Life Sciences
Draft Action Plan
June 2012

Chair: Kevin Moore OBE

Life Sciences
Executive Summary

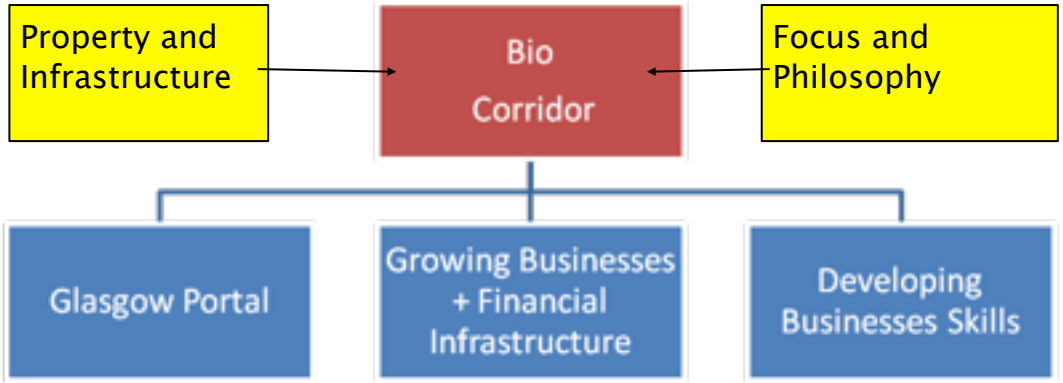
1.1 Overall Proposal from the Life Sciences Work Stream

The Glasgow Economic Leadership's Life Sciences work stream proposes that the Life Sciences sector in Glasgow/West of Scotland should be developed under the aegis of the **"Glasgow BioCorridor",** stretching from the BioCity development in Lanarkshire to the universities, research institutes and hospitals in Glasgow to the GlaxoSmithKline site in Irvine.

The Life Sciences work stream believes that the focus of the "Glasgow BioCorridor" should be on supporting the commercial success of our Life Science community through capitalising on the support from academia and the NHS. To achieve this, we will build on the evident support and enthusiasm of the key life science players from industry, academia and the NHS who were members of the work stream.

The proposed geography is Glasgow and the West of Scotland. However, in marketing terms our view is it should be branded as the "Glasgow BioCorridor" or another appropriate label to be agreed, to reflect Glasgow's branding as a city and its universities, centres of excellence and NHS university research hospitals (eg. the new South Glasgow Hospital).

The core philosophy to grow Life Science in Glasgow is to develop the "Glasgow BioCorridor" and the other key "action areas" (as shown below) to feed the development of our SMEs, attract investment to the Corridor and its companies, research and medical institutions and make Glasgow a more attractive proposition for Life Science investment in Scotland.



This report is based around this approach and work stream sub-groups were tasked to develop each theme.

In developing the BioCorridor proposal and related action plans, the work stream and sub groups also took cognisance of the following, that:

- **Glasgow should work with the other areas throughout Scotland to deliver Scotland Life Science PLC** i.e. Glasgow should build on its proposed strengths, not unnecessarily compete with other areas and work closely with them when they have very clear strengths in relation to Glasgow
- **Glasgow has to understand and work within the refreshed Scottish Life Science Life Science Strategy** as re-launched in 2011. Future working groups and programme managers should communicate directly with LISAB and its working groups
- **Glasgow needs to understand and build on its strengths**
- **Any business model developed should work within, and seek to shape, existing resources and programmes** (where relevant) that are delivered in Scotland [e.g. Health Science Scotland (to focus on **"drugs and devices"**), SE programmes, SDI, Commonwealth Games Business Portal etc]

1.2 Scottish Life Sciences Strategy - Mission

The Scottish Strategy has set a target to double the turnover of the Scottish Life Sciences Industry to £6.2bn and a Gross Added Value (GVA) of £3bn by 2020.

