
The Second Reading

*What 150 theories of Alzheimer's disease look like when you grade the evidence
instead of the idea*

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In 2020 the Oskar Fischer Prize invited anyone to explain the cause of Alzheimer's disease. About a hundred and fifty people answered and eleven were given prizes. This is a second reading of every submission, conducted six years later under a rubric fixed before the first entry was opened, with each entry read end to end by two independent assessors who saw neither the prize verdicts nor any earlier scoring. Seventy-seven of the hundred and fifty assert that their mechanism comes first; one reaches replicated human evidence at the joint its conclusion depends on.

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Abstract

In 2020 the Oskar Fischer Prize invited anyone to explain the cause of Alzheimer's disease. About a hundred and fifty people answered — laboratory heads and clinicians, retired engineers and lay theorists — and eleven were given prizes. This paper reports a second reading of every submission, conducted in 2026 under a rubric fixed in advance, with each entry read end to end by two independent assessors who saw neither the prize verdicts nor any earlier scoring.

The rubric grades one thing: how well founded a claim is, given the kind of claim it is. It asks whether the evidence matches the claim type, how far that evidence has travelled toward human confirmation at the weakest necessary link, who has confirmed it, whether a falsifier exists and an instrument could return it, what fraction of the disease is claimed, at what grain the mechanism is specified, and whether the therapeutic implication rests on the layer the evidence supports.

Three results are worth the field's attention.

Seventy-seven of a hundred and fifty submissions assert temporal priority — that their mechanism happens first and the rest follows. Almost none carries the human tissue sampled at the relevant stage that such a claim requires. **One hundred and thirty of a hundred and forty-five entries rest their load-bearing joint on an animal model or weaker.** Exactly one reaches population-scale human evidence at the joint its conclusion depends on.

Citation integrity fails in ways ordinary review does not catch. Twenty entries carry a source that contradicts or fails to support the claim attached to it. Two entries omit decisive, independently published non-replications of their own keystone results — a defect invisible to any audit of the references an author chose to include. One rests on a paper retracted after submission. Two reproduce other authors' abstracts verbatim, first person retained.

What an entrant submitted is a weak proxy for what their science supports. Programme grades, assessed independently against the 2020–2026 literature, correlate with submission grades at $r = +0.48$. Only twenty-two of seventy-eight submissions fairly represent the programme behind them. Forty-eight per cent of entrants have no findable research programme at all.

The 2022 jury selected well above chance. Its winners sit eleven points above the untiered field, a gap that exceeds this instrument's resolution. But none of its ten reaches the top thirteen of this ranking, and the highest-scoring submission in the field argues against the framework that commissioned this reading.

I. Why read them twice

A prize is a judgement made once, under time pressure, by people who cannot read everything. That is not a criticism; it is the condition of every prize. But it means the archive a prize leaves behind — in this case four hundred and thirty-nine documents from a hundred and fifty people — contains more than the verdict extracted from it.

Six years have passed. Predictions made in 2020 can now be checked against what happened. Trials named as tests have reported or failed to. Claims described as confirmed can be traced to whether the confirming laboratory shared an author list. That is the opportunity a second reading exploits, and it is available to a re-reader and was not available to the jury.

This reading grades **evidential standing**, not importance and not originality. A well-sourced literature review can outscore an original hypothesis here, and does. That is a property of the instrument, stated plainly rather than corrected, because the alternative — folding novelty into the score — is what makes evaluation frameworks unfalsifiable.

II. Method

The rubric was fixed before any entry was read, and not edited afterwards. It has one classification gate and seven axes.

The gate asks what *kind* of claim is being made — initiation, convergence, function, therapeutic, or reframing — because each is adjudicated by different evidence. An initiation claim needs human tissue sampled at the relevant stage. A convergence claim needs bidirectional intervention. A function claim needs loss-of-function physiology in the normal animal. Grading one by the standards of another is a category error, and it is the most common single error in this literature.

Three axes then grade the evidence — **fit** (does the evidence support the kind of claim made), **maturity** (how far the *weakest necessary link* has travelled toward human confirmation), **independence** (who has confirmed it). Three grade the theory — **refutability** (is there a falsifier, and could an instrument return it), **coverage** (what fraction is claimed, and is more claimed than covered), **resolution** (at what grain the entry's *own* mechanism is specified). One grades the consequence — **reachability** — and is reported beside the composite, never inside it.

Two mandatory fields are written **before** the verdict: what would refute this, and where is it weakest. Falsifiers written after a result are worthless.

Blinding. Assessors saw the submission PDFs and nothing else — no prize tier, no prior score, no expert review. Author identity is not concealable, since entrants cite their own work, and the method does not claim otherwise; what blinding protects is the anchor that would contaminate a re-grade.

Two assessors per entry. Every entry was read twice, independently, and the reported score is the mean.

III. What the instrument can bear

measure	value
mean disagreement between assessors	5.2 points
exact agreement	51 / 150
within 5 points	98 / 150
claim-type agreement	89%
standard error of the reported score	± 3.2

Ordering reliability, which is what licenses a ranking at all:

gap between two entries	ordered identically by both assessors
≥ 15 points	100%
10–15 points	95%
5–10 points	74%
< 5 points	20%

A gap of ten points or more is a real difference. A gap under five is a tie. Ranks are reported with that resolution attached. A leaderboard numbered 1 to 149 asserts some eleven thousand pairwise orderings, and only those separated by ten points or more survive re-reading.

The single grading pass that preceded this one showed a mean disagreement of about nine points on a sample deliberately spanning the score range. Doubling the assessors moved reliable ordering from roughly twenty points to ten, which is the return on the second reading and the reason it was done.

IV. What the field looks like

The claim-type result

claim type	n
initiation	77
reframing	25
therapeutic	22
convergence	17
function	4

Slightly over half the field asserts that its mechanism comes first. Temporal priority in a disease with a two-decade preclinical phase is adjudicated by human tissue sampled at stages that are largely inaccessible — which is why so many initiation claims can coexist, and why so few can be settled.

This is not a new observation, but it has not before been counted across an unselected corpus of this size, by assessors who were not told to look for it.

The maturity result

load-bearing joint	n
M5 — in vitro or inference	80
M4 — animal model	50
M3 — human, case level	5
M2 — human, single cohort	9
M1 — human, replicated	1

Graded at the weakest necessary link rather than the strongest available row, **one hundred and thirty of a hundred and forty-five entries rest on an animal model or weaker**. One reaches replicated human evidence at the joint its conclusion depends on.

This is a fact about what the field could offer in 2020, not about these entrants' competence. It is also the strongest argument for grading at the weakest link: measured at the strongest row, most of

these entries would look far better evidenced than they are.

The resolution result

Across a sub-sample examined specifically for this, **not one entry reaches residue-level specification on a claim it derives itself**. Several carry residue-level vocabulary; in every case the detail is inherited from textbook biology or another laboratory's work and would remain true if the entry's thesis were false. The finest grain any entry *earns* is a named molecule plus a direction of effect.

V. Citation integrity

Assessors verified load-bearing references against PubMed rather than accepting them. The defects sort into six kinds, and only the first is caught by ordinary review.

Present but wrong. Twenty entries cite a source that contradicts or does not support the claim it carries. A paper reporting that a protein was *unaffected* cited as evidence it was reduced. A trial in cognitively normal volunteers with a biomarker endpoint described as demonstrating efficacy in Alzheimer's disease. A study of one cell type's axonal arbor attached to a different cell type. A paper whose title states its effect is *independent* of the pathway it is cited to support.

Present but transferred. Whole reference blocks lifted from other manuscripts. One entry's in-text numbers correspond to nothing in its own bibliography; its first twenty-three references form a contiguous run characteristic of another review's reference list, OCR artefacts included. Another's hyperlinks point at anchor fragments inside three other reviews.

Present but self-cited. Confirmations presented as independent that share an author list. In one case, three papers offered as showing a phenomenon "has since been confirmed by other researchers" all share the entrant's consortium — while the one genuinely independent attempt, which reports failure by four methods, is not cited.

Absent but decisive. The class no citation audit can find, because the offending reference is missing rather than wrong. Two entries omit published non-replications that name and target their keystone results. In one, four pharmaceutical companies across five models with the same antibody isotype found no effect and concluded the animal data did not support further evaluation; the submission neither cites nor rebuts it. A first-in-human trial has since reported no efficacy signal. In the other, two independent failures to reproduce the founding detection are absent from a hundred-and-three-item bibliography.

Fabricated. One reference has no record anywhere. One author name was generated by a citation parser misreading a study's title as a person.

Uncredited reproduction. At least four entries reproduce published material verbatim without attribution, including two that paste other authors' abstracts with the first person retained — text claiming *our sample* about cohorts the entrant had no part in.

One entry rests on a paper retracted after the submission date. It is recorded and not counted against the entrant, who could not have known.

VI. What the submission does not tell you

Every entrant's research programme was assessed separately against the 2020–2026 literature: what the laboratory work supports independent of its framing, which 2020 commitments have since been tested, and where the programme is weakest now.

measure	value
entrants with no findable research programme	72 / 150 (48%)
correlation, submission vs programme	r = +0.48
submissions fairly representing their programme	22 / 78

Roughly three-quarters of the variance in what an entrant's science supports is not captured by what they submitted. Thirty-one programmes had moved on from the submitted claim; ten submissions captured a fragment; eight described work the entrant does not do; five claims had been abandoned by their own authors.

The most consequential cases run in both directions. A first-rank autophagy programme was withheld in favour of a methodology argument. A submission arguing a two-hit genetic architecture came from a laboratory that never tested it and whose own therapeutic programme presupposes it false. Conversely, several strong submissions rest on programmes that have since weakened.

A hypothesis about the format. A competition that asks for *the cause of Alzheimer's disease* may systematically elicit an entrant's boldest idea rather than their best-evidenced one — and then grade the boldness. On that reading the field's strongest work is structurally absent from the contest. This is a criticism of the format, not of the people who entered it, and it is offered as a hypothesis rather than a finding.

VII. Six years of answers

Predictions made in 2020 can now be checked, and this is the part of the exercise unavailable to any jury.

Three hard disconfirmations arrived between 2021 and 2026, and all three landed on entries that scored well *because* they were testable. An antiviral trial in seropositive patients found greater cognitive worsening on treatment than placebo. A protease inhibitor missed its primary endpoints. A hormone regimen tested at nearly the proposed timing found no cognitive benefit. In each case the programme responded with subgroup or stratification rescues rather than retraction.

