



UNIVERSITY OF
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WORDS

The Hope of Knowing Love

Research Poems to
Open Our World

A Cambridge Creative Encounters Words pamphlet

Published for Creative Encounters as part of the University of Cambridge public engagement programme

“When we choose to love we choose to move against fear— against alienation and separation. The choice to love is a choice to connect—to find ourselves in the other.”

“Knowing love or the hope of knowing love is the anchor that keeps us from falling into that sea of despair.”

bell hooks – All About Love (1999)



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Cambridge Creative Encounters WORDS

Have you ever wanted to discover how poetry can bring a new perspective to your research? How your words can engage new audiences with the subject you are passionate about?

Together with the poetry and public engagement professional, David Cain, the researchers explored the vast world of poetry, its different formats to bring out the poetry that lay behind their research for performance and for publication.

Introduction by the Creative Lead

The Words programme for Creative Encounters sets out to explore and share a wide variety of research through poetry.

I've been really interested to see how each of these writers have put the "I" – their personal experience – into their work. I believe these poems enable us to see the person, and how much their research means to them; alongside giving an extraordinary insight into the research areas they each work on.

There is tremendous creativity, and extraordinary innovation, within these poetic responses to research. I hope these poems enable you to have a new relationship not only with their subjects, but with the researchers too.

David Cain

Of Immutability

By Dr Dita N. Love

“I don’t know a soul who doesn’t feel small among the numbers. Razor small.”

Jo Shapcott, Of Mutability (2010)

These poems invite you to compassionately stay with beliefs of ‘immutability’ in the face of long-standing adversities and injustice based on mutually transformative research with young offenders. In a call to Humane Justice, Wallis wrote “the needs of the harmed and the harmer are similar” (p. 155), but, they are not the same.¹ By acknowledging this, complexity of everyone’s needs becomes more visible, and justice all the more possible.

The poems probe uneasy barriers to healing from trauma and achieving fair justice, both for victim-survivors and victim-perpetrators of various crimes. This calls us to enact our collective responsibility to counter harms reproduced by social inequities, the state, institutions, within and across our communities.

Young people from disadvantaged backgrounds and history of trauma are often defined by risk, not strength. At risk of doing poorly in school, at risk of poor mental health or chronic illness, at risk of offending. Disadvantaged young people are rarely defined by their excellence, power and ability to create change despite adversity. It is well-known that in the past 50 years there has been an increased international interest in how the creative arts can complement young people’s well-being, across sectors from education to prison. It is also known that in post-conflict countries in the South-Eastern Europe, institutional conditions across education and prison are substandard, and disproportionate policing affects the Roma ethnic group, followed by Albanian. It is less well known how young people experience the arts in prison and why popular youth art forms like hip-hop music and spoken word poetry continue to be woefully underrepresented, or entirely omitted. My research intervened in this context and introduced a new arts programme together with an ethnically mixed group of young offenders, poets and hip-hop artists in prison. Young people grew to see the programme as mainly a space to resist social stigma, voice unspeakable trauma, and belong to a community, in contrast to

their reports of social marginalisation and exclusion. I found that the programme opened the possibility for a significant deep shift in young men’s sense of self; at the same it also highlighted young men’s beliefs of ‘criminal immutability’, mediated by social stigma, as a key obstacle to change. As researcher, I realised that intended help based on punishment and individual accountability ignores young offenders’ needs as trauma victims and the impact of social oppression. In contrast, the programme’s creative space acknowledged these barriers, beginning to restore faith in healing and fair justice.

To do justice to creative research with ethnically minoritised young men racialised as Brown (Romani) and White (Albanian), I turned to poetic inquiry to also make visible my investment in Whiteness as a minoritised White woman (ethnically Vlach). The collection of these poems do not directly grapple with the risk of eliding racial relations in the specific cultural context. However, I intend to report on the responsibility of creative researchers and teachers to enact anti-racist pedagogies in another format elsewhere. For Words, I wanted to share the knowledge generated through the research I conducted within and beyond the walls of academia. I see poetic licence, the right to obscure fact, whilst staying true to the emotion, a credible way to share the research whilst protecting the privacy of participants and myself as a researcher with history of violence and trauma. Poetry as research, when harnessed carefully, has the potential to unlock liminal experience, producing knowledges not easily accessible through traditional methods. Even though poetry relies on language, a poem points to the non-verbal, and the truth of the body, central to trauma. Enacting an ethics of care in research which can honour the experiences of participants in their own right demands of vulnerable researchers to reckon with their own adversity as a necessary component of the research process.

1. Wallis, P. (2020) Restorative Justice, Putting the Heart into the Criminal Justice System in Humane Justice. Khulisa: Rowles and Haji, Monument Fellowship.

A Letter from Prison²

After Ocean Vuong

Dear Mum/ it's a secret you/ cry yourself to sleep eating egg-whites & sugar snaps/ cloaked
in Gran's hand-embossed/ throw/ up for hours on end/ fight *him* hell-bent over smashed
sidelights/ by the door/ pray *he* will be the one to suture this family's/ age-old wound/ prison
sooths me/ like the ocean/ conch within earshot—/ body strip-searched/ & unpearled by waves/
one thing/ *no tears in court—/ tell him/* I eat just fine on the wing/ the other boys/ save for
some guards/ thread light like pet peacocks/ tamed by time, there are hours/ I sit in poetry class/
put notes down about the older/ drug-lords of my neighbourhood: *how come/ a 16-year-old/
rascal makes so much dough/ & we don't see/ him in the hood?/* a lighter in hand/ ghosted
away your face between *his/* & my fist raised to burn/ my greenhouse/ sentence – schoolhouse
to jailhouse/ judge's words: a *mastermind man/ gets to money/ in a split of a second/* Dad/
welled up & stormed/ out of the courtroom I saw/ *the real parent/* you stayed/ all eyes/ on the
back of your neck/ *his* absent breath /rewind: a rolled up paper strip on my tongue/ the unhung
mirror under my left cheek/ in the hallway you/ seeing/ three lines/ two bongs & a gun enough/
for a year in/ a winged thing on repeat/ the arrest/ the eve/ before he set me up/ one of my boys
stopped by & caught a night/ butterfly by the wing/ as if with no hands/ the off-guard of make-
believe beauty/ – Mum/ I let you/ down// P.S. no parole date/ yet/ let them/ sleep/ with
one eye open/ *I am writing/ names in a book/* with my own hand/ its pages are turning/ the tide.

-
2. Note. The italicised lines in this poem are from a research interview with a young man who took part in a poetry programme in prison, and kindly allowed his words to be quoted. The poem is not a fully factual account for confidentiality reasons; instead it is an imagined letter bearing witness to the participant's emotional experience of coming into contact with the justice system, and devising creative ways to resist systemic violence.

Whoever can Cry Should Come Here³

A boy at a young offenders' institution was left to lie on a mattress on the floor of a "filthy" cell for more than 22 hours a day, a report has revealed. The chief inspector of prisons said a practice of separating children from their peers amounted to "harmful solitary confinement".

