

Life Sciences Scotland ILG Internationalisation call – notes – 11 August 2020

Present on call

Mr McKee

David Bunton, Reprocell

John McNeill, MSD

Mark Cook, Medtronic

[REDACTED], Trade and Investment - SG

[REDACTED], Innovation and Life Sciences - SG

[REDACTED], Innovation and Life Sciences – SG

- Purpose of call - to discuss the work of the ILG Internationalisation subgroup and how it can be aligned with the Scottish Inward Investment Plan. David Bunton (Reprocell) wishes to provide an update on the work on the Internationalisation group.
- Mark leads the Medtech subgroup of the ILG and chairs the Governance Group.

Internationalisation subgroup

- David and John provided an overview of the work of the ILG Internationalisation subgroup
- Work has involved a phased approach of reviewing the key subsectors and providing feedback on the key areas of focus. Both David and John held meetings with SG, SDI and SLA for feedback which lead to the matrix of sectors and priorities being produced.
- The key areas are reflected in the plan and now they are looking at how to support the sectors, moving from the consultation phase to the action phase.
- The next activity will be a focus on inward investment.
- Mr McKee's initial thinking is that there is a huge amount of work currently underway on exports. The Minister suggests that working through the subgroups would be ideal with a focal point of an overview that plugs in Global Scots.
- Mark in agreement with this suggestion of a blended approach and the Medtech subgroup is already looking at this. There is likely to be agreement from ABHI (Association of British Healthtech Industries) and Peter Ellingworth.
- Mr McKee suggests that a shortlist should be articulated that includes States that subsectors are focusing on and then they can report back to the sector, linking up with Global Scots on this to move it forward.
- Pharma – East coast
- Medtech – South/ Texas/Austin
- **ACTION – [REDACTED] to feed back to the Global Scots team, including posting out on their platform and contacting individuals on the exports side directly.**
- David and John have already been in contact with Global Scots network with the help of [REDACTED] and they introduced the ILG to the Global Scot network and both are keen to engage again. David suggests focusing on a particular theme, for example a digital health webinar.

Investment

- [REDACTED] provided an overview of the Inward Investment Plan and noted that it will be helpful to get an industry perspective on it.
- The plan is due to be published in October and will set out the ambition for Scotland, aligned with the values of the nation, the important role that inward investment will play in high value jobs and the Scottish economy.
- Inward investors are critical to the Scottish economy and Scotland has a strong track record in inward investment as it is doing well on the AY Index.
- In the past, the approach was opportunistic and now we are moving to a more strategic approach around the sectors where Scotland can demonstrate a competitive advantage. Nine opportunity areas have been identified.
- SG are looking for inward investors that are interested in contributing to net zero, wellbeing and fair work ambitions.
- OCEA analysis showed that if we capture the spill over effects such as R&D and Innovation, this can increase jobs and government revenue.
- The three main opportunities are:
 - Net Zero – energy decarbonisation
 - Digital data tech – Software, IT, financial services, business services
 - High value manufacturing – transformation of chemical industry, healthtech and food and drink.
- David asked about the areas where the ILG could support. [REDACTED] wants to engage with industry to articulate the plan to the global network.
- Mr McKee highlighted that cohorts should be lined up to build stronger relationships with new inward investors and also target existing inward investors.
- Healthtech is included but also a broad approach to include precision medicine.
- John highlighted a need for clear parameters to work towards and the Minister noted that a slot will be scheduled into the ILG meeting in September or October to discuss specific details and how to move forward.
- SDI developed a matrix and shared this with the ILG. **ACTION – David to share matrix with [REDACTED].**
- **ACTION – [REDACTED] to share a brief with David and John prior to ILG meeting.**
- John asked for the Global Scots network to operate in a similar way to their approach with food and drink sector.
- **ACTION – [REDACTED] to link up David and [REDACTED] providing email address.**
- [REDACTED] looking for comments on an investor facing brochure.

SUBJECT: ATMP update
 MEETING DATE: 16/09/20
 AUTHOR: [REDACTED], Colin Mackay, [REDACTED]

For Information	Members are asked to note the content of the paper
For Discussion and decision	Members are asked to decide on recommendations
For Approval and Action	Members are asked to agree the recommended actions

Update

One of the key supporting activities of the proposed Scottish ATMP & Vaccine Growth Plan (presented to the ILG 3 months ago) is the development & implementation of an active network of stakeholders across Scotland, linked to other networks across the UK. Over the last month, there have been discussions with the London-based Advanced Therapies Network (ATN) which has grown to 700 members/participants from across academia & industry. The ATN is currently applying for additional funding (from Research England) to link their activities to those of other UK-based networks, including Scotland.

Through Prof Andy Baker (Univ. Edinburgh) there have already been links made between Scottish ATMP researchers and those in the North East of England – thereby reinforcing the existing relationships made through the Advanced Therapy Treatment Centre (ATTC) network funded by the Cell & Gene Therapy Catapult and also the work being done by the Northern Health Science Alliance (NHSA).