Two entrants ran their own falsifiers and published the losses. One reported a meta-analysis finding little evidence for the association his own submission proposed. One ran a trial in which his intervention engaged its target and accelerated decline. Both sit at mid-ranking composites, indistinguishable by score from entries that omitted decisive non-replications. This is the most creditable behaviour the reading found, and the rubric has no way to reward it.

A distinct failure: the stated falsifier converted into silence. One entrant named a specific trial as the test of his claim; six years on it has reported no efficacy result. Another wrote two falsifiers himself; his substantial programme went to heart, muscle, bone and marrow, never to brain. The claim was not abandoned — the test was specified, begun, and never reported.

And the instrument is blind to being right early. Three times a weakly-graded entrant made the call the record went on to confirm — one with no research programme at all correctly anticipating a delivery technique later demonstrated in humans; one graded low on coverage predicting a therapeutic direction since vindicated at trial scale; one whose prediction was tested twice in humans and held. Evidential standing in 2020 was a poor predictor of who turned out right. That is a finding about the field, not a defect to repair.

VIII. The 2022 verdict, measured

	median
prize winners (n=10)	52.9
untiered entrants (n=139)	41.6

The jury selected well above chance. Eleven points separates its winners from the rest of the field, and eleven points exceeds this instrument's resolution. Whatever the jury was tracking, it was real.

But none of its ten winners reaches the top thirteen of this ranking. The highest-placed sits fourteenth; one gold medallist ranks a hundred and sixth of a hundred and forty-nine. The three highest-scoring submissions were all untiered.

The reading does not conclude the jury was wrong. A prize for the best *idea* about the cause of a disease and an assessment of *evidential standing as submitted* are different questions, and the eleven-point gap shows both track something real. What can be said is narrower and firmer: **the entries with the strongest evidence were not, in the main, the entries that won.**

That sentence turned out to be a statement about the instrument as much as about the jury. A third scoring was subsequently built to ask the prize's own question — was the hypothesis new, was it well made at the time, does it hand the field something to build on — and the jury's standing under it is very different:

2022 tier	n	mean rank, evidential standing	mean rank, prize question
gold	4	44.0	18.8
silver	2	47.5	19.0
bronze	4	49.2	42.5
untiered	139	75.9	78.1

Gold and silver medallists sit around rank 20 of 149 when the criterion is novelty and usability, against 44–48 when it is evidential standing. The untiered field does not move at all. **The jury was tracking something the evidential instrument cannot see, and it is close to what the prize said it was for.** The gold medallist ranked a hundred and sixth above scores 8 of 10 on

novelty, with only three entries in the field above it — though its idea remains untested six years on, and its usability score is middling. Section IX and Appendix C give the instrument and the full ordering.

IX. Three instruments

Every ranking in this paper comes from one scoring rule: the mean of an evidence half and a theory half, each axis weighted equally. That rule is defensible and it is not the only defensible one, and publishing it alone would imply a confidence in the choice that nothing here supports.

A second scoring was therefore built on a different principle and published beside the first. It weights **comprehensiveness heaviest** — the axis measuring what fraction of the disease an entry claims and whether it bounds its own scope — but gates that weight on whether the entry **forbids something, and whether the forbidden thing was actually looked for** between 2020 and 2026. A theory that explains everything and rules out nothing scores zero on this instrument however broad it is.

The gate is on *forbidding* rather than on internal coherence for a specific reason. A theory can be perfectly self-consistent and forbid nothing; that is the standard shape of an unfalsifiable framework rather than an incoherent one. Coherence also cannot be detected reliably by any procedure available here — an attempt to do so by pattern-matching returned false positives on roughly a third of the field. Forbidding can be detected, because a stated falsifier and a completed test are both matters of record.

The two orderings correlate at $r = +0.89$ and share fourteen of their top twenty. Six entries hold a top-ten place under both. Those six are the entries whose standing does not depend on which instrument a reader prefers, and that is a stronger claim than any individual rank in either table.

Several entries move by more than forty places. The most instructive sits thirteenth on the scope-gated instrument with coverage at the top anchor — and a claim that was never looked for by anyone, including its author. Comprehensiveness nobody tested is precisely what the second instrument discounts and the first does not.

The weakest component of the alternative is stated with it: whether a claim was "looked for" had to be classified from prose, and 19 per cent of entries could not be classified and were given a neutral default. The weighting itself — 0.60 on comprehensiveness — is a choice, not a measurement; at 0.50 the two orderings converge, and at 0.75 the ranking becomes largely a list of who wrote a falsifier.

The question neither instrument asked

Both scorings above grade **evidential standing** — how well a claim is supported. They correlate with each other at $\rho = +0.91$, which means running both and finding agreement was never much of a test; they ask one question with two arithmetics.

Neither asks what the prize asked. The invitation was for a **novel hypothesis, rigorous at the time it was written, that gives the field something to build on**. An entry can be superbly evidenced and originate nothing — a well-made restatement of a consensus position is the commonest form this takes in the field. An entry can originate a great deal and be evidenced by very little. Evidential standing is blind to both cases in opposite directions.

A third instrument was therefore built to ask the prize's question directly, frozen before any entry was read under it, and applied by graders who saw no prior score, no tier, and no other instrument's output:

```
`` core = 0.35 x novelty_2020 + 0.30 x rigor_2020 + 0.35 x usable scope_gate = 0.60 + 0.40 x
(scope_fit / 10) score = scope_gate x core x 10 + 5 x vindication ``
```

Novelty was re-graded from the submissions rather than reused. A novelty column already existed from the first reading, but it correlates $r = +0.53$ with framework overlap and $r = +0.68$ with a relevancy score that was itself 88 per cent driven by that overlap. It partly measures resemblance to the assessing programme's own commitments. Reusing it would have reimported exactly the circularity this whole exercise exists to remove.

Two design choices are worth stating because they are contestable. **The scope gate penalises both failure modes** — an entry so broad it forbids nothing and an entry so narrow it is not a theory of the disease are both discounted, and the gate never falls below 0.60 because a good idea at the wrong scale is still an idea. **The vindication term is deliberately small**, five points a step on a -3 to $+3$ scale, because a large multiplier would collapse the instrument into a ranking by hindsight, which is the one thing a prize for a *new idea* explicitly was not.

The third ordering correlates $\rho = +0.72$ with each of the first two, against their $+0.91$ with each other. It is a genuinely different reading, and the sharpest single illustration is the entry that rose furthest between the two readings — from the bottom quartile to third on evidential standing, carrying the strongest human evidence base in the field — and falls to ninety-fourth here, on novelty 2 and usability 2. It restates an established position and proposes nothing. Both readings are correct about different things.

Twenty-nine per cent of the field scores zero on vindication: not contradicted, but never examined by anyone in six years. Six of those are entries scoring 7 or more on novelty — genuinely new ideas that no group has since tested in either direction. This is the instrument's

own blind spot, and it was written into its limitations before it graded anything: vindication rewards claims the field chose to test, so an idea nobody funded scores zero whether or not it was any good. Each of those six is penalised five points against an otherwise identical entry that someone happened to follow up.

One structural result about the axes themselves. **Rigor, usability and scope form a single tight cluster** ($r = +0.76$ to $+0.83$) — close to one underlying quality of craftsmanship, which means weighting them separately hands that quality roughly two-thirds of the instrument. **Novelty is the most nearly independent axis**, its strongest tie to anything else being $+0.65$. That is the argument for including it, and the reason the first two instruments could not see what the third sees. A reasonable prior — that the field preferentially tests familiar ideas, so novelty should run *against* vindication — is not supported: the pair correlates at $+0.27$, the weakest in the matrix, but positive.

Two cautions on reading the third ordering. It is **single-graded**, where the composite carries two independent assessors and a stated ± 3.2 , so its ranks are correspondingly softer. And **the novelty axis has no truth gate**: entries proposing physically impossible mechanisms score 5 or 6 for originating a claim, and one scores 6 for a hypothesis that a mite causes dementia. The formula handles this, because rigor and usability then collapse the total to the bottom of the table. But the novelty column alone must never be read as a quality ranking.

The purpose of publishing all three is narrow. A single ranking invites a reader to treat the ordering as a property of the submissions. It is partly a property of the instrument, and the honest presentation is to show how much. The strongest evidence that the difference is real is that **the 2022 jury looks mediocre under the two instruments that grade evidence and defensible under the one that grades ideas**.

X. Limitations

The scores are means of two readers. They carry ± 3.2 , and gaps below ten points are not interpretable. Every number in this paper should be read with that attached.

Three axes are underspecified, and it shows. independence asks who has confirmed a claim without defining whether *it* means the evidence base or the claim itself; six assessors resolved it four incompatible ways. It reads high for consensus reviews that originate nothing, for claims their authors abandoned while others worked nearby, and for confirmations that do not discriminate between rival mechanisms. fit bundles distance-from-evidence with candour, so an entry that overreaches and admits it scores identically to one that overreaches silently. maturity has no quality floor at its human-case-level anchor, so unverified recollection outranks a well-designed animal study.

reachability did not discriminate. One hundred and five of a hundred and fifty entries sit on a single anchor. It is reported as a description of the field — therapeutic implications overwhelmingly rest on the animal layer — and excluded from any claim that the reading distinguished entries on it.

resolution cannot separate "proposes no mechanism" from "proposes a vague one." Reframing and taxonomic entries are the systematic casualties.

Cross-entry patterns are invisible by construction. Assessors worked in batches assigned arbitrarily. Two entries were found to share an uncredited source packet, and one entrant was found to have published the systematic review that refutes another entrant's thesis — both only because chance placed them with the same reader. Nothing in the method looks for such patterns, so their true frequency is unknown.

Four submissions were incomplete as archived — one missing its first pages, one missing its figures, one with bibliography and figure files transposed, and one folder containing the competition rules document in place of any submission. That entry is excluded rather than scored, since a missing submission is not a bad one.

The programme assessment is the softer of the two. It rests on a literature search rather than a document that can be read in full, and it is labelled as such wherever it appears.

One submission's appendix contains identifying medical records and photographs of living private individuals. Nothing derived from it is quoted or described here.

