Biotechnology Series — Overview

UFOT and Molecular Biology
The Complete Correlation Map

How the whole of life — the address, the dictionary that reads it, the copying that conserves it, the machine that builds from it, and the light that powers it — resolves onto one lattice of {2, 3, 5, π}

Stephen Daubney · The Daubney Foundation · Biotechnology Series · Overview · 2026 · Rev 2

Tau (T) *is the living fabric of time itself — the sole substance of which all physical reality is composed. Every particle, force, wavelength, and conscious experience is a structured configuration of T-flow. There is no gravity, no electromagnetic force, no strong nuclear force as separate entities: all are registers of the single T-field operating across dimensional levels. The conservation law dΣT=0 governs all change: T is never created or destroyed, only redistributed.*

Abstract

This is the map of the whole territory. The six papers of the Biotechnology Series each read one organ of molecular biology in the Universal Force of Time; this overview shows that they are one picture. Life keeps a single set of books, and every entry falls on the lattice {2,3,5,π}. The genetic dictionary is **64** words (2^6) spelling **20** letters ($2^2\times5$); the helix that stores them is **125/12** base-pairs per turn (B-DNA, $5^3/2^2\times3$) and splits into three registers, A, B and Z; copying conserves the address exactly (dΣT = 0), paying only the telomere counter that falls from **15000** ($2^3\times3\times5^4$) to **5000** ($2^3\times5^4$) base-pairs across a lifetime. The machine that reads the address, the ribosome, sits at **70.03320215** (nitrogen × 5); the proteins it builds turn once every **3.6** residues (18/5) and are paid for in **36** ATP to a glucose ($2^2\times3^2$); the light that powers all of it is caught by chlorophyll at **432** nm ($2^4\times3^3$) and **648** nm ($2^3\times3^4$), its P700 centre at **700.3320215** nm (nitrogen × 50). One atom — nitrogen, 14.00664043 — threads the whole of it, and carried through the conversion grammar it lands on the length of the Earth's day, **23564.069022** seconds, to 0.1 ppm. There is no prime seven anywhere in life. There is a lattice, and a planet keeping its time.

Every number in molecular biology is on the lattice {2,3,5,π} — read, copied, expressed, and powered as one circuit of time.

1. One set of books

Molecular biology, taught the ordinary way, is a heap of accidents. The genetic code is a frozen fluke; the ribosome is whatever evolution happened to assemble; chlorophyll is green because of some quirk of its electrons; the numbers that pepper the textbooks — 64 codons, 20 amino acids, 46 chromosomes, 432 nanometres — are just the values that turned up, with no reason behind them and no relation to one another. It is a science of brute facts, each one memorised because it cannot be derived.

The Universal Force of Time reads the same facts and finds, instead, one set of books. Every structural number in the living cell falls on the lattice {2,3,5,π} — the same small grammar that fixes the masses of particles, the angles of molecules, and the periods of the planets. Not approximately: exactly, or within a few parts per million. And the numbers are not independent. They link, domain to domain, into a single circuit — the address stored, the address read, the address copied, the address expressed as a body, and the whole of it powered by light caught on the same lattice. This overview is the wiring diagram of that circuit.

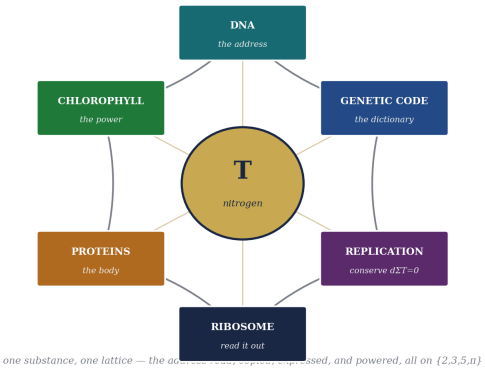

Figure 1. The life circuit. DNA stores the T-address; the genetic code is the dictionary that reads it; replication copies it while conserving every coordinate (dΣT = 0); the ribosome reads it out into protein; proteins are the body; and chlorophyll catches the light that powers the whole loop. At the centre, threading every domain, is one atom — nitrogen — and behind it the one substance, T.

The six papers of this series take the six stations of that circuit one at a time. What follows is the short account of each, the number it turns on, and the way it joins to its neighbours — and then the single thread, nitrogen, that runs through all six and out to the planet.