It is proposed that Scottish Enterprise, Scottish Universities Life Science Alliance (SULSA) and ILG work together to help improve & coordinate Scottish involvement and links with both the NHSA and ATN to deliver regional and pan-UK events and networking opportunities. Whilst the additional ATN funding will help facilitate this, it is hoped that industry sponsorship can be secured in Scotland to help develop activities and ensure that Scottish ATMP & Vaccine research & opportunities as well as skills/training programmes are highlighted to greater effect.

Additional ATMP news:

- AskBio has secured £1.99m official support in the form of a research and development grant from Scottish Enterprise. The company said it will invest £3.4m alongside the grant from the agency. The investment underlines the confidence that the American firm has in Scotland's biotechnology capability. AskBio acquired the Edinburgh Bioquarter-based Synpromics gene therapy business in August last year for an undisclosed sum.
- University of Edinburgh has submitted its application to establish a Gene Therapy Innovation Hub in Edinburgh as part of the LifeArc/MRC funding competition to develop a network of such hubs across the UK.

- There will shortly be two new spin-out companies from University of Edinburgh in the gene therapy/ATMP space. Further details will be revealed in the coming months.

COLIN MACKAY

[REDACTED]

[REDACTED]

SUBJECT: Connectivity MarComms
MEETING DATE: 16/09/2020
AUTHOR: Alix Mackay

For Information	Members are asked to note the content of the paper
For Discussion and Decision	Members are asked to decide on recommendations
For Approval and Action	Members are asked to agree to recommended actions in paper

With over 2000 followers on social media, over 1000 visitors to the website a month and with the website now organically ranking on the first page of Google for a number of relevant search terms, there is a great opportunity for the MarComms activities to now serve the Recovery Roadmap – specifically the initiatives by the individual workstreams that aim to:

- ⇒ Showcase Scotland’s capabilities
- ⇒ Attract inward investment

To that end, the MarComms team are now working with the subsector and internationalisation workstreams to ensure the major platforms below contribute to relevant initiatives, directly serve clusters of the life sciences sector and connect the community.

Below is a summary of the key priorities of the MarComms/ Connectivity Group

- i. Website
 - a. Creation of a website development proposal that will align with the Recovery Roadmap, supporting the implementation of the key outward facing initiatives from the ILG Workstreams. Specifically, with some architectural changes and new content, the website could further serve the life sciences community and support the SDI team by providing a platform or “shop window” that clearly illustrates the strengths, opportunities for collaboration and investment along with specific company case examples.
 - b. Creation of a search engine optimisation strategy so that the website ranks for search terms relevant to attracting inward investment. Over the last 2.5 years, the website has increased its rankings on Google and now features on Page 1 for 22 search terms which brings in 140 organic visitors a month, attracting more organic visitors and ranking for more terms than websites such as the SLA and Edinburgh BioQuarter. This demonstrates the opportunity to proactively rank for search terms that are relevant to the international initiatives across the three subsectors.
 - c. News from life sciences organisations across Scotland and events relevant to the community (Susan Sewell, SE and Andrea McColl, HIE)
 - d. Covid19 case examples that illustrate Scotland’s response to the pandemic and showcase the strengths, capabilities and appetite for collaboration
 - e. Insight Articles that provide advice and know-how from experts in fields that add value to SMEs and their growth ambitions
- ii. Social media
 - a. Growing the Twitter following by sharing content and news and engaging with relevant life sciences organisations.
 - b. Develop Twitter activity to raise awareness amongst international organisations that are relevant to each of the three subsectors and their initiatives to attract inward investment. A Mackay will join the Internationalisation workstream.

- c. LinkedIn Private Group. Create proposal and plan to make a private Life Sciences Scotland Industry Network in order to engage companies more directly with the Recovery Roadmap initiatives. Whilst there is currently a Life Sciences in Scotland LinkedIn Group, it is made up of professional services and a wide range of organisations.
- iii. Events
- a. The Scotsman Life Sciences Conference 2020, December 3rd. The team is working closely with the event organisers and the ILG to ensure we make the most of the opportunities a virtual conference creates to show the world how Scotland is responding to Covid19, illustrating the strengths and opportunities for collaboration.
 - b. The Life Sciences Awards Dinner 2020, postponed to March 24th 2021. The team is working closely with the SpeakEasy team.
 - c. The Times & Sunday Times are interested in holding a half day event to showcase the case examples of how Scotland's life sciences sector has responded to Covid19. The team are working closely with them to ensure we grasp this opportunity without compromising other events.
- iv. Sustainable Funding
- a. Growing the following on social media and visitors to the website to build the brand and the value of the platforms to potential sponsors and industry partners
 - b. Plans to develop a new proposal by January 2021 for maximising the Marketing & Communications function for the ILG in the most cost-effective and sustainable way.