XI. What this was for

The reading produced a ranking, and the ranking is the least durable thing in it. Scores carry ± 3.2 and will move if anyone reads these documents again.

What should survive is narrower. **A rubric fixed before the first entry, published with its own defects named.** A measured resolution, so that readers know which differences to believe. A citation register in which every defect was verified against the primary source rather than asserted — and which reproduces almost perfectly across independent readers, unlike the scores, because a paper either says what it is cited for or does not.

And one asymmetry worth carrying forward: **judgements about evidence quality carry real reader variance and need averaging; facts about whether a citation supports its claim do not.** The two classes of finding deserve different confidence, and presenting them at the same confidence — as most evaluation exercises do — overstates one and wastes the other.

Appendix A the composite ranking

All 149 gradable submissions, ordered by the mean of two independent assessors.

Read with the resolution attached. Every score carries ± 3.2 . A gap of **10 points or more is a real difference**; a gap **under 5 is a tie**. Adjacent ranks are not meaningful. *ev* and *th* are the evidence and theory sub-scores, reported separately because a single composite hides the diagnostic they exist to show.

prog is the entrant's research programme as it stands in 2026, assessed separately against the literature and the softer of the two grades. — means no findable programme (72 of 150).

div — how the submission relates to that programme: *algn* fairly represents it · *evol* programme moved on · *part* captured a fragment · *mism* programme is about something else · *dorm* claim abandoned by its author · *gap* programme is broader.

claim — *init* initiation · *conv* convergence · *func* function · *ther* therapeutic · *refr* reframing.

rel — a **non-scoring** lens: whether the entry supports, CONtradicts, is mixed on, or is silent about the architecture of the programme that commissioned this reading. Contradiction was inadmissible as a demerit. **2022** marks the gold, silver and bronze awards.

#	entrant	score	ev	th	prog	div	claim	rel	2022
1	Todd Golde	86.7	93.3	80.0	83.3	algn	init	mix	
2	David Rubinsztein	80.0	93.3	66.7	66.7	mism	refr	mix	
3	Pavel Kalvach	75.0	90.0	60.0	—	dorm	refr	mix	
4	Colin Masters	71.7	83.3	60.0	75.0	algn	init	CON	
5	Jamie Walker	70.8	56.7	85.0	88.3	algn	refr	mix	
6	Erwin Roggen	69.2	58.4	80.0	61.7	algn	refr	sup	
7	Ruth Itzhaki	69.2	66.7	71.7	61.7	algn	init	mix	
8	Daniel Michaelson	69.2	58.4	80.0	73.3	dorm	ther	mix	
9	Lary Walker	66.7	66.7	66.7	71.7	evol	init	CON	
10	Katarzyna Grochowska	66.7	66.7	66.7	58.3	part	init	sup	
11	Jin Xu	65.0	66.7	63.4	73.3	algn	conv	sup	
12	Paul Ewald	64.2	58.4	70.0	46.7	gap	init	mix	
13	Jian-Sheng Kang	64.2	61.7	66.7	50.0	evol	ther	sup	
14	Bess Frost	63.3	60.0	66.7	78.3	algn	conv	sup	G
15	Philip De Jager	62.5	75.0	50.0	90.0	part	refr	mix	
16	Pamela Maher	62.5	58.4	66.7	66.7	evol	conv	sup	
17	Anne Eckert	61.7	50.0	73.3	45.0	evol	init	mix	
18	Estela Area-Gomez	60.0	41.6	78.3	58.3	evol	conv	mix	G
19	David Gate	60.0	66.7	53.4	71.7	evol	init	mix	
20	Russell Swerdlow	60.0	50.0	70.0	70.0	algn	init	mix	B
21	Chi U Seak	59.1	71.7	46.7	—	dorm	refr	sil	
22	Amy Nelson	59.1	66.7	51.6	58.3	evol	init	mix	
23	Ashley Bush	58.3	40.0	76.7	76.7	evol	conv	mix	
24	Fernando Frassetto	58.3	66.7	50.0	—	mism	conv	mix	
25	Andrew Pieper	57.5	58.4	56.7	53.3	part	init	sup	
26	Charles Greenblatt	57.5	56.7	58.4	76.7	evol	ther	mix	

#	entrant	score	ev	th	prog	div	claim	rel	2022
27	Dennis N Crouse	56.7	56.7	56.7	—	dorm	init	mix	
28	Cristina Quigley	56.7	56.7	56.7	75.0	part	init	sup	
29	Varghese John	56.6	40.0	73.3	63.3	algn	ther	sup	B
30	Christopher Ramsden	55.9	33.3	78.3	61.7	part	init	sup	
31	Eduardo Chini	55.8	50.0	61.7	61.7	gap	init	sup	
32	Hanno Roder	55.8	45.0	66.7	58.3	part	conv	mix	
33	Michal Schwartz	55.8	45.0	66.7	58.3	evol	ther	mix	
34	Gerd Kempermann	55.8	45.0	66.7	51.7	evol	refr	mix	
35	Brenda Aske	55.0	40.0	70.0	—	gap	init	sup	
36	Zhen Huang	54.1	46.6	61.7	53.3	algn	func	mix	
37	Aleksandra Deczkows.	54.1	58.4	50.0	61.7	evol	refr	sup	
38	Paul Cox	53.3	40.0	66.7	65.0	algn	init	mix	
39	Brian Head	53.3	40.0	66.7	58.3	evol	ther	sup	
40	Karl Herrup	53.3	40.0	66.7	88.3	algn	init	mix	
41	Ralph Nixon	53.3	50.0	56.7	53.3	algn	init	mix	G
42	Maritza Quintero	53.3	45.0	61.7	—	dorm	init	sup	
43	Stephen Dominy	53.3	40.0	66.7	51.7	evol	init	mix	
44	Donald Weaver	52.5	38.3	66.7	36.7	algn	conv	mix	S
45	Martin Zhang	50.9	65.0	36.7	56.7	mism	refr	mix	
46	Mishauri Nolan	50.9	55.0	46.6	—	dorm	ther	sup	
47	Swananda Marathe	50.0	43.3	56.7	48.3	evol	conv	sup	
48	Jerold Chun	50.0	33.3	66.7	66.7	algn	init	mix	
49	Maxim Shokhirev	49.1	58.4	40.0	46.7	evol	refr	mix	
50	Christoph Methfessel	48.4	33.3	63.4	—	dorm	init	mix	
51	Günter Höglinger	48.3	30.0	66.7	53.3	evol	init	sup	

#	entrant	score	ev	th	prog	div	claim	rel	2022
52	Bernd Moosmann	48.3	40.0	56.7	60.0	dorm	conv	CON	S
53	Susan Greenfield	48.3	35.0	61.7	48.3	algn	conv	sup	
54	Li-Huei Tsai	47.5	40.0	55.0	66.7	algn	conv	mix	
55	Zaven Khachaturian	47.5	58.4	36.6	—	dorm	conv	sup	
56	Gorazd Bernard Stok.	46.7	48.4	45.0	43.3	evol	init	mix	
57	Allan Farber	46.6	41.6	51.6	—	dorm	init	sup	
58	Simon Lee	45.9	41.6	50.0	—		init	mix	
59	Amanda Alix	45.9	45.0	46.6	—	algn	init	mix	
60	Alan Snow	45.8	35.0	56.7	—	dorm	init	mix	
61	Brian Balin	45.8	30.0	61.7	61.7	evol	init	sup	
62	Lauren MacIntyre	45.0	33.3	56.7	—	dorm	func	mix	
63	Rajagopal Sekhar	44.1	35.0	53.4	56.7	part	init	sup	
64	Jesus Avila	44.1	36.6	51.6	53.3	evol	conv	sup	
65	Rafael Rodríguez-P.	44.1	31.6	56.7	48.3	evol	init	mix	
66	Grace Lightfoot	42.5	45.0	40.0	—	dorm	init	sup	
67	Annalise Barron	42.5	23.3	61.7	40.0	evol	init	mix	B
68	Dan Pulsipher	42.5	31.6	53.4	—		ther	sup	
69	Sarthak Dua	42.5	31.6	53.4	—	dorm	ther	sil	
70	Boris Decourt	41.7	56.7	26.7	36.7	evol	conv	sup	
71	Philip Serwer	41.7	16.7	66.7	50.0	mism	init	mix	
72	Hermona Soreq	41.7	21.7	61.7	58.3	evol	init	sil	
73	Soghra Bagheri	41.7	33.3	50.0	40.0	evol	init	sup	
74	Patrizia Mecocci	41.7	23.3	60.0	40.0	evol	conv	sup	
75	Prashant Joshi	41.6	36.6	46.7	—	dorm	refr	mix	
76	Stanley Prusiner	41.6	26.6	56.7	70.0	part	ther	mix	
77	Roger Rosenberg	41.6	33.3	50.0	58.3	mism	init	sup	

#	entrant	score	ev	th	prog	div	claim	rel	2022
78	Carina Clawson	41.6	45.0	38.4	—	dorm	refr	sup	
79	Simone Hasselmo	40.9	28.3	53.4	—	dorm	init	mix	
80	Ishwari Chandran Iy.	40.9	45.0	36.7	—	gap	conv	mix	
81	Bindu Paul	40.0	40.0	40.0	63.3	algn	conv	sup	
82	Leandro Bergantin	40.0	23.3	56.7	23.3	mism	ther	sup	
83	Walter Lukiw	40.0	23.3	56.7	46.7	evol	init	sup	
84	Gunnar Gouras	39.2	40.0	38.3	48.3	algn	init	sup	B
85	Dharmendra Lingaiah	39.2	40.0	38.3	—	dorm	init	mix	
86	Stacey Gorniak	39.1	38.3	40.0	60.0	mism	init	sup	
87	Delphine Boche	38.4	23.3	53.4	75.0	evol	init	mix	
88	Richelle Cutler	38.4	25.0	51.7	—	dorm	init	sup	
89	Antonio Pinto-Duarte	38.4	36.6	40.0	—	dorm	init	mix	
90	Parvathi Shanmugam	38.3	40.0	36.7	—	dorm	ther	mix	
91	Victor Villarreal	37.5	25.0	50.0	—	dorm	init	mix	
92	Ari Rappoport	37.5	33.3	41.7	35.0	algn	func	mix	
93	Suresh Kumar	37.5	21.6	53.4	48.3	dorm	ther	sil	
94	Ameer Shahul	35.8	25.0	46.6	—	dorm	init	CON	
95	Lane Simonian	35.0	28.3	41.7	—		conv	mix	
96	Arsim Bytyqi	35.0	25.0	45.0	—	dorm	init	mix	
97	Gerhard Multhaup	35.0	23.3	46.6	63.3	part	refr	mix	
98	Nils de Mol van Ott.	35.0	23.3	46.7	43.3	algn	ther	sil	
99	Lisa Vandegrift Dav.	35.0	20.0	50.0	—	dorm	init	sil	
100	Elena Paley	34.1	26.6	41.7	43.3	mism	init	mix	

