

Oswald Avery

(1877 - 1955)

He passed through time so quickly; he was already old,
With more years yet to tread to end the patient work.
His jutting brow was veined; his pate had now grown bald;
The man moved slowly, seeking always where could lurk
That one swift cause of death - searching for some hidden mode.
From patients, though a doctor, he now tried to shirk:
Bacteriology was his dedicated code
For helping heal the sick. By him, pneumonia
Was cultured in two forms: one small which smoothly flowed,
Yet killed so many it was viewed with chilling fear;
The other, seeming roughly contoured to the eye,
Would watch its virulence *in vivo* disappear
By painstaking dilutions. "Tell me how and why,"
Pondered Avery with calm deliberation,
"When given this harmless strain, healthy mice will die
From killed smooth cells in minute concentration?"
Long, timeless days to sit or pace, and think or talk,
With painful anxiousness for what direction,
From all those many byways down which he might walk,
Would lead to gallant answers to this worthy quest.
Long days in silence passed; then, like a plunging hawk,
He'd drop upon some reasoned method for the test;
For thinking in itself is never just an end:
Its value lies in what the well-trained mind can wrest
From keenest observations, which alone defend
The mind from foolishness of unpricked, bubbling thought.
He kept his lab uncluttered, without trace or blend
Of homeliness: no pictures, relics, trash nor wart
That might reveal some common human quality.
His bench lay bare, with plain test tubes in rows which caught
The Bunsen light, reflecting his humility.
"The best planned methods all demand the simplest probe;
Experimental clutter breeds banality!"
With rigorous, honed intensity, his microbe
Grew, cultured with a solitary obsession.
He stayed behind at night, a scientific Job,
Dedicated, gleaning facts by sharp selection.
He boiled huge vats of beef hearts at blood heat for broth,
Centrifuging them ice-cold with a fast motion,
Washed and cooked in brine three times to form a froth,
Then, shaken well with bile to break the cell walls down,
Reprecipitated by an alcoholic trough;
Digestive enzymes cleared away their sugary gown,
And plain chloroform removed each trace of protein.
The final fibrous strand brought Avery his crown:
It was the purest DNA, which shone so clean;
His many years of struggle proved its purity;
Its transformation through the death of mice was seen,
But many doubted its intrinsic verity.
Though Avery found no protein in the slightest trace,
Prejudiced adherents maintained their enmity,
Denying him this hard-won, vital, central ace.

Though many times he'd struggled as he sought the way -
Carrying his candle in this remote, darkened place -
In falling, he'd pick up a new-found piece of clay
And fashion it to form some worth-while novel thought.
This man, unaided, showed that simple DNA
Contains the sum of all that life has ever wrought,
Then died. "With greater honour would our wide world sway
Had it honoured him, and its Nobel trinkets brought,"
Spoke Chargaff, now ablaze with this inspiring ray.

(c) John Marr