





Biomedical Technologies and Innovation Doctoral Program (BIOTIN)



Horizon 2021 MSCA COFUND

Guide for Applicants_v2

Deadline for Application:
10 January 2024



This project has received funding from the European Union's Horizon Europe research and innovation program under the Marie Skłodowska Curie Grant Agreement No. 101081373. The project has also received funding from The Scientific and Technological Research Council of Türkiye under the scope of Agreement No. 123C212.



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1. Overview

Biomedical Technologies and Innovation (BIOTIN) doctoral program features an international, interdisciplinary and intersectoral approach to provide 10 doctoral candidates (DCs) a unique blend of research training skills in the convergence of life sciences, engineering and entrepreneurship skills, with the aim of advancing innovation in biomedical and bioengineering fields. The program will be a unique educational experience immersing DCs in courses and trainings on entrepreneurship at the early stages of their curriculum, and on data science and computing, in addition to classical biomedical and bioengineering curricula.

In the second call, BIOTIN program offers 17 research projects that applicants can choose from in three intertwined themes of biomedical research: (1) drug development, (2) diagnosis and (3) tissue engineering and artificial organs.

BIOTIN is coordinated by Izmir Institute of Technology (IZTECH) in collaboration with two implementing partners: Boğazici University (BOUN) and Izmir Biomedicine and Genome Center (IBG). IZTECH, IBG and BOUN, located in two major cities of Türkiye, i.e. İzmir and İstanbul, respectively, will be recruiting DCs.

BIOTIN fellows will benefit from a highly-qualified interdisciplinary supervisory team, secondments and short-visits to network partners in Europe and the USA including prominent universities, non-governmental organizations (NGO), large enterprises and start-ups, alongside the opportunity to develop and practice entrepreneurship skills in leading technology development zones of Türkiye. A total of 28 associated partner organizations including 17 academic and 11 non-academic organizations will contribute to the program. The list of associated partner organizations is given below.

Associated Partner Organisation name	Partner organisation acronym	Country	Partner Status
The Scientific and Technological Research Council of Turkey	TUBITAK	TR	Non-academic
İstanbul Health Industry Cluster	ISEK	TR	Non-academic
Siemens Healthcare Sağlık/Siemens Healthineers	Siemens	TR/DE	Non-academic
Amgen Turkey	Amgen	TR	Non-academic
FUJIFILM Visual Sonics	FF-VSI	NL	Non-academic
XNK Therapeutics AB	XNK	SE	Non-academic
Letgen Bioteknoloji	Letgen	TR	Non-academic
Solaris Genomic Health	SGH	TR	Non-academic
RS Research	RS Research	TR	Non-academic
Atmosfer Technology Transfer Office	Atmosfer	TR	Non-academic
Technopark İzmir	Technopark Izmir	TR	Non-academic
İzmir University of Economics	IUE	TR	Academic
Polytechnic University of Catalonia	UPC	ES	Academic
Boise State University	BSU	US	Academic
Cleveland State University	CSU	US	Academic
University of Warwick	Warw	GB	Academic
Friedrich-Alexander-Universität Erlangen-Nürnberg	FAU	DE	Academic
Villanova University	VU	US	Academic
University of Antwerp	UA	BE	Academic
Università della Svizzera Italiana	USI	СН	Academic
Temple University	TU	US	Academic
University of Warsaw	UW	PL	Academic

Barcelona Supercomputing Center	BSC	ES	Academic
University of Minho	UM	PT	Academic
Dokuz Eylul University	DEU	TR	Academic
Radboud University	RU	NL	Academic
University of Pittsburgh	PITT	US	Academic
French National Centre for Scientific Research	CNRS	FR	Academic

The program will build a group of researchers with a valuable and rare blend of academic skills and industry readiness, who can fulfil regional, national and international human resources needs in biomedical field.