The work stream has set a target for the "Glasgow BioCorridor" to increase turnover to £2bn and generate £1bn GVA pa by 2020.

1.3 Scottish Life Sciences Strategy – Global Trends and Local Opportunities

The Scottish Life Science Strategy identifies key global trends and local opportunities. The "Glasgow BioCorridor" fully intends to build a Business Plan around these:

Global Trends	Local Opportunities
Improving treatment and prevention of chronic disease	**Assisted Living** – aids to mobility, rehabilitation, patient monitoring and management to enhance independent lifestyles

An increasing desire for and ability enabled independent assisted living	**Stratified Medicine** – use of molecular diagnostics to identify optimal treatments for patients
A rising expectation of continued mental and physical wellbeing with ageing	**Wellbeing** – plant, animal and nutritional science aimed at promoting health benefits in food and drink
A growing pressure for cost effective and accessible healthcare	**Sustainability** – technologies that advance the green agenda in the use of the world's scarce resources
An accelerating impetus from treatment to prevention of disease	

In the view of the work stream, the "Glasgow BioCorridor" area has a renowned reputation in several key aspects of the "local" (i.e. Scottish) opportunities identified above. In short, these are **Medical Technology ("MedTech") and Stratified Medicine. These will be the cornerstones of our development plans for the "Glasgow BioCorridor".**

- **The "Glasgow BioCorridor" area has approximately 50% of Scotland's medical technology and medical device (MedTech) companies** who will disproportionately contribute to the Assisted Living (and Wellbeing) agenda. The creation of the new South Glasgow Hospital campus, with its clinical and academic research facilities, could provide a focal point to support our develop SME MedTech companies.
- **Glasgow/Clyde Valley's international reputation in engineering and bioengineering (particularly in academia) underpins our success and potential in MedTech.** We wish to see a greater focus in Scotland (eg. via Health Sciences Scotland) on devices (i.e. MedTech) as well as drugs, and to better tap into our engineering excellence to support the development of LS companies.
- **"Glasgow BioCorridor" must have a business infrastructure which supports growth**. Scottish Enterprise is committed to reviewing the business infrastructure to support Life Science, including market analysis on the feasibility of a Scottish Medipark at, or adjacent to, the South Glasgow Hospitals campus, the expansion of the West of Scotland Science Park, linking it more to the world-class research at the on-site Beatson and Translational Medical Research Institute and Glasgow Vet School.
- **Stratified Medicine:** The work stream proposes that Glasgow's "sick man image", the world-class research undertaken in the city and the scale and commitment of NHS Greater Glasgow and Clyde provides the best possible conditions to support development of companies in this growing market. Over 50% of clinical trials undertaken in Scotland are undertaken within the Glasgow area and academia and the NHS has a wealth of knowledge that can be built on and utilised to support and develop new diagnostics, new drugs and new business opportunities, including inward investment.

1.4 Scottish Life Sciences Strategy – Core Objectives

The Scottish LS strategy identifies three key core objectives that it sees as important to a growing and sustainable Life Sciences cluster in Scotland:

Anchor Build Attract

The "Glasgow BioCorridor" Plan has embedded these within its actions and will seek to build on the area's specific strengths and create robust, mutually-beneficial linkages between academia and industry to ensure the growth of the LS community.

1.5 "Glasgow BioCorridor" – Core Recommendations and Initial Actions

The aim for the "Glasgow BioCorridor" is to create a "can-do" philosophy that focuses on being "solutions driven" - solutions driven for local SME companies, for inward investors and for the universities and the NHS.

