

# EG Bioinformatics

Next Generation Genome Informatics

## 30 Seconds Pitch

- **Unique Opportunity:**
  - We are the *first Genome Informatics* company in the Arab Region.
  - Innovative solutions **addressing customer needs**.
  - Fast growing **multi-billion \$ market**.
- **Global Ambition:**
  - Using local/regional revenues to compete in the global market
  - Aim company to be worth more than €40-50M in 5-6 years.
- **Value Propositions:**
  - Efficient and cost effective solutions (**at least 50% saving**)
  - **Value-added genomics content** that is focused on **regional-oriented problems**
- **Expert team with International Experience**
  - Technology
  - Commercial
  - Management

## The team

- 40+ years collective research and commercial experience.
- Award winning international research.
- 130+ academic publications (30+ top journal papers).
- Strong international connections in global market place.

**Moustafa M. Ghanem**

Data mining / Workflow /  
Life Science / HPC

Commercial R&D /  
Technical Marketing



**Mohamed Abouelhoda**

Comparative Genomics / Bioinformatics  
Algorithms

Popular freeware bioinformatics tools



**Sameh El-Ansary**

Distributed Systems/ P2P /  
Cloud / HPC

Commercial Software Development / Technical  
Sales

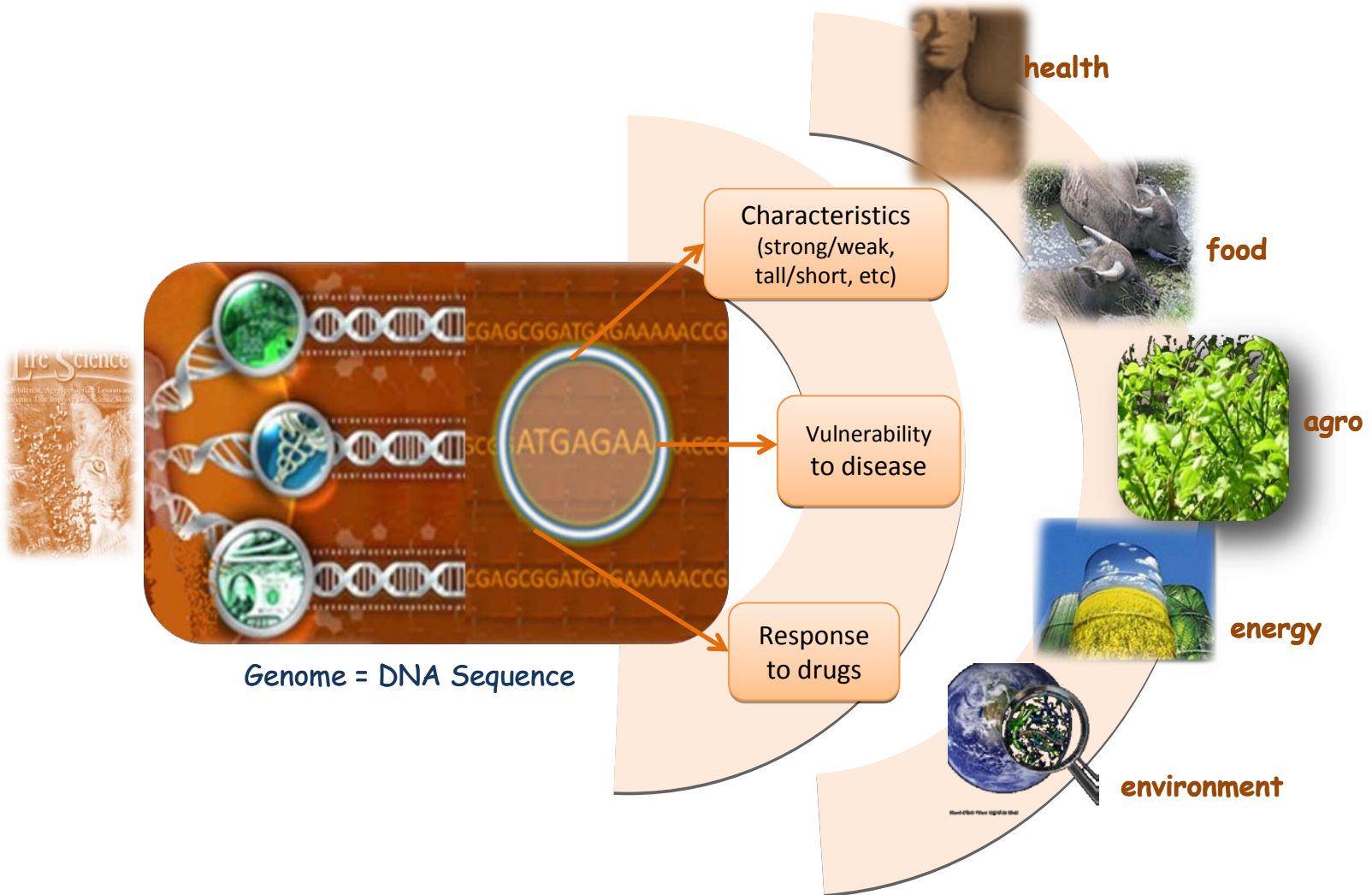


**Mohamed El-Kalioby**

Software Engineering /  
Project Management

Licensed MS, Java, Oracle Developer





## NGS: A Disruptive Technology is Here

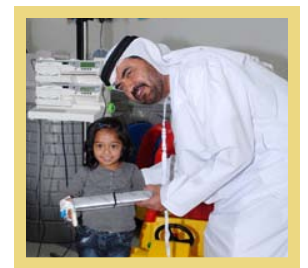


Example → Personalized medicine where individual genomes are used in clinical setting for diagnosis and treatment

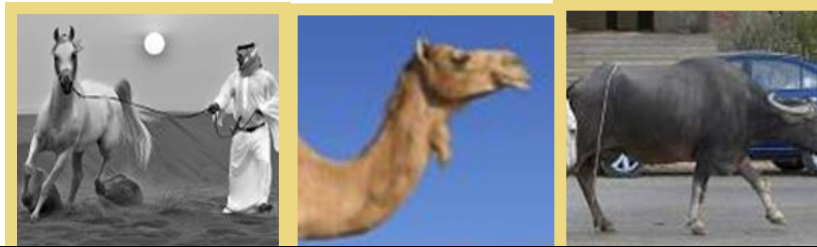
- Next Generation Sequencing (NGS) Technology → Genomes for all
    - Can produce genome data in few days
    - Affordable by small labs (\$1-2M for one machine)
    - Cost of sequencing as low as \$1000
    - Can now do it on individual level
  - Next Generation Sequencing (NGS) Technology → Genomics for all countries
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# Regional Opportunity: Fighting Regional Diseases

Liver Cancer  
Childhood Cancer  
Bladder Cancer  
Bird Flu  
Diabetes  
Sickle Cell Disease  
Hepatitis C  
Thalassimia