Members of Marcomms team

Name	Org	Industry Lead
Alix Mackay	The Life Sciences Marketing Academy	
David Ridd	Edinburgh BioQuarter	Co-Lead
[REDACTED]	University of Glasgow	
Leigh Fell	Caritas Neuro Solutions	
[REDACTED]	Wyoming Digital	
[REDACTED]	Eden Scott, Talent Spark	
[REDACTED]	Scottish Health Innovations & The Health Innovation Assessment Portal	
[REDACTED]	Ingenza	
Potential new members		
[REDACTED]	Symbiosis Pharmaceuticals	
[REDACTED]	SULSA	
SDI representative	SDI	

SUBJECT: Governance update
 MEETING DATE: 16/09/20
 AUTHOR: Mark Cook, [REDACTED]

For Information	Members are asked to note the content of the paper
For Discussion and decision	Members are asked to decide on recommendations
For Approval and Action	Members are asked to agree the recommended actions

It is recognised that with the increased frequency of ILG meetings, there is more pressure on sub-themes and in particular the leads to maintain momentum with their groups whilst balancing increasing demands from their “day jobs”. For some members this increased required commitment may be too much and members are encouraged to discuss with Mark or [REDACTED], any pinch points experienced.

1. Membership

The Governance group met on the 3rd September and confirmed a number of new ILG members and to progress several other potential members. It is important to establish and maintain a balance of representation of the life sciences subsectors and there are a number of potential new members who could be invited to work with the sub groups as a route to joining the ILG.

Confirmed members are:

- Alix MacKay, Life Sciences Training Academy
- Colin Mackay, Symbiosis Pharmaceutical Services
- Claire Wallace, ThermoFisher
- Toby Reid, BioCity

A representative from ONE will be joining LSS from October

Calls are being set up with:

- [REDACTED], ICVIA
- [REDACTED], Clintec (now part of IQVIA)
- [REDACTED], GSK

2. Priorities

Each subgroup and theme identify key priority areas of action. The subgroups then construct short term activity plans on which they will focus.

The Governance Group plans to review these current activities and in particular to identify areas where additional resources may be required.

It would be gratefully appreciated if these forms could be completed and returned to [REDACTED] by 21st September.

3. Resources

This topic will be discussed in more detail at the Governance Group meeting on 24th September. Each subgroup requires a level of support to ensure projects are driven through, the LS community is engaged, and activities communicated to the ILG. As indicated above, there are opportunities to development the next generation of leaders in the LS community through working with the subgroups.

Recommendations

LSS members are asked to:

- Welcome the new members to the ILG,
- Forward any observations and/or comments on prospective members,
- Complete the priority actions and subgroup membership forms by 21st Sept.

The next meeting of the Group will be on the 24th September.

MARK COOK

[REDACTED]

SUBJECT: Governance update
 MEETING DATE: 19/08/20
 AUTHOR: Mark Cook, [REDACTED]

For Information	Members are asked to note the content of the paper
For Discussion and decision	Members are asked to decide on recommendations
For Approval and Action	Members are asked to agree the recommended actions

There have been a number of changes to the membership of the Governance Group which met on the 10th August and which will meet again w/c 31 August and 14 September.

Governance Group members are:

Mark Cook, Chair
 David Bunton
 Dave Tudor
 Andrew Howie
 [REDACTED]

The key areas of focus are:

1. Structure

The current structure for reporting the activities of LSS activities to the wider LS community is around the horizontal themes of the Strategy document: Innovation Commercialisation, Production Sustainability, Internationalisation and Business Environment. We will continue with these themes until the next strategy refresh process.

It is recognised that historically, these themes have had a stronger focus on the pharma and pharma services subsectors, and with the increased activity around medtech and ongoing work with Triple A, consideration should be paid to how these activities are supported and reported with the strategic themes.

Additionally, how does LSS interact with other parts of the LS community, e.g. SDI, given the different focus of these teams. The LSS Internationalisation team has worked well, providing advisory support for SDI activities and the development of the Export Plan, but consideration is needed as to how this level of engagement might progress. Similarly, Skills is a strategic theme which applies across all subsectors. Since the departure of Brian Bathgate, a Skills group representative is needed from LSS to work with [REDACTED].

Below is a proposed “reporting model” to allow us to organise activities and identify key priorities and associated resource requirements, with the strategic (horizontal) themes as the framework for reporting outcomes and the subsector teams identifying priorities with these themes and updating LSS members at ILG meetings to share learning and avoid duplication of effort.

Proposed Structure is should below with the current workstream focus on ATMP also be regraded in the short-term as a “sub-sector”

	Pharma / Pharma services	Triple A	MedTech	ATMP	Digital
Innovation Commercialisation					
Sustainable Production					
Internationalisation					
Business Environment					
MarComms					

This model presents a framework for organising and reporting LSS activities. The vertical columns may change over time to accommodate priority areas. Digital, which includes data, diagnostics, devices, obviously has applications and implications across each of the horizontal themes and vertical subsectors. As work in this area proceeds, it may become clearer about where this work area should sit.