Each corner of the cell
misfired amends
 like amens—
beside a boy,
stood another boy,
none of them knew who was,
a sadder thing than the other—
why each shuts
himself inside himself.
Unlike a parent,
 the way to approach a boy
on the inside, is to keep your mouth open,
to tell his tongued whispers
from a crossed-out body, on the run,
a full calendar year broken enough at the months,
curled at the spine,
the wisdom of boyhood
made-man, only
through soft touch
of his own accord.
The only river,
the river of crimes
against tenderness—
almost, the velocity of hunger,
to push the body unto its own
 loving arms,
an en-gendered legacy
of the nation state
that kills
 and tells
in a one-minute silence.

~

In the aftermath of the body
 no one approaches it—
 Not even with wails
 close to the surface of skin
 to draw to a close
 a body's blue-lipped tyranny
 like nowhere to turn,
 he had nowhere to turn
 an unfathered tongue
 into a weaponised laughter,
 in a strange country
 that grows plants,
 against the freedom
 of life
 chances:
 all public prayers for him.
 How to approach a boy,
 on the outside
 re-move it:
 the scanned *sadness*
 in *his* eyes,
 a fingerprint,
 the pinkish letters of his fingertips.
 Not even with vigilant hands,
 candled doorknobs, or fired-up rituals,
 not even with the soles of your feet,
 or a wounded glottal stop,
 guilty till proven guilty
 not even with an out-of-body sob-
 story that burns down, softly,
 the whole city inside his chest,
 a burnt sighting of a past
 that almost like it didn't happen
 to someone with a body
 that can cry
 outside of human earshot—
 Whoever can-not love
 boys,
 should come here.

3. The title is taken from Carolyn Forché's poem *Book Codes: II* from *The Angel of History* (1994).

Blameless

Photograph © Lois Fordham



A boy, like a deer in my lap
sit down baby boy,

hold this colour-change light
with your bare hands,

snag at it, do not be afraid
to show your milk teeth

at your mother,
the hum of her face,

the rough-hewn ghost
hue of a humid day.

Painlessly so, honey-boy,
nest your head on her belly,

like a honeybee colony
in the hollow of a tree.

Somewhere a volcano falls
asleep in its chamber,

and blue-amber waters
ebb and flow untired

of your agonizing
songs and sobs—quick

grab this piece of her flesh,
will you now, even water

borrow the shape
from what holds it, your body

in her arms is a jewel,
glisten boy, if you can,

like a breast readied for breastfeeding,
hold it tight, this promise of love—

oh, you little overachiever,
eavesdropping on your mother's
heartbeat

for six months of your babyhood,
the worst espionage, her past,

a glimpsed solitude, you poke
and turn, its night-shade tulips,

its moonshade carnations,
the thousand-yard stare—

Awash, awake, your body
blooms inside the room, darling boy,

hold onto me, as if an incantation,
in a low voice, a mother

is a choice - if only,
I can leave behind

the crime, and the need
to be forgiven.

Rights to Her Own Nakedness⁴

After Beckett

[GIRL]: of abuse ... I do not speak ... the crooked problem ... reappears ... decades after ... my mind forgets ... it's meant to be forgetting ... the way the boy ... searched for ... the clitoris is ... unabashed ... an audio ... fizzing through ... the clever lad ... pushed ... through & through ... who can talk his way ... through any-thing ... the easy one ... the girl ... how can she ... not be ... he had ... tried ... fencing ... sort of ... roughing it up ... nature has its own way ... fencing me around ... a specious place ... comes to mind ... anything ... a secret ... garden ... a solution to ... danger ... until ... the grip ... loosens its authority ... he feigns it ... not to feel ... the push ... push back again ... three more times ... pull away! ... but where? ...

the landlord is his mother ... the room ... un-remarkable ... not quite ... sex ... he shot himself in the foot ... *I don't know ... what you ... want* ... he speaks up ... eager to please ... to be pleased ... he will ... win ... this ... the boy does ...

a smug look ... risks it ... the intention ... of the deed ... just teenagers ... fooling around ...

a scribbled body ... of a girl ... reappears ... in her prime ... her prime problem ... a rite of passage ... rape ... after ... rape ... unspecific ... opaque workings of the rain ... clockwork contraptions ... to be ... I tried ... not a single time ... or place ... the apartment ... super-modern ... su-perb ... to be ... the man ... on top ... he can't ... really stand it ... can't stand ... the weight ... of his own ... body ... under scrutiny ... effective ... for ... deadening ... equivalent to ... fast-forward ... wildly conscious ... wildly self-conscious ... he puts in on ... the late face ... of his late childhood ... nothing ... will save ... this ... the mind ... runs through it all ... a brick-wall ... dots on a landscape ... shadow-clouds ... come into focus ... the window ... mute panes ... checkered with rain ... grass fields ... dampen ... where the van ... attains ... the colour of the horizon ...

a blackout ... on the other end of the helpline ... *the vagina is elastic ... most vaginal injuries* ... the voice of the nurse ... slivered ... *through consensual sex* ... elastic ... as aesthetic ... nothingness ... hoards itself ... still ... a property of a kind ... spindly so ... this ... a montage ... after the fact ...

4. The title is a line from Sharon Old's poem *Ode of Girls' Things* from *Odes* (2016).

Praying for Radical Humility the Day my Probation Officer Abandons All Hope for my Reform

How many adults
put a blind eye to child abuse?

Behind baby-peach curtains fret
lilac fists, cradled, muddy-muffled screams –

a fine-sunburnt fur fires across the courtyard,
the feline yogi meows and yawns

then yields on the meagre mat of grass,
I drown the guilt of my own trespass:

dear Body of mine,
forgive the paedophile [*sign of the cross*]

the bogey-face of my line-manager
in my uncle's apartment,

the neighbour's iron-pressed shirt
hung on the window of his living-room

the probation officer at my doorstep
puts out a half-finished fag and says:

*It's not worth going after a few thousand pounds,
Justice Courts are like hungry dogs*

He yanks the Volvo door open,
eyes tight-shut on his globe-spun head,

left hand in the air as if to catch a prey
– and he's gone – I lag on the curb –

turn my slight of hand to barley blades
of a flag leaf – *will my victims ever heal?* –

save lavender stalks for the fireplace
and tiptoe across the freshly mowed lawn,

lock behind – to find the purring stray
curled and fast asleep on my reading chair.



Photograph © Lois Fordham

The Body's True Regret⁵

You need to tell your husband the truth
how the milky hands that pressed your spine
now dangle by the side of your father's hips.
Why you refused to breastfeed or
kiss your daughter on the lips how her
small form frightens you—tell him,
how each time you hold her body
in your embrace something breaks
along the line of your collar bone.
How the brush of her skull on your skin feels unbearable.

One day you will come home from work,
walk past her baby-scented room,
make a U-turn, for the paring knife,
along the corridor,
let the flow of bloodstream
map out the leaf-patterned tiles
of the kitchen floor—
as you count the cracks on the ceiling until
you faint—the way you feigned dead
when you were little, in the house
it all slipped through your fingers
– flick through the sweet memory
one last time – the pages of a picture book family:
here is the house, here is the red triangle of the roof,
here is the room, the nursery rhymes, the outline
of an innocent babe, returning to the scene
of the rape—oh, look, the red is on the roof is on fire—

5. Title line is inspired from the two lines "tiny face glittered [...] with true regret, the/ regret of the body" from Sharon Olds' poem titled *37 Years My Mother Apologizes for My Childhood* from *Strike Sparks* (2004).

