|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **program Information** | | | |
| **NO.** | |  | | |
| **Program Type** | | Degree Based …………….....  Non degree-Based ……..…. | ☑ | |
| **Level of Study** | | Undergraduate ………..……  Master …………………..……...  PhD ………………………..…….  Post Doc …………………..…..  Specialty ………………..…….  Subspecialty …………………  Fellowship ……………..……..  Short term Course ………… | □  ☑  ☑  ☑  □  □  □  ☑ | |
| **School** | | School of Medicine | | |
| **Department** | | Department of Physiology | | |
| **Major/ Name of Program** | | Research Upon Diabetes | | |
| **Keywords (3 Words)** | | Diabetes mellitus, Diabetic neuropathy, Diabetic complications | | |
| **Language Requirement** | | English | | |
| **Admission Requirement** | |  | | |
| **Contact Information** | | Phone :0098-51380022221 | | |
| Fax :0098-5138828564 | | |
| Mobile :00989155251855 | | |
| Email :Hajzadehmr@mums.ac.ir | | |
| Address : Department of Physiology, School of Medicine, Pardis Danshgah, Mashhad, Iran | | |
| Contact Person Name :Mousa-Al-Reza Hadjzadeh | | |
| **Description (500 words)** | | Diabetes mellitus as a metabolic disorder is a common disease throughout the word. Although the prevalence rate differs among groups and countries, it is high in nearly all countries.  It has been reported that 6-8% of population are diabetic in some countries including Iran. Westernized life style has been accompanied by a growing rate of obesity both in youth and younger Population. Obesity is a major risk factor inducing type-2 diabetes.  Diabetic complications, both in type 2 and type 1 diabetes, are very common in affected patients including hyperglycemia with Its associated disorders due to high glucose itself and production of advanced end glycation products (AGEs), hyperlipidemia and its associate disorders i.e. atherosclerosis causing Cerebrovascular Diseases (CVD), Coronary Artery Disease(CAD), and Renal and Retinal Disorders. The final stage of renal disease is also very common in diabetic patients. Neuropathy in diabetic patients is also common along with a very morbid complication involving all types of nerves including autonomic, motor, and sensory nerves.  Hypoglycemia attacks also can be added to diabetic complications with its high morbidity rate in some instances. In brief, "this sweet metabolic disease is accompanied by a bitter life" for all diabetic patients. The aim of our laboratory is to investigate different aspects of diabetes mellitus and to shed light in some part of this filed.  Diabetic rat is a good model to study several aspects of diabetes including biochemical parameters and enzymes both in blood and in tissues, to study blood vessels, neuropathy and its complications.  Examining different medicinal plants used in Iranian Traditional Medicine as whole extract or fractions on diabetic animals for evaluating their effects on diabetes is also another part of our interest.  A good collaboration between Endocrine laboratory with kidney and vascular research laboratories is another hallmark of the department of Physiology. | | |
| **Complete Description** | | Diabetes mellitus as a metabolic disorder is a common disease throughout the word. Although the prevalence rate differs among groups and countries, it is high in nearly all countries.  It has been reported that 6-8% of population are diabetic in some countries including Iran. Westernized life style has been accompanied by a growing rate of obesity both in youth and younger Population. Obesity is a major risk factor inducing type 2 diabetes.  Diabetic complications, both in type 2 and type 1 diabetes, are very common in affected patients including hyperglycemia with Its associated disorders due to high glucose itself and production of advanced end glycation products (AGEs), hyperlipidemia and its associate disorders i.e. atherosclerosis causing Cerebrovascular Diseases (CVD), Coronary Artery Disease(CAD), and Renal and Retinal Disorders. The final stage of renal disease is also very common in diabetic patients. Neuropathy in diabetic patients is also common along with a very morbid complication involving all types of nerves including autonomic, motor, and sensory nerves.  Hypoglycemia attacks also can be added to diabetic complications with its high morbidity rate in some instances. In brief, "this sweet metabolic disease is accompanied by a bitter life" for all diabetic patients. The aim of our laboratory is to investigate different aspects of diabetes mellitus and to shed light in some part of this filed.  Diabetic rat is a good model to study several aspects of diabetes including biochemical parameters and enzymes both in blood and in tissues, to study blood vessels, neuropathy and its complications.  Examining different medicinal plants used in Iranian Traditional Medicine as whole extract or fractions on diabetic animals for evaluating their effects on diabetes is also another part of our interest.  A good collaboration between Endocrine laboratory with kidney and vascular research laboratories is another hallmark of the department of Physiology. | | |
| **Program Detail** | | The program differs for applicants based on their graduate levels. Master and PHD students will be enrolled in the Department of Physiology, and their thesis will be run in the field of Diabetes. Those applicants who come to department for a short time to study in the field of diabetes or to do a project will be supervised in a research project and may spend about 10-20 hours in theoretical background of diabetes. | |