Further to the development and full utilisation of the "Glasgow BioCorridor" area, a number of core recommendations are made by the work stream's sub-groups:

- ✓ **The development and success of the "Glasgow BioCorridor" should be the key objective from the overall work stream.** This objective will drive the philosophy and focus of the "Glasgow BioCorridor"
- ✓ **An industry-led Executive Board involving all relevant stakeholders to be established and to confirm the vision and strategy for the "Glasgow BioCorridor"**
- ✓ **A CEO and a small administration team to work with the Executive Board to develop the strategy and more detailed recommendations made by the work stream's sub-groups. An estimate of costs of £250k is proposed in Year 1 and we suggest that this should be funded by the stakeholders**. Given the former Nexxus network, we **propose the need for a delivery, not networking, mechanism which is core to delivering our plan**.
- ✓ Any structure should improve support to all stakeholders (new and existing) within the BioCorridor and link with all existing providers. The Executive Board needs to be clear on whom it is responsible to (GEL?) and that it has appropriate Governance and legal frameworks in place.
- ✓ **During Year 1 the Board, CEO and partners will develop a robust and fundable Business Plan**. In this time the CEO will:
  - **Complete the full mapping of the Glasgow BioCorridor** (companies, research teams / Institutes (university and NHS) as well as existing business infrastructure;
  - **Undertake a full audit of BioCorridor differentiators (MedTech, Stratified Medicine etc.)**
  - **Confirm BioCorridor fit and support to the Life Sciences Strategy and the Life Sciences Scotland brand**
  - **Develop the "Glasgow BioCorridor" brand:** the brand must focus on the strengths of Glasgow/West of Scotland AND connect with Scotland's Life Sciences "offer"

- **Create a new business framework**, to include how best to access existing best practice and work with existing partners and delivery mechanisms
- **Develop a funding proposal for Glasgow BioCorridor** including relevant grants outside Scotland with the target that the BioCorridor is sustainable within 3 years
- **Create a robust commercialisation and innovation strategy for the BioCorridor**
- **Consider and develop a one stop shop "portal" for the Life Sciences community in the BioCorridor.**
- **Work with partners to maximise investment opportunities and raise awareness** (e.g. South Glasgow Hospital development, Innovation Centres, Leadership and Entrepreneurial development)
- The BioCorridor Executive Board should consider how best to ensure active company engagement in the BioCorridor and whether there should be a monetary value for membership

✓ **Where necessary, develop programmes – or fund pilots – with existing providers in line with the recommendations of the sub-groups;**

✓ **Work to build and strengthen existing linkages inside and outside the BioCorridor**, with particular focus on industry and academic linkages within our own community

1.6 Sub Group Action Plans

In proposing the above, the Life Science work stream also proposes a 3-Point Action Plan to be used as an aide memoire by the Executive Board/CEO to help them develop the Glasgow BioCorridor Strategy and Business Plan. However in summary, the key building blocks identified by the sub-groups are:

Glasgow BioCorridor "one stop shop" portal

- **Develop an industry-based "virtual sales and mentoring support" team** for existing and new companies in the BioCorridor
- **Recruit volunteer BioCorridor ambassadors** from industry and academia
- **Establish a BioCorridor intranet**
- **Encourage the NHS to pilot a "health and wealth" local procurement pilot for SMEs**

Building Healthier Businesses: Creating a new financial infrastructure

- **Encourage SMEs to invest in innovation** including via innovation vouchers, linkage supports, collaborative research, academics supporting industry
- **Create innovative funding models including a Lead Life Science Investment Fund**, akin to the US's NIH support model and the TIC Support Scheme and accessing funding bodies (e.g. TSB Catapult) to support SMEs
- **Establish one centre of support for our community**
- **Create a strong Glasgow message including showcasing/testimonials of our success**. Create and tell the world about our successful linkages, update our "MAP of Excellence" and create and market our global companies and successes,

- **Encourage industry, NHS and Academia** to work more collaboratively e.g. more Academic advisers on the Scientific Advisory Boards of local SMEs (a pilot is in progress via Health Science Scotland, funded by SE), MBA students to support SMEs commercially, more Life Science company student internships, create new formats for SMEs to access academic research and development expertise, and the creation of key innovation centres (**a stratified medicine application has been started via the Scottish Funding Council**)
- **Seek to secure the commercialisation benefits of the South Glasgow Hospitals campus by undertaking a feasibility analysis of a Scottish Medipark at SGH**, create and implement a plan to ensure our MedTech SMEs benefit from the SGH investment, ensure the SGH is a focal point for clinical trials / validations, support for our industry and pilot a "preferential access programme" for our companies to the technology developed at SGH.