Dr Alisa Zyryanova

Alisa is a postdoctoral molecular biologist working at the Cambridge Institute for Medical Research in the group of Prof. David Ron. Her research is on “cell fitness” and “fitness medicines”. Each cell that builds our body has its own fitness programme. Such a programme helps cells stay healthy, just like leading a balanced lifestyle helps us stay healthy too. Cells that lack a fitness programme could suffer more from illnesses and changes in the surrounding environment. Unforeseen genetic factors or a substantial outside stress can draw even fit cells out of balance posing a threat of bigger damages to our body. “Fitness medicines” could help our cells and our body achieve the right balance through an iterative training programme.

I try to harness the fundamental fitness programme that is keeping our cells and overall body health balanced. When a cell gets stimulated from outside by a change in the environment, say lack of nutrients, exposure to toxins, or a viral attack, it produces an internal response which culminates in sort of switching on a light bulb. This light bulb, which is more like a lighthouse, signals to all the cellular components that keep the cell's health in check to build up their defences. Once the invasion is repulsed the lighthouse switches off and the life of all the cellular dwellers carries on. To get ready for a future attack more efficiently and to timely dismiss the defence once no longer needed unleashing the resources required for normal cellular activities, various cell types comprising different body organs must fine tune the work of their cellular lighthouses accordingly. Inadequate defence response, too much or too little, can result in broader damages to our body. The power of “fitness medicines” lies in their ability to perform such fine tuning of cellular lighthouses, benefiting those cells and body organs adversely affected either genetically or by a severe outside challenge.

My poems represent my experience of being a wet lab scientist. A person in a white lab coat wearing purple nitrile gloves holding a pipette. They give a snapshot of practical work that a scientist like me could be exposed to, as well as my personal thoughts and reflections on the topic.

Doing science and working in the lab for me has always been about having a good time, finding a rhythm, finding a tune. Like poetry that often builds around a phrase, a thought, a question.

Where

How did I get here?

When I was a schoolgirl
I told my friend
I am going to invent
An anti-ageing skin cream
That will work

As I reflect on that
I surprise myself
To be a part (so small)
Though of a research potential
Trialling for brain rejuvenation

Footnote:

Sometimes we need to pause and appreciate the place where we are now, where we came from and where we are going to.

What



An experiment

I lay my tubes out
On a rack
32 of them
Plus the control

I start signing
With number one
And a date
And then continue
From left to right
Until I reach 32
And C for Control

Still thinking about that date
Should I really date all of them?

Else these are only marked by numbers
With the same aliquot of clear liquid
In each one of them

It seems like such a waste of time
The signing
The experiment is joy
Of course
Sometimes
You gotta do it

And everybody knows
In science
we repeat experiments
Exactly three times
Or more
if it's a joy
Or less
if it's a real pain
Then just admit
To your reviewers
It was a pain indeed
Starting with: "Dear Doctor ..."

And anyhow
My tubes are laid in front of me
Ready to receive

Their one and only
Experiment

Footnote:

Working in the lab is lots of fun and lots of routine, troubleshooting, improvising, praying that you will see a sharp band.

Alienations

G - D - P

G - T - P

E - I - F - 2

E - I - F - 2 - B

I - S - R

E - I - F - 2 - P

E - I - F - 2 - B

I - S - R - I - B

E - I - F - 2 - P

E - I - F - 2 - B

G - D - P

G - T - P

Footnote:

This is a cryptic description of a cellular signalling pathway named the Integrated Stress Response (ISR) that we study in the lab. Abbreviations can alienate an unprepared reader.

Cake Supernatural

(a Rhyming Protocol)

This is an ode
To a *Western Blot*
An important technique
That makes scientists tick

If you ever need help
To chase *protein* matter
Then this might be the thing
That would make you feel better

Step I - Gel electrophoresis

With the three main steps
Using extracts from *cells*
We first size *proteins* up
In *acrylamide gel*

Step II - Transfer

While the *gel* is still hot
Using solid support
We shall build
An inedible *sandwich*

With a bit of a labour
Let us put *paper* onto *membrane*
Onto *gel* onto *paper*
Wrapped around with two
Sponge *fibre pads*

Then avoiding much mutter
Sandwich lands in *tris-glycine-methanol buffer*
Where electric current applied
Makes charged *proteins* fly
While they stick like a glue
Marking *membrane* with a clue

Step III - Detection

As detectives can't wait
Moving on to third step
We shall use *antibodies*
As *protein bait*

For these *primary* captors
There are *secondary* adaptors
That will light our way
With *chemiluminescent* rays

With a bit of a luck
Protein will show itself up
And in essence that's what
Neal Burnette named *Western Blot*

Footnote:

Western Blot – is a laboratory technique used in molecular biology for detection of biological molecules called proteins. Its name was coined by Neal Burnette in comparison to similar techniques used for detection of other biological molecules: Southern Blot (for detection of DNAs), and Northern Blot (for detection of RNAs).

Why

Blue Skies Science (an Ode to a *Bacterial Colony*)

Looking at the *petri dish*
Dotted with *colonies* of *E. coli*
I am pondering over
Our place in the Universe
Hidden beyond the blue skies

Are we here to absorb the world
To uncover the mysteries
To deliver an explanation
To accept the full package?

Or

Are we here to change the world
To challenge the world
To finally find a better world
To escape to the far and beyond?

Perhaps we are both
And neither
We are many
And we are one
Just like an *E. coli colony*
a speck or a Universe
Staring at me
While I stare at the blue sky

Footnote:

Blue skies science describes limitless questions one can ask and attempt to answer in a pursuit of a discovery of the ways our natural world works.

Dr SJ Beard

SJ Beard is a Senior Research Associate and Academic Programme Manager at the Centre for the Study of Existential Risk. They work across the centres research projects, including thinking about the ethics of human extinction; developing methods to study extreme, low probability, and unprecedented events; understanding and addressing the constraints that prevent decision makers taking action to keep us safe; and building existential hope in the possibility of safe, joyous, and inclusive futures for human beings on planet earth. They also help with coordinating our communications, fundraising, policy engagement, events, and visitor programmes. SJ has a PhD in Philosophy from the London School of Economics and have twice stood for election to the UK Parliament.