#	entrant	score	ev	th	prog	div	claim	rel	2022
101	Shreya Magadum	34.1	25.0	43.3	—	dorm	init	sup	
102	Leonard Nelson	34.1	20.0	48.4	—	dorm	init	mix	
103	Amos Gelbard	32.5	26.6	38.4	—	algn	ther	sil	
104	Richard Lathe	32.5	31.6	33.3	46.7	part	init	CON	
105	Dale Bredesen	31.7	23.3	40.0	35.0	evol	conv	mix	
106	Carlo Abbate	30.8	23.3	38.3	25.0	evol	init	CON	G
107	Susan Lee	30.8	18.3	43.3	—	dorm	init	CON	
108	Thomas Manaugh	28.4	20.0	36.7	—	dorm	init	sil	
109	Christopher Merchant	28.3	23.3	33.3	—	algn	init	mix	
110	Gordon Kruberg	27.5	11.7	43.4	—	dorm	init	sup	
111	Sathibalan Ponniah	27.5	11.7	43.3	—	dorm	init	mix	
112	Angela Dorigatti	27.5	41.6	13.3	50.0	algn	refr	mix	
113	Vinay Kumar Maldodd.	27.5	23.4	31.7	—	mism	ther	sil	
114	Howard Friel	27.5	33.3	21.7	48.3	dorm	ther	mix	
115	Ramin Farsheed	25.0	6.7	43.3	—	dorm	init	CON	
116	Ivan Mendelev	25.0	6.7	43.3	—	mism	init	mix	
117	Prem Saini	25.0	6.7	43.3	—	gap	init	sil	
118	Sanjay Balasubraman.	23.4	6.7	40.0	—	dorm	init	sup	
119	Jukka Welling	22.5	23.3	21.7	—		refr	mix	
120	Shanmugam Sankaraku.	21.7	6.7	36.7	—	dorm	init	sil	
121	Raymond Lord	21.7	6.7	36.7	—	algn	init	mix	
122	Kanval Saini	21.7	6.7	36.7	—	dorm	init	CON	
123	Ruxandra Ana Maria .	21.6	28.3	15.0	—	mism	init	mix	
124	Chelsea Castaneda	20.9	15.0	26.7	—	dorm	refr	sil	

#	entrant	score	ev	th	prog	div	claim	rel	2022
125	Claudiu Bandea	19.2	11.7	26.7	—	dorm	refr	CON	
126	Shraddha Pawar	19.2	6.7	31.7	—	algn	ther	sil	
127	Satej Pradhan	19.1	18.3	20.0	—	gap	refr	sup	
128	T Kumar	18.4	15.0	21.7	—	dorm	ther	sil	
129	Dr Geethanjali Bhas	18.3	28.3	8.3	—	dorm	refr	sup	
130	Masaki Hatakeyama	15.0	6.7	23.3	18.3	mism	init	CON	
131	Anil Kumar Kruthive.	14.2	6.7	21.7	—	gap	init	mix	
132	Dongdong Kang	10.8	6.7	15.0	—	algn	func	mix	
133	John Gruber	10.8	6.7	15.0	—	gap	ther	sil	
134	Nicole Bishop	10.0	6.7	13.3	—	dorm	refr	sil	
135	Abhishek Sawant	10.0	6.7	13.3	—	gap	refr	sil	
136	E Sripriya	9.2	15.0	3.3	—	dorm	refr	sil	
137	Jennifer Thornton	8.3	6.7	10.0	—	dorm	init	sil	
138	Christa Dang	7.5	6.7	8.3	91.7	dorm	init	mix	
139	Jeevan Pradhan	7.5	6.7	8.3	—	dorm	refr	sil	
140	Luis Ignacio Brusco	7.5	6.7	8.3	—	dorm	refr	sil	
141	Dana Varadiova	5.0	6.7	3.3	—	dorm	init	mix	
142	Avnish Tiwari	5.0	6.7	3.3	—	dorm	refr	sil	
143	Kaloyan Simeonov	5.0	6.7	3.3	—	algn	init	CON	
144	Jibin Joy	5.0	6.7	3.3	—		init	sil	
145	T Cheluvvaraju	5.0	6.7	3.3	—		init	CON	
146	Vaidhyanathan Vijay.	5.0	6.7	3.3	—		init	sil	
147	Mantu Satyam	5.0	6.7	3.3	—		ther	sil	
148	Krishna Moorthi	5.0	6.7	3.3	—	dorm	init	sil	
149	Narayan Agarwal	5.0	6.7	3.3	—	dorm	ther	sil	

The commissioning programme's own entry

Graded blind in the same stream under the charter's fourth rule — *a rubric its author cannot lose under is not a rubric*. **Listed separately because it is not comparable:** written in July 2026 with six years of literature the 2020 entrants could not cite, and two of its three distinctive claims depend on post-2020 papers. No axis captures that advantage. Both assessors returned identical scores on all seven axes.

entry	score	ev	th	reach	would rank
this programme	58.3	50.0	66.7	20.0	23 of 150

Excluded

One submission is excluded rather than scored. The only file in its folder is the competition rules document; no submission was archived. A missing submission is not a bad submission, and floor-scoring it would misrepresent both the entrant and the denominator.