## Regional Opportunity: Livestock and Agriculture



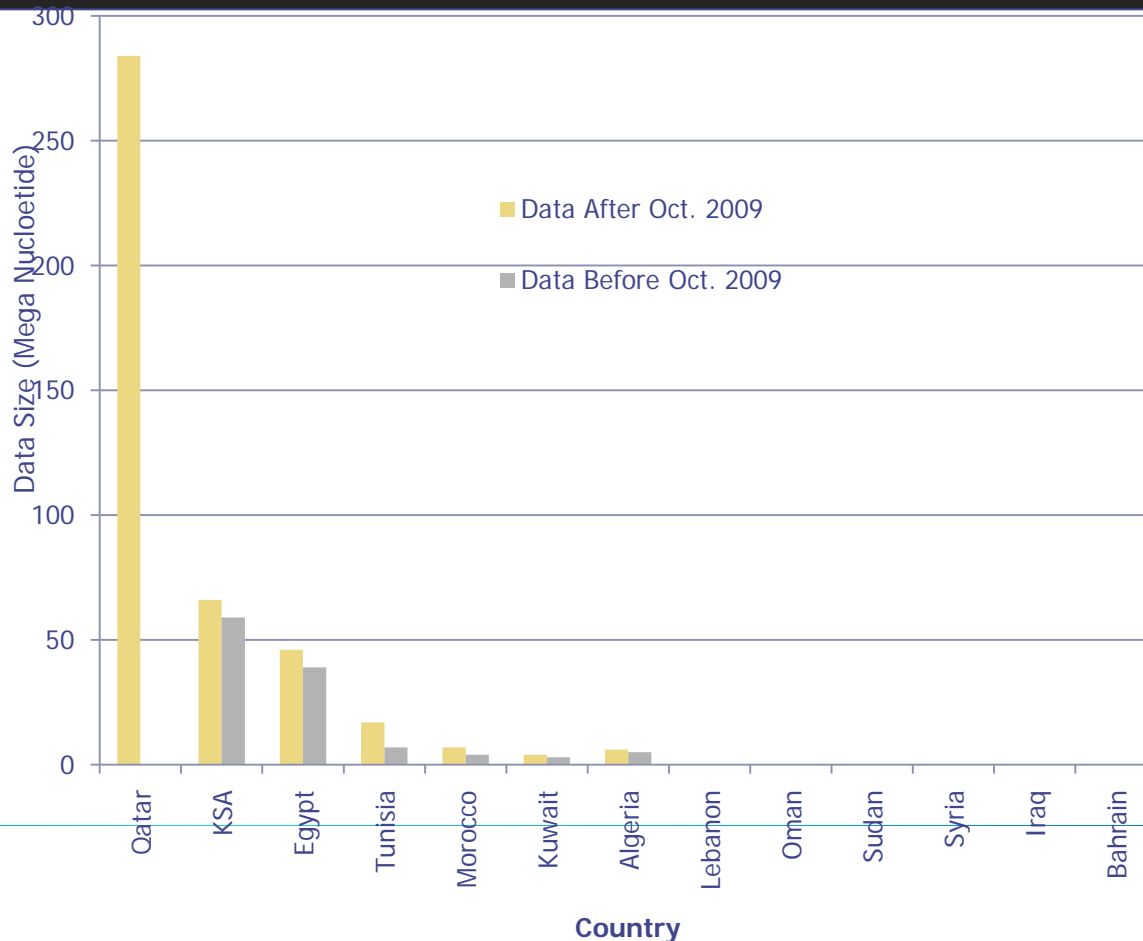
Partial Camel Genome Sequence May 2010 (Saudi)  
Date Palm sequenced in 2009 (Qatar)



# The Data is Coming

- **NGS in the region**

- 1 already in Egypt, 2 in Egypt by 2011
- 2 in Saudi, 1 in Qatar, 6 in Arab countries by 2011



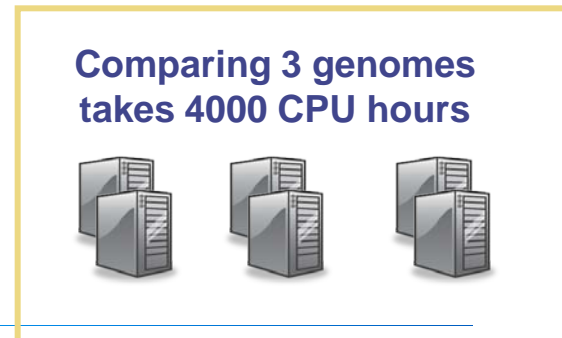
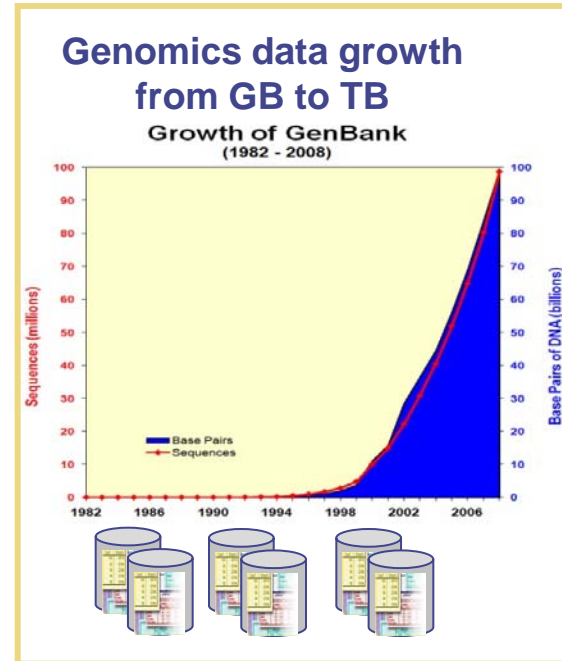
# Customer Needs

