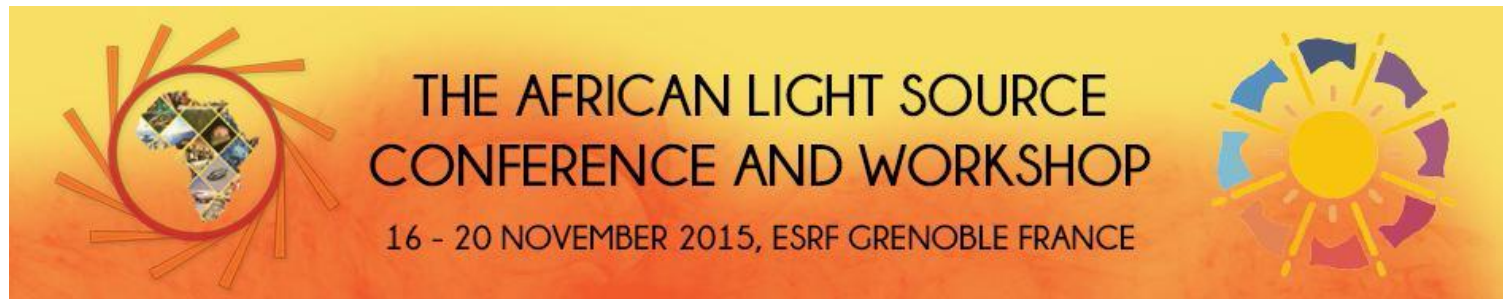




# Impact of Training in Technology Transfer “Success Story from Egypt”

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# 1-Gaining knowledge and skills

**At 2011 & 2012, I participated in three important training**

1- Bioinformatics training course at International Center for Genetic Engineering and Biotechnology (**ICGEB**)-Trieste, Italy, Jun 2011

2- **JSPS-KEK School** -Structural Biology Workshop, during SESAME user meeting, Amman, Jordan, 2011.

3-” From Genes to Atomic Structures” at International Center for theoretical Physics (**ICTP**), Trieste, Italy, 2012.

# Bioinformatics Training at ICGEB,2011





# JSPS-KEK School, 2011



# ICTP 2012



## 2- Inspiration

- Those trainings represents to me a flashes of inspiration.
- I thought in constructing a center for research and training that cover fields of Genomics, Proteomics, Drug design and Synchrotron Based Applications. Where all those fields, depend on computers ,soft ware and available web recourses for data collection, analysis, model building and interpretation.
- I shared this idea with colleagues , we put a common vision and clear strategy for establishment of **Bioinformatics Center**.



# Research Team



### 3-Convencing funding entities by importance of technology transfer:

- At 2013, we Submitting for a capacity building project “ Establishment of Bioinformatics Center at Faculty of Science, Helwan University)
- We got approval for funding the project from our home university



## 4- Project Implementation

From July 2014 to July 2015, we executed our plan which included:

- Purchasing, Installation and testing for devices and equipments
- Recruitment for the research team which is a multidisplinary team (2 Biochemists- 1- Microbiologist-1 Physicist- 1 Informatation)

# 4-Project Implementation(cont.)

- The center is consists of 3 units
- 1- Research and development unit: equipped with 1 Server PC, Dell PowerEdge T320 and 2 computer Workstation Dell Precession T1700
- 2- Advanced Training Unit equipped by 10 Pcs
- 3- Imaging and Microscopy Unit: looking for fund to purchase a live cell imaging microscope.

# R&D Unit



# Training Unit





## 5- Operation

- From September 2015 and on going
- We started 2 research protocol in developing novel drugs from natural products
- Teaching of Bioinformatics Course for under grad students
- Planning for international cooperation and submitting for joint projects

# Starting Knowledge Transfer, 2015

at Advanced Training Unit, Bioinformatics Center ,  
Helwan University, Cairo, Egypt



# Suggestions to AFLS

1-Organizing a series of **workshops and trainings** in African countries to:

- Spread the awareness by the importance of SR applications
- Develop the skills and knowledge
- Establish African Networks

# Suggestions to AFLS

2- African Scientists shall co-operate to submit a **joint project** for research in the field of SR ( Horizon 2020 fram)

<https://ec.europa.eu/research/participants/portal/desktop/en/home.html>

- As a practical way to transfer our ideas into tangible results, and hence enable us to convince authorities and funding organizations to support the project of African Light Source



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- JSPS
- ICTP
- Helwan University