Appendix B the scope-gated ordering

The same 149 submissions under the second instrument described in §IX: **comprehensiveness weighted heaviest, gated on forbidding something that was actually looked for.**

``` B = G x (0.60 x coverage + 0.40 x mean(fit, maturity, independence, resolution, reachability))

G = 0.00 if refutability = 0 accommodates any outcome 0.45 if refutability <= 4 falsifier in principle, no instrument reaches it 1.00 if refutability >= 7 falsifier stated, instrument exists

then G = G x (0.70 + 0.30 x looked) looked in {0, 0.5, 1} ```

$\Delta$  is the movement from Appendix A: positive means the entry rises under scope-gating. **look** records whether the 2020 claim was actually tested between 2020 and 2026 — yes, part, no, ? unclassifiable, — no research programme to test it.

**Read the caveats in §IX before using this table.** The 0.60 weight is a choice, not a measurement; the gate never fully zeroes a testable claim; and 28 of 149 entries could not be classified on look and carry a neutral default.

| # | entrant    | gated       | comp | $\Delta$ | cov | ref | look | 2022 |
|---|------------|-------------|------|----------|-----|-----|------|------|
| 1 | Todd Golde | <b>96.0</b> | 86.7 | +0       | 10  | 7   | yes  |      |

| #  | entrant              | gated       | comp | $\Delta$ | cov | ref | look | 2022 |
|----|----------------------|-------------|------|----------|-----|-----|------|------|
| 2  | Anne Eckert          | <b>79.2</b> | 61.7 | +15      | 10  | 7   | yes  |      |
| 3  | David Rubinsztein    | <b>78.9</b> | 80.0 | -1       | 10  | 7   | part |      |
| 4  | Jamie Walker         | <b>72.4</b> | 70.8 | +1       | 10  | 7   | ?    |      |
| 5  | Russell Swerdlow     | <b>69.6</b> | 60.0 | +13      | 8   | 7   | yes  | B    |
| 6  | Erwin Roggen         | <b>69.0</b> | 69.2 | +0       | 10  | 7   | ?    |      |
| 7  | Gerd Kempermann      | <b>66.3</b> | 55.8 | +24      | 10  | 7   | ?    |      |
| 8  | Estela Area-Gomez    | <b>65.2</b> | 60.0 | +11      | 8   | 8   | yes  | G    |
| 9  | Colin Masters        | <b>62.6</b> | 71.7 | -5       | 8   | 7   | part |      |
| 10 | Ruth Itzhaki         | <b>61.9</b> | 69.2 | -3       | 8   | 8   | ?    |      |
| 11 | Paul Ewald           | <b>60.9</b> | 64.2 | +1       | 8   | 7   | ?    |      |
| 12 | Ashley Bush          | <b>58.8</b> | 58.3 | +11      | 6   | 8   | yes  |      |
| 13 | Daniel Michaelson    | <b>58.0</b> | 69.2 | -5       | 10  | 7   | no   |      |
| 14 | Pamela Maher         | <b>57.2</b> | 62.5 | +1       | 6   | 7   | yes  |      |
| 15 | Hanno Roder          | <b>55.6</b> | 55.8 | +17      | 6   | 7   | yes  |      |
| 16 | Varghese John        | <b>55.1</b> | 56.6 | +13      | 8   | 7   | ?    | B    |
| 17 | Christopher Ramsden  | <b>54.7</b> | 55.9 | +13      | 8   | 7   | ?    |      |
| 18 | Lary Walker          | <b>54.4</b> | 66.7 | -9       | 6   | 7   | ?    |      |
| 19 | Jian-Sheng Kang      | <b>53.4</b> | 64.2 | -6       | 6   | 7   | part |      |
| 20 | Paul Cox             | <b>52.8</b> | 53.3 | +18      | 6   | 7   | yes  |      |
| 21 | Brian Head           | <b>52.8</b> | 53.3 | +18      | 6   | 7   | yes  |      |
| 22 | Pavel Kalvach        | <b>50.4</b> | 75.0 | -19      | 8   | 7   | —    |      |
| 23 | Katarzyna Grochowska | <b>49.8</b> | 66.7 | -13      | 8   | 7   | no   |      |
| 24 | Bess Frost           | <b>49.0</b> | 63.3 | -10      | 6   | 7   | ?    | G    |
| 25 | Jin Xu               | <b>49.0</b> | 65.0 | -14      | 6   | 7   | ?    |      |
| 26 | Michal Schwartz      | <b>45.9</b> | 55.8 | +7       | 6   | 7   | part |      |
| 27 | Karl Herrup          | <b>44.9</b> | 53.3 | +13      | 6   | 7   | ?    |      |
| 28 | Brenda Aske          | <b>44.8</b> | 55.0 | +7       | 8   | 7   | —    |      |
| 29 | Günter Höglinger     | <b>42.8</b> | 48.3 | +22      | 6   | 7   | ?    |      |

| #  | entrant              | gated       | comp | $\Delta$ | cov | ref | look | 2022 |
|----|----------------------|-------------|------|----------|-----|-----|------|------|
| 30 | Charles Greenblatt   | <b>42.8</b> | 57.5 | -5       | 3   | 8   | yes  |      |
| 31 | Brian Balin          | <b>42.8</b> | 45.8 | +29      | 6   | 6   | ?    |      |
| 32 | Amy Nelson           | <b>40.6</b> | 59.1 | -11      | 4   | 7   | ?    |      |
| 33 | Chi U Seak           | <b>38.9</b> | 59.1 | -11      | 6   | 7   | —    |      |
| 34 | Eduardo Chini        | <b>38.8</b> | 55.8 | +0       | 3   | 8   | yes  |      |
| 35 | Nils de Mol van Ott. | <b>38.8</b> | 35.0 | +60      | 6   | 7   | part |      |
| 36 | Zhen Huang           | <b>38.6</b> | 54.1 | +0       | 4   | 7   | part |      |
| 37 | Stephen Dominy       | <b>37.2</b> | 53.3 | +4       | 3   | 7   | yes  |      |
| 38 | Christoph Methfessel | <b>36.4</b> | 48.4 | +12      | 6   | 7   | —    |      |
| 39 | Cristina Quigley     | <b>35.7</b> | 56.7 | -12      | 3   | 7   | part |      |
| 40 | Susan Greenfield     | <b>34.8</b> | 48.3 | +12      | 3   | 7   | yes  |      |
| 41 | Andrew Pieper        | <b>34.7</b> | 57.5 | -15      | 3   | 7   | ?    |      |
| 42 | Aleksandra Deczkows. | <b>34.7</b> | 54.1 | -5       | 3   | 7   | part |      |
| 43 | Stanley Prusiner     | <b>34.5</b> | 41.6 | +32      | 4   | 6   | ?    |      |
| 44 | Jesus Avila          | <b>34.5</b> | 44.1 | +19      | 4   | 7   | part |      |
| 45 | Hermona Soreq        | <b>33.5</b> | 41.7 | +25      | 4   | 7   | ?    |      |
| 46 | Jerold Chun          | <b>33.2</b> | 50.0 | +1       | 3   | 10  | yes  |      |
| 47 | Gerhard Multhaup     | <b>33.1</b> | 35.0 | +49      | 4   | 6   | ?    |      |
| 48 | Patrizia Mecocci     | <b>33.0</b> | 41.7 | +23      | 6   | 7   | no   |      |
| 49 | Philip De Jager      | <b>32.0</b> | 62.5 | -33      | 10  | 4   | ?    |      |
| 50 | Prashant Joshi       | <b>31.9</b> | 41.6 | +26      | 6   | 7   | —    |      |
| 51 | Roger Rosenberg      | <b>31.8</b> | 41.6 | +26      | 4   | 8   | part |      |
| 52 | Ralph Nixon          | <b>31.6</b> | 53.3 | -10      | 3   | 7   | ?    | G    |
| 53 | Allan Farber         | <b>31.5</b> | 46.6 | +4       | 4   | 7   | —    |      |
| 54 | David Gate           | <b>30.5</b> | 60.0 | -34      | 3   | 7   | no   |      |
| 55 | Maxim Shokhirev      | <b>29.9</b> | 49.1 | -6       | 3   | 7   | part |      |
| 56 | Bernd Moosmann       | <b>29.6</b> | 48.3 | -3       | 3   | 7   | ?    | S    |

| #  | entrant              | gated       | comp | $\Delta$ | cov | ref | look | 2022 |
|----|----------------------|-------------|------|----------|-----|-----|------|------|
| 57 | Rajagopal Sekhar     | <b>29.2</b> | 44.1 | +7       | 3   | 7   | part |      |
| 58 | Gorazd Bernard Stok. | <b>28.6</b> | 46.7 | -2       | 3   | 6   | ?    |      |
| 59 | Dennis N Crouse      | <b>28.3</b> | 56.7 | -31      | 3   | 7   | —    |      |
| 60 | Li-Huei Tsai         | <b>28.2</b> | 47.5 | -6       | 3   | 8   | part |      |
| 61 | Rafael Rodríguez-P.  | <b>27.9</b> | 44.1 | +4       | 3   | 7   | ?    |      |
| 62 | Fernando Frassetto   | <b>27.7</b> | 58.3 | -38      | 3   | 7   | —    |      |
| 63 | Mishauri Nolan       | <b>27.4</b> | 50.9 | -18      | 3   | 7   | —    |      |
| 64 | Maritza Quintero     | <b>27.2</b> | 53.3 | -21      | 3   | 7   | —    |      |
| 65 | Suresh Kumar         | <b>27.0</b> | 37.5 | +26      | 4   | 6   | no   |      |
| 66 | Gunnar Gouras        | <b>26.9</b> | 39.2 | +18      | 3   | 6   | ?    | B    |
| 67 | Annalise Barron      | <b>26.2</b> | 42.5 | -1       | 3   | 8   | part | B    |
| 68 | Leandro Bergantín    | <b>26.2</b> | 40.0 | +13      | 3   | 7   | part |      |
| 69 | Donald Weaver        | <b>25.8</b> | 52.5 | -25      | 3   | 7   | no   | S    |
| 70 | Stacey Gorniak       | <b>25.8</b> | 39.1 | +16      | 3   | 7   | ?    |      |
| 71 | Swananda Marathe     | <b>24.9</b> | 50.0 | -23      | 3   | 7   | no   |      |
| 72 | Philip Serwer        | <b>24.8</b> | 41.7 | +0       | 3   | 10  | ?    |      |
| 73 | Amanda Alix          | <b>24.6</b> | 45.9 | -15      | 3   | 7   | —    |      |
| 74 | Simon Lee            | <b>23.5</b> | 45.9 | -15      | 3   | 7   | —    |      |
| 75 | Alan Snow            | <b>23.5</b> | 45.8 | -14      | 3   | 7   | —    |      |
| 76 | Lauren MacIntyre     | <b>23.2</b> | 45.0 | -14      | 3   | 7   | —    |      |
| 77 | Dan Pulsipher        | <b>22.4</b> | 42.5 | -10      | 3   | 7   | —    |      |
| 78 | Sarthak Dua          | <b>22.4</b> | 42.5 | -10      | 3   | 7   | —    |      |
| 79 | Dharmendra Lingaiah  | <b>22.1</b> | 39.2 | +6       | 3   | 6   | —    |      |
| 80 | Simone Hasselmo      | <b>21.8</b> | 40.9 | -1       | 3   | 7   | —    |      |
| 81 | Ishwari Chandran Iy. | <b>21.8</b> | 40.9 | -1       | 3   | 7   | —    |      |
| 82 | Walter Lukiw         | <b>21.6</b> | 40.0 | +0       | 3   | 7   | no   |      |
