

Principles of ERC

- an opportunity for science also in Czechia

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Expert group for supporting ERC applicants

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I. Healthy science?

- **Respects the investigated problem** that resist to explanations. The problem guides, scientists attempt to do justice to its challenges (Miroslav Petříček). **Humility.**
- **Avoids intellectual arrogance, conformity, prejudice, closed mindedness, lack of thoroughness**, and other intellectual traits that impede effective and responsible inquiry (Quassim Cassam). **Honesty.**
- **Honors the profession.** C.S. Lewis: "Try to tell the truth as you see it, try to do any bit of work as well as it can be done for the work's sake, and what men call originality will come unsought." **Originality.**
- **Fosters collaboration.** Competition for reputation? C. Lanczos (1966): "The emphasize has shifted form the 'it' to the 'I'. **Vocation.**

I. Healthy science?

- **Establishes leadership.** That means accepting the burden of responsibility and service to others. Luke 12,48: "From everyone who has been given much, much will be demanded." **Service.**
- **Is not conforming with fragmentation.** J. von Neumann (1947): "Mathematics falls into a great number of subdivisions, differing from one another widely in character, style, aims and influence."
Interconnections.
- **Considers communication and dissemination a part of the core.** W. P. Thurston: "The measure of our success is whether what we do enables '*people*' to understand and think more clearly and effectively about mathematics."
Clarity of thinking.

II. Principles of ERC

- **Frontier research**, big discoveries, accepting risk of possible dead ends as an integral part of big science.
- **Initiative** of individual researchers.
- **Honesty, trust and responsibility** fosters leadership. States, institutions, departments, communities are responsible for allowing leaders to lead.
- **Minimal bureaucracy**. Efficient support instead of "science management" that aims at ruling.

II. It works. Questions for us:

- ERC is changing science in Europe (and beyond Europe). Marc Mézard: "ERC saved French science."
- In Czechia - do we need change? Or, are we so exceptional **in comparison to the world** that we do not?
- Czechia slowly but steadily increases participation in ERC calls. **Congratulations to the PIs of the three recent SyG grants!** Has the research environment in Czechia changed so that ERC is now considered its standard part?

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III. The Expert group and TC Prague, since 2011

- National information day.
- System of workshops (I, II, III) + Mock Interview.
- Methodological workshops and consultations for establishing efficient support at individual institutions.
- Individual mentoring and consultations for applicants.
- Raising undistorted ERC awareness.

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As a principle, the workshops are open, with no fee for participants from any research institution in Czechia. No place for any sign of rivalry between individuals and institutions. This creates community of unconditional mutual help. Cost? Devotion, time, and energy of the volunteers involved.

IV. Barriers

- Lack of primary help and individual mentoring at the institutions.
Many applicants still enter the first workshop unprepared, with the seed idea not sufficiently mature to develop a competitive proposal. They need further mentoring after the third workshop.
- We have organized specific workshops for the institutions and their leadership. The outcome is disproportional to the effort invested.
- Despite the persisting large effort of the volunteers, a generally supportive research environment is still missing.
- ERC is not considered important by majority of Czech research institutions and their leadership.

V. What can be done - state level.

- **Foster participation in the ERC and other competitive calls.** Routine reliance on the national funds is dead end.
- Revise the practical realization of ERC-CZ following more closely the ERC principles. This will provide the most efficient tool for supporting high quality science in Czechia. **Evaluation is provided for free by ERC.**
- Stop the avalanche of the labels "excellent Czech science".
The label "excellent" should be reserved for the world-scale leadership. Participation is not enough.
- Science in Czechia, not "Czech Science".

VI. Further comments

- Recent personal comment: "You felt in love with ERC". But, you know, **ERC is really not for us**. For whom is it then?
- The work on ERC grant application is still considered as "**an exercise in writing**." This reveals a total lack of understanding.
- ERC is not ideal, the evaluation can not be without mistakes. Is there an alternative?
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We are responsible for the environment that helps our talents to grow into leaders. It is up to us. Nobody else will do our part of the work.

Thank you for your valuable time.

We will greatly appreciate your help.