Building Healthier Businesses: Develop business skills

- **Establish a separate category for modern apprenticeships in SDS progression statistics Double the number of modern apprenticeships in Life Science by 2014**
- **Improve graduate work-readiness** incorporate soft skills in undergraduate programmes, increase graduate work placements in industry and create a Life Science-specific local "milk round", and pilot SE's LS Post Doc proposal.
- **Create industry ambassadors in HE and FE** (**already started**)
- **Create "Master Classes" across all industry needs**
- **Improve global recruitment into our companies and academia (including projecting Glasgow as an attractive, cosmopolitan, safe and nurturing place to live and work).**

1.7 Assumptions that require further some discussion/clarification

Finally, there several assumptions in this action plan:

- There will be crossover in projects that may have resulted in some double counting of impact outcomes
- No consideration has been given in the programmes in relation to Treasury Rules on Government monies. This would need to be explored
- Some of the programmes would have to be undertaken Scotland-wide, although our desire is to pilot them here in Glasgow first
- In some programmes, further discussion is required with the relevant LISAB work group
- Activities will require to be prioritised by the BioCorridor Executive Board in line with the resources/funding of the collaborative partners and stakeholders, whilst taking into account any existing products/programmes and State Aid Rules

The remainder of this document contains the full Action Plans, as developed by the respective sub groups of the work stream.

Kevin Moore OBE
Chair, Life Science Work Stream
Glasgow Economic Leadership

Life Sciences Work Stream Membership

- Kevin Moore, **Biopta Ltd. (Chair)**
- Caroline Briggs, **Amici Procurement Ltd**
- Gerry MacKay, **BioOutsource Ltd**
- Cameron MacDonald, **Ferring Controlled Therapeutics**
- Alan Kidd, **GlaxoSmithKline PLC**
- Peter Silvester**, Life Technologies Ltd**
- Jim Reid, **Sistemic Ltd**
- Tim Ashton, **Vascutek**
- Dr. Marie Claire Parker, **XstalBio Ltd**
- Dr Chris Packard, **NHS Greater Glasgow and Clyde**
- Prof. Anna Dominiczak, **University of Glasgow**
- Prof. David Littlejohn, **University of Strathclyde**
- Prof. Nicky James, **Glasgow Caledonian University**
- Gill Blair, **Skills Development Scotland**
- Carlyn McNab, **Stow College**
- Kevin Kane, **Glasgow Economic Leadership**
- Sharon McKendry, **Scottish Enterprise**
- Alison McCrae**, Glasgow City Council**

The work stream also co-opted into discussions:

- **The Scottish Funding Council**
- **Health Science Scotland**
- **RedX Pharma Ltd (a potential inward investor)**
- **Human Resources team at the University of Glasgow**

In preparing this report we would like to thank Scottish Enterprise for its professional support and guidance and Glasgow City Council for organising and administrating the work of the work stream and its several sub-groups.