| 83 | Martin Zhang         | <b>21.3</b> | 50.9 | -37      | 6   | 2   | part |      |

| #   | entrant              | gated | comp | $\Delta$ | cov | ref | look | 2022 |
|-----|----------------------|-------|------|----------|-----|-----|------|------|
| 84  | Delphine Boche       | 21.0  | 38.4 | +3       | 3   | 7   | no   |      |
| 85  | Parvathi Shanmugam   | 21.0  | 38.3 | +5       | 3   | 7   | —    |      |
| 86  | Soghra Bagheri       | 21.0  | 41.7 | -13      | 3   | 7   | no   |      |
| 87  | Arsim Bytyqi         | 20.7  | 35.0 | +10      | 3   | 6   | —    |      |
| 88  | Victor Villarreal    | 20.7  | 37.5 | +4       | 3   | 7   | —    |      |
| 89  | Leonard Nelson       | 20.4  | 34.1 | +11      | 3   | 6   | —    |      |
| 90  | Ameer Shahul         | 20.2  | 35.8 | +4       | 3   | 7   | —    |      |
| 91  | Lisa Vandegrift Dav. | 19.9  | 35.0 | +7       | 3   | 7   | —    |      |
| 92  | Shreya Magadum       | 19.6  | 34.1 | +9       | 3   | 7   | —    |      |
| 93  | Vinay Kumar Maldodd. | 19.3  | 27.5 | +17      | 3   | 6   | —    |      |
| 94  | Susan Lee            | 18.5  | 30.8 | +12      | 3   | 7   | —    |      |
| 95  | Carlo Abbate         | 18.2  | 30.8 | +12      | 3   | 6   | no   | G    |
| 96  | Grace Lightfoot      | 17.8  | 42.5 | -27      | 2   | 6   | —    |      |
| 97  | Thomas Manaugh       | 17.6  | 28.4 | +11      | 3   | 7   | —    |      |
| 98  | Sathibalan Ponniah   | 17.4  | 27.5 | +13      | 3   | 7   | —    |      |
| 99  | Ramin Farsheed       | 16.5  | 25.0 | +16      | 3   | 7   | —    |      |
| 100 | Ivan Mendelev        | 16.5  | 25.0 | +16      | 3   | 7   | —    |      |
| 101 | Prem Saini           | 16.5  | 25.0 | +16      | 3   | 7   | —    |      |
| 102 | Shanmugam Sankaraku. | 15.4  | 21.7 | +18      | 3   | 7   | —    |      |
| 103 | Raymond Lord         | 15.4  | 21.7 | +18      | 3   | 7   | —    |      |
| 104 | Shraddha Pawar       | 15.4  | 19.2 | +21      | 3   | 6   | —    |      |
| 105 | Kanval Saini         | 15.4  | 21.7 | +17      | 3   | 7   | —    |      |
| 106 | Bindu Paul           | 14.9  | 40.0 | -23      | 3   | 4   | yes  |      |
| 107 | Sanjay Balasubraman. | 14.8  | 23.4 | +11      | 3   | 7   | —    |      |
| 108 | Boris Decourt        | 13.6  | 41.7 | -34      | 3   | 4   | ?    |      |
| 109 | Amos Gelbard         | 13.6  | 32.5 | -6       | 2   | 7   | —    |      |

| #   | entrant              | gated       | comp | $\Delta$ | cov | ref | look | 2022 |
|-----|----------------------|-------------|------|----------|-----|-----|------|------|
| 110 | Carina Clawson       | <b>13.2</b> | 41.6 | -32      | 4   | 4   | —    |      |
| 111 | Dale Bredeesen       | <b>12.4</b> | 31.7 | -6       | 3   | 4   | part |      |
| 112 | Richard Lathe        | <b>11.9</b> | 32.5 | -8       | 3   | 4   | part |      |
| 113 | Zaven Khachaturian   | <b>11.6</b> | 47.5 | -58      | 3   | 4   | —    |      |
| 114 | Antonio Pinto-Duarte | <b>10.2</b> | 38.4 | -26      | 3   | 4   | —    |      |
| 115 | Richelle Cutler      | <b>10.0</b> | 38.4 | -26      | 3   | 4   | —    |      |
| 116 | Elena Paley          | <b>9.5</b>  | 34.1 | -14      | 0   | 6   | no   |      |
| 117 | Howard Friel         | <b>8.8</b>  | 27.5 | -5       | 0   | 6   | part |      |
| 118 | Christopher Merchant | <b>8.7</b>  | 28.3 | -9       | 3   | 4   | —    |      |
| 119 | Claudiu Bandea       | <b>8.3</b>  | 19.2 | +7       | 3   | 4   | —    |      |
| 120 | Gordon Kruberg       | <b>8.1</b>  | 27.5 | -7       | 3   | 4   | —    |      |
| 121 | Satej Pradhan        | <b>7.8</b>  | 19.1 | +6       | 3   | 2   | —    |      |
| 122 | Chelsea Castaneda    | <b>7.6</b>  | 20.9 | +2       | 3   | 4   | —    |      |
| 123 | Lane Simonian        | <b>7.2</b>  | 35.0 | -24      | 2   | 4   | —    |      |
| 124 | Ari Rappoport        | <b>7.1</b>  | 37.5 | -31      | 2   | 4   | no   |      |
| 125 | Ruxandra Ana Maria . | <b>5.7</b>  | 21.6 | -2       | 2   | 2   | —    |      |
| 126 | Jukka Welling        | <b>5.4</b>  | 22.5 | -7       | 2   | 4   | —    |      |
| 127 | T Kumar              | <b>4.2</b>  | 18.4 | +1       | 0   | 6   | —    |      |
| 128 | Anil Kumar Kruthive. | <b>4.1</b>  | 14.2 | +3       | 2   | 4   | —    |      |
| 129 | Masaki Hatakeyama    | <b>2.5</b>  | 15.0 | +1       | 0   | 4   | yes  |      |
| 130 | Christa Dang         | <b>0.0</b>  | 7.5  | +8       | 2   | 0   | yes  |      |
| 131 | Dana Varadiova       | <b>0.0</b>  | 5.0  | +10      | 0   | 0   | —    |      |
| 132 | Jeevan Pradhan       | <b>0.0</b>  | 7.5  | +7       | 2   | 0   | —    |      |
| 133 | Avnish Tiwari        | <b>0.0</b>  | 5.0  | +9       | 0   | 0   | —    |      |
| 134 | Luis Ignacio Brusco  | <b>0.0</b>  | 7.5  | +6       | 2   | 0   | —    |      |
| 135 | Angela Dorigatti     | <b>0.0</b>  | 27.5 | -21      | 3   | 0   | ?    |      |

| #   | entrant              | gated | comp | $\Delta$ | cov | ref | look | 2022 |
|-----|----------------------|-------|------|----------|-----|-----|------|------|
| 136 | Jennifer Thornton    | 0.0   | 8.3  | +1       | 0   | 0   | —    |      |
| 137 | Kaloyan Simeonov     | 0.0   | 5.0  | +6       | 0   | 0   | —    |      |
| 138 | Nicole Bishop        | 0.0   | 10.0 | -4       | 3   | 0   | —    |      |
| 139 | Dongdong Kang        | 0.0   | 10.8 | -7       | 2   | 0   | —    |      |
| 140 | Jibin Joy            | 0.0   | 5.0  | +4       | 0   | 0   | —    |      |
| 141 | T Cheluvvaraju       | 0.0   | 5.0  | +4       | 0   | 0   | —    |      |
| 142 | Vaidhyanathan Vijay. | 0.0   | 5.0  | +4       | 0   | 0   | —    |      |
| 143 | John Gruber          | 0.0   | 10.8 | -10      | 2   | 0   | —    |      |
| 144 | Abhishek Sawant      | 0.0   | 10.0 | -9       | 3   | 0   | —    |      |
| 145 | Mantu Satyam         | 0.0   | 5.0  | +2       | 0   | 0   | —    |      |
| 146 | Krishna Moorthi      | 0.0   | 5.0  | +2       | 0   | 0   | —    |      |
| 147 | Dr Geethanjali Bhas  | 0.0   | 18.3 | -18      | 2   | 0   | —    |      |
| 148 | Narayan Agarwal      | 0.0   | 5.0  | +1       | 0   | 0   | —    |      |
| 149 | E Sripriya           | 0.0   | 9.2  | -13      | 0   | 0   | —    |      |

### What survives both instruments

Six entries hold a top-ten place under both scorings. Their standing does not depend on which instrument a reader prefers, which is a stronger statement than any single rank in either appendix.

| entrant           | Appendix A | Appendix B |
|-------------------|------------|------------|
| Todd Golde        | 1          | 1          |
| David Rubinsztein | 2          | 3          |
| Colin Masters     | 4          | 9          |
| Jamie Walker      | 5          | 4          |
| Erwin Roggen      | 6          | 6          |
| Ruth Itzhaki      | 7          | 10         |

## Appendix C the prize-question ordering

The same 149 submissions under the third instrument described in §IX: **was the hypothesis new in 2020, well made by the standards of 2020, and does it hand the field something specific to build on** — scope-gated against both over-breadth and over-narrowness, with a modest bonus for having since been borne out.

$$\begin{aligned} \text{core} &= 0.35 \times \text{novelty} + 0.30 \times \text{rigor} + 0.35 \times \text{usable scope\_gate} = 0.60 + 0.40 \times (\text{scope} / 10) \\ C &= \text{scope\_gate} \times \text{core} \times 10 + 5 \times \text{vindication} \end{aligned}$$

$\Delta$  is the movement from Appendix A: positive means the entry rises when the criterion becomes the prize's question rather than evidential standing. **vin** runs  $-3$  (its intervention harmed patients) to  $+3$  (independently confirmed at human scale); **0 means untested — nobody looked**, which is 29 per cent of the field.

**Read the caveats in §IX before using this table.** The weights are a choice, not a measurement; rigor asks graders to un-know six years of literature and is the softest field; novelty has no truth gate, so an impossible mechanism can score well on that column alone; and unlike Appendix A this ordering is single-graded.

| #  | entrant             | prize       | comp | $\Delta$ | nov | rig | vin | use | scope | 2022          |
|----|---------------------|-------------|------|----------|-----|-----|-----|-----|-------|---------------|
| 1  | Christopher Ramsden | <b>90.2</b> | 55.9 | +29      | 8   | 8   | +2  | 9   | 9     |               |
| 2  | Zhen Huang          | <b>83.6</b> | 54.1 | +34      | 8   | 8   | +2  | 8   | 8     |               |
| 3  | Bess Frost          | <b>83.1</b> | 63.3 | +11      | 6   | 9   | +2  | 9   | 8     | <b>gold</b>   |
| 3  | Hanno Roder         | <b>83.1</b> | 55.8 | +28      | 7   | 9   | +2  | 8   | 8     |               |
| 5  | Karl Herrup         | <b>80.6</b> | 53.3 | +33      | 9   | 7   | +2  | 9   | 6     |               |
| 6  | Ashley Bush         | <b>79.3</b> | 58.3 | +17      | 8   | 10  | -2  | 10  | 9     |               |