A Strange Inheritance

How strange it is
to be alive
To share in that tenacity
of adaptation and resilience
that has shaped an entire planet
for millennia
to meet its needs

Once
a simple molecule
By chance
Started turning things around it
into copies of itself
And kept on doing so
And kept on doing so
And because that molecule
was your ancestor
you too spend your time
transforming air, and water,
and many other things
into more of you
(How wonderful!)
And keep on doing so
And keep on doing so

And later
some little cells
and other little cells
quite different
merged together
And in doing so
The outer cells
Carried a source of energy
(That they could use
to make more of themselves)
around with them
And could pass that energy on
to other cells nearby
And with that simple trick
there was a reason for some of these
to form close knit groups
of little cells
all alike
And bind themselves together close
And even to start taking on
Special duties
Securely supporting
and being supported by
their 'breatharian'
And because some of those cells
were your ancestors

The millions of cells
you call your own
are a body to you
(How wonderful!)
And you are one
not many
Yet never alone

And because those cells
lived in ancient seas
Your body is filled
with briny water too
And so much of what you do
depends upon the migration
of salts across
the same molecular gradients
your ancestors once called home
And because those cells
never lived alone
but in a complex web of life
Your body too
is an ecosystem
containing myriads of living things
that make a home for you
Harmlessly co-existing
(Most of the time)
just like they always did
Turning one another's waste
into new life
That's how it goes
(Most of the time)

And later still,
of course,
some of these bodies
found yet more ways
of merging
into new things
The building blocks of life
were never set in stone
And every now and then
cells would share
their DNA
(Making new combinations
That might turn into bodies
better able to cope with
What life threw at them)
But somehow,
some bodies,
started doing this
More often

Their cells
Taking on new roles
As carriers of half the code
Searching for another half
to bind to for completeness
Permitting the slow process
Of evolutionary change
To accelerate, dramatically
And because some of those bodies
were your ancestors
You too can have sex
if you want to
(How wonderful!)
And you are entirely unique
the product of a single
recombination
Made up of cells
quite unlike those
found anywhere else
in the universe

And what of that point
when bodies in search
of food
or mates
or safety
found ways of responding
to the world around them
Or ways of manipulating
their tissues and organs
to change how they were
So that they started
not simply to be
But to behave
to sense
or chose
This happened many times,
we know
But, because one of these sentient new minds
was your ancestor,
you too have perception and control
consciousness and free will
(How wonderful!)
That mystery of being
a mind
in a world where minds seem out of place
A mystery no mind
has yet resolved
(But that makes sense
Because, it's not a mystery, any mind created
but only life in its endless wonder)

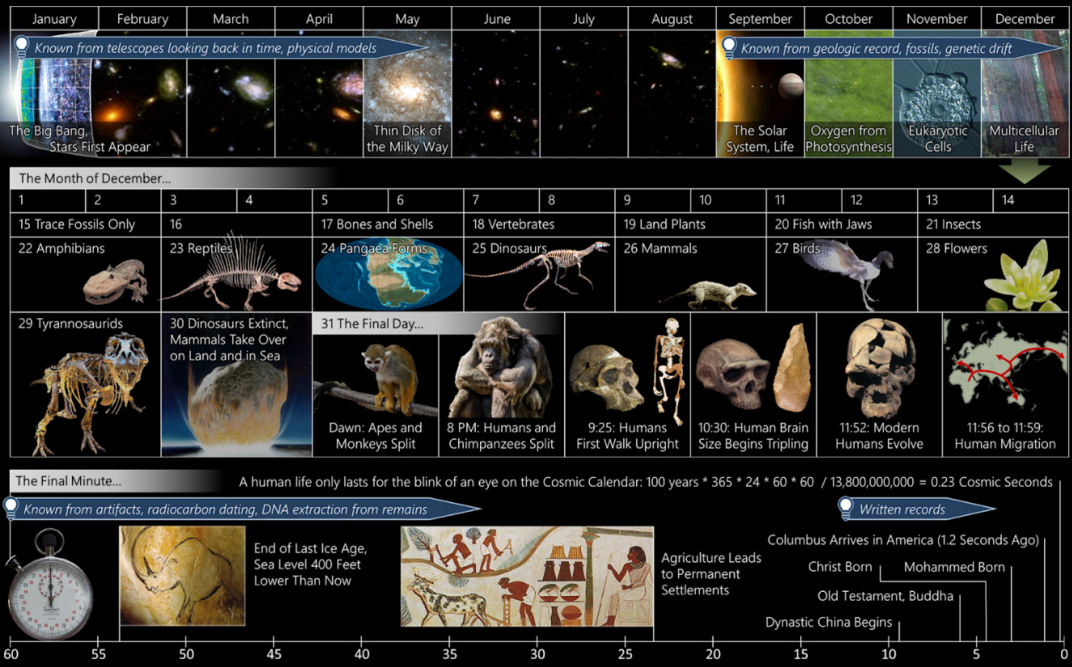
And oh
what finally of that point
When some of these minds
began to think
To use words and symbols
to express and understand themselves
Whenever did that happen
and why?
Who knows
Not me
And yet it did
And ever since, young minds
have learned to learn themselves
to make people out of bodies
spirits out of cells
And flesh and bones
have learned how to cooperate
in ways no other lifeform ever could
A whole planet networked
with wires
and roads
and social bonds
With trade,
Ideas,
and conflict
Just getting by
Doing life's work
Making more of ourselves
Grouping together, specializing,
loving and fighting
knowing and changing
But this time with meaning
And purpose
And even understanding
Breaking and mending
a world
that we made for ourselves
To inhabit
as life has always done

And because you are you
And you know you are you
You too
are descended
from those first people
Just like me
(How wonderful!)
You too bear the burden
of trying to work out
what that means
And what we must do
to stay alive

It is a strange inheritance
indeed

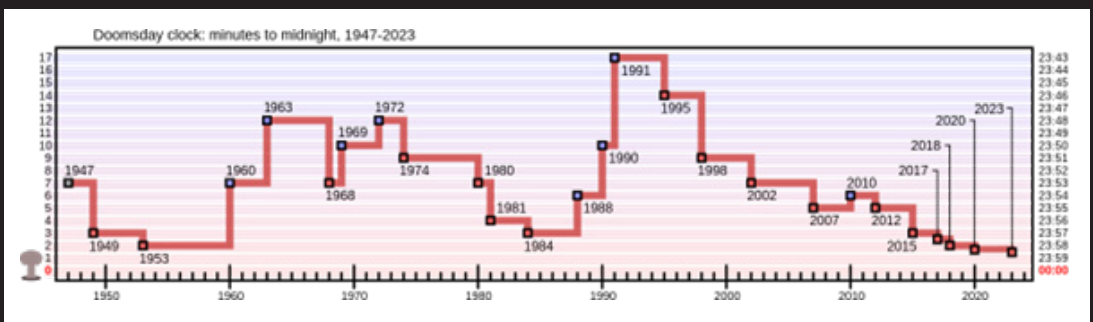
The Cosmic Calendar

The 13.8 billion year history of the universe scaled down to a single year, where the Big Bang is January 1st at midnight, and right now is midnight 1 year later



Above, the Cosmic Calendar was developed by Carl Sagan to show the immense scale over which our universe, our planet, and its lifeforms have developed via the analogy of a single year.