## ● Overcome Data Deluge

- Data is large and comes from different sources,
- Data has to be cleaned and organized

## ● Overcome Computational Challenges

- Analysis requires high performance computers
- Lack of locally installed computational infrastructure



## Market Size

### Genomics and Genome Informatics Market Size

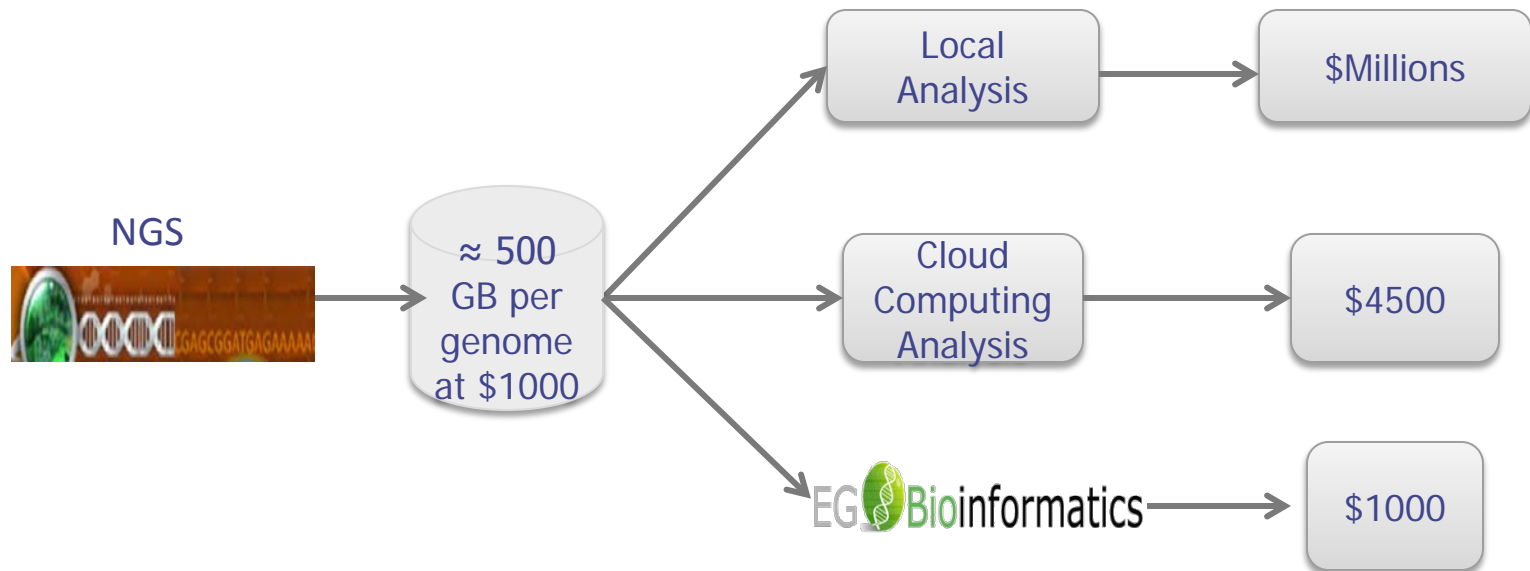
- **Global:** \$20Bn ( \$3Bn Informatics) @ 20-15% CAGR
  - **Regional:** \$150M (\$24Mn Informatics) @ 40-50%CAGR (Virgin)
  - **Local:** \$20M ( \$3Mn Informatics) @ 40-50%CAGR (Virgin)
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## Gaps in Market/Competitive Advantage