2. The address — DNA on three registers

DNA is not, in the Force of Time, merely a chemical that stores instructions. It is the **T-address** of the living thing — the coordinate file that says where this organism stands in the field of time. And it is written on more than one register at once. The molecule's three known shapes are three registers made visible: **B-DNA**, the everyday existence form, turns once every **125/12** base-pairs (10.41666…, $5^3/2^2\times3$); **A-DNA**, the form a cell adopts to read a gene, carries **10π²/9**, the geometry of the hydrogen spectrum; and **Z-DNA**, the left-handed return form, is a clean **12** ($2^2\times3$).

The four letters carry a deeper split still. Of the four bases, only **cytosine** sits π-free, on the pure Earth node **1000/9** ($2^3\times5^3/3^2$) — the flat-surface signature of the Earth register. Its partner across the three-bond pair, guanine, is the Earth's *antimatter* base: read guanine's mass as a sphere and its radius is the Earth's (6379.892 km, $50\pi^3/243$); turn that radius through the veil and you reach the Earth's year. The two base-pairs even hold the most fundamental T-ratio in their hydrogen bonds — A–T binds with two, C–G with three, the ratio 3:2 that runs through the whole of the theory. The address is not stored in a chemical by chance; it is written in the numbers that build the atom and turn the planet.

3. The dictionary — the genetic code

To read the address you need a dictionary, and every living thing on Earth shares the same one: sixty-four three-letter words spelling twenty amino acids, with three words reserved for "stop." Biology calls this a frozen accident. The Force of Time reads it as exact arithmetic. The whole vocabulary is **64** (2^6, the largest address a four-letter three-place code can hold); the alphabet it spells is **20** ($2^2\times5$); and the excess of words over letters is the redundancy **3.2** ($2^4/5$) — the built-in error tolerance that makes most slips of the third letter harmless.

The structure bisects cleanly: the sixteen two-letter stems split into eight family boxes and eight split boxes, so the codons divide **32 : 32** (each 2^5), a pure doubling in which the third "wobble" position is exactly the redundant digit. Translation is closed by **3** stop codons (3) and opened by one start. The code is not a lookup table that could have come out any other way; it is the {2,3,5} address-grammar of life, and it could hardly have come out otherwise.

4. The copying — replication as conservation

Every time a cell divides it must copy three thousand two hundred million letters (3,200,000,000 = $2^{13}\times5^8$) and hand a complete set to each daughter. It never copies blind: it splits the helix down the middle and keeps one original strand in each new copy, so every daughter is half old, half new. Biology calls this semi-conservative replication. The Force of Time calls it a law made visible. The parental strand is a T-address, and $d\Sigma T = 0$ forbids destroying it. What replication conserves is the coordinate: the two strands are the two registers of the helix, matter and antimatter of the Earth, and each daughter keeps one whole.

Copying has a price, and it is paid on the lattice too. The telomere counter — the protective cap on each chromosome — falls from **15000** base-pairs at birth ($2^3\times3\times5^4$) to about **5000** at the end of a life ($2^3\times5^4$), a clean ratio of three, shedding **200** letters ($2^3\times5^2$) at every division. To copy is to conserve the address; to age is to spend the counter that lets you copy. Both numbers are {2,3,5}.

5. The reading machine — the ribosome and the nitrogen node

The address, copied and conserved, must finally be read out into a body, and the machine that does it is the ribosome. Its clean structural counts are pure {2,3,5}: the small subunit that reads the three-letter words is **30S** ($2\times3\times5$), the large subunit that forges the bond is **50S** (2×5^2), and the most conserved piece in all of biology, the universal 5S RNA, is exactly **120** letters ($2^3\times3\times5$).

And the completed machine — long written 70S and long misread as carrying a prime factor of seven — does no such thing. Sedimentation is a settling-*rate*, not a count, and read properly the assembled ribosome sits at **70.03320215**, which is nothing other than the atomic weight of nitrogen (14.00664043) multiplied by five. The seven was a costume on a rounded figure; underneath is the atom that builds every protein. The old prime-7 reading — and the theory of disease once built on it — is retracted. Life's reading machine is tuned to nitrogen.

