Prof Sheila Rowan, Chief Scientific Adviser for Scotland, Director of the Institute for Gravitational Research
Role of the Chief Scientific Adviser in the Scottish Government context

Science for Policy

Aims to make sure Ministers and policy officials have access to independent scientific advice on issues of strategic importance.

Champions the role of science in the economy and in improving the wellbeing of stakeholders and citizens.

Represents and acts as an advocate for Scottish science in Scotland, in Whitehall in Europe, and internationally.

Aims to inspire the next generation of scientists and encourage diversity in the STEM (science, technology, engineering, and mathematics) workforce.

Policy for Science

Science for Society
Science for Policy

• ensuring officials and Ministers know about the impact that scientific developments might have on policy development and delivery.

• championing the use of science as a core part of the evidence base that informs policy decisions
  • to sit alongside eg: economic evidence, evidence around public opinion and social and cultural licence.

• embedding a process where Ministers and officials have access to science advice from a range of sources
  – internal and external to government – includes other chief scientists and Scottish Science Advisory Council
  – adding value across the spectrum of government policies.

Science advice contributes to how we can tackle big issues – climate change, ageing population, cyber-resilience...
The system of government support for science, including:

- Funding for higher education and research
- Support for innovation

- June referendum outcome resulted in important sector specific concerns

The CSA can act as a conduit between the Scottish Government and the science community, making Ministers and officials aware of the concerns of the ‘science sector’

Conversely the CSA can represent Scottish science interests at the UK and international level

Threats and opportunities for Scottish science?
Inspiring our next generation of scientists:

• STEM teacher recruitment, the curriculum and attainment in STEM

• Funding for public engagement with science – informal science education, often in a family context
Technology: rich source of spin-offs

- High precision/stability bonding
- Stem cell differentiation
- Coating damage
- Weathering of sandstone
- Analysis of retinal scans
- Gravity sensors for environmental monitoring/security/oil & gas
As CSA I want to ensure that:

- the Government has access to the best science advice to inform its work;
- the science sector has a strong voice to represent its concerns to Government;
- people across Scotland, of all ages, backgrounds and abilities, are able to see the positive impact that science skills and knowledge can have.

Communication a key tool for scientists and researchers

Need to work together and get across that sense of wonder that we feel about science, and the message that science is for everyone – potential for huge gains to be made.