Question 1: Should SDI be invited to join, more formally, the LSS Internationalisation subgroup and / or the ILG?

Question 2: Who would like to volunteer to be LSS Skills lead?

2. Membership

LSS members are appointed as individuals with appropriate skills and expertise not as representatives of their individual companies. These are fixed term appointments which can be renewed once under the current governance arrangements. The trade bodies have a named representative but are entitled to offer a named alternative representative on those occasions when they are unable to attend.

A number of LSS members are nearing the end of their tenure and the Governance Group will have open dialogues with members about their continuing involvement and engagement with the Group.

LSS welcomes suggestions for new members of LSS. The current process is for current LLS members to send suggestions to the Governance Group in the first instance with an outline of why they are recommending the individual. They should also consider which subgroup that individual might join. They should not include the individual in the correspondence with the Governance Group, but they should check whether the individual is interested and motivated to work with LSS.

Selection of new members is through a combination of recommendations and actively seeking areas where LSS is under-represented. This applies not only to subsectors, but also to address the diversity and inclusivity balance which we seek to achieve as a group.

New members should normally join a subgroup for a period of time before joining the LSS main group.

The priority areas of subgroups should be as open as possible, allowing as many parts of the LS community to engage and be involved. These can also be used as development routes for less experienced industry members to get more exposure to the whole sector and how it operates in Scotland. Members should consider whether they have members of staff who could be engaged in these subgroups.

We do not want LSS to be seen as a “closed shop” or “elite Group” but as an open and inclusive group, where new ideas and perspectives are positively encouraged.

3. Priorities

Each subgroup and theme identify key priority areas of action. The subgroups then construct short term activity plans on which they will focus.

The Governance Group plans to review these current activities at their next meeting at the end of August. In the meantime, copies of the current activity areas will be circulated for group leads to check and also to include members of their subgroups.

4. Resources

This topic will be discussed in more detail at the Governance Group meeting mid-September, but each subgroup requires a level of support to ensure projects are driven through, the LS community is engaged, and activities communicated to the ILG. As indicated above, there are opportunities to development the next generation of leaders in the LS community through working with the subgroups.

Recommendation

LSS members are asked to:

- approve the proposed reporting structure,
- identify a skills lead from within the group,
- consider the membership process and continue to encourage others to join LSS, and
- consider whether they have, within their organisations, individuals who could join any of the subgroups as part of their development programme.

MARK COOK

[REDACTED]

17th June 2020 13:00 – 15:00**Skype online meeting****Attendees**

Ivan McKee (IM)	Co-Chair, Minister for Trade, Investment and Innovation
Dave Tudor (DT)	MMIC, Industry Co-Chair
Alison Culpan (AC)	ABPI
Alix Mackay (AM)	Alix Mackay Marketing
Andrew Howie (AH)	Scottish Enterprise
David Bunton (DB)	Reprocell
David Crossman (DC)	CSO
John Mackenzie (JMac)	Roslin Innovation Centre
John McNeill (JMcN)	MSD
Mark Cook (MC)	Medtronic
Peter Ellingworth (PE)	ABHI
Clive Badman (CB)	University of Strathclyde
James Cameron (JC)	Highlands and Islands Enterprise
[REDACTED]	LSSILG
Brian Bathgate (BB)	Charles River Laboratories
Peter Mathieson	Universities Scotland
Giles Hamilton (GH)	ODx Innovations Ltd

Observing

[REDACTED]	Scottish Enterprise
[REDACTED]	Scottish Government
[REDACTED]	Scottish Government
[REDACTED]	Scottish Government

Guests/Presenters

Colin MacKay	Symbiosis
[REDACTED]	CSO
[REDACTED]	Head of CSO
[REDACTED]	Scottish Enterprise
[REDACTED]	SDS

APOLOGIES

Joe Fitzpatrick (JF)	Minister for Public Health, Sport and Wellbeing
Julie Brittenden (JBrit)	NRS/Glasgow University
Sinclair Dunlop (SD)	Epidarex
Claire Wallace	Thermo Fisher Scientific

AGENDA

1	13.00	Welcome, Introductions, Adoption of May Meeting Note Chair update Reminder of telephone etiquette & Chatham House Rule	Dave Tudor, Industry Chair
2	13.20	Minister's Update Update on Scottish Government actions in response to COVID-19	Ivan McKee, Ministerial Chair
3	13.35	Impact of COVID on LSS companies Update from members <i>Giles Hamilton, John McNeill, David Bunton</i>	Dave Tudor
4	13.50	Update on Government – Industry Engagement <i>(Action 2.3)</i>	David Crossman/ [REDACTED]
5	14.00	Future Areas: ATMP MedTech Group focus update Skills current and post COVID	Dave Tudor Colin MacKay/[REDACTED] Mark Cook [REDACTED]
6	15.50	AOB	Dave Tudor
	16.00	Close	

