Capacity building through PhD programs

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Overview

• Capacity building
• Doctoral trajectory and training
  - What?
  - Why?
  - How?
• Joint degree
  - What?
  - How?
• Example from IUC Limpopo
Global challenges

• From VLIR-UOS website....
  - “We are faced with **global challenges** such as poverty, migration and climate change. The effects are felt locally, but the causes and **solutions are global**. These challenges affect all of us....
  - We need **knowledge** to find answers to the challenges....
  - **Universities and university colleges** can play a key role in social innovation by trying to find solutions in their research and education to the social challenges.....
  - We need universities and university colleges worldwide that **work together** to find solutions”
Basic ideas behind IUC

- Research based education
- Research as basis for innovation
- Universities as important actors for socio-economic development
- Share/exchange ideas to change minds/share knowledge
Sustainability

• Building strong interpersonal relationships
  • basis and guarantee for a longstanding cooperation
• Today’s students are tomorrow’s research partners and teachers
• Sound joint research results in good joint publications.
• Motivated students (master and PhD) are a stimulus for enthusiastic teachers
• Joint collaboration creates a broad international network
Sustainability (again)

- Demand-driven
- Mutual interest
- Long-term cooperation
  - IUC programs 10-12 years
- Continuity
  - VLIR NSS after/during IUC
  - National funding
  - International funding
- Regional integration (North and South)

“Joint capacity building” P. Janssen, 13/4/2011
Collaboration project: the PhD

• Most graduated PhD students play an important role in the development of tomorrow

• All parties have an interest
  - Academic
  - Financial

• Good “stress test”
PhD trajectory: what are you expected to do?
but there is more...

Develop your skills!

Transferable Skills

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Doctoral Study Program

What?

- Third Cycle education program
- Obligatory
  - PhD students of UoA
  - outgoing PhD students
- Available but not obligatory for incoming PhD students
- Flexible!
  - you compose your own personalized study program
7 categories

- Research skills and techniques
- Adapting to the research environment
- Research management
- Personal effectiveness
- Communication skills
- Networking and teamwork
- Career management
A PhD degree can bring you to a lot of places!
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How can we help the PhD student?
Administrative scenario for PhD students

Start, during and end of PhD

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Joint PhD

- A joint PhD is a PhD that is prepared at two universities (in Belgium or abroad).
- The minimum requirement is that the PhD student conducts at least six months of research at the partner institution.
- The thesis is defended at only one of the two universities, but the PhD student receives a doctoral diploma from both institutions.
Joint vs double PhD

- In the case of a **joint PhD**, the two institutions issue one diploma in which one title is conferred (the same in both institutions).

- A **double PhD** means that a double diploma is issued and two titles are conferred (this happens when the institutions do not use the same title). This can be done either with one diploma or with two separate diplomas that refer to each other.
Requirements for a joint/double PhD

- The doctoral thesis must be prepared in both partner institutions under joint supervision.
- The PhD student must conduct at least six months of research at the partner institution.
- The jury must include at least one member of the tenured academic staff from each of the partner institutions.
- An separate agreement must be drawn up between both partner institutions for each joint or double PhD.
- If the application for a joint/double PhD is approved, incoming PhD students must ensure that the administrative procedures in both partner institutions are completed properly (including, for example, enrolment as a PhD student).
Interuniversity agreements

- Thorough discussion on wishes and demands
- Is there already a framework in place in the country with a Flemish institution
- Before the first “joint PhD”
  - Framework agreement between institutions
  - Legal issues
    - Type of defense
      - UoA demands a viva
    - Language of thesis document and defense
    - Jury
      - Internal
      - External
  - Customs and habits
- Individual agreement per student

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Incoming PhD

• Incoming joint PhD students enroll as PhD students at another university (=their home university) when starting their double or joint PhDs.

• These students come to Belgium to conduct joint PhD research with a supervisor who is employed by the Flemish university as a member of the tenured academic staff.

