**The British Society for Gene and Cell Therapy at 20 (2003-2023)**

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ABSTRACT

2023 marks the 20th anniversary of the British Society for Gene and Cell Therapy. In these 20 years, the field of gene and cell therapy has gone from promising strategy to clinical reality. This report describes the history, objectives, organisation and activities of BSGCT to advance research and practice of gene and cell therapy in the UK.

Twenty years ago, gene and cell therapy was still a dream and there was a clear need for scientists to co-ordinate their activities and to communicate better with the general public. In the UK, this spearheaded in 2003 the formation of an Steering Executive Committee including some of us: Eric Alton, Andrew Baker (Treasurer), Charles Coutelle, George Dickson (Secretary), John Fabre, Nagy Habib, Richard Harbottle, Susan Kingsman, Nick Lemoine, Ann Logan, Vivien Mautner, Andrew Mountain, Len Seymour (President), Adrian Thrasher and Dominic Wells, with inspirational support from Charles Coutelle. The same year, this Committee coordinated the foundation of the British Society for Gene Therapy (BSGT), which was formally registered on November 14th. In 2004, elections were held, and Len Seymour was elected as founding president of the Society, post in which he served until 2009. Len was followed by Adrian Thrasher (2009-2013), Andy Baker (2013-2017), Uta Griesenbach (2017-2021) and the current president Rafael Yáñez (2021-2025). In 2012, the Society’s membership voted to change the name to the British Society for Gene and Cell Therapy (BSGCT), acknowledging the inextricable intertwining of gene therapy and cell therapy. The names of all board members who have served the Society are included in Fig. 1. Photographs of the boards in 2013 (first board picture available, at the 10th anniversary) and 2023 (latest, at the 20th anniversary) are included in Fig. 2.

An inaugural, Department of Health-sponsored meeting of the Steering Committee was held in 2003 at the Medical Research Council (MRC) Head Office in London. The first activity of the Committee was a letter to *Lancet* criticising the British Broadcasting Corporation (BBC) for their Horizon programme “Trial and Error”. Following the death of Jesse Gelsinger in 1999, in a clinical trial for ornithine transcarbamylase deficiency at the University of Pennsylvania, this BBC programme gave the strong and explicit message that gene therapy was no longer a valid research area and that all work with viral vectors had been halted, which was not correct ([1](#_ENREF_1)).

The Society is governed by a Memorandum and Articles of Association, which state that the objects of the Society shall be to advance the science and practice of gene therapy for the public benefit, in particular (but not exclusively) by:

i. advancing diffusion of scientific knowledge in the field of gene and cell therapy;

ii. facilitating sharing of scientific resources in the field of gene and cell therapy;

iii. facilitating clinical advancement of gene and cell therapy technology; and

iv. providing expert advice to strategic, regulatory, ethical and funding bodies in the UK.

Objects i-iii were initially served through the organisation of annual scientific conferences and public engagement events. The first annual conference was held at Keble College, Oxford in March 2004, and sponsored by the International Society for Cell and Gene Therapy of Cancer (ISCGTC). To date, 19 conferences have been held, the annual flow only altered by the organization of two themed conferences in 2018 (on *Lentiviral and other retroviral vectors*, and *Genome editing for gene and cell therapy*), and interrupted by the COVID-19 pandemic, which precluded their celebration in 2020 and 2021. Two of the conferences, Brighton 2011 and Edinburgh 2022, were jointly held with the European Society of Gene and Cell Therapy (ESGCT). The latter, with around 2,100 attendees, was our largest ever event. Next year we will celebrate the 20th conference, Oxford 2024.

Public engagement was a core goal for the Society from the outset. The first outreach event took the form of a session celebrated at the beginning of the Manchester 2005 annual conference. This quickly evolved to a full day event under the leadership of Renée Watson, the first manager of the Society. Initially called *Journeys in the Genetic Jungle* (JIGJ), the first full day event was held ahead of the annual conference at Imperial College in 2006. Later referred to as the Society’s *Public Engagement Day* (PED), it is regularly attended by about 300 secondary school students and other interested parties. Talks by people affected by genetic diseases or their family members are always a highlight, to put research efforts into context and discuss risk/benefit from a much more informed perspective. The Society has also participated in Rare Disease Day activities from 2011 and developed hands-on outreach materials, like the “Genes in Action Curiosity Box”, in partnership with *The Curiosity Box Ltd*. For many years the Society supported *In2Science*, thus promoting social mobility and diversity in STEM (Science, Technology, Engineering and Medicine), and more recently this support has been channelled through a yearly programme of BSGCT undergraduate research bursaries.