2. Recruitment and Selection Process

Dates	Step
30 October 2023 – 30 November 2023	Pre-Call Announcement
30 November 2023	Call Opening
10 January 2024	Call Closing
10 January 2024 – 12 January 2024	Eligibility Check of Candidates
12 January 2024 – 15 January 2024	First Redress Deadline
15 January 2024 – 17 January 2024	Redress Procedures
17 January 2024 – 07 February 2024	Expert Review
11 February 2024	Announcement of Short-Listed Candidates
12 February 2024 – 14 February 2024	Second Redress Deadline
15 February 2024 – 19 February 2024	Redress Procedures
26 February 2024 – 06 March 2024	Interviews
18 March 2024	Announcement of Successful Candidates
19 March 2024 – 21 March 2024	Third Redress Deadline
22 March 2024 – 29 March 2024	Redress Procedures
01 April 2024	Final Ranking List/ Offer of Contracts
08 April 2024	Deadline for Acceptance of Offers
26 May 2024	Expected Date for Submitting Registration Documents (GRE & TOEFL scores)
04 September 2024	Deadline for Enrolment in Doctoral Programs
01 January 2028	End of the BIOTIN Project

3. BIOTIN and MSCA Eligibility Criteria – Who Can Apply?

BIOTIN is focused on attracting excellent DCs worldwide. The program is open to researchers of any nationality, gender, age, race or ethnicity who meet the following eligibility criteria for entering the PhD program.

- **1. Mobility rule:** At the time of the deadline for submission of applications, researchers must not have resided or carried out their main activity (work, studies, etc.) in Türkiye for more than 12 months in the 3 years immediately prior to the reference date. Compulsory national service and/or short stays such as holidays are not taken into account.
- **2. Master's degree:** Eligible candidates must be, at the time of recruitment, in possession of a master degree or equivalent degree (certificate available at the time of application) in one of the following areas: Engineering, Natural Sciences (i.e. chemistry, physics, biology, maths), Medicine, Data Science or closely related fields.
- **3. Early-stage researcher status:** At the application deadline, applicants must not be in possession of a doctoral degree. Researchers who have successfully defended their doctoral thesis but who have not yet formally been awarded the doctoral degree will not be considered eligible.
- **4. English language:** The candidate must have an excellent proficiency of the English language according to the TOEFL (iBT) test or alternative tests PTE, YDS, e-YDS, YOKDIL, CPE or CAE (received within 5 years if the validity period is not specified on the document). The score should satisfy the following criteria: TOEFL/IBT \geq 84 (received within 2 years), PTE \geq 71, YDS/e-YDS/YOKDIL \geq 70, CPE \geq C or CAE \geq B.

Applicants who have completed their degree in a program conducted fully in English could provide, at the application stage, a certificate/letter from university that awarded undergraduate or postgraduate degree stating that the degree of the candidate (obtained within 3 years) is conducted fully in English.

Applicants, whose mother language is English will not be required to provide English proficiency document at the application stage.

Applicants who cannot provide any of the English proficiency documents stated above by the application deadline are still eligible to apply. However, all applicants, if they are accepted to the BIOTIN program, must submit their TOEFL (iBT) or alternative test score before the registration deadline of PhD programs. The successful applicants who cannot provide the English proficiency score before the registration deadline will be dismissed from BIOTIN program.

GRE score: Applicants must have minimum GRE quantitative score required by the project to which they apply (received within 5 years).

Applicants who cannot provide a valid GRE score document by the application deadline are still eligible to apply, however those applicants, if they are accepted to BIOTIN program, must submit their GRE score document before the registration deadline to the PhD program. The successful applicants who cannot provide the required GRE score document before the registration deadline will be dismissed from BIOTIN program. The minimum GRE score requirement of each BIOTIN PhD project can be found at https://biotinhub.com/en/for-applications