- Regionally
    - No local/regional informatics suppliers !
    - Eg-Bioinformatics regional and cultural fit
  - Globally
    - No mature NGS informatics tools available !
    - Novel validated technology/international links
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# The problem in numbers

Computational cost is higher than chemical cost



# Our Technology

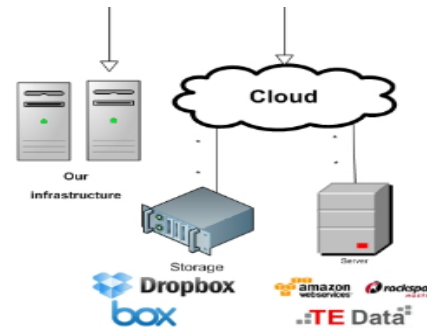
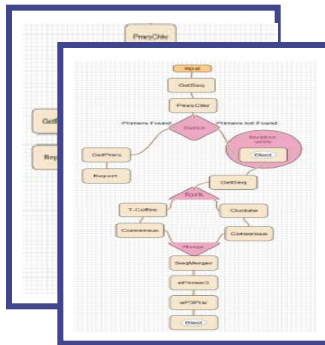


**Innovation**  
**Cost-effectiveness**  
**Regional-Advantage**  
**Quality**

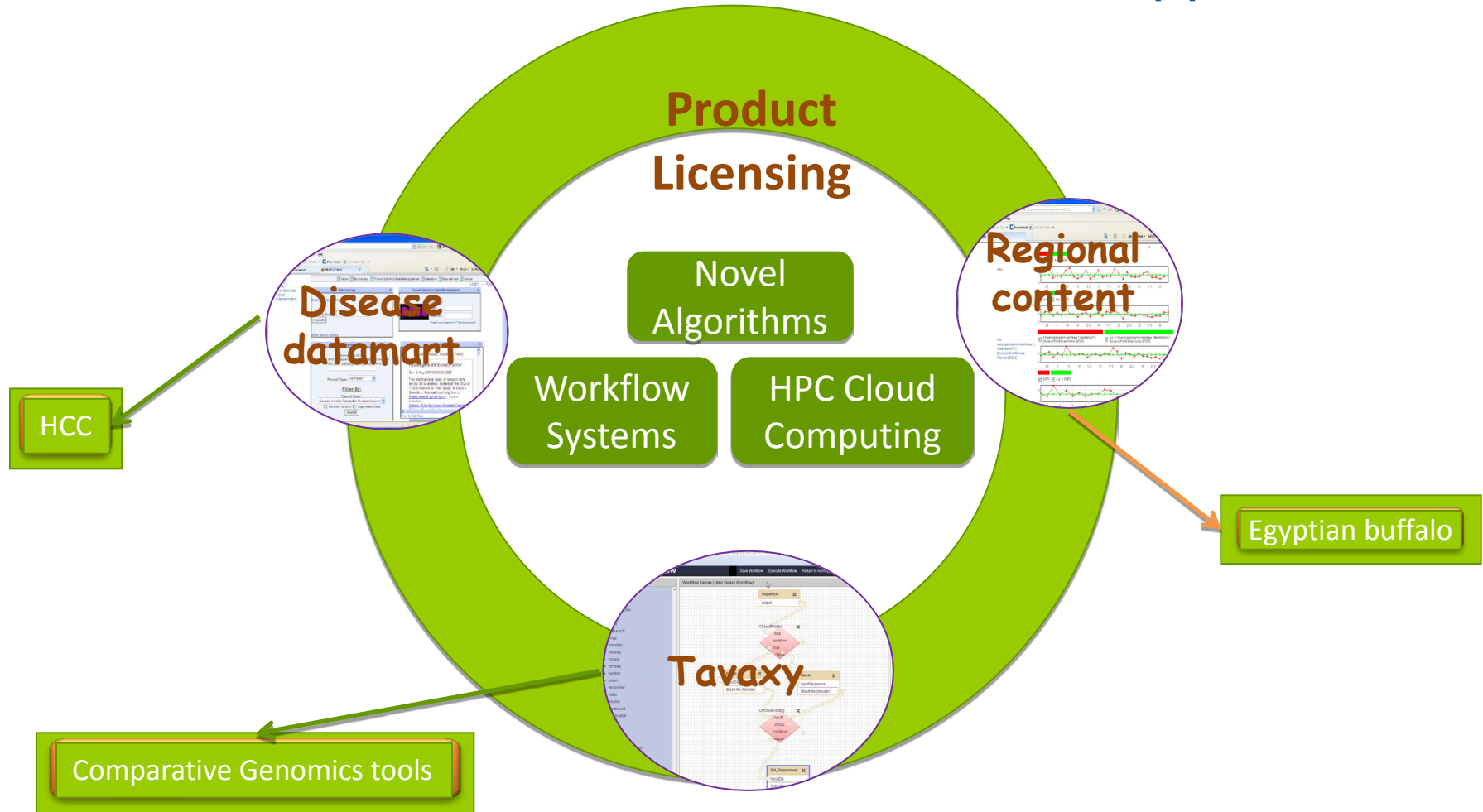
Novel Algorithms

Workflow Systems

HPC Cloud Computing



# Our Products and their Applications



# Our Services



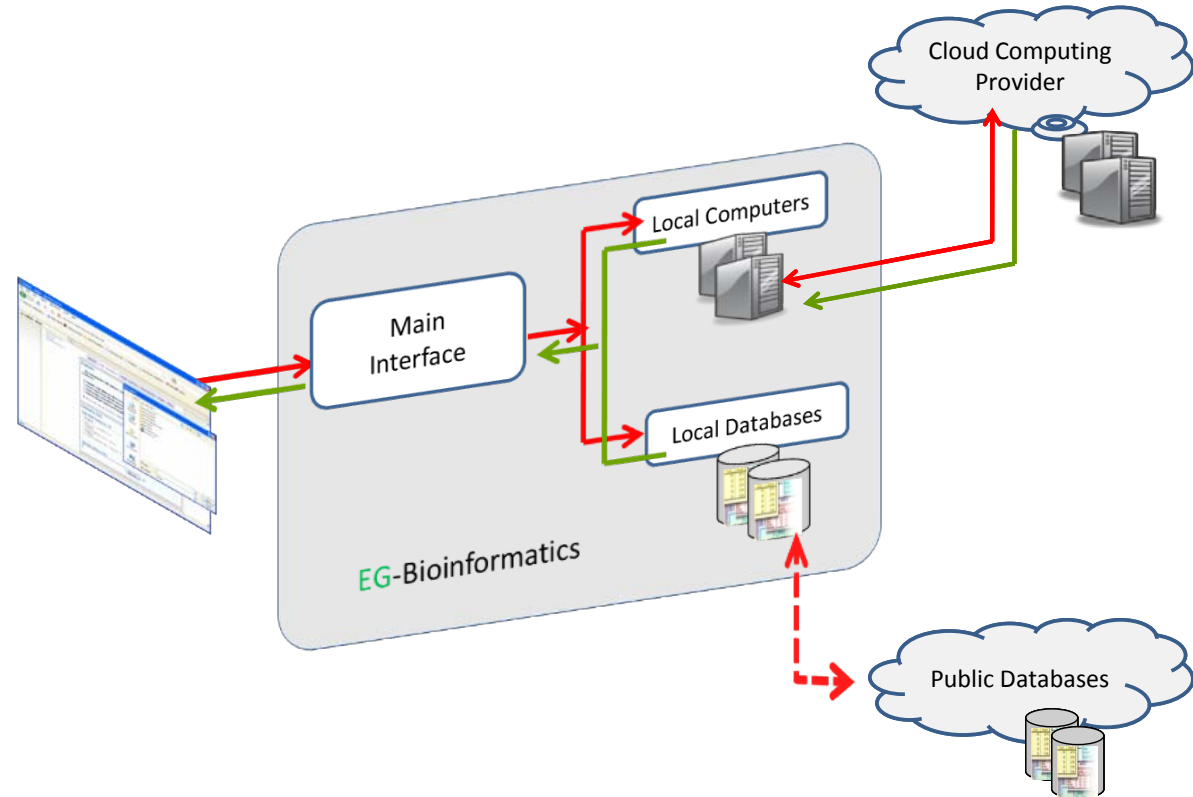
## Our Services

Imperial College  
London

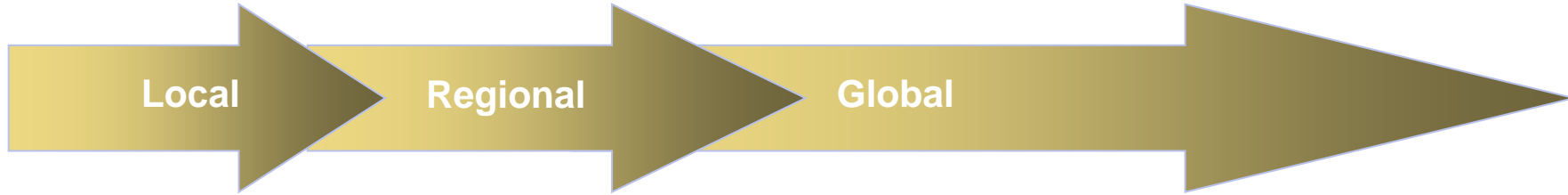
AnurOS  
Novel IT Solutions

المعهد القومي للأورام

Crosslinks  
Life Sciences redefined

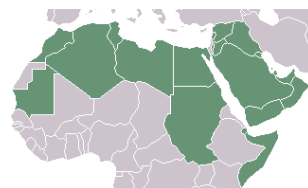



# Sales and Marketing



Reference / Engaged







Potential/Typical













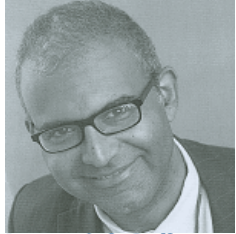







# What Customers Say

Hani Gabra, Imperial College London



Imperial College  
London

