification

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How Can PharmaTrain Achieve Acceptance? (cont.)

- Utilisation of PharmaTrain's established position as a recognised training and course recognition infrastructure
- Creation of a network of suitable training course providers committed to apply the PharmaTrain syllabus, curriculum and quality standards for training of the different investigator levels

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How Can PharmaTrain Achieve Acceptance? (cont.)

- Development of a gloabl examination infrastructure, physically close to the investigators, together with partner organisations like ECRIN, DIA, ACRP,national academic institutions, etc.
- Identification of national partner universities in all countries willing to issue national „PharmaTrain-Standard" investigator training certificates

How Can PharmaTrain Achieve Acceptance? (cont.)

- Achievement of requests from national authorities and ethics committees to adhere to this standard
- Inclusion of requirement for this level of investigator training into upcoming legislation
- Early interaction with global organisations like ACRES to ensure that these training requirements are in line with or even drive the implementation of global standards

Thank You for Your Attention!

We welcome your ideas, comments and critique during the current consensus seeking process

and hope

to gain your support for striving towards higher competence of clinical investigators

to develop new medicines more efficiently and to better protect study participants.

PharmaTrain

Improving investigators training by blended learning methodology

Jean-Marie Boeynaems

PHARMED Hôpital Erasme ULB

- The need to improve clinical investigators training : multiple initiatives
- Importance and diversity of e learning
- PHARMATRAIN eCLIC and other e learning tools
- Optimal design of e learning
- A timely topic : MOOCs

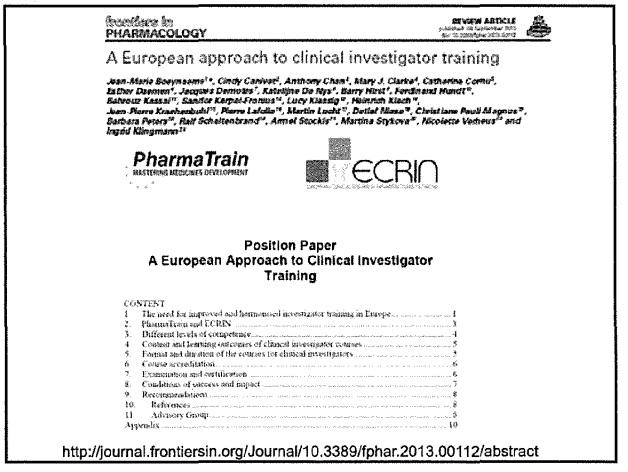
The need to improve clinical investigators training : multiple initiatives

Multiple initiatives and documents

- Statement of clinical investigator competence, APPI Consensus Statement, Monitor, August 2011: 79-82
- CSIS (July 2013): 44 strategic measures to enhance health industries in France … including setting up training sessions on clinical research for healthcare professionals
- CLIC initiative of the IMI (Innovative Medicines Initiative) project PharmaTrain
- TransCelerate BIOPHARMA
- OECD-WHO working group on « Global core competencies for clinical trials »

IMI PharmaTrain

- IMI (Innovative Medicines Initiative) : a public-private partnership between EU Commission and EFPIA companies to foster medicines development in Europe.
- PharmaTrain was one project focused on training in Medicines Development Sciences/Pharmaceutical Medicine.
- Goal : developing and implementing common standards in order to improve quality.
- Also creation of new tools, especially e-learning modules.
- The IMI project has ended in 2014 and PharmaTrain is now a permanent not-for-profit organisation.



frontiers in PHARMACOLOGY — REVIEW ARTICLE

A European approach to clinical investigator training

PharmaTrain — ECRIN

Position Paper
A European Approach to Clinical Investigator Training

CONTENT

1 The need for improved and harmonised investigator training in Europe ... 1
2 PharmaTrain and ECRIN ... 3
3 Different levels of competence ... 4
4 Content and learning outcomes of clinical investigator courses ... 5
5 Format and duration of the courses for clinical investigators ... 5
6 Course accreditation ... 6
7 Examination and certification ... 6
8 Conditions of success and impact ... 7
9 Recommendations ... 8
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11 Advisory Group ... 9
Appendix ... 10

http://journal.frontiersin.org/Journal/10.3389/fphar.2013.00112/abstract

Importance and diversity of e learning

Advantages of e learning as compared to face-to-face

- Pure e learning :
  - No need to travel : ! travel budget cuts in the biopharma industry.
  - No schedule constraint : during the week-end at home…
- Blended learning :
  - Students visit an introductory e module before the face-to-face session → less theory and more case studies/ interactions.
- E learning is obviously ideal for busy people like clinical investigators!

Different types of e learning

- From e books and self-learning to virtual classes
- Some e learning courses can be started at any time, wheras others take place according to a defined schedule
- Various degrees of interaction (self-assessments, learning activities, role of instructors, discussion forum)
- Different degrees of blending with face-to-face sessions

PHARMATRAIN eCLIC and other e learning tools

E learning in PharmaTrain

- Objective : development of « blended learning ».
- Basic concept : students visit an introductory e module before the face-to-face session → less theory and more case studies/ interactions.
- Collaboration between :
  - Pharma companies who provided internal resources (UCB, Pfizer, Amgen…)
  - E learning producers (Hibernia College, ScienceMedia, HSeT Foundation).

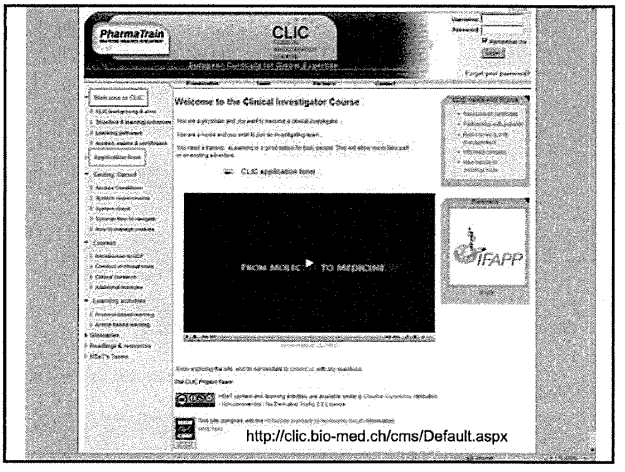
PharmaTrain e library (I)

9 modules on the drug development process

- Introduction to drug development
- How to get it right – The scientific basis of formulating dose-response
- Introduction to ethical issues in clinical research
- Introduction to Good Clinical practice
- Introduction to the registration of medicinal products
- Introduction to health economics
- Full development of a monoclonal antibody
- Parkinson's disease
- Asthma and COPD

PharmaTrain e library (II)

- A course for clinical investigators and their teams : CLIC
- The PharmaTrain e library is accessible following free of charge registration at : www.pharmatrain.eu



CLIC versus other e learning courses for clinical investigators

Several courses are available. They differ *inter alia* by their length :

- Brookwood academy : ± 2.5 hours
- Zenosis : ± 3 hours
- CITI Program (University of Miami) : 4-6 hours
- Online GCP (Infonetica) : ± 6 hours
- eCLIC (HSeT, PharmaTrain) : 16 hours and more

Optimal design of e learning

Design of e learning courses

- The emerging format combines :
  - Slide summarising the content
  - Voice recording providing additional details and explanations
  - Possibility to print a transcript of the voice recording.
- Surveys among students show that they differ in their preferences : looking at the screen or listening to a podcast or printing and reading a paper transcript.

Issues in the design of e learning courses

- Ease of navigation through a module
- Images and figures: true added value?
- Interactivity tools : drag and drop…
- Importance of videos of the lecturer?
- IT technical requirements