Below, the progress of the Doomsday Clock, set each year by the Bulletin of Atomic Scientists to illustrate the current level of existential peril facing humanity via the analogy of a clock that will tick inevitably towards midnight unless we chose to set its hands back again. (sources: Wikipedia/Efbrzil & Wikipedia/Fastfission)



Foresight

I remember well the first
time I heard the warning
to king Croesus
from the oracles
at Delphi and at Thebes
That were he to invade Persia
a mighty empire would be destroyed
It sent shivers down my spine to hear
of such a warning
being misinterpreted
as a blessing

Yet, while I would not dare
presume to know
the mysteries
of mighty Apollo
I think perhaps I've come to understand
a little more about this famous tale

You see, there still remain
some of us who claim
to practise foresight
Yet, when done well
this should not be misunderstood
as an ability
literally
to see into the future.
Rather, our practise is about
bringing together the many varied
visions of this present
So much of which we do not know
And using those to clarify
what is going on right now
and all the many ways this might turn out

We cannot know what the fates have in store for us
Yet wisdom and courage can help reveal
possibilities we had not dreamed ourselves
And maybe careful planning can allow
us some small control over which of those dreams
is manifest
In hope that our futures may be sweeter
And our nightmares more fleeting

Great Croesus could not have known
for certain
that the empire he'd destroy
would be his own
Yet a wise king might still have understood
how this was possible
And we too should be careful
in choosing what we want
that we do not ignore its risks
As if our will were the only thing
that brings the future into being

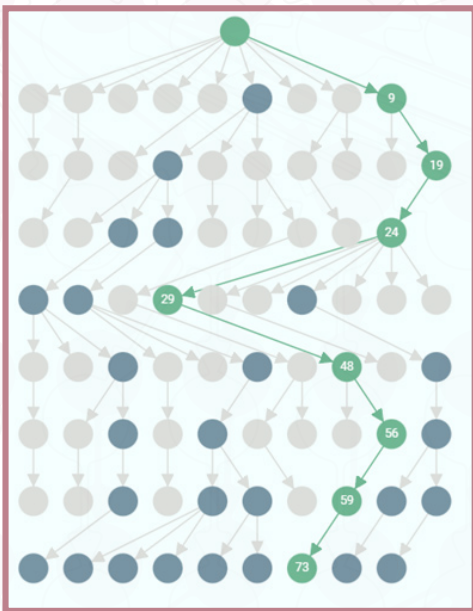


Illustration from a recent foresight exercise conducted by SJ at the Centre for the Study of Existential Risk, showing the branching tree structure of different futures that were developed and explored by a team of researchers (green and blue) and, no less importantly, the paths not taken (grey) (source: Rick Davis)

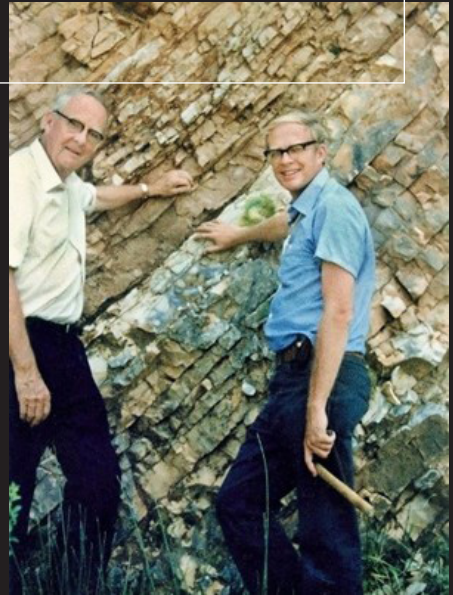
Seeing is Believing

The first person to see
The world end twice
For real
Was Luis Alvarez
The same scientist who
Measured the destruction
Of Hiroshima and Nagasaki
Also identified
How a strange line in the rocks
Marked that moment all the dinosaurs
Were wiped out
By a meteorite
What a life to have lived

But you too may
On screens
Have seen it happen many times
The world destroyed
By aliens or asteroids
Rogue AI, even sometimes climate change
Although not of a kind that is familiar
To climate scientists

Yet that desire
To see these things for yourself
Is part of what always makes them look the same
Some explosive force arrives
Out of the blue
And lays us all to waste
Just as when the Mesopotamians
First thought that angry gods
Might kill them with a flood
And how that had already happened once
With only a few, virtuous and wise
Humans surviving in an ark
You know that story too

It scares me
Because in many ways
The endings we should fear the most
Are not like that, cannot be seen
Take many forms, as slow
Creeping disintegrations
Of the systems we rely on
Becoming inexorable
Irreversible
And out of our control
And none of us
Should count on seeing
The world end
More than
Once



Above, original witness to two explosively apocalyptic events Luis Alvarez with an unnamed military police officer holding the plutonium core of the Fat Man nuclear bomb, whose effects he was responsible for measuring (1945), and, with his son Walter, indicating the site of geological formations that they had discovered provided evidence of the asteroid impact that killed off all non-avian Dinosaurs (1980).

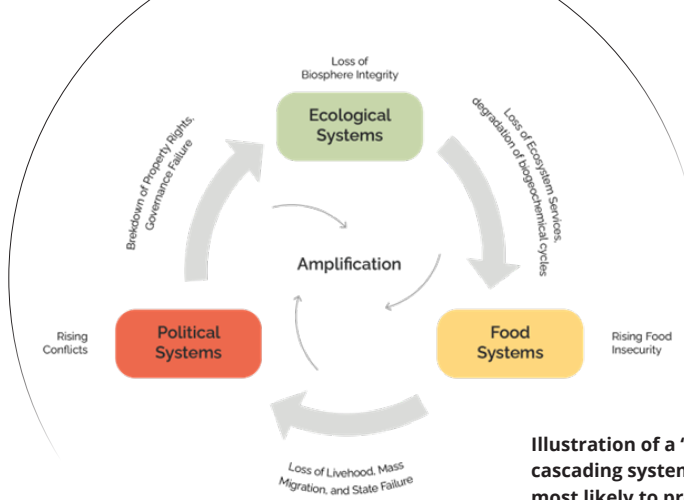


Illustration of a 'global systems death spiral', the kind of cascading system failure that SJ and colleagues believe are most likely to produce a global catastrophe from climate change. (sources: Los Alamos National Laboratory, Laurence Berkley National Laboratory, & Allesia Musio)

Collapse

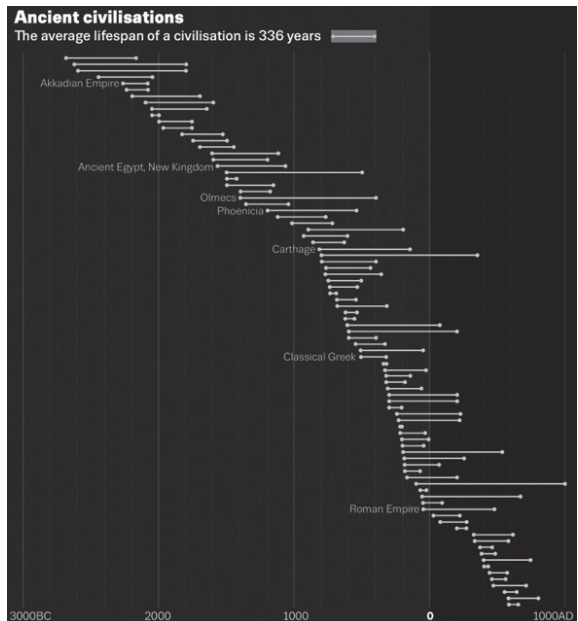
Once, in school assembly
 Our chaplain talked about St Augustine
 He told us how he lived
 During a time of great upheaval
 Because the Roman Empire was collapsing
 And, unironically,
 I thought how interesting it must be
 To live through such a time

In fact, the fall of Rome
 Was rather slow
 It took centuries, or longer
 The final kings
 Who claimed that their authority
 Descended from the Caesars, fell
 Only after world war one
 So, while this period saw many upheavals
 It is likely that at the time
 It felt rather less interesting
 Than we think of it in hindsight
 Indeed, many of those who lived through it
 Likely saw themselves
 As just carrying on, as people always had
 Clear that the real catastrophe
 Was happening somewhere else

Could it be the same with us?
 Not knowing
 If our age
 Is interesting
 Or just another stage
 In the gradual transition
 Of the past into the future.
 And if it is, what will future generations
 Make of our decline?

