

Talking and Thinking



(BrisSynBio, 'Invincible' Immersive Theatre, 2017-2018)

[Themes]

Ethics & Reflexivity
Artistic Collaborations
Responsible Research & Innovation (RRI)

Dialogue with creative practitioners is a unique opportunity to reflect deeply about research ethics, impact and responsibility



[Aim & Approach] Synthetic biology research in the redesign and engineering of biological systems has novel, but potentially controversial, applications in technology health, and agriculture. [BrisSynBio](#) researchers worked with Kilter Theatre and the Public Engagement team to create a play based on a future scenario, allowing audiences to learn more about synthetic biology research and discuss its possible impacts and ethical issues.

[Practical Details] The play was developed over 18 months as part of [Synenergene](#), a large EU-funded project. Development and staging cost around £45K for two performance runs. Over 500 people of all ages attended 33 shows in 2017 & 2018, including mental health practitioners, policy makers, teachers & students.

[Key Partnerships] [Kilter Theatre Company](#) is a Bath-based arts organisation specialising in creating collaborative and immersive theatre pieces which encourage audiences to think about ethics, society, our environment, and the future.

[Activity & Outcomes] From a first meeting where researchers explained their research and Kilter their creative approach, the group iteratively developed a script together, ensuring the science was communicated in an accurate and credible narrative. The finished play, '[Invincible](#)', explored an imagined future where synthetic biology-based treatments were common. Researchers had supporting roles and took part in post-performance discussions with the audience. The production was [thought-provoking for audiences](#), but just as significantly, provided BrisSynBio researchers with a unique opportunity for deep reflection. The development phase enabled in-depth and nuanced conversations between researchers, theatre makers and cast about the societal implications of synthetic biology. The process provided a new space for genuine dialogue, intellectual exchange, sharing diverse perspectives and confronting challenging questions.

[Support] A Public Engagement Associate was funded through [Synenergene](#) to support this project. The team have extensive expertise assisting academics to develop engaged practice and [embed RRI](#) in their work. We provide training, a [Researchers' RRI Toolkit](#) and broker connections with creative practitioners. Our [RRI Residentials](#) give researchers time, space, and guidance to develop skills and thinking around ethics and responsible research.

[Impact] Responsible Research is often perceived as a theoretical concept but working with creative professionals who have different viewpoints is a concrete way of putting it into practice. By creating something thought-provoking and challenging together, both parties learn from each other. As one researcher said: *"Other experts exist in society. By working with them we develop better research because it is informed by lots of different areas of expertise."* BrisSynBio has continued to value and encourage [participation in engagement activities](#) which explore different dimensions of RRI, as the Director explains: *"We started with simple 'information-sharing' forms of public engagement, but are moving much more towards listening, involving and including external people in the research process at all stages, even co-producing research with the public."*

Public Engagement

Strengthening research with conversations that count

For more details of this project, or to discuss your own engagement idea, please contact the Public Engagement team: www.bristol.ac.uk/public-engagement