

## GlaxoSmithKline and Harvard Stem Cell Institute announce major collaboration agreement

May be largest commitment to stem cell research by a major pharmaceutical company

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**Harvard Stem Cell Institute**

GlaxoSmithKline (GSK) and the [Harvard Stem Cell Institute](#) (HSCI) today announced that they have entered into a five-year, \$25 million-plus collaborative agreement to build a unique alliance in stem cell science to hasten the development of treatments and cures for a range of diseases.

GSK's investment, one of the largest by a pharmaceutical company in stem cell science, will support innovative research at Harvard and in at least four Harvard-affiliated hospitals in six disease areas - neurological, cardiac, cancer, diabetes, musculoskeletal, and obesity. In addition, GSK will fund an annual grant in HSCI's "seed grant" program, which supports early stage innovative research.

"This is an exciting, extremely significant moment in the history of HSCI," said Brock Reeve, the Stem Cell Institute's Executive Director. "This kind of collaborative alliance with GlaxoSmithKline, one of the world's leading research-based pharmaceutical and healthcare companies, will allow the Harvard Stem Cell Institute to ultimately fulfill its promise of advancing stem cell science to benefit patients. This infusion of research support builds upon the generosity of our donors which continues to be vitally important for our ongoing success."

The collaboration will integrate HSCI's world-class stem cell expertise with GSK's pharmaceutical capabilities to drive advances in drug discovery research. This will include, for example, a staff exchange program where HSCI and GSK researchers will spend up to several



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months in each other's laboratories. The collaboration will be overseen by a joint steering committee made up of HSCI and GSK scientists and managers.

"GSK believes stem cell science has great potential to aid the discovery of new medicines by improving the screening, identification and development of new compounds. We have carefully chosen the Boston biomedical community to collaborate with on this important venture. It has the highest concentration of leading stem cell scientists, and the Harvard Stem Cell Institute is the epicenter of that community," said Patrick Vallance, Head of Drug Discovery at GSK.

The agreement allows HSCI researchers to pursue promising findings and to publish their findings as they normally would.

Among the planned projects are:

- An effort lead by Amy Wagers, at the Joslin Diabetes Center, focused on muscle regeneration;
- Work on fat stem cells and obesity, lead by Chad Cowan, at Massachusetts General Hospital;
- A project in the cardiovascular area, lead by Ken Chien, head of the Cardiovascular Research Center at MGH. Additionally, Chien and Kit Parker, of Harvard's School of Engineering and Applied Sciences will undertake a project focused on developing cardiomyocyte models for drug screening and discovery;
- A cancer effort, lead by Siddartha Mukherjee at MGH and Ben Ebert, at Brigham and Women's Hospital, with guidance from Gary Gilliland, of BWH, and David Scadden of MGH, the HSCI co-director. The researchers will focus on novel therapeutic approaches to selectively target cancer stem cells;
- A neuroscience study that will address ways to block pain and measure risk factors for developing chronic pain. This effort will be lead by Lee Rubin of Harvard's Department of Stem Cell and Regenerative Biology, Qiufu Ma, of Dana-Farber Cancer Institute, Clifford Woolf, of MGH, and Joachim Scholz, of MGH.

Cardiologist and stem cell scientist Ken Chien called the GSK collaboration "a significant milestone for HSCI that furthers our mission of actualizing science to develop therapeutics for patients. This agreement

demonstrates HSCI's novel approach to collaboration and is the first of additional ventures to come in the future."

For a junior faculty member such as Chad Cowan, the "GSK collaboration provides additional funding for my lab and leveraged expertise in drug discovery in a major disease area. It's also aligned with one of HSCI core fundamentals of cross-lab fertilization in areas of common interest."