Might they argue, just as we do
 Over whether it was caused
 By corrupt power
 Or rising superstition
 Or will they have forgotten
 All about us and our petty struggles?
 Or will they even come to be at all?

For me the most interesting thing
 About living, right now,
 Is the not knowing



All civilizations collapse. This graph shows the lifespans of many ancient civilizations and was based on ongoing research by SJ's colleague Luke Kemp (source: BBC)

The Turtle Dove

The turtle dove
is calling again
outside my window pane
His call,
Turr Turr,
a solemn evocation of his name.

Last year he called all summer
alone
without a mate
Love's martyr
a bird known
for its lifelong devotion
desolate

He makes his lonely home
next to an ancient road
people have been walking for a thousand years
or more.

A road that once carried the footsteps
of William the Conqueror
and his army,
The only safe path to Ely
across the fens
before we built dykes to drain them,
or the warming sea will rise to claim them
But that, this moment, is little but a track.

A way along which people long have heard
the turr turr
of these burnished birds
since when they were so common
Solomon sang of them to announce the spring
Yet now, how long before
we don't hear them again?

The turtle dove is calling
to my heart.
Its solemn pleas
for a future and a part
of life's inheritance, to every living thing
A wildness born of being as you are,
A place in the great family of things,
A grief for what may never come again,
A plaintive hope that this song will last
not disappear!

Below, his Magestic Dovelyness. The European Turtledove was once among the most common of birds and was widely seen as a symbol for undying love, both due to their strong pair bonding and the role they play in the ancient love poem The Song of Solomon. Yet their numbers have declined precipitously and they are now threatened. This dove in particular kept SJ company with its call throughout the summer or 2021 and made its home in the Croft Close Set Aside, an area of re-wilding former farmland whose future they helped secure. (source: Penny Reeves/Abbey Fields)



Dr Lorena Escudero

Lorena Escudero is a Senior Research Associate at the Department of Radiology. Her background is in Particle Physics (Neutrino Physics) and currently her research focuses on applying her skills in Data Science and Artificial Intelligence to the analysis of radiological images for cancer research.

One of her poems is a collection of haikus in a video format about Data Science, representing a dialogue between the data scientist or researcher and the data.

Her other poem here talks about the human side of research: struggles we face as researchers, our mental health, and how we need to embrace the uncertainty on what we do and that not having all the answers is the nature of research itself.

Things We Don't Talk About

There are two things
we don't talk about:
the *falls* and the *jumps*.

We pretend
that *falls* never happen.

We feel so bad
so worthless
down there
in the *fall*
every single one of the many times in which that happens
that we purposely ignore that we did
spend some time, so very many times,
down there
as soon as we rise again
as soon as the experiment finally works
as soon as the paper is published
we wipe from existence the dark moments in the *fall*
that we all experience
absolutely every one of us
as the job indeed requires it
but we insist it doesn't
we insist on believing is our fault
a reason to feel shame
something not to talk about.

And we keep on going
refusing to acknowledge
the *falls*
down there
that piece of reality
expecting us
teaching us
more than the prize we look after.
But we stubbornly disregard that wisdom
hiding in the untold of our dark days
the most important piece of information worth sharing
that the *falls* exist
and that no one has reached the light without going through them
condemning with our denial,
with our fake super power of avoiding the *falls*,
perpetuating the collective misery
of the ones coming behind
who will inevitably sink there, momentarily,
or maybe eternally
feeling shameful

so worthless
down there
ignorant that the *falls*
exist for a reason:
to come up from them
with a new solution
with a novel idea
with an answer.

We also don't talk
about the *jumps* either.
We have learnt to ignore
the bars on the staircase
blended with the style of the concrete building
but also preventing
the *jumps*
the desperation
because it's not allowed to quit
because it's not allowed to work less
because it's not allowed to free your weekend
to have a family
to buy a house
to stop
moving from one country to another.

Admittedly, the *jumps* are easier
to shut one's eyes to
than the *falls*:
they don't come as often
and nobody else is there to look
nobody
follows the steps that take them to the bridge
or the top floor;
the only witnesses
are the imposed expectations
they carry everywhere
like a shadow.

Let's be honest.
The *jumps* are tragic
consequence of the oblivious
of the so many *falls*
unspoken
and they will both continue
existing
for as long
as we deny them.

Dr Kirsty Ferguson

Kirsty's research focuses on the intersection of stem cell and cancer biology - where development goes awry, and cancers develop. She completed a PhD at the University of Edinburgh working on the molecules driving 'cancer stem cells' in an aggressive adult brain cancer called glioblastoma. She is now a Research Associate in the laboratory of Professor Anna Philpott at the Cambridge Stem Cell Institute, where she researches neuroblastoma, the most common extracranial solid tumour in children. These tumours occur when immature cells of the

developing sympathetic nervous system fail specialise properly and begin dividing uncontrollably. As part of the Philpott research group, she is looking for ways to specialise or 'differentiate' these tumours using drugs, to both stop the cancer cells from dividing and lead them down their correct developmental path. Outside of the lab, Kirsty is an aspiring poet. She believes observation is an essential process to both science and poetry and finds that writing poetry helps to improve her ability to observe the world and communicate her thoughts and ideas.

“Writing poetry helps me to see my research through a different lens and consider cancer research from many different perspectives.”



You, Me and Us

The poetry collection 'You, Me and Us' reflects on patient tissue donation (the 'you'), life as a research scientist and research culture (the 'me'), and patient perspectives (the 'us', as cancer likely affects us all in some form during our lives). I began writing poetry in the Covid-19 lockdowns during which reading and writing poems provided a great deal of comfort and helped me to become more observant of my surroundings. Through this collection, I hope to both provide the public and patients with new insights into the process of cancer research and help scientists take a step back from minutiae in the lab to observe their work from different perspectives.

All illustrations and photography that accompany Kirsty Ferguson's poetry are her own.

I find it quite amazing that we can grow cells in the lab from a patient's tumour that was removed decades ago. 'It's about time' considers this concept of time, from a patient in 1971 to a scientist in 2023. Research takes time and involves incremental

change, yet there is no denying the vast improvements in our knowledge and treatment of cancer over recent decades. And this research will continue, day after day, until cancer has no tomorrow.

