



EMBO Installation Grants: Excellent Research in Life Sciences.

Vision for the Czech Republic 2021–2030



"The EMBO Installation Grant is the best program for junior PIs that is available in the Czech Republic – not so much for the money, but mainly because of the EMBO community and benefits."

— Petr Svoboda

EMBO, www.embo.org was established by European biologists led by [Max Perutz](#) (UK) and Sir [John Kendrew](#) (UK) in 1964. EMBO brings together and represents scientific excellence in life sciences – more than 1800 best researchers worldwide ([EMBO Members](#)). Among other activities, EMBO provides access to unique research infrastructure ([EMBL Core Facilities](#)), publishes high quality professional journals ([EMBO Press](#)), organizes conferences, practical courses, workshops and seminars ([EMBO Events](#)), supports professional development of young talented researchers and their international networks ([EMBO Young Investigators](#)), and awards short-term and long-term fellowships for research mobility ([EMBO Fellowships](#)).

Life sciences represented by EMBO cover a wide range of areas: Cell Cycle, Cell & Tissue Architecture, Cellular Metabolism, Chromatin & Transcription, Development, Differentiation & Death, Evolution & Ecology, Genome Stability & Dynamics, Genomic & Computational Biology, Immunology, Membranes & Transport, Microbiology, Virology & Pathogens, Molecular Medicine, Neuroscience, Plant Biology, Proteins & Biochemistry, RNA, Signal Transduction, Structural Biology & Biophysics, Systems Biology.

The Czech Republic is represented in EMBO by these members: [Eva Bártořová](#) (2020, Institute of Biophysics CAS), [Jiří Forejt](#) (1999, Institute of Molecular Genetics CAS), [Mary Anne O'Connell](#) (2017, CEITEC MU), [Václav Pačeš](#) (1997, Institute of Molecular Genetics CAS), [Ivan Raška](#) (2011, Charles University), [Karel Říha](#) (2020, CEITEC MU), [Peter Šebo](#) (2013, Institute of Microbiology CAS), [Petr Svoboda](#) (2018, Institute of Molecular Genetics CAS), [Štěpánka Vaňáčřová](#) (2019, CEITEC MU) and [Jan Závada](#) (1996). Among EMBO members are also Czechs working abroad: [Jiří Bartek](#) (2000, Danish Cancer Society, Copenhagen), [Marek Basler](#) (YIP 2016, University of Basel), [Jiří Friml](#) (2010, Institute of Science and Technology Austria, Klosterneuburg), [Petra Hájřková](#) (2018, Imperial College London), [Martin Jinek](#) (YIP 2016, University of Zurich), [Josef Jiřičný](#) (1996, ETH Zurich), [Jan Klein](#) (1982, USA), [Jiří Lukáš](#) (2002, University of Copenhagen), [Pavel Tomančák](#) (2016, MPI-CBG).

The [EMBO Gold Medal](#) has been awarded annually since 1986 for outstanding contribution to life sciences in Europe. Two Czech researchers received this award: [Marek Basler](#) (2018, University of Basel) and [Jiří Friml](#) (2012, Institute of Science and Technology Austria, Klosterneuburg).

EMBO Installation Grants (EMBO IG), www.embo.org/funding-awards/installation-grants support early-stage researchers in life sciences to set up their own independent research group in one of the six EMBC member states (Czech Republic, Estonia, Lithuania, Poland, Portugal and Turkey) that are currently funding the grants, <http://embc.embo.org>. The aim of the grants is to strengthen research in life sciences by incoming researchers from abroad.

EMBO IG awards € 50,000 (approx. CZK 1,300,000) per year for a period of three years with the possibility of a two-year extension. Although EMBO IGs do not represent a significant financial burden for the funding provider, they provide crucial and indispensable support for the success of early-stage research groups in a highly competitive international environment of life sciences. In particular, EMBO IGs allow award-winning researchers to (i) have a better negotiating position with the management of a research institution for setting up their own independent research group, (ii) a small start-up to set up their own research program, (iii) visibility in the international scientific community, and (iv) access to **EMBO benefits** (international networking, mentorship, participation in the annual meeting of EMBO Young Investigators, participation in EMBO training courses, access to EMBL core facilities, travel grants and more) www.embo.org/funding-awards/installation-grants/apply.

Applications for EMBO IG are evaluated by (1) an EMBO member with a specialization of the applicant, (2) a ten-member international EMBO Young Investigator Committee, and (3) the final selection is guaranteed by the Strategic Development Installation Grants (SDIG) Board. All applications for EMBO IG undergo several demanding international evaluations, including an interview of the applicant and presentation of the project plan at an international research institution. The EMBO IG is awarded only to researchers who meet the **highest EMBO standards** and have worked abroad at a top institution for at least two years.

In 2006–2020, 122 EMBO Installation Grants were awarded in life sciences, of which 18 (14.75 %) to researchers from the Czech Republic. 18 grants in the Czech Republic represent 1/2 grants in Turkey and 2/3 grants in Poland and 3 grants less than in Portugal.

These Czech research institutions have accommodated EMBO IG holders in 2007–2021: CEITEC Masaryk University (6 grants: Panagiotis Alexiou, Peter Lukavsky, Pavel Plevka, Karel Říha, Lukáš Trantírek, Štěpánka Vaňáčková), Institute of Molecular Genetics CAS (3 grants: Petr Svoboda, Ondřej Štěpánek, Vladimír Varga), Institute of Organic Chemistry and Biochemistry CAS (2 grants: Zuzana Kečkéšová, Kvido Stříšovský), Biology Centre CAS (1 grant: Alena Zíková), Institute of Biotechnology CAS/BIOCEV (1 grant: Cyril Bařinka), First Faculty of Medicine Charles University/BIOCEV (1 grant: Peter Dráber), University of South Bohemia in České Budějovice (1 grant: Alena Krejčř), Masaryk University (1 grant: Vítězslav Bryja), Institute of Microbiology CAS (1 grant: Martin Schwarzer), Institute of Animal Physiology and Genetics CAS (1 grant: Martin Anger).