6. The output — proteins and the engines of life

What the ribosome builds is protein, and protein is counted too. The most common fold, the α-helix, turns once every **3.6** residues ($18/5 = 2\times3^2/5$); proteins assemble into machines in powers of two (haemoglobin 2^2, RUBISCO 2^4, the nucleosome 2^3). Every link in the chain is a carbon joined to a nitrogen — the peptide bond — so nitrogen is not only in the reading machine but in every rung of everything it makes.

And building costs energy, paid in a single currency. One glucose is banked as **36** ATP ($2^2\times3^2$) — two from glycolysis, two from the Krebs cycle, thirty-two from the electron chain (2^5) — burned through a Krebs wheel of **8** steps (2^3) turning twice. The whole energy economy of the body balances on twos and threes. The cell is a converter of time: light in, structure held, work out, and never a coordinate lost.

7. The power supply — chlorophyll and the light of the lattice

All of it runs on sunlight, and sunlight is caught on the lattice. Chlorophyll harvests at two exact nodes — **432** nm in the blue ($2^4\times3^3$) and **648** nm in the red ($2^3\times3^4$) — holding between them the fundamental ratio 432:648 = 2:3, and reflecting the equilibrium node at **540** nm ($2^2\times3^3\times5$), which is why the living world is green. The blue node is also the hydrogen bond energy, 432 kJ/mol — one number wearing a wavelength in one register and a bond in another.

And the reaction centre that catches the last of the light, P700, sits at **700.3320215** nm — the atomic weight of nitrogen multiplied by *fifty*. The same atom that tunes the ribosome at five times its weight tunes the leaf at fifty. The factory that builds the body and the antenna that powers it answer to one element. Photosynthesis is the mechanism by which the biosphere reads the Sun's Universal Force of Time — the light of the Sun made into the substance of life.

8. The thread through everything — the nitrogen spine

Stand back from the six domains and one atom is everywhere. Nitrogen is the head of every amino acid and the hinge of every peptide bond; it is the ring at the centre of every base in DNA and RNA; it cages the magnesium at the heart of chlorophyll inside four of its atoms. Wherever life stores, reads, builds, or powers, nitrogen is in the molecule. And its weight is a node that reaches from the cell to the sky.

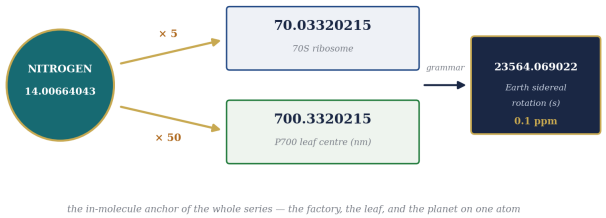

Figure 2. The nitrogen spine. Nitrogen's atomic weight, 14.00664043, times five is the ribosome (70.03320215) and times fifty is the leaf's P700 centre (700.3320215). Carried through the conversion grammar the same atom lands on 23564.069022 — the sidereal rotation of the Earth, 0.1 ppm from the canonical value. The factory, the leaf, and the planet on one atom.

Take nitrogen's mass through the grammar that links the registers — into kilograms, multiplied by 864 and turned through 2π — and it lands first on the speed of light (299816259.84, this register) and finally, read as a free fall and topped to a full day, on **23564.069022** seconds: the sidereal rotation of the Earth, 0.1 ppm from the canonical 23564.069025. The atom that threads every paper in this series keeps the time of the spinning planet it is written on. This is the coherence the Force of Time was built to expose — six independent readings of six different objects, all landing on one atom, and that atom landing on the day. The agreement is the evidence.

9. What biotechnology is

There is one number left, and it is the largest. Of all the DNA in a human cell, only about **1.5%** codes for protein; the other **98.5%**, long dismissed as "junk," is in the Force of Time the **T-address registry** — the coordinate file that locates the organism in the field of time. The genes are the functional output; the address space is the primary content. Biotechnology, read this way, is not the manipulation of a chemical accident. It is the science of reading, copying, and expressing the T-address that defines a living thing.

And every operation it performs is counted on one lattice. The dictionary is {2,3,5}; the helix is {2,3,5}; copying conserves the address exactly; the reading machine is tuned to nitrogen; the body it builds and the light that powers it are {2,3,5} throughout. Six papers, six domains, one circuit — the address read, copied, expressed, and powered, all on the same small grammar that builds the atom and turns the planets.

