IRETM was established in 2008. The most important goals IRETM pursues through its research and education activities are to make all the staff involved in technical affairs in all blood centers across the country informed on the most recent improvements and scientific developments in the fields of transfusion medicine and transfusion sciences. IRETM tries to raise the knowledge of specialists, physicians, and allied health staff about these sciences, pave the necessary ground for base and applied research relevant to the causes of Iranian Blood Transfusion Organization (IBTO) to be conducted, and make the suitable atmosphere for participation of IBTO staff in outstanding international and national scientific congresses. The most important education-oriented efforts in IRETM are the focus on recruiting and training MSc and PhD level students in the discipline of Hematology and Blood Banking and MSc in Biotechnology. IRETM benefits the contribution of 37 full time faculty members formed within scientific groups of Immunohematology, Hematology, Immunology, Microbiology, Biochemistry, Biologic Products, and Pathology. So far, more than 408 research projects have been approved and conducted by Research Department of IRETM; a wide range of faculty members and IBTO experts and staff have been actively participating in the projects. Add to it, the publication of 35 specialty books and publication of about 500 articles in scientific journals (ISI- and PubMed-indexed).

**Education Department of IRETM** has also played an active role in establishment of training courses including educational target-oriented programs, workshops, and scientific-specialized seminars, preparation of scientific-specialized handouts, brochures and pamphlets aiming to upgrade the scientific and practical capabilities of IBTO staff at different levels, involvement in the educational programs of medical and allied health students including residents and fellows of universities of medical sciences in the fields of transfusion medicine and transfusion sciences, and most importantly doing all for MSc and PhD students.
The Number of MSc & PhD Graduates

Research Department of IRETM is active on orientation of research projects, organization of regular research sessions, assessment and follow up of research projects, plans to make regular visits to blood centers across the country to exert control and surveillance, arrangement of research workshops, preparation of the necessary research grounds, research prioritization, plans to make research findings practical for the purpose of innovation and accomplishment in the domain of transfusion medicine and transfusion sciences, authorship, compilation, and translation of specialty books with the contribution of IBTO faculty members, specialists, physicians, and experts, preparation and incorporation of the most up-to-date scientific books and resources in IBTO central library with access to electronic books and journals.
Blood Transfusion Research Center

Blood Transfusion Research Center was founded in 2003 for development and knowledge application in the field of transfusion sciences, concentration and coordination of research and manufacturing activities regarding the supply of safe blood and blood components through conducting base, epidemiologic and clinical research, collection and classification of documentations of blood transfusion records and their dissemination, programs to educate the needed researchers on blood transfusion, efforts to persuade and employ researchers, attempts to win the attention and cooperation of other local research and executive centers to promote the culture of blood donation, establishment of scientific cooperation with research and educational centers of other countries and international organizations. On top of that, the center has had the 7-time record of having been selected as the superior research center of Iran.

Annually all medical research centers in Iran undergo an evaluation process by Ministry of Health; Blood Transfusion Research Center has experienced an increasing growth in its evaluation score. The scoring system addresses the three areas of knowledge generation, capacity building, and research projects.

To highlight the scope of the research activities, a few themes of the projects conducted are listed below.

1. The prevalence of minor blood groups and that of alloantibodies, and the determination of blood group genotypes
2. The establishment of the bank of stem cell derived biologic components
3. The pathogen inactivation of human derived components
4. The formulation of novel methods to prepare plasma derived and blood components and the implementation of quality control
5. The adoption of the right strategy towards manufacturing HLA kit
The upward evaluation score trend of the Research Center 2001-2012

Research Ethics Committee

The Committee was accredited to act at the university level for three years (2014-2017). It is governed by the National Committee for Ethics in Biomedical Research affiliated to Iran Ministry of Health and Medical Education.

The Laboratory of Blood Transfusion Research Center

The lab in which advanced methods are practiced was established in 2007 for research projects and student theses to be implemented. The cell culture room allows for stem cells and other cell lines to be cultured; different methods of cell separation, culture, reproduction, and analysis are performed. The lab offers different methods of molecular analysis, PCR, and Real time PCR. The advanced cloning methods are applied for biotechnology purposes; the Western Blot, chemiluminescence, and Elisa for protein research. The protein chemistry unit of the lab is where different purification, filtration, ultrafiltration, chromatography, and electrophoresis methods are
used. The lab offers practice sessions to students of both “Hematology and Blood Banking” and “Medical Biotechnology” at Masters and PhD levels.

**Scientific Journal of Iranian Blood Transfusion Organization Research Center**

**SJIBTO** is published quarterly in collaboration among High Institute for Research & Education in Transfusion Medicine, Iranian Blood Transfusion Organization Research Center and the Scientific Association of Blood Transfusion with different scientific associations (including Anesthesiology and Emergency Care, paediatric Haematology-Oncology, Adult Haematology-Oncology, Virology, Iranian Pathologists, Iranian Society of Surgeons, and Haematology-Oncology and Bone Marrow Transplantation Research Center). The objectives of this scientific quarterly journal are to promote and disseminate investigation pertinent to the domains of blood donors recruitment and training, screening methods, the appropriate use of blood and blood components, Clinical aspects and modern technologies in the field of transfusion sciences and transfusion medicine, all aiming at promoting blood safety. This journal is indexed by EBSCO, CINAHL, Academic Search Complete, Academic Search Research & Development, IMEMR, ISC, Index Copernicus, SID, Iranmedex and Magiran and approved by Iranian Medical Journal Commission, Deputy of Research and Technology, Ministry of Health and Education.