Date of next meeting: Skype online meeting Wednesday 15th July, 13.00 – 15.00

ACTIONS

ITEM	DESCRIPTION	LEAD	DEADLINE- all 150720
1	Industry Chair		
1.1	A Scottish version of the recovery roadmap to be produced	DT, AC, PE, DC, JM, AH	
1.2	Digital Health and care Transformation –actions to be scoped for next meeting	AH	
2	Ministerial update		
2.1	A practice session using Microsoft Teams to be set up	DT, [REDACTED], [REDACTED], IM, [REDACTED]	
3	Impact on companies		
3.1	Scot Gov to respond to ODx points re clinical trials restarting and staff retention. <u>GH to provide overview of challenges.</u>	IM, GH	
3.2	ODx, MSD and Reprocell update paragraphs on to LSS website	GH, JM, DB to AM	
3.3	Volunteer company updates for next meeting	All to [REDACTED]	
3.4	Companies encouraged to post updates on LSS website	All to AM	
4.	Update on Government – Industry engagement		
4.1	David Crossman to share slides and [REDACTED] to circulate	DC, [REDACTED]	
5	Future areas		
5.1	How to “socialise” ATMP strategy	DT, IM	
5.2	ATMP to analyse the “asks”	CM, [REDACTED], [REDACTED], DT, [REDACTED]	
5.3	[REDACTED] to send full ATMP presentation and [REDACTED] to circulate around members and members to feed back with comments to [REDACTED], via [REDACTED].	[REDACTED], [REDACTED], All	
5.4	MedTech: lessons learned from TripleA	MC, JM, JC	
5.5	Skills: [REDACTED] to attend all future ILG meetings	[REDACTED], [REDACTED]	
5.6	[REDACTED] to put a paragraph up on LSS website, liaise with Alix	[REDACTED], AM	
6	AOB		
6.1	Both Chairs to catch up offline to identify key opportunities and how to maximise impact	IM, DT	

Meeting Note

1. Welcome & Introduction from ILG Co-chair, Dave Tudor:

- Dave Tudor (DT) welcomed all to the meeting. Reminder of etiquette and increased frequency of meetings. LSSILG operates under Chatham House Rule.
- Meeting note from May meeting was approved.
- DT was encouraged by the ILG Review, led by Nora Senior. Not much will change based on the recommendations. ILG will continue to be the fundamental way that Scottish Government and the Enterprise Agencies engage with industry. Hopefully formal document should be available prior to next meeting in July.
- There is currently a proposal to organise the Annual Scotsman Conference in December as a virtual event.
- Update on vaccine taskforce – UK Government backing both candidates, Oxford University and Imperial College London. The Imperial candidate is to be first in human tomorrow (18 June 2020).
- Pfizer, Moderna and GSK amongst others are all in discussions with government on buying vaccines, with Kate Bingham assessing.
- In the longer term, monoclonal antibodies, lipid and soft cell technologies – DT highlighted the need for Scotland’s capability to be communicated.
- DT involved in supply chain of RNA Imperial candidate at MMIC and securing supply of vaccine. The first doses should come around December this year.
- DT would like the ILG to hit the start button on the ATMP Strategy.
- It was agreed that a Scottish version of the UK level Life Sciences Recovery Roadmap (document circulated) be produced. Both ABPI and ABHI were involved in production of this document.
- [REDACTED] stated that this document was a good fit with current NHS thinking.
- David Crossman (DC) mentioned a paper on NHS /R&D/ Innovation, drafted by [REDACTED], should align with Scottish Recovery Roadmap proposals.

ACTIONS:

A Scottish version of the recovery roadmap to be produced - DT, AC, PE, DC, JM, AH
Digital Health and care Transformation –actions to be scoped for next meeting – AH

2. Ministerial update

- Minister gave thanks for raising ILG Review still some stages to go through. As the review is written for all ILG’s, many of the recommendations are already actioned by LSSILG as business as usual.
- Mr McKee outlined the work being carried out in response to the Covid-19 crisis. This includes increasing the test capacity, engaging with business and the wider supply chain.
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- Mr McKee had a call with various other ministers in relation to economic recovery work. Priorities will include skills, building resilience and business engagement.
- The Life Sciences sector will be in a key position to provide an immediate response, leverage jobs and contribute to growing exports during the recovery phase.
- A document will be published shortly outlining the return to work process for labs and research facilities.

- The timeline for the economic recovery work, led by Benny Higgins is targeted for the end of this month and the report will be published in next few weeks. The recommendations will then be rolled out and the group will have looked at it by next meeting.
- DT outlined that SE will bring a paper on digital health and technology with detailed actions to the next ILG Meeting.
- Minister referenced need for a statement everyone can work to, the Life Sciences Strategy remains valid
- DT requested that TEAMS be used as the preferred platform given the issues experienced with Skype.