Action Plan 1/4: "Glasgow BioCorridor" **Chairman:** Cameron Macdonald, Ferring Controlled Therapeutics

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Establish core principles that will differentiate BioCorridor from other similar initiatives	As a starting USP, the focus should be on offering collaborations on unique areas of research excellence e.g. Stratified Medicine	Clear differentiation on areas of research interest Perception of a 'group' to work with. Avoid conflict with SLA, SE, SDI	Executive Committee formed from representatives of Industry, Universities, NHS, SE and Glasgow City Council CEO	By end Q3 2012	£250k Year 1
BioCorridor mapping	Identify centres of research excellence Identify key local companies Identify what sites/space is available to house new ventures	Creation of integrated bioresearch environment	Universities and NHS SE Glasgow City Council	By end Q3 2012	tbc
Establish BioCorridor management structure (this is regarded as key to establishing an effective framework for success)	Decide on role and structure of overseeing body Decide on staffing structure and funding required to give best change of achieving aims	Establishment of Executive Board/Council/ Directorate or similar Establishment of support office e.g. - Admin Office/ Commercial Office/Liaison Office etc	BioCorridor Executive Committee BioCorridor Executive Committee	By end Q3 2012 By end Q4 2012	tbc

Establish research and commercialisation strategy	Establish set of key economic Deliverables/KPIs	Proof of economic success e.g. – value created, projects commercialised, licensing deals done, local company growth (headcount/income generated), research funds raised.	BioCorridor Executive Committee	By end Q3 2012	tbc

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Identify sources of funding available and/or resources which could be made available to support BioCorridor	Discuss with SE and other potential funders. Take soundings from BioCorridor members on staff secondments Also suggested that MBA and Saltire students could be enlisted as part of their business training	Sustainability	BioCorridor Executive Committee	By end Q4 2012	tbc
Consider whether a legal framework is required	Who will BioCorridor (or its Executive) report to? Consideration should be given as to whether standard legal documents should be used? e.g. Confidentiality Agreements, Research Agreements, Licensing Agreements, Commercialisation Agreements etc Is it intended that research groups receive any upside from commercialisation?	Reduction in costs Greater simplicity Faster response times	BioCorridor Executive Committee		tbc
Review whether BioCorridor is the most appropriate title to describe the enterprise **("BioGlasgow" was preferred by the Group)**	Discuss with stakeholders and assess in relation to existing initiatives and brands	Better recognition nationally and internationally (Glasgow already known for its research excellence)	BioCorridor Executive Committee		tbc

Action Plan 2/4: "Glasgow Portal" **Chair:** Caroline Briggs, Amici

Procurement

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Virtual sales and support team for existing + new companies to BioCorridor):	Community of LS and other companies including supply chain prepared to sell, share experience and advice (part of sign-up to BioCorridor?): - Dating events - Showcasing Glasgow - Selling the LS assets - Family support for recruitment - Potential secondments	Provision of bespoke, LS company-sourced advice to aid growth of existing and new LS companies in BioCorridor - Support 20 existing spin outs in 3 years - Support min. of 5 inward investment ops in 3 years	Glasgow City Council – "Inward Investment Team"/Scottish Enterprise (SE/ SDI)/Industry	Establish for 2012/13	Portal team (1.5 / 2 FTE) to organise this and other Portal activity (refer below) Circa £50k per annum
NHS 'Health + Wealth' local procurement pilot	Identify NHS / university (?) procurement streams and pilot local LS supply chain programme in the BioCorridor using a 'Business' Community Benefits clause	The development of closer commercial and innovation links between the NHS/universities and local LS (incl. MedTech) companies /suppliers in the BioCorridor - Min of 10 SME LS companies to benefit from procurement pilot - Min. of 10 linkages between SMEs and NHS - SMEs to gain contracts in excess of £500k in lifetime of pilot	NHS GG&C / GCC/BioCorridor	Launch pilot in 2013	Minimal (sharing knowledge b/w GCC/HHS) Secondment administrator from NHS?