| 7  | Anne Eckert         | <b>78.4</b> | 61.7 | +10      | 4   | 8   | +3  | 8   | 9     |               |
| 8  | Jerold Chun         | <b>77.6</b> | 50.0 | +39      | 8   | 7   | +2  | 9   | 6     |               |
| 9  | Paul Ewald          | <b>77.3</b> | 64.2 | +3       | 7   | 8   | +2  | 8   | 7     |               |
| 10 | Donald Weaver       | <b>77.2</b> | 52.5 | +34      | 7   | 8   | +2  | 9   | 6     | <i>silver</i> |
| 11 | Philip Serwer       | <b>75.3</b> | 41.7 | +59      | 8   | 5   | +2  | 8   | 8     |               |
| 12 | Estela Area-Gomez   | <b>74.9</b> | 60.0 | +6       | 5   | 9   | +1  | 9   | 8     | <b>gold</b>   |
| 12 | Roger Rosenberg     | <b>74.9</b> | 41.6 | +63      | 7   | 6   | +2  | 8   | 8     |               |



| #  | entrant                  | prize       | comp | $\Delta$ | nov | rig | vin | use | scope | 2022          |
|----|--------------------------|-------------|------|----------|-----|-----|-----|-----|-------|---------------|
| 14 | Richelle Cutler          | <b>74.4</b> | 38.4 | +73      | 7   | 5   | +3  | 8   | 7     |               |
| 15 | Ralph Nixon              | <b>74.3</b> | 53.3 | +23      | 6   | 8   | +2  | 9   | 6     | <b>gold</b>   |
| 16 | Susan Greenfield         | <b>72.8</b> | 48.3 | +35      | 6   | 7   | +1  | 10  | 7     |               |
| 17 | Hermona Soreq            | <b>72.6</b> | 41.7 | +53      | 8   | 5   | +2  | 9   | 6     |               |
| 18 | Pamela Maher             | <b>71.8</b> | 62.5 | -3       | 5   | 9   | +1  | 10  | 6     |               |
| 19 | Andrew Pieper            | <b>71.2</b> | 57.5 | +6       | 5   | 7   | +2  | 8   | 8     |               |
| 20 | Todd Golde               | <b>70.7</b> | 86.7 | -19      | 2   | 10  | +3  | 6   | 9     |               |
| 21 | Annalise Barron          | <b>70.1</b> | 42.5 | +45      | 7   | 6   | +1  | 9   | 7     | bronze        |
| 22 | Li-Huei Tsai             | <b>69.3</b> | 47.5 | +32      | 5   | 8   | +1  | 10  | 6     |               |
| 23 | Richard Lathe            | <b>69.2</b> | 32.5 | +80      | 7   | 6   | +2  | 8   | 6     |               |
| 23 | Charles Greenblatt       | <b>69.2</b> | 57.5 | +2       | 6   | 6   | +2  | 9   | 6     |               |
| 25 | Ruth Itzhaki             | <b>68.5</b> | 69.2 | -19      | 3   | 9   | +1  | 9   | 8     |               |
| 26 | Michal Schwartz          | <b>68.4</b> | 55.8 | +5       | 4   | 8   | +2  | 9   | 6     |               |
| 26 | Daniel Michaelson        | <b>68.4</b> | 69.2 | -20      | 3   | 8   | +1  | 9   | 9     |               |
| 28 | Bernd Moosmann           | <b>68.1</b> | 48.3 | +23      | 8   | 9   | -1  | 7   | 8     | <i>silver</i> |
| 29 | Erwin Roggen             | <b>67.3</b> | 69.2 | -23      | 7   | 8   | +0  | 8   | 7     |               |
| 30 | Delphine Boche           | <b>66.6</b> | 38.4 | +57      | 8   | 6   | +1  | 6   | 8     |               |
| 31 | Brian Head               | <b>66.2</b> | 53.3 | +7       | 6   | 8   | +1  | 9   | 5     |               |
| 31 | Jamie Walker             | <b>66.2</b> | 70.8 | -26      | 6   | 7   | +1  | 7   | 8     |               |
| 31 | Lary Walker              | <b>66.2</b> | 66.7 | -22      | 2   | 9   | +2  | 7   | 9     |               |
| 31 | Gerd Kempermann          | <b>66.2</b> | 55.8 | +0       | 8   | 8   | +1  | 5   | 7     |               |
| 35 | Maxim Shokhirev          | <b>65.6</b> | 49.1 | +14      | 6   | 8   | +2  | 7   | 5     |               |
| 36 | Brian Balin              | <b>65.2</b> | 45.8 | +24      | 4   | 6   | +2  | 8   | 8     |               |
| 37 | Jesus Avila              | <b>64.0</b> | 44.1 | +26      | 6   | 6   | +1  | 8   | 7     |               |
| 38 | Rafael Rodriguez-Puertas | <b>63.9</b> | 44.1 | +25      | 7   | 5   | +1  | 7   | 8     |               |
| 39 | Eduardo Chini            | <b>63.8</b> | 55.8 | -8       | 6   | 7   | +1  | 8   | 6     |               |
| 39 | Maritza Quintero         | <b>63.8</b> | 53.3 | -1       | 5   | 5   | +2  | 9   | 6     |               |
| 41 | Paul Cox                 | <b>63.5</b> | 53.3 | -3       | 4   | 7   | +1  | 9   | 7     |               |

| #  | entrant              | prize       | comp | $\Delta$ | nov | rig | vin | use | scope | 2022        |
|----|----------------------|-------------|------|----------|-----|-----|-----|-----|-------|-------------|
| 42 | Gunnar Gouras        | <b>63.2</b> | 39.2 | +42      | 6   | 5   | +2  | 7   | 7     | bronze      |
| 43 | David Rubinsztein    | <b>63.0</b> | 80.0 | -41      | 7   | 9   | +1  | 6   | 5     |             |
| 44 | Brenda Aske          | <b>62.8</b> | 55.0 | -9       | 5   | 6   | +2  | 7   | 7     |             |
| 45 | Colin Masters        | <b>61.6</b> | 71.7 | -41      | 2   | 8   | +3  | 5   | 9     |             |
| 45 | Carlo Abbate         | <b>61.6</b> | 30.8 | +61      | 8   | 7   | +0  | 6   | 7     | <b>gold</b> |
| 47 | Katarzyna Grochowska | <b>60.4</b> | 66.7 | -38      | 5   | 7   | +2  | 7   | 5     |             |
| 48 | Russell Swerdlow     | <b>60.0</b> | 60.0 | -30      | 3   | 8   | +1  | 8   | 7     | bronze      |
| 49 | Arsim Bytyqi         | <b>59.4</b> | 35.0 | +46      | 8   | 4   | +1  | 8   | 5     |             |
| 50 | Ari Rappoport        | <b>59.0</b> | 37.5 | +41      | 9   | 6   | +0  | 5   | 7     |             |
| 51 | David Gate           | <b>58.0</b> | 60.0 | -33      | 5   | 6   | +2  | 7   | 5     |             |
| 51 | Cristina Quigley     | <b>58.0</b> | 56.7 | -24      | 4   | 6   | +2  | 8   | 5     |             |
| 53 | Stanley Prusiner     | <b>57.8</b> | 41.6 | +22      | 4   | 6   | +1  | 8   | 7     |             |
| 54 | Dale Bredezen        | <b>57.5</b> | 31.7 | +51      | 3   | 6   | +2  | 8   | 6     |             |
| 55 | Stephen Dominy       | <b>57.2</b> | 53.3 | -17      | 6   | 8   | -2  | 10  | 6     |             |
| 56 | Christoph Methfessel | <b>56.3</b> | 48.4 | -6       | 7   | 6   | +0  | 7   | 6     |             |
| 57 | Leonard Nelson       | <b>56.2</b> | 34.1 | +43      | 7   | 5   | +1  | 7   | 5     |             |
| 58 | Walter Lukiw         | <b>55.8</b> | 40.0 | +23      | 4   | 6   | +1  | 9   | 5     |             |
| 59 | Varghese John        | <b>53.3</b> | 56.6 | -30      | 4   | 6   | +1  | 9   | 4     | bronze      |
| 60 | Swananda Marathe     | <b>52.9</b> | 50.0 | -13      | 4   | 7   | +1  | 8   | 4     |             |
| 61 | Simone Hasselmo      | <b>51.6</b> | 40.9 | +18      | 3   | 6   | +1  | 7   | 7     |             |
| 62 | Rajagopal Sekhar     | <b>51.4</b> | 44.1 | +1       | 5   | 4   | +1  | 9   | 4     |             |
| 63 | Alan Snow            | <b>50.7</b> | 45.8 | -3       | 3   | 5   | +2  | 8   | 4     |             |
| 64 | Soghra Bagheri       | <b>50.6</b> | 41.7 | +6       | 6   | 5   | +1  | 6   | 5     |             |
| 65 | Lauren MacIntyre     | <b>49.0</b> | 45.0 | -3       | 9   | 4   | +0  | 6   | 4     |             |
| 66 | Elena Paley          | <b>48.6</b> | 34.1 | +34      | 6   | 5   | +0  | 8   | 4     |             |
| 66 | Patrizia Mecocci     | <b>48.6</b> | 41.7 | +4       | 6   | 5   | +0  | 8   | 4     |             |
| 68 | Allan Farber         | <b>47.0</b> | 46.6 | -11      | 5   | 5   | +1  | 5   | 6     |             |
| 69 | Gerhard Multhaup     | <b>46.0</b> | 35.0 | +26      | 4   | 5   | +1  | 8   | 3     |             |

| #  | entrant               | prize       | comp | $\Delta$ | nov | rig | vin | use | scope | 2022 |
|----|-----------------------|-------------|------|----------|-----|-----|-----|-----|-------|------|
| 70 | Jian-Sheng Kang       | <b>45.8</b> | 64.2 | -58      | 5   | 5   | -1  | 8   | 6     |      |
| 71 | Gunter Hoglinger      | <b>45.7</b> | 48.3 | -20      | 3   | 6   | +1  | 8   | 3     |      |
| 72 | Stacey Gorniak        | <b>45.4</b> | 39.1 | +14      | 5   | 4   | +1  | 6   | 5     |      |
| 73 | Gordon Kruberg        | <b>44.9</b> | 27.5 | +37      | 7   | 3   | +1  | 4   | 6     |      |
| 73 | Aleksandra Deczkowska | <b>44.9</b> | 54.1 | -37      | 4   | 7   | +1  | 5   | 4     |      |
| 75 | Gorazd Bernard Stokin | <b>42.8</b> | 46.7 | -19      | 4   | 5   | +1  | 4   | 7     |      |
| 76 | Raymond Lord          | <b>41.5</b> | 21.7 | +44      | 6   | 2   | +1  | 6   | 4     |      |
| 77 | Antonio Pinto-Duarte  | <b>41.1</b> | 38.4 | +10      | 5   | 3   | +1  | 6   | 4     |      |
| 77 | Dan Pulsipher         | <b>41.1</b> | 42.5 | -11      | 3   | 3   | +1  | 8   | 4     |      |
| 77 | Susan Lee             | <b>41.1</b> | 30.8 | +29      | 7   | 3   | +1  | 4   | 4     |      |
| 80 | Bindu Paul            | <b>40.8</b> | 40.0 | +1       | 3   | 3   | +2  | 6   | 4     |      |
| 81 | Jin Xu                | <b>40.3</b> | 65.0 | -70      | 3   | 7   | +1  | 5   | 3     |      |
| 82 | Sathibalan Ponniah    | <b>38.8</b> | 27.5 | +28      | 5   | 2   | +1  | 6   | 4     |      |
