Actuarial
Research Centre

Institute and Faculty
of Actuaries

# An introduction to the IFoA's Actuarial Research Centre

19 May 2016, ACA

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# Paul Reynolds

***Director of Public Affairs***

Institute and Faculty of Actuaries

2 March 2016

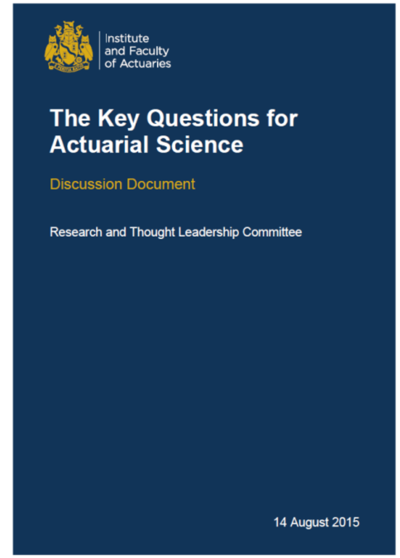
# Strategic Objective

We will advance all matters relevant to actuarial science and its application

- A complementary approach
  - Working Party
  - Centrally Commissioned

# Recent developments

- Creation of the RTLC
  - Coordination
  - Key questions
    - Optimal way to bear risk
    - Consequences of changes in how people age
    - Investment strategies in a changing world
  - Call for research
    - Council underwriting £3.1m of funding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The Key Questions for Actuarial Science

Discussion Document

Research and Thought Leadership Committee

14 August 2015

# Programmes from the Call for Research

- ***Minimizing longevity and investment risk while optimising future pension plans*** Future pension products that meet customer needs, balancing stability, performance and cost

- ***Use of Big Health and Actuarial Data for understanding Longevity and Morbidity*** The development of new statistical and actuarial methods in the use of Big Data, in the context of health and wider applications

- ***Modelling, Measurement and Management of Longevity and Morbidity Risk*** A new generation of mortality and morbidity models, with a specific focus on the drivers for mortality

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# New delivery mechanism

Actuarial Research Centre

- Bridging academic rigour with practitioner needs
- Collaboration
  - Academics
  - Industry
  - Actuarial bodies
- Academic quality overseen by ARC Director and ARC Associate Directors

**The ARC becomes a global network of actuarial researchers**

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# Jens Perch Nielsen

***Professor of Actuarial Science***
***Cass Business School***
***and Primary Investigator at***
Institute and Faculty of Actuaries


2 March 2016

# Appetizer of IFoA-funded research

## “Minimizing longevity and investment risk while optimising future pension plans”

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# Four big ambitions

- One short conversations with the customer: the entire bespoke pension design is backcalculated
- As much as possible of investment guarantee is shared. Perhaps all.
- As much as possible of mortality risk is shared. Perhaps all.
- Investment dynamics – market timing - should be incorporated

# First big ambition

- **One short conversations with the customer: the entire bespoke pension design is backcalculated**

# Second big ambition

- **As much as possible of investment guarantee is shared. Perhaps all.**

# Third big ambition

- **As much as possible of mortality risk is shared. Perhaps all.**

# Fourth big ambitions

- **Investment dynamics – market timing - should be incorporated**