**Aarif Y Khakoo, M.D., M.B.A.**

## SUMMARY OF ACCOMPLISHMENTS

I am a physician scientist performing research focused on identification of novel therapeutic targets and development of therapeutic compounds against those targets. I currently am the Therapeutic Area Head of Cardiometabolic Disorders Research at Amgen, Inc in South San Francisco. In this role, I help set the strategy for our cardiovascular and metabolic disorders pipeline, together with our Global Clinical Development and Commercial Colleagues. Tactically, I lead a group of 110 discovery scientists focused on developing novel and innovative small and large molecule therapeutics for the treatment of human cardiovascular and metabolic diseases, with an emphasis on heart failure, atrial fibrillation, dyslipidemia, pulmonary hypertension, obesity, diabetes, and chronic kidney disease.

I am also named the Site Head of Amgen’s South San Francisco site, a growing R&D site of approximately 350 full-time employees with representation of all of Amgen’s therapeutic areas. This is an administrative position in which I am responsible for site-wide issues, including laboratory safety, strategic positioning of the site, and interactions with the external biomedical research community in the Bay Area, including both academia and small biotech.

Prior to coming to Amgen in May, 2011 I built a cardiovascular research laboratory as a tenured faculty member at MD Anderson Cancer Center, exploring the implications of clinically significant cardiac toxicities in patients treated with anti-cancer therapies. Using this bedside-to-bench approach (which we call “Cardiotoxicity as a Discovery Platform”), we demonstrated that the cardiac myocyte itself plays a key role in regulation of cardiac angiogenesis, and have contributed to understandings of the structure and function of the cardiac microvasculature that have therapeutic implications.

## PRESENT AFFILIATION

**Therapeutic Area Head, Cardiometabolic Disorders Research, Amgen, San Francisco, CA**

Key Responsibilities: I lead a research group of ~110 biological scientists, supported by a team of protein scientists, chemists, toxicologists, and other support scientists. Our mission is to build an industry-leading pipeline of agents from discovery to first in human for the treatment of human cardiovascular and metabolic diseases, focusing on dyslipidemia/atherosclerosis, heart failure, pulmonary hypertension, atrial fibrillation, diabetes and obesity. In addition, I manage and provide scientific direction for strategic research collaboration between Amgen and a small biotech partner. In this role, I help manage an additional 6 scientists supported by Amgen. Our approach focuses on small molecule, peptide, and antibody modalities as appropriate dependent upon the indication.

Functionally, I provide high-level scientific direction of the entire group, including novel platform generation, in vitro biology, and small and large animal in vivo pharmacology. I strive to create an environment where innovation and risk-taking is encouraged, balanced with achieving organizational efficiency while maintaining alignment with the overarching strategic direction of the company.

In addition, I provide leadership in the scientific assessment of potential licensing and acquisition opportunities related to cardiovascular and metabolic diseases which arise from external R&D efforts. I am also charged with seeking out new opportunities for collaboration between our team and scientists in academia performing cutting-edge research with translational relevance. In these roles, I interface closely with colleagues in clinical development, marketing, and commercial. I was a core member on the diligence team of two recent Amgen acquisitions/partnerships. I am also the Executive Sponsor for a small biotechnology company that is a portfolio company of Amgen Ventures.

Specific accomplishments over the past three years:

1. My team discovered a first-in class small molecule therapeutic for heart failure. Program A (indication- systolic and preserved ejection fraction heart failure) started as a screening project in 2010 and a clinical candidate (Molecule A) has been selected. Currently preparing for IND filing for Molecule A, with a Projected FIH Q2 2016.
2. Program B started as a screening project in 2012, and is in the mid-stages of clinical candidate selection of another first-in-class small molecule therapeutic for heart failure (indication systolic heart failure. Projected FIH Q4 2016.
3. Together with my Business Development partner, I championed the interaction with Servier leading to Amgen’s acquisition of US rights to develop ivabradine from Servier for heart failure and chronic stable angina. I oversaw my team’s non-clinical diligence work that led to this acquisition. My team wrote the non-clinical pharmacology section of the NDA-filing, which has received fast-track designation from the FDA for the heart failure indication.
4. I am the leader of Amgen’s Cardiovascular Drug Safety assessment process for carfilzomib (Kyprolis), a proteasome inhibitor indicated for multiple myeloma. I designed the adjudication process for adverse cardiac events from the FOCUS and ASPIRE trials, and oversaw the writing of the submission of the cardiac safety data that went into the EMA filing for Kyprolis. I have also overseen the adjudication of adverse cardiac events in ENDEAVOR, a head-to-head study of carfilzomib and bortezomib, including the cardiac echo sub-study that was requested by the FDA.
5. I charted the course for new cardiovascular indications at Amgen. My team has established several early research programs (multi-modality) for the treatment of dyslipidemia/atherosclerosis, pulmonary hypertension, atrial fibrillation and heart failure. Most of these targets have validation based upon discoveries from rare variant human genetics.
6. I have built a team with world-class target discovery and target prosecution capabilities, spanning in vitro, ex vivo, and in vivo pharmacology capabilities, including a large animal cardiovascular laboratory.
7. I gave seminars describing Amgen’s R&D efforts in Cardiovascular Disease at the China Heart Congress, the Canadian National Cardiovascular Advisory Board Meeting, the US Cardiovascular Global Advisory Board Meeting , American Heart Association Scientific Sessions, and multiple universities (e.g. Stanford, UCLA, UCSF)

[Publications](https://peoplesofthr.partners.org/psp/HRMSPROD/EMPLOYEE/HRMS/c/ROLE_MANAGER.PHS_SS_EE_INF_MGR.GBL?FolderPath=PORTAL_ROOT_OBJECT.CO_MANAGER_SELF_SERVICE.HC_JOB_PERSONAL_INFO.PHS_SS_EE_INF_MGR&IsFolder=false&IgnoreParamTempl=FolderPath%2cIsFolder)