# CENTER FOR FACULTY DEVELOPMENT

125 Nashua Street, Suite 8-8240 Boston, Massachusetts 02114

Tel: (617) 724-0818 Email: <u>cfd@partners.org</u>

https://www.massgeneral.org/faculty-development

**Center for Faculty Development**Office for Clinical Careers
Office for Research Careers

- Graduate Student Division
- Post Doctoral Division Office for Well-Being Office for Women's Careers

## SAMPLE CV NARRATIVE ASSOCIATE PROFESSOR AoE Inv

#### Overview

I am a translational human genomics investigator who aims to bring the treatment of type 2 diabetes into the new era of molecular medicine. Although my main effort focuses on this exciting area of research, I retain patient care and teaching as two core professional pursuits. Clinically, I have maintained a twice-monthly diabetes clinic. I cover the Inpatient Diabetes Management Service at MGH, I continue to see patients at the MGH Down Syndrome Program, and I attend on the MGH Endocrine Inpatient service. Administratively, I am the Chief of the Diabetes Unit at MGH and serve as the Associate Director of the Boston Area Diabetes and Endocrinology Research Center.

## Area of Excellence: Investigation

In my early training I conducted genetic association studies of genes that encode antidiabetic drug targets in type 2 diabetes. I characterized the haplotype structure of multiple genes targeted by available diabetes drug classes (prior to the availability of the HapMap) and completed well-powered association studies for several genes which helped clarify the conflicting association literature surrounding these loci. In all these experiments I played a major role, including experimental design, laboratory work, data integration and statistical analysis.

We developed a genetic analysis pipeline and tested many of these variants in the Diabetes Prevention Program. We have shown that the lifestyle intervention reduces diabetes incidence even in individuals with greatest genetic risk. Further genetic work in the DPP, using the newly designed Metabochip and a recently completed GWAS, is supported via an R01 award in which I am the PI, currently in its third cycle of competitive funding.

Most recently I have been involved in the conduct, analysis and integration of genome-wide association studies and high-throughput sequencing for type 2 diabetes and related traits, in the Framingham Heart Study and elsewhere. I currently lead several projects in a large international consortium of cohorts that have collected similar glycemic phenotypes (MAGIC) and help direct another international consortium devoted to the discovery of genes involved in diabetic kidney disease (GENIE). I am the PI of a consortium studying the genetic determinants of type 2 diabetes in Latino populations (SIGMA).

In addition, I have obtained funding to launch two pharmacogenetic studies. The Study to Understand the Genetics of the Acute Response to Metformin and Glipizide in Humans (SUGAR-MGH) intends to establish whether genetic variation at selected loci influences the acute response to a sulfonylurea, metformin or a glucose load; this was also supported by an R01 grant in which I was the PI. The Patients with Hyperglycemia Assessed for Response to Medications by Genetics (PHARMGen) study, supported by the MGH Research Scholars Award, is mining the electronic medical record to assess the genetic determinants for medication failure. I am also the PI of the Data Coordination Center for the Accelerating Medicines Partnership in Type 2 Diabetes, the main task of which is the creation of a Type 2 Diabetes Knowledge Portal funded via a U01 mechanism and additional ancillary grants from the Foundation for NIH.

# **Teaching**

From a didactic perspective, I teach in courses at the Harvard Medical School and Harvard School of Public Health, and I am a regular lecturer for MGH residents and fellows. I derive a great deal of satisfaction from my mentoring sessions.

### **Summary**

Since I completed my clinical training, I have endeavored to be at the forefront of physician-scientists who attempt to unravel the genetic basis of type 2 diabetes and contribute to usher in genetically tailored therapies. Service to the scientific and hospital communities, and to society at large, with particular attention to Latino patients and persons with Down syndrome, also holds a special place in my heart.