The BRITISH MASS SPECTROMETRY SOCIETY Delivering World-Class Science with British Mass Spectrometry... Looking to the Future!

# Statement of Needs

2021





## UK MS Vision Project Summary & Feedback

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### **UK community drive to secure the future for MS**



- The UK scientific community who depend on mass spectrometry across all levels, are coming together to bid to UKRI for large infrastructure and resource.
- Our aim is to ensure the required infrastructure, support and training are in place to assure the generation of "fit for purpose" data from the UK MS user community.
- The BMSS initiative has made considerable progress, but what is now needed is wider UK community engagement to drive forward.
- A lot of work has been done already and documentation can be found at the BMSS website <u>https://www.bmss.org.uk/about-us/uk-mass-spectrometry-vision/.</u>

#### **OUR VISION + CASCADING EXCELLENCE & BEST PRACTICE**

TIER3:AdvancedMSNational Research Facilities.Providing access to world-leadingspecialists,technology and knowhow.

TIER 1: Targeted MS Research Groups. Tightly focusing on a specialist area of study. Providing specialised and in depth advice within the MS (0) cascade landscape.



TIER 2: Regional MS Research facilities. Collaborative research and development of innovative MS approaches. Supporting the lower tiers.

TIER 0: Remote Access MS Facilities. Supported on-line by staff in the higher tiers with an experiment design and data interpretation advice service.

WORLD-LEADING RESEARCH + KNOWHOW + ACCESSIBILITY + TRAINING + ANALYTICS + BEST PRACTICE



#### Where we have got to ....





- Statement-of-Need has been accepted by EPSRC.
- Scale of investment ~ £100M over 5 years spread across strategic technology and application areas, strengthened and united by a networking hub.
- Currently pulling together the information, with supporting evidence, to submit a full proposal to UKRI Infrastructure Advisory Committee
- Engaged with BBSRC and MRC, Henry-Royce Institute, Rosalind Franklin Institute and Faraday Institute – all ongoing

#### What's next?



- Write and submit a full bid to the UKRI Infrastructure Advisory Committee, including funding for equipment and resource (personnel, supplies, fEC, *etc.*). The more community engagement, the more likely this bid is to be approved by UKRI. The more inclusive the process, the more beneficial the result is likely to be for the whole community
- If funded, the EPSRC will announce a set of calls for proposals to set up these Advanced National Research Facilities and the MS Networking hub.
  - Our community then needs to help 'parametrize' these calls to help EPSRC get out a set of calls that is 'fit for purpose' and meets our community needs.
  - You and your colleagues will hopefully be able to contribute to, or host one or more of these NRFs
  - These will be bid for, reviewed, and go through an EPSRC funding panel (as usual)
- As PhD studentships are not allowed in the infrastructure call, we will need to build a community-wide Doctoral Training Centre (or similar) to cover the broad demand for training and trained staff.





- To gather the detailed information, supported by evidence, to underpin the proposal for the Advanced MS Centres and Networking Hub that will focus on and provide critical mass in mass spectrometry and related technologies by:
- Recruiting an independent consultant to engage with field leaders and deliver the necessary detailed information on:
  - What this community needs from MS (technical need and scale of investment, people and skills gaps/training)?
  - What scientific achievements cannot happen without these technology developments?
  - What impact will these technology developments have? How will this be transformative?
  - Who else should we be talking to to help us gather this information?
- Organising user consultation via workshops to define the framework of ESPRC bid in materials.

#### We need you to make it happen !



- Great opportunity to help shape the future landscape for MS in the UK
- Getting involved to help collectively structure the funding for future research, training and community resource
  - If you would like to get involved, please email Chair@BMSS.org.uk
  - We welcome ideas and opinions on how to best manage & facilitate the team



# Your participation is critical for our community!