EMBO IGs are of great importance for a positive change of the academic environment in Czech science. The above-mentioned researchers represent the top of Czech research in life sciences. They know each other well from the activities of the EMBO IG program and are gradually reaching leading positions in their institutions. With their international experience, progressive thinking and shared values of the EMBO program, they represent a great hope for systemic change in Czech science towards a European standard. Enhancing the support of the EMBO IG program can significantly strengthen this important generation of Czech scientists. With a relatively small amount of funding resources that are needed to support the program, EMBO IGs represent an efficient strategic investment that will have a far-reaching impact on the competitiveness of Czech research on an international scale.



Impact and benefits of the EMBO Installation Grants for the Czech Republic

Increasing the number of funded EMBO IG grants leads to a higher number of outstanding researchers returning or coming from abroad to the Czech Republic and to higher number of new independent research groups with an international recognition. This has a very positive impact on the quality of research produced in the Czech Republic, contribute to the improvement of the Czech research environment and support better integration of the Czech Republic into the European Research Area (ERA) and international scientific communities. EMBO IG holders with their innovative research projects are succeeding in international highly competitive funding schemes and bring prestigious international grants (ERC, MSCA, Wellcome Trust, etc.) to the Czech Republic.

The long-term strategic goal of the Czech Republic is

1. to be competitive with other EU states in the European Research Area (ERA) and to become one of Europe's "Innovation Leaders",
2. to be internationally visible and attractive for outstanding international researchers and to have an active brain-hunting policy,
3. to support the integration of new researchers from abroad into Czech research institutions,
4. to support excellent researchers capable of obtaining prestigious grants in international highly competitive calls,
5. to be represented by as many excellent scientists as possible in international research organisations such as EMBO, www.embo.org.

Support of the EMBO IGs is one of the goals of the Innovation Strategy of the Czech Republic 2019–2030, pillar Financing and evaluation of research and development: *to support research topics that cross the criteria: world- / field-relevant research – sufficient capacity of follow-up applied research – successful applications (new solutions for quality of life, patents, sold licenses, products) – a real connection to the field-corresponding corporate environment and to fields with the potential of breakthrough technologies with the primary goal of commercializing on the basis of final production in the Czech Republic.*

EMBO IG holders have received financial support from private sources for their innovative research projects and also bring public and private international capital to the Czech Republic:

National private sources (CZK 2 million): **Neuron Award** (Vítězslav Bryja 2016, Pavel Plevka 2016, Martin Schwarzer 2017, Petr Svoboda 2014)

Foreign public sources (> CZK 150 million): **ERC** (Pavel Plevka StG-2013, Petr Svoboda CoG-2014, Ondřej Štěpánek StG-2018); **EU H2020** (Cyril Bařinka, Vítězslav Bryja, Pavel Plevka, Karel Říha, Lukáš Trantírek); **MSCA IF** (Martin Anger); **MSCA ITN** (Petr Svoboda); **FNSNF** (Ondřej Štěpánek)

Foreign private sources (> CZK 6 million): **BTCZ Ventures** (Zuzana Kečkéšová); **la Caixa** (Kvido Stříšovský); **STINT** (Vítězslav Bryja); **Wellcome Trust** (Štěpánka Vaňáčková)

Current experience with EMBO IGs shows a tangible intellectual, material and financial benefit for the Czech Republic. To maintain the international research competitiveness of the Czech Republic and to build the brand of a European innovative leader, it is necessary to use all means to attract brains and increase the visibility of excellent researchers from Czech research institutions in the international scientific community. The Czech Republic needs to award at least **2–3 EMBO Installation Grants** each year to keep pace with the world in life sciences.

Increasing the annual number of awarded EMBO IGs for the Czech Republic to 2–3 grants will have the following impact:

- ▶ the number of excellent scientists returning or incoming to the Czech Republic from abroad will increase,
- ▶ the number of new independent research groups in the Czech Republic with an international recognition and visibility will increase,
- ▶ the quality of research produced in the Czech Republic will increase, the research environment will improve, more top-quality publications and patents with an international impact will be produced,
- ▶ the chances of obtaining prestigious grants (e.g. ERC, EMBO, MSCA, etc.) and through this European funding to support excellent science in the Czech Republic will increase,
- ▶ the support of research from private funds of companies, individuals or investors will increase,
- ▶ the integration of the Czech Republic into the European Research Area (ERA) and international scientific community will strengthen,
- ▶ the key objectives of the Innovation Strategy of the Czech Republic 2019–2030 will be implemented and fulfilled.



Impact and benefits of the EMBO Installation Grants for Czech holders

Vítězslav Bryja, Faculty of Science, Masaryk University: "(1) Involvement in the community of EMBO researchers - valuable contacts, motivation and constant comparison with the top scientists. (2) Flexible financial support in a tumultuous start. (3) Especially for Brno, the creation of a community of young scientists sharing similar values and principles. At MU (together with HHMI / EMBO scientists, which was a precursor to EMBO IG), we tried to initiate some specific events: At least the MU Life Sciences Seminar is still alive and thriving, already supported by institutional funding."

Zuzana Kečkéšová, Institute of Organic Chemistry and Biochemistry CAS: "EMBO IG is a fantastic and very original grant. It enables new laboratory leaders to integrate into European science, learn about Europe's best science and scientists, use top services for free or for a small fee, provides many courses where researchers learn practical things in laboratory management, hiring people, ethical approaches and creating very efficient and productive laboratories."

Pavel Plevka, CEITEC Masaryk University: "EMBO IG is the most flexible grant I have. Although it makes up only 7 % of my group's budget, it allows me to compensate for restrictive funding from other sources. Grant funding is associated with minimal administration. Involvement in the EMBO community is beneficial."

Karel Říha, CEITEC Masaryk University: "EMBO IG brought me: (1) Benefits of the YIP program, including the possibility of intensive networking; (2) Perhaps the only source of completely free money that can be obtained in the Czech Republic, for 5 years. This gave me the flexibility to fund risky research without the pressure of having to publish at all costs. Such a source of money creates a "playground", within which it is possible to test very early and often risky directions of research, which, for example, the GAČR would never fund. This is very important for real innovative research."

Martin Schwarzer, Institute of Microbiology CAS: "EMBO IG will help me to consolidate my research group. I appreciate the freedom to use money according to current research needs. I don't consider the advantages of the EMBO IG just in terms of money, it's a brand and a ticket to the company of people who do science at the highest level."

