

THE UNIVERSITY of EDINBURGH

Professor Andrew Morris FRSE FMedSci Professor of Medicine Vice-Principal Data Science The University of Edinburgh Edinburgh BioQuarter 9 Little France Road Edinburgh EH16 4UX

www.ed.ac.uk

24th October 2019

Professor Steve Wigmore Chair Royal College of Surgeons Nicolson Street EDINBURGH EH8 9DW

Dear Professor Wigmore

I write to lend my full support for the planned SCONe and Foresight Consortium's pioneering big data project in Scotland, with the potential to have a transformational impact on retinal health in general, and age-related macular degeneration (AMD) in particular. Further, reading the data within a retinal image opens a window onto extraocular health through detailed analysis of the retino-choroidal microvasculature, thus represents a rich resource for biomedical research into common systemic co-morbidities affecting other microvascular beds including CVD, CNS and renal disorders. Their ambition to create a Scottish repository of retinal images as a national bioresource is laudable, and will be a pipeline for retinal biomarker discovery, cross-linked healthcare research and a platform for continuous improvement in referral accuracy, triage prioritisation and cost-effectiveness in the AMD patient pathway.

SCONe's multidisciplinary team encapsulates wide-ranging expertise from ophthalmology, optometry, image analytics and the Usher Institute is ideally placed to maximise the opportunities arising from this unique retinal biorepository. The project adds value to the investment NHS Scotland has historically made in funding free eye tests, high-street retinal imaging and e-referral networks from opticians and optometrists in the community over the past decade.

SCONe and the Foresight Consortium's objectives are timely and align well with other Scottish initiatives including the City Deal/Futures Institute and also with the goals of HDRUK. I am confident that significant investment from UK Government shall enable continued prospective curation of multimodal retinal images captured in the high street as described in their proposal. Their retinal phenotyping platform could be further enriched by genotyping, opening a portal to personalised medicine in primary care. The data analytics and AI applications arising from SCONe will firmly stamp Scotland's credentials as a world leader in digital and scientific innovation.

Yours sincerely,

ds DMann

PROFESSOR ANDREW MORRIS CBE FRSE FMedSci Professor of Medicine Vice Principal Data Science