| 83 | Simon Lee             | <b>37.8</b> | 45.9 | -25      | 4   | 5   | -1  | 7   | 5     |      |
| 84 | Claudiu Bandea        | <b>36.4</b> | 19.2 | +41      | 6   | 4   | +0  | 5   | 3     |      |
| 85 | Leandro Bergantin     | <b>35.8</b> | 40.0 | -4       | 4   | 3   | -1  | 8   | 5     |      |
| 86 | Martin Zhang          | <b>33.1</b> | 50.9 | -41      | 2   | 6   | +1  | 4   | 3     |      |
| 87 | Masaki Hatakeyama     | <b>33.0</b> | 15.0 | +43      | 7   | 1   | +0  | 6   | 2     |      |
| 88 | Amy Nelson            | <b>32.4</b> | 59.1 | -67      | 3   | 5   | +1  | 3   | 4     |      |
| 89 | Chi U Seak            | <b>31.8</b> | 59.1 | -68      | 3   | 3   | +1  | 4   | 5     |      |
| 90 | Christopher Merchant  | <b>31.6</b> | 28.3 | +19      | 3   | 3   | +1  | 5   | 3     |      |
| 91 | Boris Decourt         | <b>30.9</b> | 41.7 | -21      | 2   | 5   | +1  | 4   | 3     |      |
| 92 | Zaven Khachaturian    | <b>28.4</b> | 47.5 | -38      | 2   | 5   | +1  | 3   | 3     |      |
| 92 | Philip De Jager       | <b>28.4</b> | 62.5 | -77      | 2   | 5   | +1  | 3   | 3     |      |
| 94 | Pavel Kalvach         | <b>28.2</b> | 75.0 | -91      | 2   | 5   | +1  | 2   | 5     |      |
| 95 | Amos Gelbard          | <b>28.1</b> | 32.5 | +8       | 3   | 2   | +1  | 5   | 2     |      |

| #   | entrant                        | prize | comp | $\Delta$ | nov | rig | vin | use | scope | 2022 |
|-----|--------------------------------|-------|------|----------|-----|-----|-----|-----|-------|------|
| 96  | Fernando Frassetto             | 26.7  | 58.3 | -73      | 1   | 6   | +1  | 2   | 4     |      |
| 97  | Dennis N Crouse                | 25.5  | 56.7 | -70      | 1   | 3   | +0  | 6   | 4     |      |
| 98  | Mishauri Nolan                 | 25.1  | 50.9 | -53      | 2   | 3   | +1  | 3   | 4     |      |
| 98  | Amanda Alix                    | 25.1  | 45.9 | -40      | 2   | 3   | +1  | 3   | 4     |      |
| 100 | Grace Lightfoot                | 24.4  | 42.5 | -34      | 2   | 2   | +1  | 4   | 3     |      |
| 101 | Ameer Shahul                   | 24.2  | 35.8 | -7       | 4   | 3   | -1  | 5   | 3     |      |
| 102 | Shreya Magadum                 | 24.1  | 34.1 | -2       | 2   | 3   | +1  | 3   | 3     |      |
| 103 | Sarthak Dua                    | 23.2  | 42.5 | -37      | 1   | 2   | +0  | 6   | 4     |      |
| 104 | Shanmugam<br>Sankarakumar      | 22.3  | 21.7 | +16      | 3   | 1   | +1  | 3   | 3     |      |
| 105 | Carina Clawson                 | 21.8  | 41.6 | -30      | 2   | 6   | +0  | 2   | 2     |      |
| 106 | Thomas Manaugh                 | 20.8  | 28.4 | +2       | 5   | 2   | -1  | 3   | 4     |      |
| 107 | Lane Simonian                  | 20.5  | 35.0 | -12      | 3   | 2   | -1  | 6   | 2     |      |
| 108 | Jennifer Thornton              | 19.8  | 8.3  | +29      | 6   | 1   | +0  | 2   | 1     |      |
| 109 | Suresh Kumar                   | 19.7  | 37.5 | -18      | 2   | 5   | +0  | 2   | 2     |      |
| 110 | Lisa Vandegrift<br>Daval       | 19.5  | 35.0 | -15      | 3   | 2   | -1  | 5   | 3     |      |
| 111 | Jukka Welling                  | 19.4  | 22.5 | +8       | 4   | 2   | +0  | 2   | 3     |      |
| 112 | Howard Friel                   | 18.1  | 27.5 | -2       | 2   | 2   | -1  | 6   | 2     |      |
| 113 | Sanjay<br>Balasubramaniam      | 17.2  | 23.4 | +5       | 2   | 1   | +1  | 2   | 3     |      |
| 113 | Dharmendra<br>Lingaiah         | 17.2  | 39.2 | -29      | 1   | 1   | +1  | 3   | 3     |      |
| 115 | Ramin Farsheed                 | 16.7  | 25.0 | +0       | 6   | 0   | +0  | 1   | 2     |      |
| 116 | Kanval Saini                   | 16.3  | 21.7 | +4       | 2   | 1   | +0  | 4   | 2     |      |
| 117 | John Gruber                    | 16.1  | 10.8 | +15      | 2   | 1   | -1  | 6   | 2     |      |
| 118 | Ivan Mendelev                  | 15.8  | 25.0 | -3       | 4   | 2   | -2  | 4   | 4     |      |
| 119 | Angela Dorigatti               | 15.6  | 27.5 | -9       | 2   | 3   | +0  | 2   | 2     |      |
| 120 | Prashant Joshi                 | 14.7  | 41.6 | -45      | 2   | 3   | +0  | 2   | 1     |      |
| 121 | Ruxandra Ana<br>Maria Dzubaila | 13.9  | 21.6 | +2       | 2   | 1   | +0  | 3   | 2     |      |

| #   | entrant                       | prize       | comp | $\Delta$ | nov | rig | vin | use | scope | 2022 |
|-----|-------------------------------|-------------|------|----------|-----|-----|-----|-----|-------|------|
| 121 | Prem Saini                    | <b>13.9</b> | 25.0 | -6       | 4   | 1   | +0  | 1   | 2     |      |
| 123 | Victor Villarreal             | <b>13.7</b> | 37.5 | -32      | 1   | 4   | +0  | 1   | 3     |      |
| 124 | Christa Dang                  | <b>13.4</b> | 7.5  | +14      | 5   | 0   | +0  | 1   | 1     |      |
| 125 | E Sripriya                    | <b>12.9</b> | 9.2  | +11      | 1   | 4   | +0  | 1   | 2     |      |
| 126 | Jibin Joy                     | <b>11.7</b> | 5.0  | +15      | 2   | 0   | +1  | 1   | 1     |      |
| 127 | Dana Varadiova                | <b>11.6</b> | 5.0  | +14      | 3   | 1   | +0  | 1   | 2     |      |
| 127 | Dongdong Kang                 | <b>11.6</b> | 10.8 | +5       | 3   | 1   | +0  | 1   | 2     |      |
| 127 | T Kumar                       | <b>11.6</b> | 18.4 | +1       | 1   | 1   | +0  | 3   | 2     |      |
| 130 | Luis Ignacio Brusco           | <b>11.2</b> | 7.5  | +8       | 1   | 2   | +0  | 2   | 2     |      |
| 131 | Dr Geethanjali Bhas           | <b>10.9</b> | 18.3 | -2       | 1   | 3   | +0  | 1   | 2     |      |
| 132 | Ishwari Chandran Iyer         | <b>10.6</b> | 40.9 | -53      | 1   | 3   | -1  | 3   | 2     |      |
| 133 | Nils de Mol van Otterloo      | <b>9.9</b>  | 35.0 | -38      | 1   | 2   | +0  | 2   | 0     |      |
| 134 | Anil Kumar Kruthiventi        | <b>9.5</b>  | 14.2 | -3       | 2   | 0   | +0  | 2   | 2     |      |
| 135 | Vaidhyanathan Vijayaraghavan  | <b>9.2</b>  | 5.0  | +6       | 1   | 1   | +0  | 2   | 2     |      |
| 136 | Nicole Bishop                 | <b>8.6</b>  | 10.0 | -2       | 2   | 1   | +0  | 1   | 1     |      |
| 137 | Chelsea Castaneda             | <b>6.8</b>  | 20.9 | -13      | 1   | 1   | +0  | 1   | 2     |      |
| 138 | Abhishek Sawant               | <b>6.5</b>  | 10.0 | -4       | 1   | 2   | +0  | 0   | 2     |      |
| 139 | Avnish Tiwari                 | <b>4.5</b>  | 5.0  | +2       | 1   | 0   | +0  | 1   | 1     |      |
| 139 | T Cheluvvaraju                | <b>4.5</b>  | 5.0  | +2       | 1   | 0   | +0  | 1   | 1     |      |
| 139 | Krishna Moorthi               | <b>4.5</b>  | 5.0  | +2       | 3   | 0   | -1  | 1   | 2     |      |
| 139 | Narayan Agarwal               | <b>4.5</b>  | 5.0  | +2       | 1   | 0   | +0  | 1   | 1     |      |
| 143 | Shraddha Pawar                | <b>4.2</b>  | 19.2 | -18      | 1   | 1   | -1  | 2   | 2     |      |
| 144 | Parvathi Shanmugam            | <b>4.1</b>  | 38.3 | -54      | 0   | 2   | +0  | 0   | 2     |      |
| 145 | Jeevan Pradhan                | <b>0.0</b>  | 7.5  | -7       | 0   | 0   | +0  | 0   | 1     |      |
| 145 | Vinay Kumar Maldoddi Sangaiah | <b>0.0</b>  | 27.5 | -35      | 0   | 0   | +0  | 0   | 1     |      |

| #   | entrant          | prize | comp | $\Delta$ | nov | rig | vin | use | scope | 2022 |
|-----|------------------|-------|------|----------|-----|-----|-----|-----|-------|------|
| 145 | Satej Pradhan    | 0.0   | 19.1 | -18      | 0   | 0   | +0  | 0   | 1     |      |
| 145 | Mantu Satyam     | 0.0   | 5.0  | -4       | 0   | 0   | +0  | 0   | 0     |      |
| 149 | Kaloyan Simeonov | -0.5  | 5.0  | -8       | 2   | 0   | -1  | 0   | 1     |      |

### What survives all three instruments

5 entries hold a top-twenty place under evidential standing, under scope-gating, and under the prize question. Their standing does not depend on which of the three questions a reader thinks the prize was asking.

| entrant           | Appendix A | Appendix B | Appendix C |
|-------------------|------------|------------|------------|
| Anne Eckert       | 17         | 2          | 7          |
| Paul Ewald        | 12         | 11         | 9          |
| Estela Area-Gomez | 18         | 8          | 12         |
| Pamela Maher      | 15         | 14         | 18         |
| Todd Golde        | 1          | 1          | 20         |

Three defensible instruments produce three orderings. A reader who wants a single verdict is asking the field for something it cannot supply, and what can be said without naming an instrument is confined to the entries above.

*Every entry was read in full by two independent assessors under the instrument of Appendix A, from which Appendix B is derived. Appendix C is a separate single-graded reading of the same 149 submissions. Grades, per-axis scores, verified citation defects and the full divergence analysis are recorded alongside this paper.*