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Company intranet for BioCorridor LS firms (+ social media platform)	Private network for BioCorridor members, linked to all relevant LS sites and support (eg. LSS, Talent Scotland, SE LS etc.) - 24 hours response from partners - Linkage to BioCorridor asset database incl. relevant academics	To provide a private, community-based, digital vehicle for LS companies to seek / provide advice to members	Portal team (as above) funded by GCC/Industry	In operation in 2013	IT costs - £20k pa; on-cost via Portal team Person to administer / manage partners £30k per annum
Portal/BioCorridor Ambassadors	Senior BioCorridor (industry., FHE, NHS) individuals to market/ sell the BioCorridor as a place to do business and invest for spin-outs, start-ups, local / mobile talent + research funders (private /3rd sector and public) - 12 external ambassador visits supported p.a. (world class conferences) - 12 internal ambassador visits supported p.a.	To attract additional investment and grow the LS asset base in the BioCorridor, working with others: SDI, SE, LiSAB, LSS, GCC and GCMB.	Portal team, backed by GCC / SE/SDI	Identify initial ambassadors in 2012	GCMB to advise Trip support £24k pa Meeting support for internal ambassador to meet £6k pa
Portal LS Growth Target of £200m over 2012-2017	Specify a LS Growth Action Plan for the BioCorridor (with SE/SDI/ GCC) with target to increase BioCorridor income by min. of £200m over 2012 - 2017	Grow total BioCorridor income: business, NHS and university research and knowledge exchange	Portal/BioCorridor with support of SE/SE, GCC, GCMB and Scottish Govt.	Parties to agree Action Plan in 2013	tbc

Action Plan 3/4: "Building Healthier Businesses: Infrastructure and Finances" **Chairman:** Kevin Moore

Definition of Creating Healthier Glasgow Businesses: Creating an infrastructure and environment that optimises the potential to grow and sustain potential global businesses

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Creating the right financial infrastructure	Create an infrastructure which encourages SMEs to invest in innovation (Glasgow as the BERD Capital) Establish Glasgow as the LS research and development lead for Scotland	Supporting/handholding SMEs (Build on the innovation voucher - £20-25k) - A)Create a minimum of 30 support linkages between academia and SMEs by 2015 - B) Create a minimum of 15 support collaborations between companies within BioCorridor **NB there may be crossover and potential double counting of these outcomes**	SE, GC and HSS and Interface, SFC, SLA, LISAB	2013	£2m
		Support linkage to innovative academic support - Create at least 5 innovative linkages outside 1 B) above - Complete on development project producing a positive commercial outcome - Create at least two Innovation Centres within BioCorridor (or equivalent) SFC, TSB	Academia, Industry Group, SE	Start 2013 and complete 2018	£10m over 5 years
		Collaborative research (inter company etc) using company-to-company voucher scheme - Create a minimum of 10 market lead collaborative research projects involving b2b or b2a over 5 years	SE, Academia, Industry Group LISAB Commercialisation Work Stream	Start 2013 and completed 2018	£2.5m over 5 years

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
		Academics supporting industry e.g. involvement in Science advisory Boards etc - Health Science Scotland Pilot will undertake minimum 6 SME and academics interactions - HSS pilot expanded so that at least 20 SMEs benefit from academic and clinical input	HSS	Pilot 2012 and expansion 2013 Outcomes by 2016	Pilot £250k (total £250k per project
		Driving Innovation in SMEs - Innovative support for SMEs undertaking Innovation for 1st time e.g. one off higher grant support – 12 companies investing in innovation by 2016 - Innovative R&D grant support (cash at front e.g. 50% and 50% intervention) – 20 companies investing in innovation by 2016	SE and GC	2013	£1m per annum
		Use KTPs more or mimic scheme - 5 programmes being used pa			

