

## **Three-Year Plan to Generate External Research Funding**

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This three-year plan sets out a focused strategy to secure external funding to support a research programme in explainable and trustworthy AI, privacy-preserving federated analytics, and AI for healthcare. The approach combines (a) rapid early-stage seed and fellowship bids, (b) mid-level collaborative research grants with clinical and industry partners, and (c) larger programme-level and translational awards in years 2–3. The plan emphasises building UK clinical/industrial partnerships, leveraging national funders and international collaborative routes, and delivering measurable research outputs and impact that strengthen future bids.

### Strategic aims (years 1–3)

1. Establish a strong portfolio of UK-funded pilot projects and fellowships to generate preliminary data and partnerships.
2. Convert early wins into larger competitive grants (UKRI councils, MRC/NIHR, Wellcome, Royal Society, Innovate UK) during years 2 to 3.
3. Build sustainable industry and NHS collaborations to co-fund translational work and offer matched contributions.
4. Develop a coherent REF-ready publication and impact pipeline to support future institutional leverage.

### Year 1 (Months 0–12): Seed, visibility & partnerships

- Objectives: produce 2 to 3 strong pilot studies, secure one fellowship or small award, and formalise industry/NHS partnerships.
- Actions:
  - Submit rapid pilot proposals (internal pump-priming & small external schemes) to develop proof-of-concept datasets and preliminary results.
  - Apply for individual fellowships or early-career awards (Royal Society, Wellcome early schemes where appropriate) and targeted UKRI responsive-mode small grants.
  - Initiate formal collaboration agreements (MoUs) with one NHS Trust and one industry partner for data access, co-supervision and matched funding.
  - Produce 2 to 3 short-term outputs (code, preprints, pilot analyses) and a clear impact case for translational funding.

### Year 2 (Months 13–24): Scale-up & collaborative grants

- Objectives: win mid-sized collaborative grants (£200k–£1.2M), secure NIHR or MRC collaborative awards for health-focused projects, and submit cross-council UKRI bids.

- Actions:

- Lead a cross-disciplinary UKRI responsive/cross-council application (EPSRC/MRC/BBSRC as appropriate) building on Year 1 pilots.
- Submit NIHR Programme Development Grant or themed NIHR/Health funding bids for clinical translation with NHS partners.
- Partner with industrial collaborators to apply to Innovate UK / matched industry funding for applied demonstrators.
- Use early outputs to bolster applications to Wellcome Investigator/Discovery schemes where relevant.

### Year 3 (Months 25–36): Sustainability

- Objectives: secure large programme or centre-scale funding, consolidate industry and clinical funding streams, and embed doctoral/postdoc positions funded externally.

- Actions:

- Submit programme-level bids (e.g., EPSRC programme grants, major Wellcome/MRC programme awards, or NIHR Programme Grants where appropriate).
- Apply for collaborative Horizon/European funding consortia where beneficial to scale impact and international partnerships.
- Establish industrial contribution agreements to unlock matched funding and pathways to commercialisation.
- Create a small internal ‘funding pipeline’ team (PhD/postdoc + RA time) sustained by external awards to maintain momentum.

### Target funders & routes (UK-specific)

Primary: UKRI research councils (EPSRC, MRC, BBSRC), UKRI cross-council schemes and responsive-mode routes; NIHR for applied/clinical projects; Wellcome Trust and Royal Society fellowships and project funding. Applied/translation: Innovate UK, industry partnerships and university knowledge-exchange schemes. International leverage: Horizon collaborative calls when strategically beneficial.

### Deliverables & milestones

- End Year 1: 1 fellowship or small external award; 2 pilot studies with preprints and demonstrators; signed NHS and industry MoUs.
- End Year 2: 1–2 mid-sized grants secured (£200k–£1.2M); at least one Innovate UK/industry-funded demonstrator; external PhD/PDRA post funded.
- End Year 3: 1 programme-level award or multiple sustained grants (combined >£1M),

established industrial/NHS co-funding, and a clear pipeline for REF-impact case development.

**Risk management & mitigation**

- Risk: delayed or unsuccessful grant outcomes. Mitigation: maintain a diversified portfolio of small/medium bids and use institutional seed funding to produce additional evidence for resubmission.

**Support requested from the School/University**

- Support from Research Services for bid development, costing (FEC), and access to industry liaison and NHS contacts.
- Internally advertised seed funding competitions to catalyse larger collaborative proposals.