The Society has always been very supportive of Early Career Researchers (ECRs). ECR representatives have been selected to serve on the Board of the Society from 2010, with equal standing to elected members. The Society provides ECRs with multiple career development opportunities, including membership of conference organising committees, co-chairing of meeting sessions and abstract reviewing. ECR representatives lead the Society’s Early Career Development and Collaboration (ECDC) subcommittee, they organise an annual ECR event, an ECR webinar series and a writing competition, and coordinate the BSGCT mentoring scheme. ECR representatives also lead the Society’s communications and promotion activities. Most conference prizes are awarded to ECRs, including the prestigious Fairbairn Award, established to honour the memory of Lez Fairbairn, who chaired the Manchester 2005 conference and had agreed to become the next president of the Society, before his untimely death.

The Society’s activities are coordinated by four subcommittees. In addition to the already mentioned ECDC, we have: a Public and Patient Engagement subcommittee, which organises the PED and a dedicated webinar series; a Communication and Promotion subcommittee, leading on website, newsletter, blog, and social media; and an Equality, Diversity and Inclusion (EDI) subcommittee, whose principles inform all activities of the society and which reaches out to enhance Global Majority membership. The Society regularly convenes an advisory panel, the BSGCT Partner Forum, including regulatory and other government organisations, funding agencies, large pharma, SMEs, biotech startups, industrial partnership experts, patient groups, and BSGCT representatives, with the following goals: to provide a forum to allow engagement with the BSGCT, to provide strategic advice to the BSGCT, to disseminate information on relevant BSGCT activities and initiatives, and to identify and help overcome challenges to the development and adoption of Advanced Therapy Medicinal Products (ATMPs). In 2023 BSGCT also established a partnership with The Bioindustry Association (BIA) which groups the life sciences and biotech industry in the UK.

Given the breadth and number of activities routinely organized by the Society, it is also considered important to set strategic goals to ensure that novel priorities are supported. For the 2021-2025 period, these goals are: to increase the membership of the Society, for it to be truly representative of the gene and cell therapy community in the UK; to establish the EDI subcommittee; and to ensure that training and promotion opportunities within the BSGCT Board allow for an equal, diverse and inclusive distribution of officer posts.

BSGCT currently has a membership of about 300 people, with a split of approximately 30% academic and 10% industry; a large proportion of members are postgraduate and undergraduate students, and some are private citizens. The Society’s web address is [www.bsgct.org](http://www.bsgct.org), and social media presence is through Facebook (BSGCT), X (formerly Twitter, @\_BSGCT), LinkedIn (British Society for Gene and Cell Therapy) and YouTube (@BSGCT).

To promote and acknowledge excellence and commitment, facilitate collaboration and attendance to conferences, and training, the Society will from 2024 award the following prizes and financial support to existing members:

* BSGCT Outstanding Achievement Award (biennial)
* BSGCT Services to the Society Award (biennial)
* BSGCT Patient and Public Involvement and Engagement (PPIE) Award
* ECR Conference awards: Fairbairn, best oral and best poster presentation
* ECR Travel grants
* ECR Writing Competition
* Workshop organisation support
* Undergraduate Research Bursaries

The last twenty years have been a rollercoaster for the gene and cell therapy field. Following considerable difficulties, resounding successes have been obtained on multiple fronts: mRNA and viral vector COVID-19 vaccines, oligonucleotide, viral vector and genetically modified cells for multiple inherited diseases, and CAR-T cells for lymphoma and leukaemia, to name a few. Commercialisation of these life-saving therapies is progressing rapidly, to ensure a sustainable supply and widespread adoption. While challenges exist, it is undisputable that gene and cell therapy is no longer a promise and indeed is a reality. The Society is proud of the contribution of the UK science community to this endeavour. We look forward to the next twenty years.

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AUTHORSHIP CONTRIBUTION STATEMENT

Len Seymour, Adrian Thrasher, Andrew Baker and Uta Griesenbach: Writing - Reviewing and Editing. Rafael J. Yáñez-Muñoz: Conceptualization, Writing - Original draft preparation.

AUTHOR’S DISCLOSURE

All authors have been (LS, AJT, AB, UG) or are (RJY-M) presidents of BSGCT.

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FIGURE LEGENDS

Figure 1. Alphabetical list (by surname) of all BSGT/BSGCT board members who have served the society from its foundation in 2003.

Figure 2. Top: Board picture from 2013, at the 10th anniversary conference in Royal Holloway University of London. From left to right: Uta Griesenbach, Chris Denning, Steven Howe, Simon Waddington, Andrew Baker, Adrian Thrasher, Stuart Nicklin, Rafael Yáñez, Suzy Buckley and Lynda Coughlan. Bottom: Board picture from 2023, at the 20th anniversary meeting in Stevenage. From left to right, Alex Baker, Gerry McLachlan, Alan Parker, Rebeca Gil Garzon, Giulia Massaro, Beata Surmacz-Cordle, Rafael Yáñez, Rajvinder Karda, Stuart Nicklin, Ivana Barbaric, Mustafa Munye, Florian Merkle and Carly Bliss.