Kvido Stříšovský, Institute of Organic Chemistry and Biochemistry CAS: "EMBO IG gave me some financial flexibility when I started my group (very demanding period) for a period of 5 years, which is unfortunately unusual in the Czech Republic these days (most projects in life sciences require a five-year cycle). Furthermore, and this was actually more important from a long-term perspective, YIP provided me with access to a community of excellent scientists, who meet regularly, support career growth in the form of various soft-skill training workshops. I have gained valuable contacts within YIP for further research work and I am proud to belong to the EMBO Young Investigator Program community."

Petr Svoboda, Institute of Molecular Genetics CAS: "Without the support of EMBO IG, my group would never have achieved the success we had achieved, we would never have published in Cell, and I would never have been able to obtain an ERC Consolidator Grant. Without EMBO IG, no one would know me today, even if I remained in science at all. EMBO IG provided me with funding for launching new research directions, which resulted in the collaboration with Croatian bioinformaticians and provided data for publication in Cell. The EMBO YIP community provided me with the environment and know-how to be able to write and push the publication through peer review, and trained me in how to write a successful ERC grant. The EMBO brand has increased my visibility in the research community, made it easy to gain contacts and collaborations from which my laboratory, institution, and, after all, also Czech science benefits, (in May 2019, I was organizing an EMBO workshop on genome activation at the IMG). This cannot replace any local attempt to support young researchers, as it can offer perhaps better money, but not the community and an established career development program."

Ondřej Štěpánek, Institute of Molecular Genetics CAS: "The EMBO IG grant is a great thing (flexible money, networking within the EMBO YIP). First of all, I appreciate that the Czech government is still participating in the project, unlike Hungary, Slovakia, Latvia, Croatia, Slovenia, Greece, etc."

Štěpánka Vaňáčková, CEITEC Masaryk University: "Thanks to EMBO IG, I was able to start compiling my own independent research. Without this support, I would not have received a position offer from the NCBR. This type of grant gives starting group leaders financial support (although not too high), which allows flexible planning and progress, which is very much needed especially in the beginning. It also allows you to connect with great EMBO Young Investigators, participate in their conferences and EMBO workshops. Last but not least, it makes the institute visible."

Vladimír Varga, Institute of Molecular Genetics CAS: "EMBO IG is great for two main reasons: (1) It is a very flexible grant, the resources can be used more-or-less freely. This is very important at the beginning when one sets up a laboratory, as he/she does not yet have a clear idea of how much it costs to plan exactly in other grants. It is possible to apply for other types of EMBO support that are not directly paid by the Czech Republic, e.g. small grants (up to € 10,000 per year for devices, contributions to participation in conferences, payment of publication fees, contribution to conference organization, internships, etc.), which in an ideal case can add up to ca € 14,000 for a laboratory per year. (2) It offers a lot of opportunities for networking and collaboration with the very best scientists in Europe. Attending the annual EMBO Young Investigator Meeting is very motivating. Last but not least, it is a prestigious grant that has a sound abroad."

Alena Zíková, Biology Centre CAS: "EMBO IG – I would even name it a "dream" grant, that has nothing analogous in the Czech Republic. (1) Selection of successful grants by EMBO members – guaranteed quality of professional reviews, impartiality; (2) Five-year grant – a sufficiently long period to establish a laboratory; (3) Complete freedom to draw funds – funds can be used for salaries, chemicals, investments (!!!), travel expenses – no spending categories, no transfer requests; (4) Extremely low administrative burden – only financial reports, after three and five years, short scientific reports; (5) No indicators, promised numbers of articles and similar nonsense; (6) Possibility to extend the spending of the funding in case of maternity leave; (7) Possibility to transfer money to subsequent years. In short, this is what the scheme of each scientific grant should look like."

EMBO Installation Grants 2006–2021

In 2006–2020, 122 EMBO Installation Grants were awarded in life sciences (Table 1, Table 2, Figure 1). Turkey attracted and supported 20 more researchers than the Czech Republic, Poland 13 more researchers than the Czech Republic and Portugal 3 more researchers than the Czech Republic (Table 2, Figure 1). The share of researchers supported by Turkey has been increasing every year since 2009. While in 2009 the lowest share was 16.13 %, in 2021 it is already 31.15 % (almost double, Figure 2). The share of supported researchers has also been growing for a long time in Poland (to today's 25.41 %) and Portugal (to today's 17.21 %). The Czech Republic has seen the opposite trend since 2009. In 2009, the share of researchers in the Czech Republic was 19.35 % and it has been decreasing every year to today's 14.75 % (Figure 2). The year 2020 is a milestone in the fifteen-year history of EMBO IG. For the first time, the Czech Republic did not support any promising researcher coming from abroad and awarded zero grants.

The eight states that have joined the EMBO IG program have already invested a total of € 25,490,000 (CZK 662 million; Figure 3, Figure 4) in EMBO IG in 15 years. In 2007–2015, EMBO IG grants were fully funded by individual states. In 2015–2021, EMBC has contributed € 15,000 for each grant in the second year of project implementation. Thus, over the last 7 years, EMBC has supported 54 researchers with a total amount of € 810,000 (Table 4, Figure 5, Figure 6). Turkey (€ 285,000, 35.19 %), Poland (€ 225,000, 27.78 %) and Portugal (€ 135,000, 16.67 %) have received the largest EMBC contribution. In 2007–2021, the Czech Republic financed 18 EMBO IG grants in the amount of € 3,930,000 (Figure 3). The Czech Republic received a contribution of € 120,000 from EMBC for 8 researchers (14.81 % of EMBC support, Figure 5).

EMBC is going to contribute € 15,000 annually to each grant awarded from the 16th year of the competition, which closes in 2021 (start of implementation in 2022). The EMBC will thus gradually contribute € 75,000 (30 %) to each newly awarded grant. The remaining € 175,000 (70 %) will be paid by the receiving state.