Life does not invent its numbers. It inherits them — from the lattice that underlies all of physical reality, and from the one atom that carries the speed of light and the length of the day into every protein you are made of. To be alive is to be a configuration of time that reads its own address and builds itself to match, one conserved tick at a time, keeping the same count as the turning Earth.

Appendix A — The complete correlation map

Every load-bearing number across the six papers of the Biotechnology Series, with its lattice or register address. Numbers lead; the {2,3,5,π} form is the quiet stamp that each sits where the theory says.

Domain	Biological fact	Value	Lattice / register form
DNA	B-DNA helical pitch (bp/turn)	125/12	5^3 / (2^2×3) · 10.41666...
DNA	A-DNA — the reading register	$10\pi^2/9$	hydrogen-spectrum geometry
DNA	Z-DNA — the return register	12	$2^2 \times 3$
DNA	Cytosine — the Earth base (π-free)	1000/9	$2^3 \times 5^3 / 3^2$
DNA	Guanine sphere → Earth radius (km)	6379.892	$50\pi^3 / 243$
Code	Codon vocabulary	64	2^6 (4^3)
Code	Amino-acid alphabet	20	$2^2 \times 5$
Code	Word/letter redundancy	3.2	$2^4 / 5$
Code	Family : split box bisection	32 : 32	each 2^5
Code	Stop codons	3	3
Replication	Genome length (bp)	3,200,000,000	$2^{13} \times 5^8$
Replication	Telomere at birth (bp)	15000	$2^3 \times 3 \times 5^4$
Replication	Telomere at senescence (bp)	5000	$2^3 \times 5^4$
Replication	Shed per division (bp)	200	$2^3 \times 5^2$
Ribosome	Small subunit	30S	$2 \times 3 \times 5$

Domain	Biological fact	Value	Lattice / register form
Ribosome	Large subunit	50S	2×5^2
Ribosome	Universal 5S RNA (nt)	120	$2^3 \times 3 \times 5$
Ribosome	Complete monosome	70.03320215	nitrogen × 5
Proteins	α-helix residues per turn	3.6	$18/5 = 2 \times 3^2/5$
Proteins	ATP per glucose	36	$2^2 \times 3^2$
Proteins	Krebs steps × turns	8 × 2	$2^3 \times 2$
Proteins	Quaternary assembly	4 / 16 / 8	$2^2 / 2^4 / 2^3$
Chlorophyll	Blue harvesting node (nm)	432	$2^4 \times 3^3$
Chlorophyll	Red harvesting node (nm)	648	$2^3 \times 3^4$
Chlorophyll	Reflected green node (nm)	540	$2^2 \times 3^3 \times 5$
Chlorophyll	P700 reaction centre (nm)	700.3320215	nitrogen × 50
Spine	Nitrogen atomic weight	14.00664043	register root of the series
Spine	Earth sidereal rotation (s)	23564.069022	nitrogen → grammar (0.1 ppm)
Address	Non-coding "junk" fraction	98.5%	T-address registry

Appendix B — Master propositions

P-BIOTECH-1 — Every structural number in molecular biology is a product of the lattice {2,3,5,π}, exactly or within a few ppm. No genuine exception has been found across the canonical biotechnology literature. The numbers are not independent: they link domain to domain into one circuit — address stored (DNA), read (genetic code), copied (replication), expressed (ribosome → protein), and powered (chlorophyll).

P-BIOTECH-2 — DNA is the T-address system of the living world. Its three conformations are three registers: B-DNA = 125/12 (existence), A-DNA = $10\pi^2/9$ (reading), Z-DNA = 12 (return). Of the four bases only cytosine is π-free on the Earth

node 1000/9; its partner guanine is the Earth's antimatter base, proven by its sphere-radius landing on the Earth's own radius and year. Cross-ref [[project-fot-cytosine-earth-base]].

P-BIOTECH-3 — The genetic code is the {2,3,5} address-grammar of life, not a frozen accident: 64 = 2^6 words, 20 = $2^2 \times 5$ letters, redundancy $2^4/5$, a 32:32 family/split bisection, 3 stops and 1 start. Its arithmetic is forced, not chosen.

