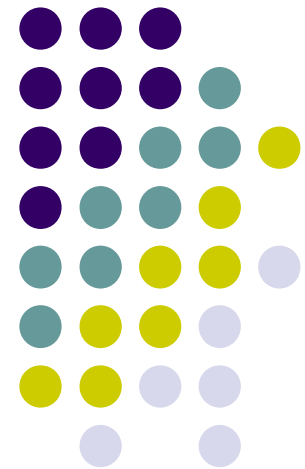


Countries Having the Competitive Edge -

Scotland



How did Scotland create it's competitive edge?



1. Scientific Excellence
2. Supportive Environment;
 1. Political
 2. Regulatory
 3. Funding
 4. Co-ordination
3. Infrastructure;
 1. Facilities
 2. Supply chain
 3. Processes



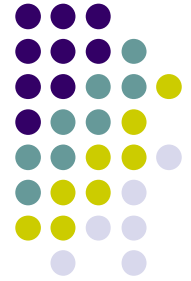
Scientific Excellence



- “ First cloned mammal, Dolly the sheep, in 1996.
- “ University of Edinburgh **3rd** in the world for stem cell research based on citation impact (*Source: ScienceWatch*).
- “ University of Edinburgh has the same number of world-leading and internationally excellent clinical medicine researchers as the University of Cambridge (*Source: RAE*)

- “ On a global scale Scotland ranks;
 - “ **1st** in the world for stem cell research based on citation impact 2007 (*Source: ScienceWatch*)
 - “ **1st** within the G8 for clinical medicine papers based on citation impact 2009 (*Source: Evidence Ltd.*)
 - “ **4th** in the world for clinical medicine research based on citation impact 2009 (*Source: ScienceWatch*)

Supportive Environment



- “ Devolved government enables local strategies for health, science and economic development.
- “ Regulatory environment is flexible and appropriate for the opportunities the technology offers.
- “ Scottish government has invested over \$150m
- “ Support from major charities such as MS Society and British Heart Foundation
- “ Scottish Stem Cell Network . a single point of contact to establish collaborations.
- “ Scottish Development International . a single entry point for commercialisation.
- “ Direct with companies and institutes through Scottish Enterprise.

Infrastructure - Facilities



- “ BioQuarter - \$1.2 billion public/private investment project
 - “ 1.4 million square feet of flexible development
 - “ Houses largest group of stem cell researchers in UK
 - “ A 100-acre biomedical research park with;
 - “ 1150 researchers
 - “ 870 bed teaching hospital
 - “ \$90m MRC Regenerative Medicine Centre
 - “ \$34m BioIncubator
 - “ \$18m commercialisation fund
- “ Edinburgh Science Triangle, one of the top 20 global science parks
- “ Aberdeen Science and Technology Park
- “ Glasgow 27 acre. West of Scotland Science Park

Infrastructure - Supply Chain



“ Supply of Cells



“ Therapeutics



“ Screening Tools



“ Scale-up and Manufacturing



“ Supporting Technologies
and Reagents



“ QA and QC



“ Infrastructure and Research
Support



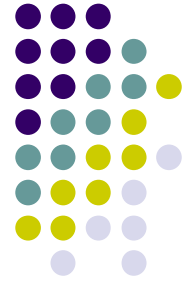
Infrastructure - Processes



- “ SSCN - development of software based tools to improve speed and success of commercialisation
- “ Scottish Academic Health Sciences Collaboration - a single point of contact to access clinical and research expertise
- “ Single national database of patients records enabling rapid clinical trial recruitment.
- “ Generation Scotland has genetic data on healthy and diseased families allowing disease to be tracked.
- “ NHS Research Scotland offers a route for the fast and efficient approval of multi-centre clinical research studies.
- “ Adoption of Scotland-wide agreements allowing rapid negotiation and signature of NDAs, standard contracts etc.

Summary

Key Success Factors



1. Scientific Excellence
2. Supportive Environment
3. Innovative development and translational processes
4. Multiple collaborative mechanisms



Thank you.

Please visit us at;

www.sscn.co.uk

SSCN  scottish stem
cell network