Table 1: Overview of 122 EMBO Installation Grant holders funded in years 2006–2020

Year	Grants	Czech Republic	Estonia	Croatia	Lithuania	Hungary	Poland	Portugal	Turkey
2006	10	Petr Svoboda	Arnold Kristjuhan	Kristian Vlahovicek	-	-	Andrzej Dziembowski Krzysztof Ginalski Marcin Nowotny	João Morais Cabral Bruno Silva-Santos	Devrim Gozuacik Nesrin Özören
2007	9	Vítězslav Bryja Štěpánka Vaňáčková	-	Bojan Žagrović	-	Csaba Pál Attila Reményi	Agnieszka Dobrzyń	Henrique Veiga-Fernar	Arzu Çelik İbrahim Yaman
2008	7	Martin Anger	Viljar Jaks	-	-	Attila Gacser Rita Sinka	Tomasz Guzik	Tiago Outeiro	Ertugrul Kilic
2009	5	Cyril Bařinka Alena Žiková	-	-	-	-	Pawel Bednarek Agnieszka Chacinska	Elena Baena-González	-
2010	6	Alena Krejčí	-	-	-	-	Szymon Swiezewski Tomasz Wilanowski	Luísa Figueiredo	Michelle Adams Cory Dunn
2011	7	Kvido Štřšovský	Tambet Teesalu	-	-	-	Bartosz Wilczyński Dorota Włoga	-	Talga Emre Ebru Erbay Nurhan Özlü
2012	10	Lukáš Trantířek	Ivar Ilves	-	-	-	Michał Komorowski	Sandra Fonseca Reto Gassmann	Can Alkan Deniz Atasoy Tamer Önder Kerem Pekkan Erdal Toprak
2013	6	Karel Říha	-	-	-	-	Joanna Sułkowska	Edgar Gomes Raquel Oliveira	Mustafa Köksal Özgür Şahin
2014	8	Peter Lukavsky Pavel Plevka	-	-	-	-	Piotr Setny	Nuno Barbosa-Morais Ana Domingos	Talga Çukur Günes Özhan Gerhard Wingender
2015	9	Ondřej Štěpánek	-	-	-	-	Sebastian Glatt Maria Górna	Sónia Melo Vanessa Morais	Çağlar Çekiç Aşkin Kocabaş Yongsoo Park Umut Şahin
2016	8	Vladimír Varga	Jaan-Olle Andressoo	-	-	-	Rafał Ciosek Piotr Ziolkowski	Claus Maria Azzalini Catarina Homem	Murat Alper Cevher Abdullah Kahraman
2017	8	Zuzana Kečkéřová	Elin Org Arto Pulk	-	-	-	Wojciech Pokrzywa Agata Starosta	Bruno Costa-Silva	Elif Firat-Karalar Ayse Koca Caydasi Ogun Adebali Serap Aksu
2018	10	Martin Schwarzer	-	-	-	-	Anna Karnkowska Lukasz Piatkowski Michał Szymanski	Claudia Bank	Şükrü Anıl Doğan Serap Erkek Serkan Kir
2019	11	Panagiotis Alexiou Peter Dráber	-	-	-	-	Yusuke Azuma Rafał Mostowy Aleksandra Pekowska Grzegorz Sumara Piotr Szwedziak	Pedro Sousa-Victor	Bahar Degirmenci Uzur Ezgi Karaca Gunes Unal
2020	8	-	-	-	Algirdas Toleikis	-	Piotr Gerlach Kinga Kamieniarz-Gdul Michał Wandel	Elias Barriga Ricardo Henriques	Serkan Belkaya Onur Oztas
Total	122	18	7	2	1	4	31	21	38
	100,00 %	14,75 %	5,74 %	1,64 %	0,82 %	3,28 %	25,41 %	17,21 %	31,15 %

Table 2: Number of EMBO Installation Grants awarded in each year between 2006–2020

Year	Grants	Czech Republic	Estonia	Croatia	Lithuania	Hungary	Poland	Portugal	Turkey
2006	10	1	1	1	0	0	3	2	2
2007	9	2	0	1	0	2	1	1	2
2008	7	1	1	0	0	2	1	1	1
2009	5	2	0	0	0	0	2	1	0
2010	6	1	0	0	0	0	2	1	2
2011	7	1	1	0	0	0	2	0	3
2012	10	1	1	0	0	1	1	2	5
2013	6	1	0	0	0	0	1	2	2
2014	8	2	0	0	0	0	1	2	3
2015	9	1	0	0	0	0	2	2	4
2016	8	1	1	0	0	0	2	2	2
2017	8	1	2	0	0	0	2	1	2
2018	10	1	0	0	0	0	3	1	5
2019	11	2	0	0	0	0	5	1	3
2020	8	0	0	0	1	0	3	2	2
Total	122	18	7	2	1	4	31	21	38
	100,00 %	14,75 %	5,74 %	1,64 %	0,82 %	3,28 %	25,41 %	17,21 %	31,15 %

Table 3: Number of EMBO Installation Grants funded in years 2007–2021

Year	Grants	Czech Republic	Estonia	Croatia	Lithuania	Lithuania	Poland	Portugal	Turkey
2007	10	1	1	1	0	0	3	2	2
2008	19	3	1	2	0	2	4	3	4
2009	26	4	2	2	0	4	5	4	5
2010	31	6	2	2	0	4	7	5	5
2011	37	7	2	2	0	4	9	6	7
2012	34	7	2	2	0	4	8	4	8
2013	35	6	3	1	0	2	8	5	11
2014	34	6	2	0	0	0	8	6	12
2015	37	6	2	0	0	0	7	7	15
2016	40	6	2	0	0	0	7	8	17
2017	41	6	2	0	0	0	7	10	16
2018	39	6	3	0	0	0	8	9	13
2019	43	6	3	0	0	0	10	8	16
2020	46	6	3	0	0	0	14	7	16
2021	45	5	3	0	1	0	15	7	14

Table 4: Overview of the payments of states and EMBC's contribution to EMBO Installation Grants in 2007–2021