• The minimum requirement for incoming joint PhD students is that they conduct at least six months of research at the Flemish university (=the partner institution).
Evaluation in Flanders

- Small differences between Flemish universities
- The progress of your **PhD research** is evaluated by your Individual Doctoral Committee (IDC)

Potentially

- The progress of your **Doctoral Study Program** is evaluated by a peer review-commission from your faculty.
Submission of the PhD thesis

• Procedure starts when concept thesis is submitted to the appropriate channels in their home institution
  - Office of the Dean?
• Procedure starts in Flanders when the PhD student submits a concept thesis to their Individual Doctoral Committee. The IDC has max. 4 weeks to evaluate the concept thesis.
  - Through the office of the Dean or faculty doctoral coordinator
Jury

• Composed by the Faculty on both sides
• Both universities will have “their rules and wishes”
  - Important to decide before the first PhD student
  - Read and discuss individual contracts!
• Composition
  - supervisors from both sides
  - at least one independant tenure member of both sides
  - at least two external members
    • holding a PhD
    • no joint publication in the last 5 years or on the specific subject
“An excellent defense. Let’s give her the doctorate.”
Defense (viva)

- Permission of the jury
- Location and date set by the Board of the Faculty
- Fill in the required form to register for your defense
- Incoming PhD students usually will have their defense in their home institutions
  - flying out Flemish supervisors and internal member(s)
    - who pays?
  - travel of external members!
    - who invites?
    - who pays?
Pitfalls

- Degree has a different name on both sides
  - eg. PhD in medical virology vs PhD in medical sciences
- Differences between Flemish universities
- Choosing one university means not choosing the others....
- Number of promotors
  - eg. UoA allows a max of three promotors (2+1)
- Co-publications
  - Financial hurdles can cause limits on co-authorship
Tips and tricks of the joint degree

- Discuss wishes and demands carefully
- Get legal advise
- Read individual contracts carefully!
- Become and (more importantly) stay friends!
- What will happen with the new PhD
  - tenure position offered?
my UoL experience

- VLIR-UOS IUC UoA-UoL
  - Started in 2010
  - 8 areas of interest
  - I got involved in 2011

- Reformulation of goals for phase 2 (launch 2015)
  - Focus on STIs (mainly HPV-Chlamydia-Gonorrhea)
  - A focused research consortium with both laboratory facilities and public health expertise in STIs in a unique niche in sub-Saharan Africa

- One PhD student in project “Infectious diseases”
  - Defended in 2014
  - Still issues with certificate
  - Transferred to staff of UoL/SMU
First PhDs

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First PhDs
the spin-off...

- An independent research line on HPV research in SMU
- the “Training center for Africa for STI and HPV”
- WAKA
- funding proposals to national and international funders
HPV and STI training center for Africa

HPV & STIs Training Center for Africa
Inaugurated by Professor Tshepo Gugashe
On the 27th May 2015
Sponsored by Ilex SA & SepSci (Hologic Distributors)

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WAKA- Network – basic idea

- To form a network to:
  - Exchange complementary research initiatives
  - Standardize and validate research protocols
  - Initiate multicenter initiatives
Network – expanded idea

- Setup of laboratory network to perform EQA and sharing of know-how
- Support for local HPV detection
- Performance of high end typing techniques and validation of local results
- Integration with Phase 2 of VLIR-UOS initiative with University of Limpopo
WAKA was born….

• Waka HPV is the abbreviation of 'Wanavyama wa Kudhibiti ya HPV’
  • [The translation of: Wanavyama (Partners) wa (of the) Kudhibiti (control) ya (for) HPV (HPV)]
• The aim of the project is to set up a HPV reference centre and establishment of HPV research network within the African countries within the VLIR-IUC program.
• The WAKA HPV Africa project is a North South South Cooperation Program in the framework of the Institutional University Cooperation (IUC) of VLIR.
Collaborations

• University of Limpopo – Medunsa – SMU – South Africa
• Jimma University - Ethiopia
• Moi University – Kenya
• UNIKIN - Congo
• Mbarara University – Uganda
• University of Burundi - Burundi
Kick-off meeting (May 2014)
Second WAKA meeting (Johannesburg, May 2015)
Preliminary conclusions from “my” South-African adventures

- The capacity of the SA laboratory is drastically increased
  - Human resources
  - Laboratory equipment
- One PhD student was much more influential than a group of Master students
  - Metastatic potential
- Legal issues need to be solved upfront
  - The Flemish part is at least as difficult as the Southern part
Conclusions

- PhD students are a sustainable way to invest in capacity building
  - the PhD project “tests” the system
    - long term
    - future position
  - “automatically” followed by masters/bachelors/…
  - creates opportunities for future funding
- Good agreements are necessary before the start of a PhD program
  - Discuss wishes and demands before the start
- Dedicated promoters on both sides are a must!
- Co-promoting a double degree creates friends!
We can offer a lot...

but not everything....

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Ph.inisheD.