"The EG-Bioinformatics team have helped us build a unique data mart for genomics research in ovarian cancer. This is a very valuable data resource for our work. EG-Bioinformatics has a competitive business model which is cost effective and based on sound technology and expertise.

Dr. Rob Gill, AnurOS Ltd



AnurOS  
Novel IT Solutions

"The business model of EG-Bioinformatics is highly attractive and competitive: the team has unique expertise, technology and products. We look forward to taking them to our customers in the UK and Europe."

Dr. Alex Michie CrossLinks BV



Crosslinks  
Life Sciences redefined

"finding suitable partners who can match our particular needs has been extremely difficult, but we were very excited to find out about EG Bioinformatics, whose specialist skills in bioinformatics provide exactly the resources we need. We have already commenced work with them on one of our projects and are looking forward to growing this partnership to provide us with both a scalable, cost-effective development base and also a route into the fast-growing Middle-Eastern genomics and diagnostic markets."

## Why MedVentures

- Capital Sought:

- We currently seek investment of US €200,000
- The capital would enable us to speed-up our recruitment process and our marketing activities

- Investors' Experience Sought:

- Access to International Genomics/Life Science market
- Connections in Regional Markets

- Exit Strategy:

- Acquisition
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- **The Business:**
  - Software services, products & data content
- **The Sectors:**
  - Life Sciences: Healthcare, Biotechnology, Pharmaceutical, Agrobusiness.
- **The Market:**
  - **Core Bioinformatics:** \$3bn 2010 CAGR 10-30%
  - **Cloud Computing:** \$42bn by 2012
- **The Value Proposition:**
  - **Regional:** Address lack of expertise and lack of resources
  - **Global:** Novel Technology, Low-cost and scalable access using Cloud computing
- **Technology:**
  - String Algorithms
  - Workflow Technology
  - Cloud Computing

- **Revenue Streams:**
  - Pay as you go cloud services
  - Licensed software tools and content
  - Outsourced data analysis
  - Outsourced custom development
- **Strategy:**
  - Using revenues from local/regional operation to compete in the global market
  - Leverage graduating students
  - Exploit founders links in Europe and Arab world.
- **Status:**
  - Several pilot sites
  - Building partnership network
- **Potential Value:**
  - \$50M after 5 years
- **Team:**
  - Highly skilled experts