Year	Grants	Czech Republic	Estonia	Croatia	Lithuania	Hungary	Poland	Portugal	Turkey	Total
2007	states	50 000 €	50 000 €	50 000 €	- € 0	- € 0	150 000 €	100 000 €	100 000 €	500 000 €
2008	states	150 000 €	50 000 €	100 000 €	- € 0	100 000 €	200 000 €	150 000 €	200 000 €	950 000 €
2009	states	200 000 €	100 000 €	100 000 €	- € 0	200 000 €	250 000 €	200 000 €	250 000 €	1 300 000 €
2010	states	300 000 €	100 000 €	100 000 €	- € 0	200 000 €	350 000 €	250 000 €	250 000 €	1 550 000 €
2011	states	350 000 €	100 000 €	100 000 €	- € 0	200 000 €	450 000 €	300 000 €	350 000 €	1 850 000 €
2012	states	350 000 €	100 000 €	50 000 €	- € 0	200 000 €	400 000 €	200 000 €	400 000 €	1 700 000 €
2013	states	300 000 €	150 000 €	- € 0	- € 0	100 000 €	400 000 €	250 000 €	550 000 €	1 750 000 €
2014	states	300 000 €	100 000 €	- € 0	- € 0	- € 0	400 000 €	300 000 €	600 000 €	1 700 000 €
2015	states	300 000 €	100 000 €	- € 0	- € 0	- € 0	350 000 €	350 000 €	750 000 €	1 850 000 €
2015	EMBC	- € 0	- € 0	- € 0	- € 0	- € 0	- € 0	- € 0	- € 0	- € 0
	sum	300 000 €	100 000 €	- € 0	- € 0	- € 0	350 000 €	350 000 €	750 000 €	1 850 000 €
2016	states	270 000 €	100 000 €	- € 0	- € 0	- € 0	335 000 €	370 000 €	805 000 €	1 880 000 €
2016	EMBC	30 000 €	- € 0	- € 0	- € 0	- € 0	15 000 €	30 000 €	45 000 €	120 000 €
	sum	300 000 €	100 000 €	- € 0	- € 0	- € 0	350 000 €	400 000 €	850 000 €	1 685 000 €
2017	states	285 000 €	250 000 €	- € 0	- € 0	- € 0	320 000 €	470 000 €	740 000 €	2 065 000 €
2017	EMBC	15 000 €	- € 0	- € 0	- € 0	- € 0	30 000 €	30 000 €	60 000 €	135 000 €
	sum	300 000 €	250 000 €	- € 0	- € 0	- € 0	350 000 €	500 000 €	800 000 €	1 885 000 €
2018	states	285 000 €	285 000 €	- € 0	- € 0	- € 0	320 000 €	420 000 €	620 000 €	1 930 000 €
2018	EMBC	15 000 €	15 000 €	- € 0	- € 0	- € 0	30 000 €	30 000 €	30 000 €	120 000 €
	sum	300 000 €	300 000 €	- € 0	- € 0	- € 0	350 000 €	450 000 €	650 000 €	2 050 000 €
2019	states	285 000 €	320 000 €	- € 0	- € 0	- € 0	470 000 €	385 000 €	770 000 €	2 230 000 €
2019	EMBC	15 000 €	30 000 €	- € 0	- € 0	- € 0	30 000 €	15 000 €	30 000 €	120 000 €
	sum	300 000 €	350 000 €	- € 0	- € 0	- € 0	500 000 €	400 000 €	800 000 €	2 350 000 €
2020	states	285 000 €	250 000 €	- € 0	- € 0	- € 0	605 000 €	335 000 €	725 000 €	2 200 000 €
2020	EMBC	15 000 €	- € 0	- € 0	- € 0	- € 0	45 000 €	15 000 €	75 000 €	150 000 €
	sum	300 000 €	250 000 €	- € 0	- € 0	- € 0	650 000 €	350 000 €	800 000 €	2 350 000 €
2021	states	220 000 €	150 000 €	- € 0	50 000 €	- € 0	625 000 €	335 000 €	655 000 €	2 035 000 €
2021	EMBC	30 000 €	- € 0	- € 0	- € 0	- € 0	75 000 €	15 000 €	45 000 €	165 000 €
	sum	250 000 €	150 000 €	- € 0	50 000 €	- € 0	700 000 €	350 000 €	700 000 €	2 200 000 €
	states	3 930 000 €	2 205 000 €	500 000 €	50 000 €	1 000 000 €	5 625 000 €	4 415 000 €	7 765 000 €	25 490 000 €
		15,42 %	8,65 %	1,96 %	0,20 %	3,92 %	22,07 %	17,32 %	30,46 %	100,00 %
	EMBC	120 000 €	45 000 €	- € 0	- € 0	- € 0	225 000 €	135 000 €	285 000 €	810 000 €
		14,81 %	5,56 %	0,00 %	0,00 %	0,00 %	27,78 %	16,67 %	35,19 %	100,00 %
sum	sum	4 050 000 €	2 250 000 €	500 000 €	50 000 €	1 000 000 €	5 850 000 €	4 550 000 €	8 050 000 €	26 300 000 €
		15,40 %	8,56 %	1,90 %	0,19 %	3,80 %	22,24 %	17,30 %	30,61 %	100,00 %



