Project Title: Research Platform at the Institute of Intensive Care Medicine, University of Zurich

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Collaborators: Reto Schüpbach, Intensive Care Unit for Visceral and Transplantation Surgery; Dominique Bettex, Intensive Care Unit for Cardiosurgery University and University Hospital of Zurich, Switzerland

Background, Challenge or Opportunity:
The number of residents, attendees and fellows in intensive care who seek an academic career is small. They often complain that there is no postgraduate training that include clinical research. The new Institute of Intensive Care Medicine (IICM) has high potential and synergies to increase the research output as an overall institution.

Purpose/Objectives:
To set up a research platform at the IICM. A common infrastructure and educational program to support residents and fellows in performing basic and clinical research will be developed.

Methods/Approach:
The project covers the following steps/milestones:
1. Interviews with the deputy-dean and dean of the faculty (√ Oct 15)
2. Definition of the problems, requirements and targets based on interviews with residents and fellows (ongoing, until May 16) and visits to other ICUs (√ Nov 15, ongoing)
3. Search for collaborators among the heads of other ICUs (√ Feb 15, ongoing)
4. Definition of instruments (ongoing, until May 16) and obtaining necessary approvals (until July 16) for program implementation (training sessions in research, protected time for research, journal clubs, platform for master students and doctoral graduates, exchange programs with other ICUs).
   Milestone 1 (July 16): Instruments in place
5. Identification of resources needed (until July 16)
7. Set up alliances and contracts for collaboration (within University of Zurich: animal labs, institutes of biostatistics, medical informatics; with technical University ETH, other ICUs, etc.) (Aug – Oct 16)
8. Start of program, running platform (milestone 2; Dec 16)

Outcomes and Evaluation Strategy:
The following metrics will be used to evaluate the effectiveness:
1. Metrics for scientific output:
   • Number of publications in scientific journals and contributions at scientific meetings
   • Amount of third party funds acquired
   • Number of patents applied for, spin-off companies
   • Academic degrees acquired by residents and fellows
2. Satisfaction of residents and fellows
   • Length of stay at the institution of residents and fellows
   • Regular surveys of residents and fellows
Research Platform at the Institute of Intensive Care Medicine, University of Zurich

Emanuela Keller, Neurointensive Care Unit, University Hospital Zurich, Switzerland

Collaborators: Reto Schüpbach, Intensive Care Unit for Visceral and Transplantation Surgery, Dominique Bettex, Intensive Care Unit for Cardiosurgery, University and University Hospital of Zurich, Switzerland

Background & Opportunity

- The number of residents and fellows in intensive care medicine who seek an academic career is small.
- They complain that there is no postgraduate training that include clinical research.
- The new Institute of Intensive Care Medicine (IICM) has high potential and synergies to increase the research output as an overall institution.

Purpose & Objectives

To set up a research platform at the IICM:

- A common infrastructure and educational program to support residents and fellows in performing basic and clinical research will be developed.

The project covers the following steps/milestones:

1. Interviews with the deputy-dean and dean of the faculty (D1 Oct 15)
2. Definition of requirements based on interviews with residents and fellows (D2, ongoing until May 16) and visits to other ICUs (D2 Nov 15, ongoing)
3. Search for collaborators among the heads of other ICUs (D3 Feb 15, ongoing)
4. Definition of instruments (D4a)
   - Protected time for research
   - Courses (structured teaching in biostatistics, academic writing, application for third party funds, intellectual property and patenting, etc.; journal club; research lunch)
   - Platform for master students and doctoral graduates
   - Exchange programs with other ICUs (ongoing, until May 16) and Implementation of instruments (D4b until July 16) (milestone 1: instruments in place July 16)
5. Identification of resources needed (D5 until July 16)
6. Application for third party funds (D6 Aug – Oct 16)
7. Set up alliances and contracts for collaboration (within University of Zurich: animal labs, institutes of biostatistics, medical informatics; ETH, other ICUs, etc.) (D7 Aug – Oct 16)
8. Start of program (milestone 2: running platform Dec 16)

Methods

Table 1: Timeline with Target Dates

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<td>Q4</td>
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Outcomes & Evaluation Strategy

The following metrics will be used to evaluate the effectiveness:

1. Metrics for scientific output:
   - Number of publications in scientific journals and contributions at scientific meetings
   - Amount of third party funds acquired
   - Number of patents applied for, spin-off companies
   - Academic degrees acquired by residents and fellows
2. Satisfaction from participants and those providing the instruction
   - Length of stay at the institution of residents and fellows
   - Regular surveys of residents and fellows as well as teachers

Discussion & Impact

- University: Increase of research output
- University Hospital: Highly qualified personnel, reference center for intensive care medicine

Summary & Next Steps

- Currently, a detailed masterplan is being prepared to implement the various instruments

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