Create an innovative funding model(s)	Life Science Investment Fund (LEAD FUND) to work with stakeholders to generate growth funds for BioCorridor companies: - Support a minimum of 12 indigenous LS companies within 5 years - Support a minimum of 12 start up businesses or inward investment opportunities within 5 years - This will include a recycling element of funds	SE, GCC, CoC, Industry, Academia	2014	£10m pa
	Create something that gives Glasgow companies the edge – preferably non dilutive and mimic NHS/SBRI/NHS Innovation Initiative - Create a innovation support programme that will generate a minimum of 10 investment SME innovation programmes by 2016 (pilot 2013	GCC, NHS, SE Academia, Industry	2015 2013	£5m pa £1m pa
	TIC Support Scheme (and other Innovation Centres) - A minimum of 5 SME businesses are supported annually by Innovation Centres - A minimum of 1 TIC lead opportunity is assigned to a Glasgow SME pa	 SE/SDI, Industry	 2013	 £200k pa (admin and consultant support)
	Levering in other countries' grants e.g. Massachusetts - At least 3 SMEs (possibly academia) per annum benefit from grants (or other funds) from outside EC	 SE/Industry	 2017	 Admin support
	The Glasgow LS Innovation Recycling Mechanism from outcomes of innovation support within BioCorridor - A minimum of £1m pa is recycled by successful businesses to support			

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Supporting Glasgow Businesses	One centre of support (within Glasgow) e.g. Glasgow Life Science Business Club	One stop shop for supporting existing, new and inward investing businesses - A minimum of 20 businesses are supported pa with at least 1 new inward investment pa Individual company mentor/network - A minimum of 20 businesses are mentored or supported pa - 4 support event are managed pa Co-ordinate the linkages/processes Centre takes a global approach by attending 3 key meetings per year eg. Bio, Medica etc.	GCC with support SE and SDI	2013 quarter 1	£500k pa £50,000
	Increase the quality of leadership	Be picked up by sub group working on skills			

	Create a strong Glasgow reality	Track record of success in developing technology - A minimum of 2 world class case studies developed pa to showcase Glasgow (from 2013 onwards) - Creation of at least one global story pa (2013 onwards) Proven linkages with Academia/NHS - Creation of at least 5 stories on successful SME academic linkages pa - Creation of at least 5 successful academic technology spin outs pa including licenses BioCorridor has sustainable excellence - Creation of the excellence map and updating it on a continuous basis - Ensure we are supporting the potential champions Create “some” global companies “poster boys” - Create and promote at least 2 “poster boys” per annum Create Glasgow LS Club Have Glasgow lead on appointing Commercial people to co-positions/ advisory positions within Academia	GCC with support from SE and SDI This programme could include an annual competition where the winning company or individual receives an award £50-100k for international promotion as the poster boy	2013	£250k pa

Establish the role of the NHS/Academia	Academic Advisers on SME boards - undertake minimum 6 SME and academics interactions - HSS pilot expanded so that at least 20 SMEs benefit from academic and clinical input	HSS	Pilot 2012 and expansion 2013	Covered earlier
	Use of MBA students in SMEs (marketing) - 5 MBA used in supporting SMEs pa on specific commercial opportunities	Academia /GCC	2013	£40k pa including administration
	Outcome from Wilson report (student must spend time in industry) - 10 Life Science students pa supporting industry with one year or relevant time internships industry to pay commercial rate	Academia /SFC/ GCC/ Industry SE/SFC/Academia	2013 2013	£250k pa (from industry?) £500k – £1m
	Glasgow LS Academic "R" and SME "D" programme - One academic pilot completed on the Glasgow Life Science R&D programme by 2016	Industry/SE/SFC and academia	2013	£0
	Programme for exploring mechanisms for R&D exploitation - Review team to explore new innovative approaches for R&D exploitation	Industry/SE/NHS/GC	2013	£0 although NHS may want to support a number of away days to develop
	Definition of GG&C NHS needs and programme to support - Review team to understand and develop need so NHS and how SMEs can benefit			£200k pa
	Creation of innovation centres - Covered earlier in document	SE/Scotland Europa and Academia	2013	
	Remove barriers in EC funding (i.e. cost to SMEs etc)			