Figure 1: Summary of 122 EMBO Installation Grants awarded in 2006–2020

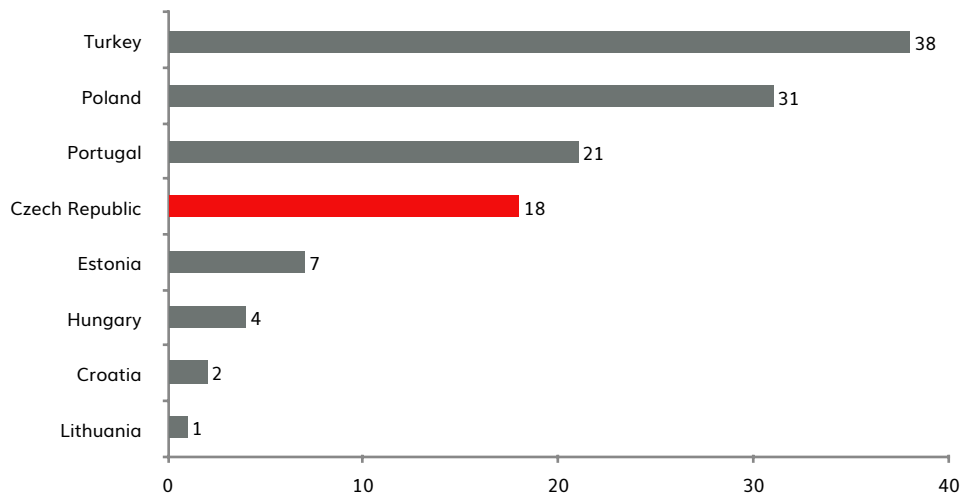


Figure 2: Percentage of EMBO IG holders by states

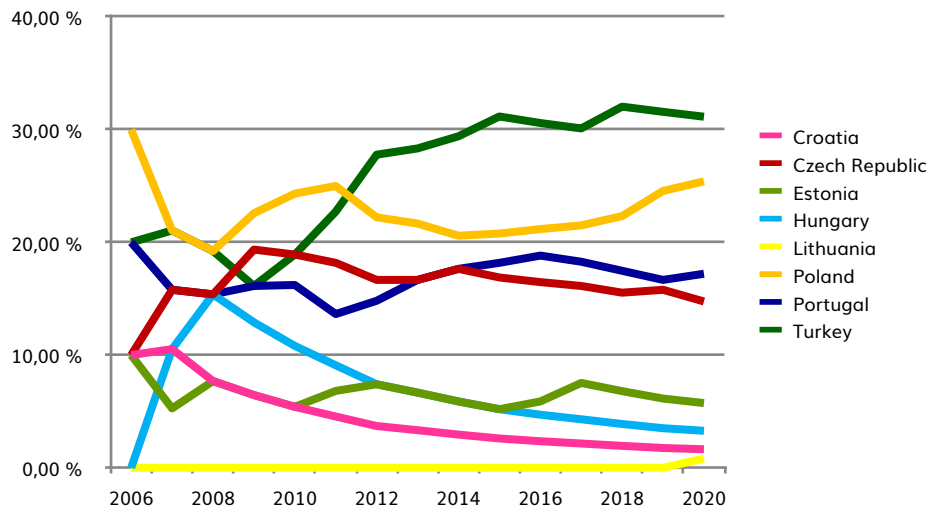


Figure 3: Investments of individual states in EMBO IG in 2007–2021

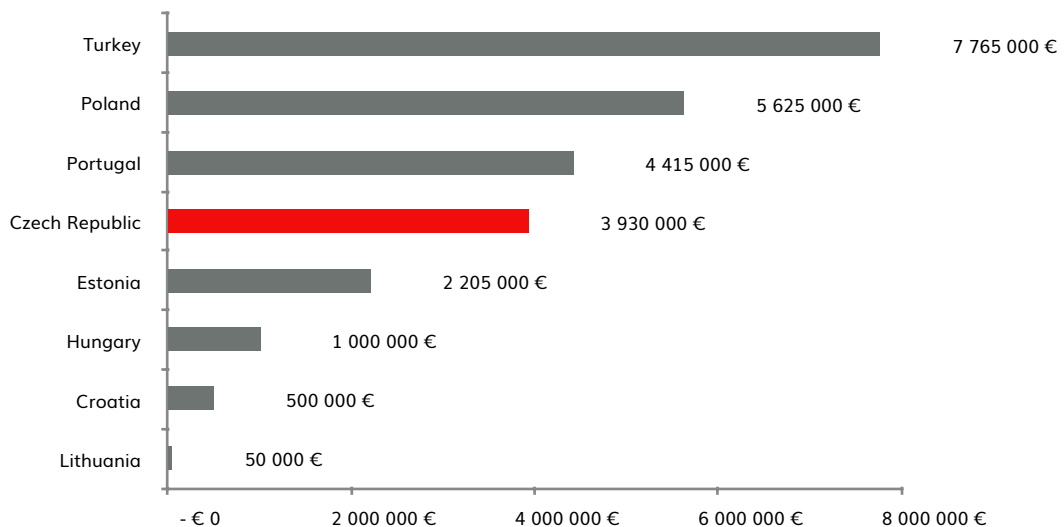


Figure 4: Investments of individual states in EMBO IG in 2007–2021

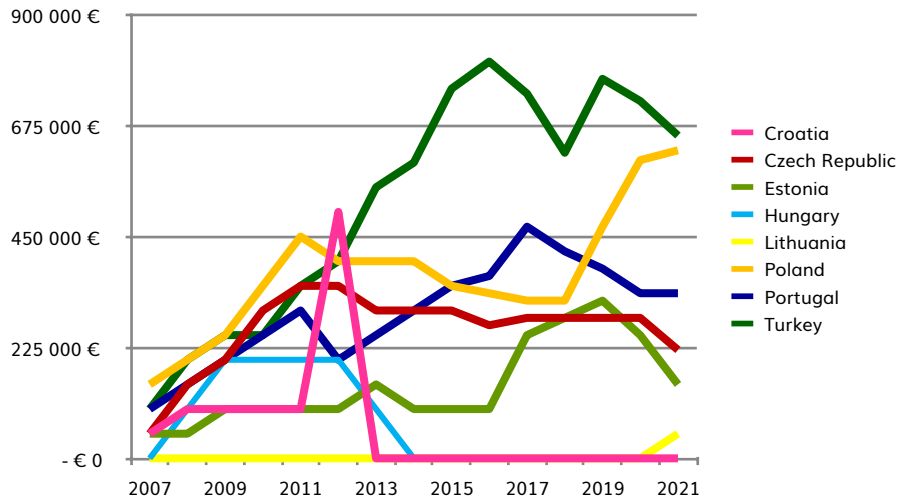


Figure 5: EMBC's contribution to individual states in 2007–2021

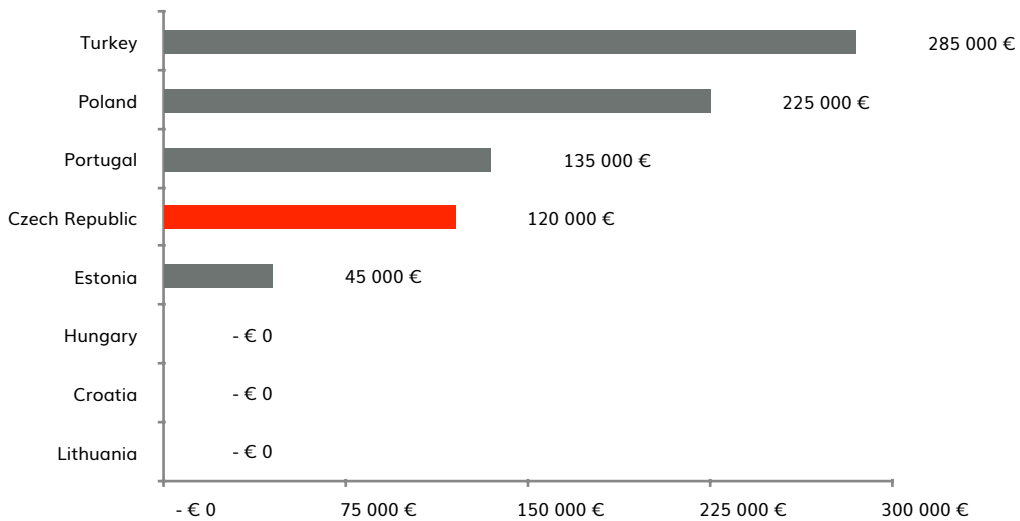
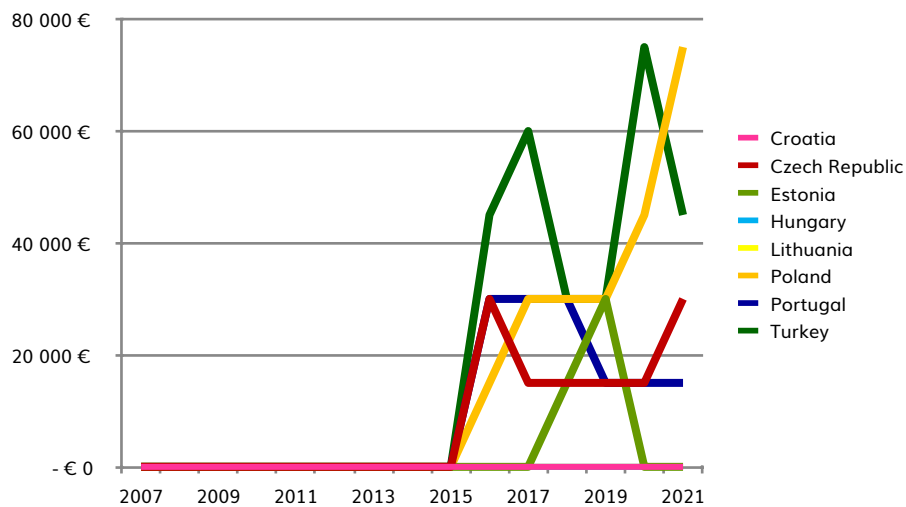


Figure 6: EMBC's contribution to individual states in 2007–2021



Vision of EMBO Installation Grants 2021–2030

Table 5: Model calculation of annual costs of the Czech Republic and EMBC's contribution to EMBO Installation Grants in 2022–2030

	Year	No of funded researchers	Payment by CZ	% CZ	EMBC contribution	% EMBC	Total EUR	Total CZK
Variant C	2007	1	50 000 €	100	- € 0	0	50 000 €	1 300 000 Kč
	2008	3	150 000 €	100	- € 0	0	150 000 €	3 900 000 Kč
	2009	4	200 000 €	100	- € 0	0	200 000 €	5 200 000 Kč
	2010	6	300 000 €	100	- € 0	0	300 000 €	7 800 000 Kč
	2011	7	350 000 €	100	- € 0	0	350 000 €	9 100 000 Kč
	2012	7	350 000 €	100	- € 0	0	350 000 €	9 100 000 Kč
	2013	6	300 000 €	100	- € 0	0	300 000 €	7 800 000 Kč
	2014	6	300 000 €	100	- € 0	0	300 000 €	7 800 000 Kč
	2015	6	300 000 €	100	- € 0	0	300 000 €	7 800 000 Kč
	2016	6	270 000 €	90	30 000 €	10	300 000 €	7 800 000 Kč
	2017	6	285 000 €	95	15 000 €	5	300 000 €	7 800 000 Kč
	2018	6	285 000 €	95	15 000 €	5	300 000 €	7 800 000 Kč
	2019	6	285 000 €	95	15 000 €	5	300 000 €	7 800 000 Kč
	2020	6	285 000 €	95	15 000 €	5	300 000 €	7 800 000 Kč