ACTION:

A practice session using Microsoft Teams to be set up to see if better functionality than Skype - DT, [redacted], [redacted], IM, [redacted]

3. Impact on companies

Giles Hamilton (GH) – ODx Innovation Ltd:

- [redacted]
[redacted]
[redacted]
- [redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]

ACTION:

GH to provide details of challenges regarding clinical trials and staff retention. Scot Gov to respond to ODx points - IM, GH

John McNeil (JM) – MSD

- [redacted]
[redacted]
[redacted]

David Bunton (DB)– Reprocell

- [redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
- [redacted]
[redacted]
[redacted]
[redacted]

ACTIONS:**ODx, MSD and Reprocell update paragraphs on to LSS website - GH, JM, DB to AM****Volunteer company updates for next meeting – All to [REDACTED]****Companies encouraged to post updates on LSS website – All to AM****4. Update on Government – Industry engagement David Crossman (DC) and [REDACTED]**

- [REDACTED] – Acknowledged support to the NHS.
- Restart programme and moving to reopen support for business partnering with the NHS.
- NSS opened this week. (Innovation Portal)
- Restart sharing industry work and needs of health and social care – Innovate with funded contacts e.g. CivTech in Scotland – Covid-19 testing. Need more support for PCR – scientists at NHS Glasgow looking for support.
- DC – CSO behind innovation in the NHS is up running again. There are three domains of work, vaccine development, new treatments and diagnostics.
- DC – CSO totally behind restarting clinical trials
- David discussed the diagnostics developments and future options:
 - Process what we have at scale
 - Guanidine viral inactivation
 - Pooling of samples
 - “End Point” PCR techniques
 - LAMP technology – high scale and lower sensitivity
 - Viral sequencing – high sensitivity and low scale
- DC outlined that LAMP technology in Scotland has different supply chains to PCR tests and is cheaper. The test also takes less than 30 minutes to provide a result.
- DC highlighted that Roche are developing a test based on multiplex testing which will be useful when we reach October and there is multiple flu’s, rhinovirus and Covid-19 mimics circulating.
- Lateral flow tests could possibly be manufactured in Scotland.
- Mr McKee flagged that he is keen to know where the companies are in the process of these test evaluations.
- [REDACTED] mentioned the relevant enterprise agencies will be involved to make sure there are direct links.

ACTION:**David Crossman to share slides and [REDACTED] to circulate – DC, [REDACTED]****5. Future areas****ATMP Strategy**

- Colin MacKay (CM) updated group that the ATMP is moving forward. Current initiatives they are working on involve the supply chains that support ATMP and a have issued a survey for contributions from industry (not had good response so far).
- The group was asked if there is resource available to look at life sciences sector capabilities to put together a landscape picture with SG and SE.
- [REDACTED] presented a draft strategy. This will be circulated, seeking feedback.
- Viral vector manufacturing is a global need and [REDACTED] is keen to address this.

- [REDACTED] (SDS) mentioned skills action plan and the evidence from Cell and Gene Catapult.
- The skills document is available to circulate, and [REDACTED] is keen to speak to companies about technical and clean room training, data security as this is a great opportunity to showcase the careers in this area.
- [REDACTED] highlighted the need to support inward investment opportunities as international companies see the benefits of coming to Scotland.
- DT flagged a need for a united effort behind the strategy.
- Mr McKee positive on the progress being made and this work should continue with the actions identified and if specifics come out then this will be looked at. There is a need to 'socialise' the strategy.
- DT asked for senior alignment to provide resources as a priority to map out life sciences space and publish as Scotland has a lot to offer.
- [REDACTED]
- [REDACTED]
- [REDACTED]
- Andrew Howie (AH) and SG to have a call with [REDACTED] on this challenge.
- A new vaccines division in SG with health focus will help to feed into networking and co-ordination.

MedTech – Mark Cook (MC)

- [REDACTED]

Skills current and post Covid-19 – [REDACTED]

- Since pandemic the skills environment has changed. SDS are responding to this through their 90 Day Covid-19 Plan. So far, they have 13 companies interested in taking part.
- They want to encourage young people (those displaced from schools, universities) to move into the sector and build resilience of the sector.
- Currently they have a life sciences framework for apprenticeships and have 16 modern apprentices due to start work later in the year.
- Still to deliver work on graduate apprenticeships.
- The lighthouse lab is looking to employ 240 scientists by August.