4. Open Research Projects / Supervisors and Secondment Opportunities

Project #	PhD Project Title (Research Theme) (1) Drug Development, (2) Diagnostics, (3) Tissue Engineering & Artificial Organs	Interdisciplinary Aspect	Intersectoral Secondment Foreseen	International Secondment Foreseen
1	Centular adaptation to microgravity (3)	Biomechanics, Cell Biology, Data Sci.	FujiFilm VisualSonics (NL), İstanbul Health Industry Cluster (TR)	Boise State University (USA)
2	Development of novel quantum- mechanical descriptors for nano- biomaterials and their application to predicting toxicity (1)	Toxicology, Nanomaterials, Data Sci.	Siemens Health (TR), Istanbul Health Industry Cluster (TR)	University of Antwerp (BEL)
3		Electrical Eng., Cell Biology, Data Sci.	Siemens Health (TR/DE), İstanbul Health Industry Cluster (TR)	Temple University (USA)
4		Biomolecular Eng., Mol. Biol., Data Sci.	Siemens Health (TR), Istanbul Health Industry Cluster (TR)	Polytechnic University of Catalonia (ES) OR Barcelona Supercomputing Center (ES)
5	Development of membranes for isolation and separation of extracellular vesicles (2)	Chemical Eng., Cell Biol., Biomaterials	Amgen (TR), İstanbul Health Industry Cluster (TR)	Cleveland State University (USA)
6		Chemical Eng., Cancer Biol., Radiology	(TR/DE), İstanbul Health Industry Cluster (TR)	University of Pittsburgh (USA)
7	Organoid-on-chip models for precision medicine (2)	Biophysics, Data Sci., Medicine	stanbul Health Industry Cluster (TR)	University of Temple (USA) OR University of Warsaw (PL)
8	Extending query processing with big data pipelines of multi-omics data for better understanding of complex phenotypes (2)	Data Sci., Genomic, Immunology	Health (TR), Istanbul Health Industry Cluster (TR)	Polytechnic University of Catalonia (ES) OR Barcelona Supercomputing Center (ES)
9		Data Sci. Struct. Biol., Biomolecular Eng.	Siemens Health (TR), Istanbul Health	Polytechnic University of Catalonia (ES) AND Barcelona Supercomputing Center (ES)
10	Two Dimensional Materials for Sensing Applications (2)	Computational Sci., Material Sci., Protein Eng.	Siemens Health (TR), İstanbul Health Industry Cluster (TR)	University of Antwerp (BEL)
11	Characterizing the regulatory roles of long-noncoding RNAs in tumor immunity (1)	Molecular, Biology, Immunology, Data Science	Amgen (TR), İstanbul Health	French National Centre for Scientific Research (CNRS) (FR)
12		Materials Eng., Biomaterials,	Amgen (TR),	University of Minho (PT)
13	Targeted drug delivery for cancer (1)	Polymer Chemistry, Nanomedicine, Cancer Biol.	RS Research (TR), İstanbul Health	Università della Svizzera Italiana (CH)
14	reactive polymeric materials for cellular targeting (1)	Polymer Chemistry, Nanomedicine, Cancer Biol.	DC Descerab (TD)	University of Warwick (UK)
15	for soft tissue engineering applications	Materials Sci. and Eng., Chemical Eng., Medicine	Health Industry Cluster	Friedrich-Alexander- Universität Erlangen- Nurnberg (DE)

16	Development of smart powered prosthetic devices and neurorehabilitation technologies (3)	Mechanical Eng., Neuroscience	Siemens Health (TR/DE), İstanbul Health Industry Cluster (TR)	Radboud University (NL)
17	An example for democratization of biomedical instrumentation: how to make your own cell/culture monitoring device (2)	Optoelectronics, Medicine Cell Riol	Siemens Health (TR), Istanbul Health Industry Cluster (TR)	Radboud University (NL)