It's about time

It's nineteen seventy-one,
And a young boy of four
Has a tumour removed.
It's twenty twenty-three
And his cells of fifty-two
Are frozen in a time capsule.

It's nine thirty am
On September the third,
A scientist is deep in thought.
It's about time
To stop these cells,
To end their evil onslaught.

Too many children
Have their lives cut short
To cancer, a great sorrow.
It's about time
To stop the clock.
Ensure cancer has no tomorrow.



When tumour tissue is donated by a patient, the cells can be grown in the laboratory into what is called a 'cell line'. These cells form an integral part of pre-clinical research, leaving a legacy behind that will help improve future lives. Anonymous identifiers are given to these cells in the lab, such as the neuroblastoma cell lines 'SK-N-BE(2)-C' and 'IMR-32'.

However, behind this string of letters and numbers is a person that we as scientists know very little about. I hope this poem both inspires patients and their families to consider tissue donation for research and provides some comfort knowing the invaluable legacy this leaves. For scientists, it reminds us to take a step back and appreciate the life beyond the letters.



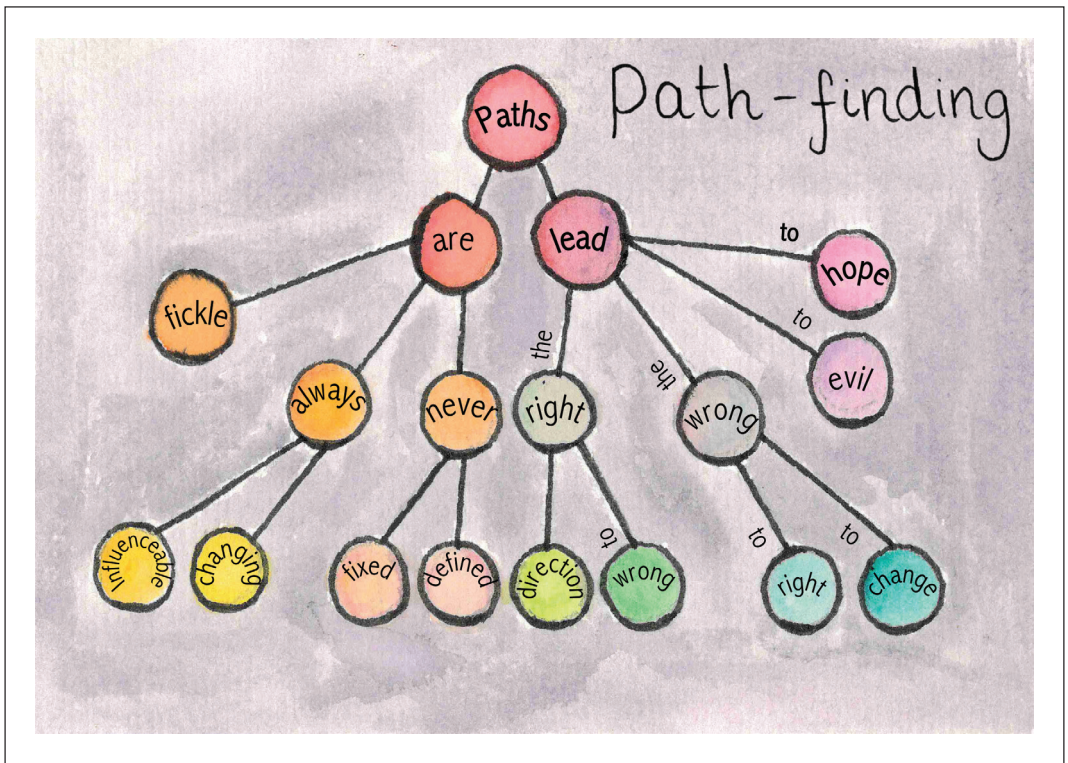
Legacy

S K N B E two C,
Did you live to see the moon?
I M R thirty-two,
Did you see the summer through?

Kelly, LAN five and S Y five Y,
If you perished, it was not in vain.
You can rest in peace, in the knowledge that
Your legacy here remains.

'Path-finding' is depicted in the form of a stem cell hierarchy: the master stem cell, which can divide and become many different specialised cells is at the top, and cells become progressively more specialised through different paths as you move down the tree. Sometimes these paths go wrong, for example in neuroblastoma, cells become stuck in an immature state. In this way, paths can lead to evil. However,

paths are changeable and can also lead to hope; we are researching ways of manipulating this to send cancer cells back down the 'right' path that development intended. The reader is invited to take their own path, exploring the different possibilities this poem can take, and remembering, finally, that the fickleness of nature means that paths can lead to evil, but it also means that paths they can lead to hope.



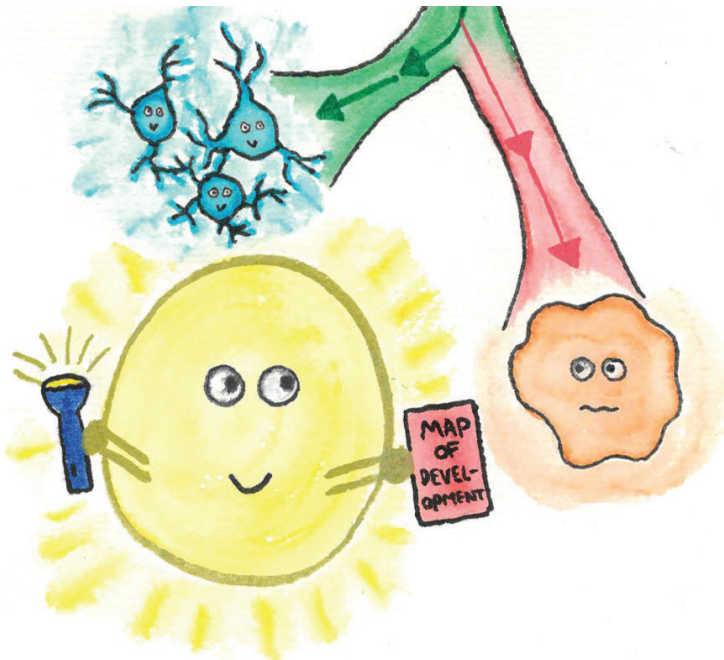
In the Philpott laboratory we are working towards discovering new therapies for the childhood cancer called neuroblastoma. Neuroblastoma is formed by cells in the developing nervous system that go down the wrong path – instead of becoming specialised cells, such as neurons, they begin to divide uncontrollably. We are investigating ways of ‘differentiating’ these cells, that is sending them back

down the path that development intended. Such therapies could present a kinder treatment for developing infants, as the treatment does not aim to kill the cells. In the poem ‘Kindness’, the kinder treatment is directing neuroblastoma back to ‘neuron-end’ with a map of development. With this poem I hope to convey the aim of our research both to adults and children.

Kindness

Neuroblastoma,
You look a bit lost,
What are you doing here?
I think you took
A wrong turn somehow,
And should have turned right back there!

Here take this map,
To neuron-end,
And follow the steps with care.
And this torch,
To light up your path –
Soon you’ll find your way there.



