

# Life and Chemical Sciences Skills Investment Plans

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SCI

*Starting Your Career in  
Chemical and Life  
Sciences*

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# Life/Chemical Science skills investment plan



**Skills Investment Plan**  
For Scotland's life sciences sector



**Skills Investment Plan**  
For Scotland's chemical sciences sector



# Life science sector

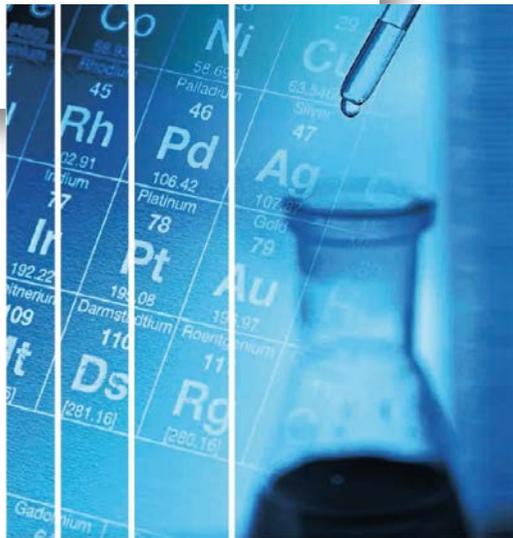
- Deliver the Scottish Government's **economic strategy and skills strategy** in relation to the life sciences sector – high growth potential and with capacity to boost productivity.
- **Double economic contribution** by 2020 to £6.2bn turnover & £3bn GVA.
- Position Scotland as a **world-class centre of excellence** in life sciences.
- Increasing **global opportunities** – attract inward investment.
- Acknowledge that skills will continue to play an **integral and vital role** in the achievement of strategic objectives.

# Life/Chemical Science skills investment plan



Skills Investment Plan  
For Scotland's life sciences sector

Skills  
Development  
Scotland



Skills Investment Plan  
For Scotland's chemical sciences sector

Skills  
Development  
Scotland



Based on evidence and consultation:

- Quantitative and qualitative research with numerous businesses
- Carried out 20+ individual meetings to discuss action plan
- Tested and endorsed by LiSAB and CSS Skills groups
- Life Sciences SIP launched on 29<sup>th</sup> April 2014
- Chemical Sciences SIP launched 28<sup>th</sup> Oct. 2014

IM European Lead Compound Facility

Pharma Services Strategy for Scotland 2013 - 2020

Life Science Strategy for Scotland 2011 - 2020

Market Initiatives

Market Influencers

**Customers**

**Multinationals**

**Pharma Services Supply Chain**

Drug Discovery	Pre-Clinical Research	Clinical Research	Manufacture & Preparation

**Support Service**

Health Informatics	Specialist Tools, Products & Services	Drug Delivery Technologies

Medicine and healthcare products Regulation Agency (MHRA), Scottish Medicine Coordinator (SMC) and Medicines Coordination Centre, European Medicines Agency (EMA), Food and Drug Administration (FDA)