	2021	5	220 000 €	88	30 000 €	12	250 000 €	6 500 000 Kč
	2022	5	235 000 €	94	15 000 €	6	250 000 €	6 500 000 Kč
	2023	5	220 000 €	88	30 000 €	12	250 000 €	6 500 000 Kč
	2024	5	205 000 €	82	45 000 €	18	250 000 €	6 500 000 Kč
	2025	4	140 000 €	70	60 000 €	30	200 000 €	5 200 000 Kč
	2026	5	175 000 €	70	75 000 €	30	250 000 €	6 500 000 Kč
2027	5	175 000 €	70	75 000 €	30	250 000 €	6 500 000 Kč	
2028	5	175 000 €	70	75 000 €	30	250 000 €	6 500 000 Kč	
2029	5	175 000 €	70	75 000 €	30	250 000 €	6 500 000 Kč	
2030	5	175 000 €	70	75 000 €	30	250 000 €	6 500 000 Kč	
Variant B	2022	6	270 000 €	90	30 000 €	10	300 000 €	7 800 000 Kč
	2023	7	290 000 €	83	60 000 €	17	350 000 €	9 100 000 Kč
	2024	8	310 000 €	78	90 000 €	22	400 000 €	10 400 000 Kč
	2025	8	280 000 €	70	120 000 €	30	400 000 €	10 400 000 Kč
	2026	10	350 000 €	70	150 000 €	30	500 000 €	13 000 000 Kč
	2027	10	350 000 €	70	150 000 €	30	500 000 €	13 000 000 Kč
	2028	10	350 000 €	70	150 000 €	30	500 000 €	13 000 000 Kč
	2029	10	350 000 €	70	150 000 €	30	500 000 €	13 000 000 Kč
	2030	10	350 000 €	70	150 000 €	30	500 000 €	13 000 000 Kč
Variant A	2022	7	305 000 €	87	45 000 €	13	350 000 €	9 100 000 Kč
	2023	9	360 000 €	80	90 000 €	20	450 000 €	11 700 000 Kč
	2024	11	415 000 €	75	135 000 €	25	550 000 €	14 300 000 Kč
	2025	12	420 000 €	70	180 000 €	30	600 000 €	15 600 000 Kč
	2026	15	525 000 €	70	225 000 €	30	750 000 €	19 500 000 Kč
	2027	15	525 000 €	70	225 000 €	30	750 000 €	19 500 000 Kč
	2028	15	525 000 €	70	225 000 €	30	750 000 €	19 500 000 Kč
	2029	15	525 000 €	70	225 000 €	30	750 000 €	19 500 000 Kč
	2030	15	525 000 €	70	225 000 €	30	750 000 €	19 500 000 Kč

