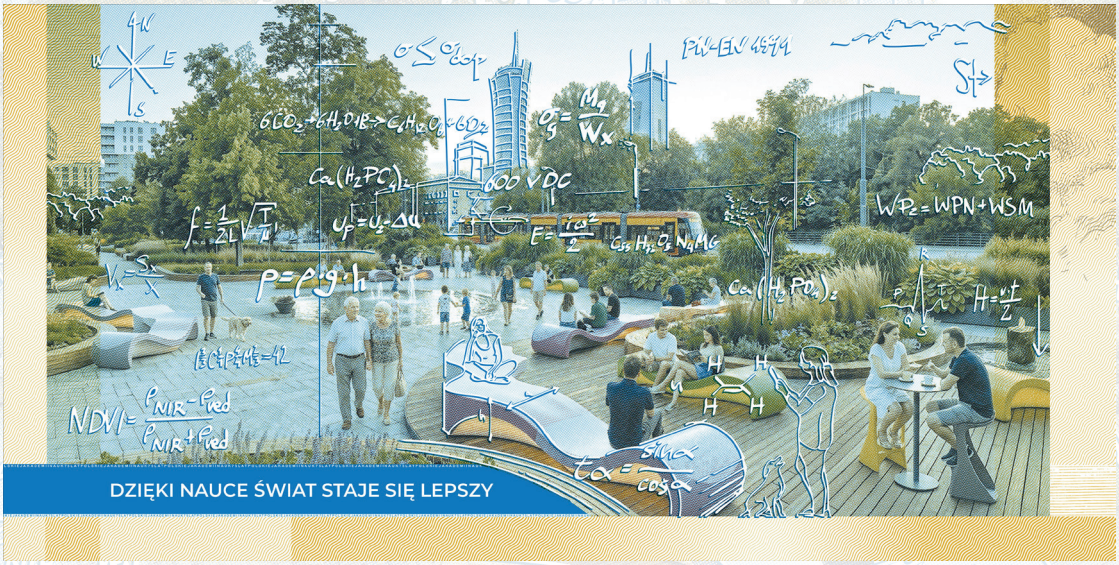

When will Poland get a Nobel? Every October the same question returns. It sounds proud, but it is also a trap.

Tomasz Dietl calls the Nobel a singularity and reminds us about the law of small numbers. The prize goes once a year to a handful of people chosen by a narrow circle at the Stockholm Academy, and the shortlist in physics alone runs to roughly three hundred names. As a measure of scientific quality it is therefore noisy, shaped by chance. Better, he argues, to look at the number of ERC grants, because there statistics start to work. And in those statistics Poland has received around fifty times less funding than Germany.

So this issue makes no promise of a Nobel. It asks a harder question, and a more useful one: what conditions do the people who could compete for it actually need.

The answers from our contributors converge on a surprisingly consistent picture. Dorota Gryko says plainly that great discoveries cannot be planned, since CRISPR grew out of research on yogurt bacteria rather than from a grant labelled „for a breakthrough." Jacek Kuźnicki holds that the Nobel itself is secondary, because first you need candidates, and a candidate is the end of a very long process. Marek Konarzewski, in turn, insists that the roses of Polish science have already bloomed and merely need to be noticed, then the differences begin. Which is exactly what makes this issue worth reading.

Where one sees roses, another points at the weeds. Andrzej Jajszczyk argues that we invest in walls rather than in people, that we dilute the best in a mass of mediocrity, and that academic inbreeding stifles science more effectively than any funding gap. Kuźnicki adds an observation that is hard to shake off: too often we treat those who stand out as a problem rather than an opportunity. The points system taught us to boast about a hundred points instead of a discovery.

Money sits, of course, behind every one of these conversations. The argument over „3 percent for science" runs through the whole issue, this year especially heated, because funding has fallen for the first time in fifteen years. It is hard to write about this calmly when a young PhD starts on a few thousand złoty and half of all doctors leave research or emigrate. Yet our contributors keep pointing further than the budget alone. At the stability that vanishes when the NCN cuts the number of grants, and at the mobility we still fear (though Jajszczyk sees in it a chance rather than a threat). Dietl goes one step further and invokes the model of the Weizmann Institute or IST Austria near Vienna, where excellence attracts excellence.

There is also a thread that rings loudest in Dietl and echoes in the others. The lack of belief that the world belongs to us. If we assume in advance that we will not conquer it, we will not. That sentence deserves to hang above more than one dean's desk.

Islands of excellence really do exist, and not as promises. Konarzewski points to astronomy and the borderland of chemistry and physics. Dietl gives names: the Horodecki family in Gdańsk, whose paper on quantum entanglement has thousands of citations, or the group led by Andrzej Udalski, hunting for planets by gravitational microlensing from a telescope in Chile. These teams already work at a world level, here, on the Vistula.

The figures in Tomasz Rożek's essay are merciless. Citing The Economist, he recalls that nineteen Nobel laureates were born on the territory of today's Poland, Marie Curie among them, and not one did the prize-winning work here. We are the world's largest donor of Nobel talent and almost its zero recipient. This is not bad luck but the consequence of a model we chose, even if, as Rożek rightly notes, we chose it unawares.

Tomasz Łuczak adds something said far too rarely among us. Young Polish mathematicians are excellent, they win EMS Prizes, they publish in the best journals. But without a good school, without treating the teaching of the exact sciences as a serious discipline, that advantage will erode. Great science begins in secondary school, not on a grant list.

We did not close this issue with a ready thesis. We closed it with a catalogue of conditions worth fighting for. Kuźnicki put it best: you cannot create laureates by ministerial decree. You can, however, build the places where they have a chance to appear.

I invite you to read on.


ARCHIVES PAS

PROF. DARIUSZ JEMIELNIAK
VICE-PRESIDENT OF THE POLISH ACADEMY OF SCIENCES