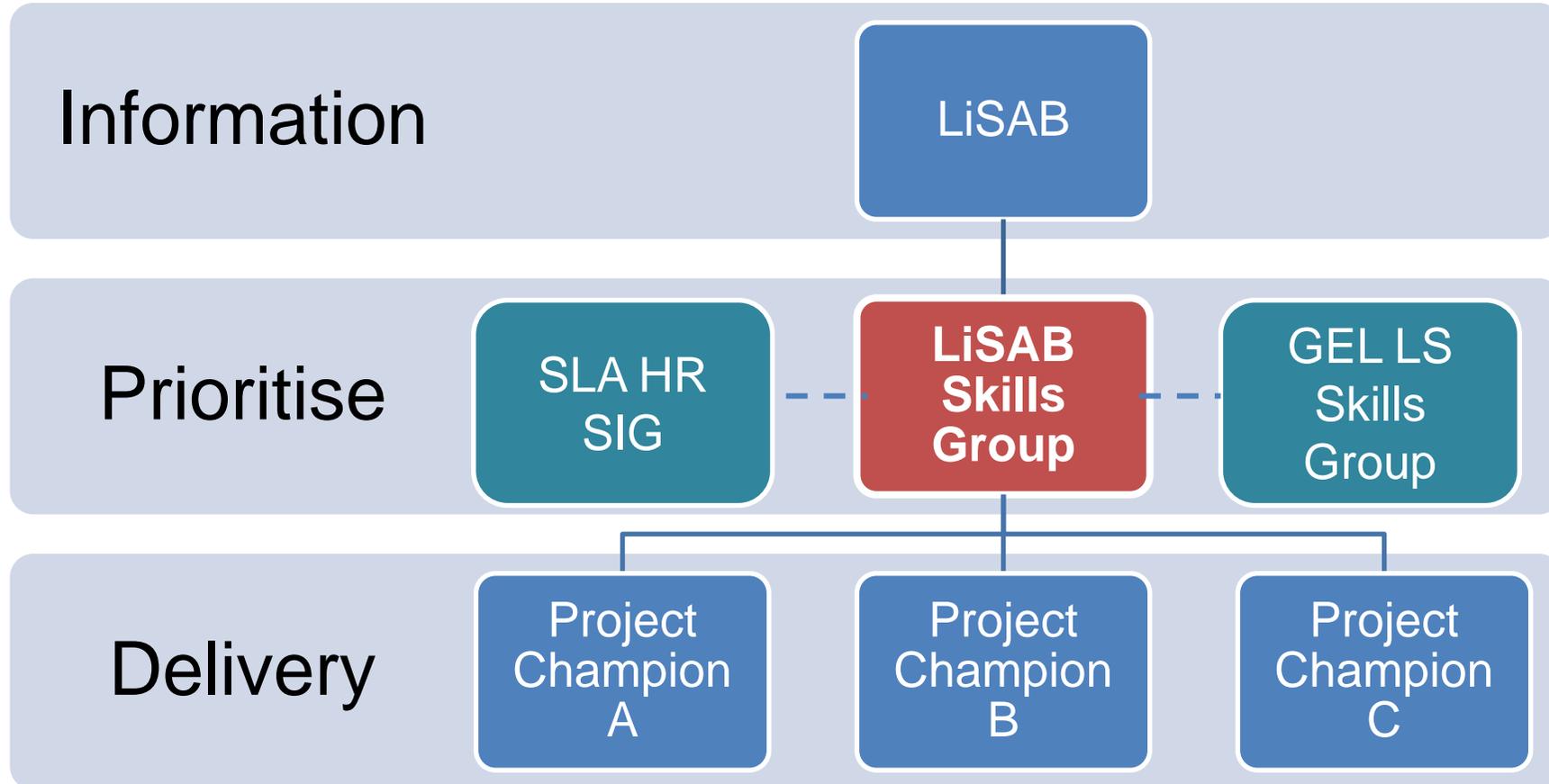
Regulatory & Approval

# Key skills issues

- Graduate work readiness
  - Lab skills, soft skills, career expectations and work experience
- Outdated view of Life Science careers
  - Pupils, teachers and careers advisers
- Low uptake of Life Sciences Modern Apprenticeship
- Small talent pool in Scotland
- Access to senior staff with a blend of scientific and business skills
- Gaps in business skills such as sales & marketing and HR



# Operation



# Theme 1: Building graduate work readiness

## Lab skills project

- Industry endorsed course to run at Edinburgh Napier University
- 40 students went through the programme 2014. A further 40 planned for 2015
  - Graduates in employment, should have been in a lab based role for no longer than 6 months
  - Unemployed Life Science graduates
  - Employed but working within another industry
- The course is feeding into the new Biosciences general accreditation degree
- Roadshows planned around the Universities



Laboratory skills viewed as an important part of the curriculum  
Students have greater awareness of industry needs

# Theme 1: Building graduate work readiness

## CV competition

- Proposed in response to industry concerns that University graduates are not adequately prepared for the world of work.
- 12-week placements, 50% funded by SDS.
- Initial pilot focussed on Glasgow (in conjunction with GEL)
- 7 students won a 12 week placement within a Life Science company in the Glasgow Bio-corridor.
- The programme has expanded for 2015.
- 24 placements on offer across Glasgow and Edinburgh
- 840 applications through the ScotGrad placement service
- Winners announced in June 2015



# Theme 1: Building graduate work readiness

## Placement coordination

- Sub team set up
- Initial work is to focus on the current placement provision for both Life and Chemical sciences in Scotland
- A course by course mapping exercise has been conducted to identify which courses cover placements
- An employer survey captured the views and experiences of Life and Chemical Sciences employers
- Two reports are now available for Life and Chemical Sciences
- The aim now is to co-ordinate all university and other placement opportunities across the sector.
- An initial proposal is currently being developed

**Co-ordination of university placements into the Life Sciences industry**

# Theme 2: Improving the attractiveness of the sector to new entrants

## STEMNET Pupil and Teacher Events

- STEMNET have now delivered a series of Life Sciences careers focussed events.
- 4 teacher events and 10 pupil events, which have reached out to more than 1,500 pupils.
- Evaluation document produced.