-Project Supervisors Teams of Open Projects

Project #	PhD Project Main Supervisor	Co-supervisor	Co-supervisor
1	Prof. Engin Özçivici (IZTECH)	Assoc. Prof. Nesli Erdoğmuş (IZTECH)	Assoc. Prof. Bora Garipcan (BOUN)
2	Assist. Prof. Ceyda Öksel Karakuş (IZTECH)	Prof. Hasan Şahin	Assoc. Prof. Gökhan Karakülah
3	Assoc. Prof. Cumhur Tekin (2)	Assoc. Prof. Mustafa Özuysal (IZTECH);	Assoc. Prof. Sinan Güven (IBG)
4	Assist. Prof. Deniz Tanıl Yücesoy (IZTECH)	Assist. Prof. Işıl Öz (IZTECH)	Assoc. Prof. Duygu Ege (BOUN)
5	Prof. Sacide Alsoy Altınkaya (IZTECH)	Assoc. Prof. Özden Yalcin Özuysal (IZTECH)	Prof. Amitav Sanyal (BOUN)
6	Assoc. Prof. Sevgi Kılıç Özdemir (IZTECH);	Prof. Bünyamin Akgül (IZTECH)	Prof. Güneş Özhan (IBG)
7	Prof. Devrim Pesen Okvur (IZTECH)	Assoc. Prof. Mustafa Özuysal (IZTECH)	Prof. Esra Erdal (IBG)
8	Assoc. Prof. Belgin Ergenç Bostanoğlu (IZTECH)	Assoc. Prof. Efe Sezgin (IZTECH)	Assoc. Prof. Gökhan Karakülah (IBG)
9	Assist. Prof. Işıl Öz (IZTECH)	Assist. Prof. Deniz Tanıl Yücesoy (IZTECH)	Assoc. Prof. Ezgi Karaca (IBG)
10	Prof. Hasan Şahin (IZTECH)	Assist. Prof. Ceyda Öksel Karakuş (IZTECH)	Assoc. Prof. Bora Garipcan (BOUN)
11	Assist. Prof. Atakan Ekiz (IZTECH)	Prof. Bünyamin Akgül (IZTECH)	Assoc. Prof. Gökhan Karakülah (IBG)
12	Prof. Fatih Toptan (IZTECH)	Assist. Prof. Deniz Yücesoy (IZTECH)	Assoc. Prof. Duygu Ege (BOUN)
13	Prof. Rana Sanyal (BOUN)	Prof. Cengizhan Öztürk (BOUN)	Prof. Esra Erdal (IBG)
14	Prof. Amitav Sanyal (BOUN)		Assoc. Prof. Özden Yalçın Özuysal (IZTECH)
15	Assoc. Prof. Duygu Ege (BOUN)	Assist. Prof. Deniz Tanıl Yücesoy (IZTECH)	Prof. Güneş Özhan (IBG)

16	Prof. Can A. Yücesoy (BOUN)	Assist. Prof. Sinan Öncü (BOUN)	Prof. Yalın Baştanlar (IZTECH)
17	Prof. Cengizhan Öztürk (BOUN)	Prof. Rana Sanyal (BOUN)	Assoc. Prof. Cumhur Tekin (IZTECH)

5. How to Apply?

The application form is entirely online and needs to be completed in English through the online application portal (https://biotinhub.com) before the call deadline. The requested application documents must be submitted together with the online application form.

Applications received by other means (post, email or similar) or applications in other languages will not be considered as an eligible application. Applications missing required documents will not be considered.

6. Application Documents

The application must be complete and contain all mandatory documents given below:

- a) Application form: it contains general information about the applicant's profile, educational background and compliance with the eligibility rules. Applicant must fill in all the information requested, following the instructions given in the templates.
- **b)** Curriculum vitae (CV): must be in Europass CV format (https://europa.eu/europass/en/create-europass-cv) and should not contain more than 3 pages. Any other CV formats will not be accepted.
- **c) Motivation letter:** applicant must indicate his/her research project selection (a **maximum of 5 projects**) by listing them in order of preference and justify his or her interest in the selected projects.
- **d) Bachelor and Master's degrees:** a copy of Bachelor & Master's degrees must be submitted. If diplomas are not in English, a certified translation must be provided.
- **e) Referee information:** contact information of three referees, including their names, affiliations, e-mail addresses, telephone numbers and relationships must be provided. Applicant does not need to provide reference letters from their referees at the time of application, but she/he is expected to notify respective referees in advance to ensure the proper completion of application process. Reference letters from referees will be requested directly by the BIOTIN program manager.
- **f) Signed declaration of honour**: applicant should certify that the information provided in the application is correct and complete.

An application is only considered eligible if it is complete and received before the deadline. All documents must be in English.

7. Evaluation and Selection Procedure

The BIOTIN evaluation and selection procedure is based on equal evaluation and selection principles and aims to select excellent and highly talented scientists. Applicants will be selected exclusively on the basis of scientific excellence. No restrictions on age, gender, citizenship or disabilities will apply to the offered positions. In addition, the program is based on the principles of openness, efficiency,

transparency, supportiveness, and international comparability as stated in the EU's **European Charter** for Researchers and Code of Conduct for the Recruitment of Researchers.