ACTIONS:

How to "socialise" ATMP Strategy – DT, IM

ATMP to analyse the "asks"- CM, [REDACTED], [REDACTED], DT, [REDACTED]

[REDACTED] to send full ATMP presentation and [REDACTED] will circulate around members and members to feed back with comments to [REDACTED], via [REDACTED] – [REDACTED], [REDACTED], All

MedTech: lessons learned from TripleA – MC, JMac, JC

Skills: [REDACTED] to attend future ILG meetings – [REDACTED], [REDACTED]

█ to put a paragraph up on LSS website, liaise with Alix – █, AM

AOB

- Mark Cook has accepted chairmanship of the Governance Group.
- David Bunton is the second industry member to join the Governance Group.
- Mr McKee encouraged to see the sub-groups engaged, clear direction and clear asks on next steps. Mr McKee and DT to align on a one to one session.
- Next meeting will involve generic sustainable supply chain and digital health technologies.

ACTION:

Both Chairs to catch up offline to identify key opportunities and how to maximise impact – DT, IM

Next meeting – Wednesday 15th July, 13:00 – 15:00 Online

FINAL APPROVED

SUBJECT: Recovery Roadmap for Scottish Life Sciences
MEETING DATE: 15.07.20
AUTHOR: Dave Tudor, [REDACTED], Mark Cook, Peter Ellingworth, Alison Culpan, John MacKenzie

For Information	Members are asked to note the contents of the paper
For Discussion	Members are asked to decide on recommendations
For Approval	Members are asked to agree the Recovery Roadmap recommendations

Background

The 2015 Life Sciences strategy set out the ambition to grow the Life Sciences sector in Scotland to £8bn by 2025. Four key themes were identified to deliver this strategy: Innovation Commercialisation, Sustainable Production, Internationalisation and Improve the Business Environment, coupled with improved connectivity and stakeholder engagement.

In response to the COVID-19 pandemic, the Life Sciences Scotland ILG has taken the decision to issue this Recovery Roadmap, calling out the key recovery actions for the sector, to ensure the unique strengths which Scotland has in mobilising effort behind a common goal are realised. This Recovery Roadmap will deliver significant benefits to patients and will help the Scottish economy to recover post COVID-19. We have 2 clear priorities:

- To ensure that patients and consumers in Scotland have access to both existing and new, innovative treatments, products and services
- That we continue to work together to grow the Life Sciences sector to ensure we reach or exceed our growth target of £8bn by 2025.

The Life Sciences sector in Scotland is made up a number of sub-sectors and the following general recommendations are applicable to all sectors;

Recommendation [1] - The development and application of digital technology and the management of data is an essential economic recovery strategy for Life Science companies. The ILG will work with colleagues from the Enterprise Agencies, Scottish Government Economics and Health departments, NHS Scotland and innovation centres to prioritise the areas on which we should focus in the short to medium term.

Recommendation [2] – Scotland has a strong track record of producing a skilled, scientific workforce for the Life Science sector. It is important that the current Life Sciences Skills Investment Plan [SIP] is fully supported by the ILG.

Recommendations [3] – Ensuring that Scotland continues to build the infrastructure and landscape to allow the Life Science sector to continue to grow at 7% yoy is an important outcome. The ILG will partner with the Scottish Government and the Enterprise Agencies to drive the Infrastructure plan.

We have identified three key focus areas which are sector specific, Pharmaceutical, Medical Technologies and Animal, Agriculture Technology and Aquaculture (AAA) to highlight specific sector priorities and recommendations.

Pharmaceutical

The pharmaceutical industry in Scotland comprises a group of well-connected and innovative companies across the pharma services supply chain. In order to “build back better” following the Coronavirus pandemic, the pharmaceutical industry believes that there are three broad themes to consider in order to improve patient outcomes, drive economic growth and provide value for the NHS.

The three Pharmaceutical key themes to consider when looking to the recovery post- COVID-19 are:

1. The improved use of healthcare data to drive efficiencies, deliver better patient outcomes and attract pharmaceutical investment to Scotland.
2. The need to enshrine COVID collaboration between industry, NHS and Government as a cornerstone of future working.
3. The specific advantages to Scotland of a Vaccines and Advanced Therapies Strategy and the time imperative in capturing the present opportunity.

On Pharmaceutical Data and IT, we recommend that:

- The NHS must evaluate changes introduced during the pandemic, including the increased use of virtual consultations, homecare and remote monitoring, with a view to “locking-in” those deemed successful.
- The five recommendations from the 2018 Data Scoping Taskforce Review are implemented in full.
- The pandemic presents an opportunity to explore how we can use large accessible, datasets to attract clinical research and deliver faster and more effective clinical insights. For example, this could include combining clinical research with real world evidence.