Keeping detailed notes and records is a vital part of being a scientist. Of course, our laboratory books are often regimented and structured for planning and performing experiments. However, science is very creative, and we must

also make records of our ideas. For me, these thoughts are often more fleeting and chaotic, just like when I write poetry! And as with all ideas, writing and 'immortalising' them often provides a new sense of clarity.

Ideas

Ideas swirl around my mind,
In a chaotic condensate.
Ideas flit from side-to-side,
As a pendulum oscillates.

Sometimes ideas
Pass through like birds –
In flight to a faraway land.
I have to catch them
By the tail,
A feather in my hand.

Quick! Fashion a quill,
Find some ink,
Or I know I'll forget this later.

The ideas they flap,
they swing and compact,
Until the moment,
They're immortalised on paper.



For me, poetry is inspired by observations; I began writing poetry during the Covid-19 lockdowns when I stopped to better observe the world around me. In scientific research, observations are often the foundation upon which hypotheses are built.

Yet sometimes it is hard to cut out the noise and take a step inwards, or outwards. Indeed, to stop and observe, is a skill I'm always learning, both inside and outside the laboratory.

Observation

Take a little
Time to observe,
What is it I see?
Pause and stop and
Take a breath
Now -
What's in front of me?

What is that?
How very strange.
I've not noticed that before.
Perhaps it's worth
Some exploration -
My mind boots up once more.

I hear a whirring
Inside my head;
The cogs are ever-turning.
To pause and stop,
And just observe,
Is a skill
I'm always learning.

There are traditional measures of success in the research community, but should they be the only ways we define our success? The experiences that have stood out for me during my scientific career include working in a team from around the world, sharing ideas, teaching the next generation of scientists, communicating

research to the public and, ultimately, being part of a bigger picture to improve the lives of cancer patients. These are all, I think, fundamental to a functioning and successful research community, and are successes that we can all share and recognise.

Success in Science

Success in science is hard to define,
What pops into your mind?
A Nobel Prize, the impact factor,
A finding that's one of a kind?

Success is measured in more ways than one,
What does it mean to you?
With a different perspective we can find success
In not only the year but the everyday too.

*

We work in a team and voice our ideas,
Two heads are better than one.
All around the world we collaborate and share
To gain knowledge that is second to none.

We pass on our skills to the next generation,
Just as others have filled our own cup.
We mentor each other and throw down ladders,
To help others that are on their way up.

We communicate our research and our aims
To make the world a cancer-free place.
We share evidence and ask questions of own,
For an inquisitive mind there is always space.

Getting through each day can sometimes be a test,
Experiments don't always go as planned.
But we pick ourselves up and think again and again,
As the more we persist the more we understand.

For each day brings us a step closer,
To ease a patient's pain and struggle.
Every experiment like a pin prick,
That is gradually bursting the cancer bubble.

*

Success in science we can all share,
Even in ways we may think are small.
For these make up the foundation of research,
So, let's recognise and celebrate them all.

This poem was inspired by one of my favourite poems, 'The Orange' by Wendy Cope, and a break I shared with a lab colleague. It was simple - a walk downstairs, a sweet macaroon and a good old laugh. And it was enough to set us up for the rest of the day.

Sometimes ten minutes is better spent clearing your mind than trying to squeeze more into an already saturated one. Ask a colleague and who knows, maybe this small interaction will brighten both of your days.

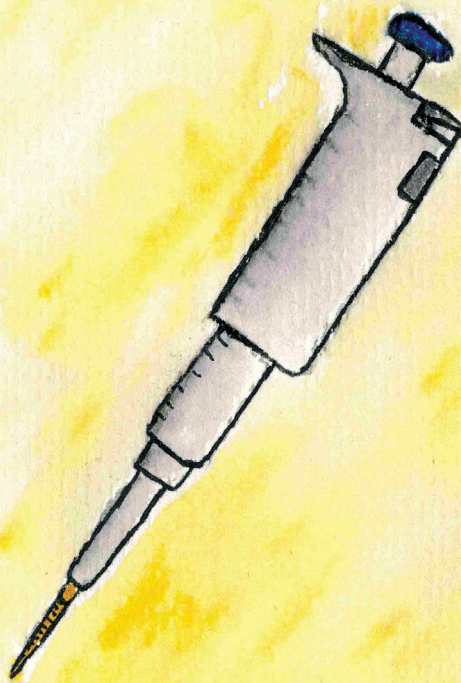
Think, Pipette, Repeat.

It's time to take a break,
Take a walk outside.
Grab a coffee with a friend,
A moment to clear your mind.

Today I took a break
And I bought a macaroon;
Mrs Crimble's finest baking,
Her face on a wooden spoon.

The slogan made us all chuckle,
To 'Live, Love and Bake'.
We shared ideas of lab mottos,
Laughed 'til our tummies ached.

Yes, it was time to take a break,
And enjoy a sweet treat.
Back to work refreshed,
Ready to 'Think, Pipette, Repeat'.



In this project I wanted to portray the voices of those with lived experience of neuroblastoma. Tragically this disease mostly inflicts infants and young children under five, who sadly

may have not even spoken yet. The poem 'The Words Unspoken' is in remembrance of the children lost to this devastating disease and represents their words that remain unspoken.

The Words Unspoken

This is a poem
Of the words unspoken

'Fly High' was inspired by quotes from personal stories of neuroblastoma patients and their families shared by the charity Neuroblastoma UK- these words are italicised in the poem. It was important to me to represent the voices of patients and their families with lived experience of neuroblastoma in this project, including those who have tragically passed away and those who look back on their childhood experience of neuroblastoma and how it has shaped their lives now. The message 'fly high',

words from Beth's story, speaks to children who are now angels, those who have survived neuroblastoma and fly high despite side-effects, and families who continue to navigate this path alongside their children and courageously share their stories. Thank you to Neuroblastoma UK and all those who allowed me to share their words through this poem, namely Georgia's dad, Richard; Sayra; Becky; Charlotte; Lauren; and Beth's mum, Jill. You can read their stories here: neuroblastoma.org.uk/personal-stories

Fly High

*None of us
Had heard the word
Neuroblastoma,
Until that frightful day.*

*Just 18 months old,
Tumour size of a fist,
With ten per cent chance
of surviving, they say.*

*Then chemotherapy, surgery,
A stem cell transplant;
We were so proud
Of her fighting spirit.*

*Radio- ,
Differentiation - ,
Immuno-therapy;
And he never complained one bit.*

*This cancer -
It was relentless.
What would we fight
It with now?*

*There's a lasting impact
When a child has cancer,
But we continue through,
Somehow.*

*My little angel
Slipped away that morning,
As I whispered,
"I love you, fly high".*

*Now up above ,
With wings they spread,
Sparkles of hope
In the deep blue sky.*

*See everyone
needs a bit of hope,
Even just,
A tiny glimmer.*

*You never know the journey
Life will take you on-
Remember to look
For the things that shimmer.*

*Put your heart and soul
Into what you want to achieve-
Don't let cancer
Hold you back.*

*I truly wish you
A future you deserve,
Fly high,
And never look back.*