P-BIOTECH-4 — Semi-conservative replication is $d\Sigma T = 0$ made visible: the parental T-address strand is conserved whole in each daughter. The price is the telomere counter, 15000 bp ($2^3 \times 3 \times 5^4$) at birth → 5000 ($2^3 \times 5^4$) at senescence, 200 ($2^3 \times 5^2$) shed per division. To copy is to conserve the address; to age is to spend the counter.

P-BIOTECH-5 — The ribosome carries NO prime factor of seven. Sedimentation is a rate, not a count (30S + 50S ≠ 70S); the complete monosome reads 70.03320215 = nitrogen atomic weight (14.00664043) × 5. Its clean counts are {2,3,5}: 30S = $2 \times 3 \times 5$, 50S = 2×5^2, 5S RNA = 120 = $2^3 \times 3 \times 5$. The old prime-7 reading and the disease theory built on it are retracted.

P-BIOTECH-6 — Protein architecture and the cell's energy economy are counted on {2,3,5}: α-helix 3.6 = 18/5 residues per turn; quaternary assembly in powers of two (haemoglobin 2^2, RUBISCO 2^4, nucleosome 2^3); 36 ATP per glucose = $2^2 \times 3^2$ (2 + 2 + 32); the Krebs cycle 8 steps = 2^3 run twice. Every peptide-bond link is a carbon joined to a nitrogen.

P-BIOTECH-7 — Chlorophyll harvests on the lattice: 432 nm = $2^4 \times 3^3$ (also the H–H bond, 432 kJ/mol) and 648 nm = $2^3 \times 3^4$, ratio 2:3, reflecting 540 nm = $2^2 \times 3^3 \times 5$ (the green world). The P700 reaction centre = 700.3320215 nm = nitrogen × 50 — the same atom that tunes the ribosome at × 5. Photosynthesis is the biosphere reading the Sun's T.

P-BIOTECH-8 — Nitrogen is the spine of the whole series — in every amino acid, every nucleic-acid base, and the chlorin ring of chlorophyll. Its weight × 5 is the ribosome and × 50 the leaf; carried through the conversion grammar (mass × 2 × 864 / 2π → c-face → radius² energy → ×24 free fall → ×2400) it lands on Earth sidereal rotation 23564.069022 s (canon 23564.069025, 0.1 ppm). The factory, the leaf, and the planet share one atom. Cross-ref [[fot-photosystems-two-registers]].

P-BIOTECH-9 — The 98.5% of DNA called "non-coding" is the T-address registry — the spacetime coordinates of the organism within the universal T-field. The protein-coding ~1.5% is the functional output, not the primary content. Biotechnology is the science of reading, copying, and expressing the T-address that defines every living thing.

A note on the numbers

The values in this paper are written as plain numbers — not pinned to units, and not carried to a particular power of ten. This is not loose notation; it is the physics. A T-value is one number that appears at once across every register: a helical pitch in base-pairs, a settling-rate in Svedberg units, a wavelength in nanometres, an atomic weight, a rotation in seconds. That is why one atom of nitrogen can be the ribosome at five times its weight, the chlorophyll P700 centre at fifty times, and the length of the Earth's day. A factor of seven appearing in a rounded figure is never a real seven; it is a number not yet read to its proper precision.

References

[1] S. Daubney, *The Universal Force of Time — Master Compendium v5*, The Daubney Foundation (2026).

[2] NIST CODATA, *Recommended Values of the Fundamental Physical Constants*, 2022.

[3] S. Daubney, *The DNA Registers*, Biotechnology Series Paper 2, The Daubney Foundation (2026).

[4] S. Daubney, *The Genetic Code — Sixty-Four Words, Twenty Letters*, Biotechnology Series Paper 3, The Daubney Foundation (2026).

[5] S. Daubney, *Proteins, Nitrogen, and the Engines of Life*, Biotechnology Series Paper 4, The Daubney Foundation (2026).

[6] S. Daubney, *The Ribosome — the Machine That Reads the Address*, Biotechnology Series Paper 5, The Daubney Foundation (2026).

[7] S. Daubney, *Chlorophyll and the Light of the Lattice*, Biotechnology Series Paper 6, The Daubney Foundation (2026).

[8] S. Daubney, *Replication, the Conservation of Time*, Biotechnology Series Paper 7, The Daubney Foundation (2026).