On increased collaboration we recommend that:

- The NHS and industry must continue to work together to address the treatment backlog, including the use of innovative medicine to reduce the burden on individual clinicians and commit to no further treatment holidays during any “second wave”.
- Working together to ensure non-COVID clinical research can restart with clear processes in place to mitigate any future “second wave”.
- Scotland needs to be positioned as a priority market for the launch of innovation, with broader measures of value needed to reflect the changing nature of medicine.
- Flexible commercial arrangements are supported to accelerate the deployment of new and existing treatments to ensure Scottish patients can benefit from the latest technology.
- In a future proofed HTA system that maintains Scotland’s position as an attractive launch market and manufacturing base for new medicines.
- In pursuing a sustained prevention strategy for conditions such as diabetes and heart disease given the impact of comorbidities on patient outcomes during the pandemic.

Advanced Therapies and Vaccines – Growth Plan

Over the next 10 years, Scotland will grow its capability in developing a pipeline of new ATMP/vaccine therapeutics, expand its specialist manufacturing capacity and its supporting supply chain to the extent where a strong industry and academic cluster is making a significant impact on the UK and international ATMP & vaccine markets.

A coordinated and agile ATMP/vaccine community in Scotland will be better able to compete for significant funding opportunities, attract increased inward investment and, as recent events have demanded, respond to national and international medical need by leading or supporting the rapid development of innovative therapies.

Building on existing assets and expertise to create a high-value ATMP/vaccine manufacturing cluster in Scotland is strategically well-aligned with Scottish Government’s emerging “**Making Scotland’s Future**” strategy.

Medical Technologies

Scotland is home to a large and vibrant medtech industry encompassing more than 250 companies and with over 9,000 people employed within the sector. MedTech has enjoyed a growth rate of 8% per annum over the last decade – clear evidence of the ambition of this thriving and connected community. Success stems from a globally recognised research community, an outstanding reputation for innovation, a collaborative clinical base and a highly skilled and flexible workforce.

The three key themes to consider when looking to the recovery post- COVID-19 are:

1. Data
2. Innovation landscape
3. Internationalisation

On Medical Technology data we recommend that:

- A national, integrated approach to data, bringing together NHS data as well as data generated by wearable and implanted devices or apps, health data held by private companies including HealthTech companies and environmental data. For this, policymakers need to formulate a view on how to construct a mixed ecosystem of consumer, public and private actors;
- A focus on the use of high quality, well curated, real-world data utilizing existing structures to create a trusted governance environment that streamlines access while maintaining citizen control over sharing of their data;
- Implementation support for data led projects, including a standard process for contracting with private sector for use of health data, provision of data analytics support and appropriate incentives (through adaptation of reimbursement / funding mechanisms) for novel care pathways enabled by digital health technologies; and
- Appropriate incentives (through adaptation of reimbursement / funding mechanisms) for novel care pathways enabled by digital health technologies

On the Innovation landscape we recommend that:

- Streamlining of the innovation landscape and creation of stronger mechanisms for measuring adoption of technologies

On Internationalisation we recommend that:

- Working with industry to showcase Scottish excellence in healthcare globally and continue to build a growing export base with the vibrant SME community

AAA

The triple AAA sectors (animal health, agri-tech and aquaculture) represents three out of the seven life sciences sub sectors. Two key themes to consider when looking to the recovery roadmap post COVID-19 are:

1. Future of Food
2. One Health

On the Future of Food we recommend that businesses should be looking at how **innovation** can help with the future of food by:

- Increasing interest in **robotics and automation** solutions in order to overcome labour challenges, e.g. for fruit and vegetable harvesting, and other areas; Increased interest in production systems which allow for greater domestic production of some foods which are often imported e.g. vegetables via vertical growing systems – *We have launched Scotland's first Venture Studio for AAA, FAST <https://www.roslininnovationcentre.com/food-agriculture-science-transformer-fast>. Three new Opportunity Areas including Regenerative Aquaculture, Pollinator Reinforcement and Controlled Environment Agriculture established to attract talent and newco scale up activity to Scotland.*
- Asking how we can respond to COVID-19 to make industry improvements, e.g. redesign systems to help achieve **net zero targets**. – *We are 'on message' with A3Scotland2021. <https://www.roslininnovationcentre.com/a3-scotland-2021>.*
- Being interested in the logistics of **food supply chains** and how they can be improved and de-risked to deliver fairer shared value across the whole food chain.

On One Health we recommend that industry should be focused on **technology** in the context of One Health with:

- A big focus on skills, training and deployment of **digital/data**. e.g. aquaculture is 'bloated' with data
- **IoT and AI** technologies development should be particularly aimed at the biological data around agri-tech, disease and life science biology.
- With 60% of existing human diseases being **zoonotic**, (including not least Covid-19), with increased **R&D**, Scotland will be even better placed to respond to the next pandemic.

AAA has the ideal opportunity to be at the heart of the green and circular economies for growth and recovery in Scotland, making better use and impact of land, whilst being front and centre in the 'forensics of food' and leading in the discoveries of vaccines and therapeutics.

LifeSciences Scotland ILG Next Steps

The ILG will now focus on leading and coordinating the key groups required to implement these recommendations to ensure the continued growth of the Life Sciences sector.