The selection procedure consists of multiple steps:

- **1. Eligibility check by the Administrative Committee (AC):** The AC first performs an eligibility check against the eligibility criteria listed in Section 3 (BIOTIN and MSCA Eligibility Criteria Who Can Apply). To ensure minimal bias, any photos or explicit information on gender, age and nationality will be removed from any documents.
- **2. Notifying applicants:** Ineligible candidates will be informed on their rejection by (electronic) letter stating the insufficient or lacking criteria. Appeals regarding eligibility will be carefully assessed by Redress Committee (RC).
- **3. Expert-review evaluation and scoring:** Eligible applications will be forwarded to External Expert Review Panel (EPP) for evaluation of application materials. Each application is evaluated by three independent external experts of the EPP that assess the candidates against the evaluation criteria. Each expert will write an individual report for each eligible application, including scores for each criterion and justification. The scores and reports of each applicant will be forwarded to the AC who will then short-list top 30 candidates based on their scores.
- **4. Notifying applicants:** The top 30 candidates will be invited for an online interview. Remaining applicants will be informed on their rejection via an (electronic) letter in which positive as well as negative aspects will be highlighted, based on EPP members' individual reports, with a clear reference to criteria for which performance yet is insufficient. This feedback will help candidates to improve their success in future applications.
- **5.** Interviews by Interview Committee (IC) and project supervisors: A 30′ online interview will be conducted by the IC and 2 project supervisors to each short-listed candidate. They will listen to and grade soft skills of each short-listed candidate according to predefined evaluation criteria. During the interview, the candidate will be asked to elaborate on his/her educational background and his/her choice of research projects (15′). Then, a Q&A session (15′) on competencies such as communication skills, creativity, time management, career planning, analytical and critical thinking will take place. This stage will meet the judging merit principle of European Charter & Code. The interview will also provide an opportunity for the candidate to discuss any personal requirements or clarify doubts. Each IC member and two BIOTIN supervisors will write an individual report for each interviewed applicant, including scores for each criterion and justification, and forward their reports to the AC.
- **6. Ranking:** Ranking will be made based on the combined score of expert-review (60%) and interview (40%). Applicants will be ranked according to their scores.
- **7.** Assignment of top 10 candidates to projects: Top 10 applicants will be assigned to one of their top five project choices, in accord with their preference order, with priority given to candidates with higher marks. If an applicant happens to have none of his/her topics available anymore (being taken by applicants with higher score), she/he will be offered one of the vacant projects.
- **8. Funding decision and offering of positions:** The ranking will result in a final list consisting of the 10 most suitable candidates as well as back-up candidates (a reserve list of 10 candidates). The candidates will be informed by (electronic) letter about their status. The Steering Committee (SC) will approve funding decision and then contact selected fellows and forward

them to the HR department of the Host Institution to negotiate their contract and plan moving to Türkiye. This process is expected to take around 2-3 months. Researchers will be hired based on contracts, ensuring their access to social security. Rejected candidates will receive a (electronic) letter.

8. Evaluation Criteria

Applications will be assessed against criteria addressing the applicant's educational background, the synergy between the applicant's background and his/her motivation, and the impact on the applicant's career advancement. Each applicant's merits will be judged quantitatively as well as qualitatively. Scoring and threshold criteria are listed below, including priority ranking in case of ex-aequo. To be invited to interview, applicant must have a score of at least 35 points from expert-review evaluation.

Criteria	Score	Threshold	Weight	Priority
Part A: Peer-review				
Academic excellence	20			
Extra-curriculum skills and volunteering	5			
Coherence of educational background with BIOTIN's research themes/topics	10	35	60%	2
Motivation letter	10			
Recommendation letters	10			
Potential of researcher to be autonomous/independent	5			
Part B: Interview		•		
Communication skills	10			
Affinity for personal development and innovation-oriented training	10	25	40%	1
Technical knowledge matching research theme wishes of the applicant	10		45/0	_
Quality of answers to questions	10			

9. Redress Procedure

The candidates will have the possibility to discuss the results of the selection procedure and the possibility of 'Legal Appeal' with one of the Redress Committee (RC) members. Appeals regarding procedures (e.g. eligibility check) will be assessed by the RC. When an appeal is rejected, applicant will be informed. When an appeal is accepted, and depending on why the appeal was made, the application/candidate will be checked for eligibility again, forwarded to a new EPP or interviewed by a new interview panel, and the ranked list may change. Appeals for scientific part will not be accepted and the judgement of appropriately qualified experts is not called into question.