Grow the MedTech community	Build on New South Glasgow Hospital	Complete gap analysis to confirm a need or otherwise for Glasgow Medipark Undertake an audit on benefits to SME of centre for academic and clinical research Develop plans for Glasgow Medipark Start development of Medipark if requirement identified – First tenant by 2016 – Minimum of 8 tenants by 2020 – Establish a commercially focused Board to support existing Board	S /UoG /NHS	2012	Cost to be confirmed but expected to be £20-50m
	Create an understanding of the need for SME linkage to NHS	Dealt with in previous section			
	Clinical trial/validation in NHS	NHS and Academia undertaking at least 5 new clinical trials and validations for Glasgow BioCorridor SMEs p.a. Glasgow Medipark companies accessing SGH facilities at preferential terms – 20% saving on cost – High speed trial approval – Free access to academic for 1year – Glasgow Medipark profile programme supporting and promoting trial outcomes etc	HSS HSS/NHS/UoG/SE	2013 2016	Costs funded by SE, NHS and companies £1m pa year 1 and the £2m thereafter

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
	Access to Technology	Preferential Access Programme accessing academia and NHS technology at preferential rates if Glasgow BioCorridor MedTech SME including – 3 deals pa – full assignation of IP – low royalty or delayed purchase terms for IP	Academia and NHS	2013	Admin costs only
	Involvement in CAB/SAB in SME	Dealt with earlier in document			
	Complete audit on MedTech community (audit and access to NHS expertise –HSS) including GAP analysis in community	Audit completed on Glasgow BioCorridor MedTech companies and NHS expertise	SE / NHS / HSS	2012	£50k
Growing Businesses Globally	To be considered under BioCorridor Business Plan and consultation with SDI		Executive Board, CEO and SDI		

Action Plan 4/4: "Building Healthier Businesses: Developing Business Skills"

Chair: Carlyn McNab, Stow College

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Establish a separate category for modern apprenticeships progression statistics	Engage in discussion about progression category for modern apprenticeships at school	Increased numbers of modern apprentices – directly from school?	SDS	2013	Admin support £10k
Increase the number of LS MAs in Glasgow	Promote the MA/ GCC Commonwealth Apprenticeships Programme across LS companies, HE institutions and NHS Increase the number of LS employers employing modern apprenticeships	Increased industry/ NHS/ HE uptake of modern apprentices Double number of LS modern apprentices in Glasgow from 26 to 52	GCC Skills Council/ FE Lead/ GCC/NHS	2014	SDS funding

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Improve graduate work readiness	Introduce 'soft' skills into undergraduate programmes across all life science programmes	Increase in "industry ready" graduates	Life Science leads at HE/industry SE, SFC, NHS	Pilot GCU 2012	N/A
	Increase the number of placements for undergraduates	20 additional life science placements established			Industry funded
	Develop a specialist 'milk round' for Life Science graduates (include GCC Commonwealth Graduate staff)	Increased employment opportunity across industry for Glasgow Life Science graduates			Admin support £10k
	Pilot SE's LS post doc proposal	More graduates entering industry			SE
Facilitate development of industry ambassadors in HE/ FE	Coordinate industry ambassadors with HE/FE similar to STEMNET for schools	Industry ambassadors participating in HE/FE Students more aware of industry opportunity	Industry, Director of Education	2012	Admin Support £10k

Action	Related Tasks	Proposed Outcomes	Suggested Collaborative partners	By When	Estimated Costs
Develop series of master classes	Survey industry for needs Identify suitable HE/ industry ambassadors Organise master class series	Increased networking opportunities for industry/HE	Portal/BioCorridor, LiSAB	2012	Admin Support £10k
Develop support for leadership and managerial skills	Link to PORTAL for advice/ support	Life Science industry uptake of support	PORTAL team, LiSAB	2012/13	See PORTAL sub-group
Improve global recruitment	Coordinate information, support and opportunities for global recruitment	Increased number of enquiries to Glasgow companies	PORTAL team, TalentScotland	2012/13	See PORTAL sub-group