## Innovation and Enterprise Partnership Event

- Brought together industry, HE/FE and school pupils in order to stimulate pupil's interest in science through practical workshops.
- Took place in a commercial environment (BioCity Scotland)
- Over 160 pupils (S3+) from 12 schools with approx. 70 teachers/ reps
- Lots of positive media generated and excellent video around the event



Students and pupils will give much greater consideration to the career paths they may be interested in and the most effective routes into any chosen area

# Theme 2: Improving the attractiveness of the sector to new entrants

## Scottish Graduate Fair Oct 22-23

- 10 Life Science SMEs took part in a careers fair
- ~5,000 students attended the event
- Details of 134 students captured. A lot more attended the stand.

Students and pupils will give much greater consideration to the career paths they may be interested in and the most effective routes into any chosen area

## MA provision

- Sub team of colleges and industry formed
- Research conducted to understand the 'Barriers to uptake of Life Sciences MA'
- Initial recommendations are around marketing
- Bespoke Life science MA material is currently being produced
- STEM MA business breakfast organised for SAW

Encourage schools and industry to use the MA in Life sciences

# Theme 3: Attracting and anchoring key skills



- **SE's TalentScotland project promotes Scotland globally as a career location of choice for scientists**
  - Engaged 34 new life sciences companies. c190 LS employers now profiled, on website, 72 advertised c360 jobs
  - Increased the audience for Scotland's talent attraction proposition by 2,000 (c1,000 scientists subscribed to the TalentScotland website and another 1,000 became LinkedIn followers)
  - Promoted Scotland at careers events: Nature in London and BCF in Amsterdam
  - Promoted employers and jobs at Alere Technologies outplacement event
  - Provided immigration information and/or support to 5 Life Sciences companies
  - Published new edition of TalentScotland Life Sciences magazine
  - Improved perceptions of Scotland as a place to live and work by 4 percentage points amongst TalentScotland users.

Increased numbers of experienced staff taking up roles within Scottish Life science companies

# Theme 4: Building accessible and responsive skills system

- **Re-fresh the SIP**

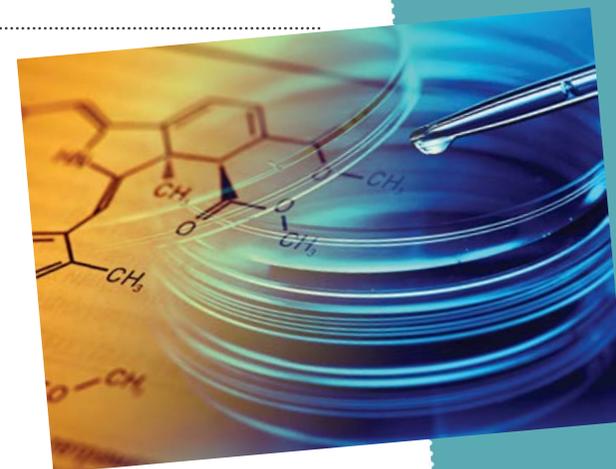
- Initial discussions with the wider sector Med Tech and Health informatics

- **Future Priorities**

- Strengthening Life Sciences content on SDS MWOW/ Our Skillsforce page
- Develop Placement coordination
- Reviewing uptake of Life Sciences Modern Apprenticeship framework
- Commissioning a pilot sales and marketing course for Life Sciences companies
- Refresh of the labour market research and provision mapping exercise to identify specific gaps
- Work with TalentScotland and Scottish Enterprise to deliver on objectives contained within *Attract* and *Anchor* key skills
- Soft skills training, HR toolkit, Career events



# Chemical Sciences Skills Challenges



- **Competition for experienced staff with other industries, and opportunities abroad**
- **Retaining existing staff amidst strong competition**
- **Technological developments driving demand for higher level skills**
- **Sporadic demand due to plant shut downs and turnarounds**
- **Cultural change, particularly in smaller businesses to engage in ongoing people development**
- **Need to secure new entrants and workers from other sectors to secure talent pipeline**

# Priorities

- **Increasing the flow of new entrants to the sector**
  - Shared apprenticeship model
    - Initial discussions taken place.
  - Placement for NHD/C students
    - 15 funded places available. Mechanism/framework in discussion
  - Target gender balance for apprenticeships
  - Up to date career information
    - Working with IBioIC on School engagement program
- **Developing pathways to help recruit experienced people**
  - Transition training
    - Calachem, GSK and Ineos focusing on initial cohort of 9 at FVC
  - Promotion of sector outside of Scotland
- **Upskilling the existing workforce**
- **Better meeting employer demand**



# Driving the action Plans

- Industry Driven
- Broadening LiSAB and CSS skills group membership
- Link to other skills groups (IB, SLA and GEL)
  
- <http://www.ourskillsforce.co.uk/spotlight-on-industry/developing-skills-in-life-sciences/>
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