10. Employment and Working Conditions

Doctoral candidates (DCs) will be recruited for **48- months on a fixed employment contract** according to Turkish Employment Act (EA) No. 4857 of 2003.

Living and mobility allowance: gross salary of €2.800/month for 48 months; covering DCs' all expenses linked to their living and mobility (i.e. income tax, social security coverage including benefits for health care, occupational accident, unemployment and disablement benefits, paid parental and sick leave as well as relocation and travel expenses including secondment visits). Please note that all these expenses based on Turkish laws and regulations can reach up to 50% of total gross salary. In general, DCs' monthly net salary is calculated as below;

Net salary = Gross salary (€2800 * exchange rate of Euro to Turkish Lira) – Total deductions (Social Security Premium Employee's Share (including Unemployment Insurance) + Income Tax + Stamp Tax+ Social Security Premium Employer's Allocation (including Unemployment Insurance).

According to Turkish income tax regulations (summarized below) a DC may be paid <u>approximately</u> a net salary of €1450 to €1750 per month depending on the amount of taxable income

Income Tax (Cumulative) (2023)	Tax Rate
Up to 70.000 TL	%15
Between 70.001 and 150.000TL in excess	%20
Between 150.001 and 550.000 TL in excess	%27
Between 550.000 TL and 1.900.000 in excess	%35
Over 1.900.000TL in excess	%40

BIOTIN fellows will receive a salary that is on average higher than other researchers in similar positions in Türkiye would earn. The average salary of a research assistant who is typically a graduate degree candidate is 1000€/month (as of November 2023). A single person estimated monthly costs are approximately 500€ without rent.

For detailed information on cost of living in Türkiye, please check: https://www.numbeo.com/cost-of-living/country result.jsp?country=Turkey&displayCurrency=EUR

Family allowance: €50/month for 48 months for BIOTIN DCs with family obligations at the time of recruitment.

Research, training and networking allowance: In cash and in-kind financial contribution up to a total of €1600/month will be provided to cover research (laboratory analyses and consumables, publications, etc.) and training & networking (registration fee for conferences and workshops etc.) related costs. The funding will be managed by the project management team in coordination with project supervisors.

Special needs allowance: BIOTIN will provide additional support for researchers with disabilities to ensure necessary assistance by third persons or for adapting their work environment.

Working conditions for recruited fellows under BIOTIN will be in line with the EU Charter and Code. The hosting institutions will ensure that working conditions meet respective national, regional or sectoral legislation requirements. The legal arrangements with regards to labor and social security in Türkiye are in line with the International Labour Organization (ILO) and other generally accepted standards.

All DCs will be appointed on a fixed employment contract under Turkish Employment Act (EA) No. 4857 of 2003. This law applies for all employees in Türkiye. All DCs will be covered for social security and be entitled to social benefits under the SGK scheme, under the same conditions as Turkish citizens. Social security coverage for the contracted DCs includes benefits for health care, occupational accident, unemployment and disablement benefits, parental and sick leave. For the coverage and the details of

the social security system in Türkiye, please see the following document: https://drive.google.com/file/d/1s6l32F Xz-crkp92eObsluQJ9PAVCJMb/view

Statutory working practices for BIOTIN DCs will be the same as for other staff from the host organizations working in similar positions. The DCs will be entitled to carry out 40 hours work per week and have an annual period of paid leave of 2 weeks, all official holidays and sick leave. All DCs will have access to laboratory and/or office space that is needed for the proper implementation, and will have access to all infrastructure and equipment needed to carry out the project. All DCs have the right to attend conferences relevant for the advancement of their career.

11. Secondment

BIOTIN DCs will be provided support to develop networking & communication skills within and outside the academic environment, in order to increase and broaden the impact of their research projects and actions. The DCs will be exposed to a multidisciplinary & intersectoral program combining several research and training activities, including secondments in international universities, research organizations and industries at the forefront of research, access to state-of-the-art facilities to carry out advanced experiments, and a number of training activities (schools, workshops, complementary skills, etc.) that will enhance and improve their personal skills at different levels (management, writing, communication, RRI, Open Science, etc.).