Figure 7: Model calculation of the number of EMBO IG in Czechia

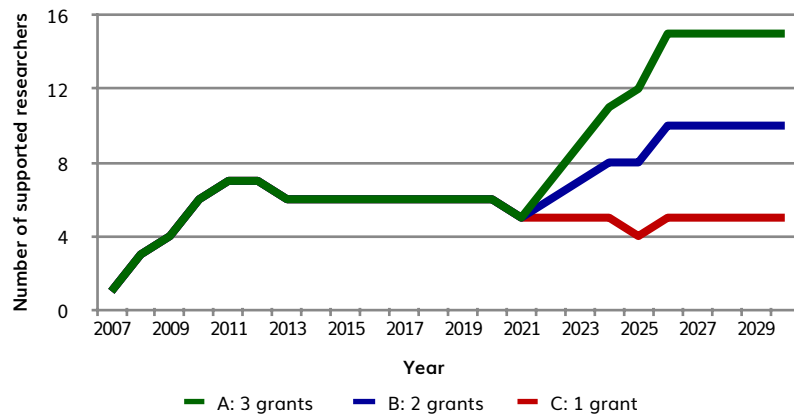


Figure 8: Model calculation of annual costs of the Czech Republic for 1–3 EMBO IG

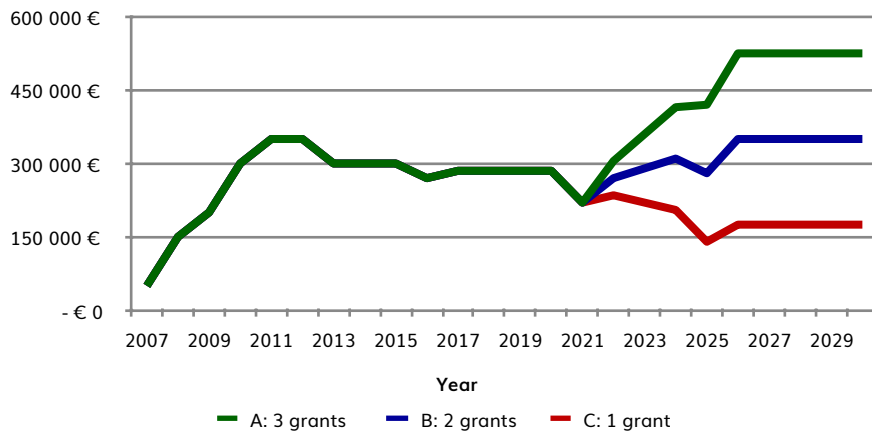
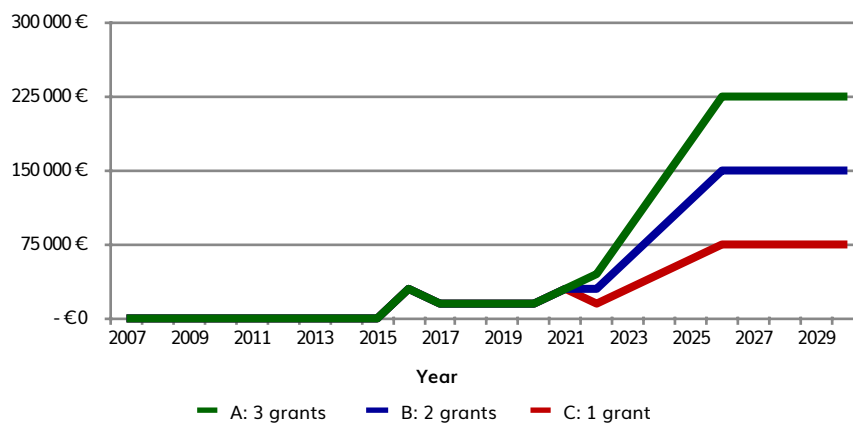


Figure 9: Model calculation of annual EMBC's contribution for 1–3 EMBO IG





Model calculation of annual costs of the Czech Republic for annual awarding 1–3 EMBO Installation Grants

In 2020, the Czech Republic financed 6 EMBO IGs: 1x 2015 + 1x 2016 + 1x 2017 + 1x 2018 + 2x 2019.

In 2021, the support of the Czech Republic decreased to 5 EMBO IGs: 1x 2016 + 1x 2017 + 1x 2018 + 2x 2019 + 0x 2020 (Figures 7–9). The investment of the Czech Republic in 5 researchers in 2021 is € 250,000 (approx. CZK 6.5 million), of which € 220,000 (88 %) is paid by the Czech Republic, the remaining € 30,000 (12 %) is covered by EMBC.

If the support of 1 EMBO IG per year continues (Table 5 variant C), the Czech Republic will support only 5 researchers in parallel, the annual costs for the Czech Republic will be € 175,000, and the annual EMBC's contribution will be € 75,000. The Czech Republic will continue to lag behind Turkey, Poland and Portugal.

If the number of annually awarded grants will increase to 2 EMBO IGs (Table 5 variant B), the Czech Republic will support 10 researchers in parallel from 2026, the annual costs for the Czech Republic will be € 350,000, and the annual EMBC's contribution will be € 150,000.

If the number of annually awarded grants will increase to 3 EMBO IGs (Table 5 variant A), the Czech Republic will support 15 researchers in parallel from 2026, the annual costs for the Czech Republic will be € 525,000, and the annual EMBC's contribution will be € 225,000.

We propose to the Government of the Czech Republic to increase the number of EMBO Installation Grants awarded annually for the Czech Republic to 2–3 depending on the number of excellent applicants selected and recommended by EMBO, and to secure funding for the payment of grants. By awarding 2–3 EMBO Installation Grants per year for three years with the possibility of extension to five years, the form of the prestigious EMBO competition and high selection of the best candidates will be maintained. At the same time the number of excellent researchers coming to the Czech Republic will significantly increase as well as the representation of the top Czech scientists in EMBO. The annual costs for the Czech Republic will be approximately CZK 14 million from 2026, and 15 scientists will be supported in every year.

The nearest deadline for applications for EMBO IG is on Thursday 15 April 2021 14:00 CET, www.embo.org/funding-awards/installation-grants. The selected projects will start on Sat 01 January 2022. New EMBO IG holders will be selected by the EMBO Strategic Development Installation Grants (SDIG) Board at the end of November 2021. The results of the evaluation will be announced by the EMBO in December 2021.



The intention of the Government of the Czech Republic to develop excellent Czech science in life sciences in the long-term perspective and to invest in prestigious EMBO Installation Grants support

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29 March 2021

