

A Tale of Two Twins

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This is the ninth year the Biochemical Society has run the **Science Communication Competition**. The competition aims to give talented young science communicators the opportunity to have their work published in *The Biochemist*. This year's competition attracted entries from around the world covering a wide variety of topics, in both the written and video categories. The entries were judged by our expert panel of judges. In this issue we are proud to present the winning entry from the written category by Judy Sayers from the University of Cambridge.

The tale which I herein must tell,
I should forewarn you casts a spell –
A tale of shock, stupor, of strife
That begins at the start of life.
My friends today I talk in brief
– And, indeed, with the upmost grief –
Of a man who, with defiance,
Tarnished the great name of science.

To begin I must introduce
The technology with whose use
This landmark event came to pass –
And on which I compose this farce.
So, ladies and gents, lend an ear:
CRISPR is the word of the year.
But please! Know this – the tool does good
If you apply it as one should.
So, as I proceed to relate
How this was used for ill of late,
Don't forget its potential use –
If spared of such thoughtless abuse.

This CRISPR tool may make a cut
In DNA, to create a rut –
On whose repair a change may come
Which alters the genome in sum.
But, you cry, this is hardly new –
We have enzymes who this can do!
This cut, though, comes where'er we like
And so, we choose which genes to strike!

Of designer babes, you have heard –
A case in point of ethics blurred:
Philosophers have mused for years
On rights and wrongs, connected fears,
But 'til now, 'twas academic –
Changing babies was alchemic.
CRISPR alters all this you see:
Gene editing? Reality!
A cause celebre this clearly is –
To regulate this? Needs a whizz!

As scientists now took front lead,
Ready to set the rules we need,
Amidst debate, research, much thought,
If on human embryos we ought
To use such tools, correct disease
In light of risks of using these:
Off-target effects, for a start,
Transgenerational at heart;

During this debate, in China,
One man made himself pariah.
For without awaiting results
Of the discussions of adults,
He Jiankui has claimed to have made
Twin girls with whose genes he has played:
This, I must add, he has not proved
But – he says – CRISPR has removed
CCR5: a gene of note –
Linked to HIV, but remote.

The problem is indeed at large,
From research posts, he was discharged.
It remains unclear if in truth,
These babes now in their prime of youth
Really have CRISPR-made changes,
How far the editing ranges?
My heart goes out to those new-borns
Who lie now in a bed of thorns;
Victims of such reckless testing
The results still manifesting.

Thus, my friends, the saga goes on:
The conclusion is not forgone.
So be you artist, writer, clerk –
Albeit at this you may smirk:
Think long, think hard, on what I say
On regulating tech today –
I beseech you, join the debate,
Right here, right now, 'fore it's too late!