Secondments will open up new horizons for BIOTIN DCs by encouraging transnational mobility. All DCs will engage in at least one research secondment at an international academic institution for 6 months, and at least one short-visit or training at an industry partner (in Türkiye or in abroad). A total of 17 academic organizations and 11 non-academic organizations will contribute to the program. Additional short research visits will be encouraged to support skills training and collaborations.

12. Career Development and Mentoring

Recruited DCs will be appointed **three academic supervisors** from different disciplines complementary for their PhD projects. The **primary academic supervisor** takes the lead in day- to-day supervision and is responsible for training the DC. The supervisory team will also guide the DC with regards to the training program.

DCs will also receive mentoring from non-academic partners on career guidance.

A personalized **Career Development Plan (CDP)** will be defined and implemented for each DCs according to the different research and training needs.

13. Data Protection

During the application process, personal data submitted by the applicant will be processed by the Administrative Committee (AC), Ethics Committee (EC), EPP (External Expert-Review Panel) and Interview Committee. All bodies will respect the privacy of the applicant and ensure that all personal data are processed in accordance with currently applicable laws and regulations, in particular, the General Data Protection Regulation of the EU and the national data protection laws of Türkiye.

14. Intellectual Property Rights

The employment contract signed by the host organization and DC will include the IP arrangements between the host organization and the DC during the project and beyond. In case of secondments, the Partnership Agreement will outline the IP arrangements.

IZTECH shall ensure that researchers (supervisors and DCs) reap the benefits of the exploitation (if any) of their research results through legal protection and, in particular, through appropriate protection of Intellectual Property Rights, including copyrights. All DCs may avail of training in Exploitation issues as part of the BIOTIN training program.

DCs and supervisors will be asked to identify any innovative research outputs together. They will be encouraged to seek advice from the Technology Transfer Office of the hosting institution. They may also seek advice from the relevant Turkish IP institute. The IP approach will also apply during any secondments the DCs may undertake.

All BIOTIN projects must adhere to the hosting institution's regulations on IPR. In cases where the researcher is the IPR holder, he/she shall be entitled to claim for arranged income deriving from any commercialization of the product of the research. The DC is responsible to abide by the rules and regulations that are related to the protection of confidential information of project in the aspect of applicable security and financial interests concerns while carrying out research.

15. Ethics

BIOTIN fully recognizes fundamental principles and the European and National regulations on ethics. BIOTIN Ethics Board (EB) which is composed of three independent and external members (Prof. Petek Ballar (petek.ballar@ege.edu.tr), A/Prof. Sıla Turaç Baykara (silaturac.baykara@idu.edu.tr), Burcu Kiper (burcu.kiper@yasar.edu.tr) will ensure compliance of the application, evaluation and selection process with the EU Code of Conduct Policy. Applicants or any other party involved in the application, evaluation and selection process can direct their concerns on ethical issues to any member of the EB.

All research activities in BIOTIN program will respect fundamental ethics principles and the European and national regulations on research. Türkiye does not have a national ethics committee for Research and Technological Development. Therefore, hosting institutions' Ethics Committees have an important role in decision-making on research related ethical issues. In line with Horizon Europe ethical rules (how-to-complete-your-ethics-self-assessment_en.pdf (europa.eu), the BIOTIN project will not fund any activity which deals with:

- Research aiming at human cloning;
- Research intended to modify the genetic heritage of human beings (research related to cancer treatment of the gonads can be supported);
- Research intended to create human embryos.

In addition, areas which require ethical approval are:

- Informed consent
- Human embryonic stem cells
- Privacy and data protection
- Use of human biological samples and data
- Research on animals

For ethical issues on Human Embryonic stem cells, the applicant will apply to the Central Ethics Committee which has been established within the Ministry of Health. Any application for financing for research on human embryonic stem cells will include, as appropriate, details of licensing and control measures that will be taken by the competent authorities, as well as details of the ethical approval that

will be provided. Additionally, according to the national laws, the supervisors must have ethics approval from the Human Research Ethics Committees or Animal Research Ethics Committees for the research proposals, to be conducted in Türkiye and dealing with human or animal samples, respectively.

16. Contact

For any query regarding the BIOTIN program and recruitment process, please contact: biotin@iyte.edu.tr