



**2016 Discovery  
Fast Track:  
UK Golden Triangle  
Challenge**

*Your chance to join GSK scientists and work alongside them to find tool compounds against your target of interest that may lead to a future medicine.*

**Are you an academic researcher based within a 50 mile radius of the GSK Medicines Research Centre in Stevenage? Do you have a drug discovery concept you're eager to explore?**

Tell us about your idea. Our expert judges will select up to 3 researchers to win a collaboration with GSK to screen their target/pathway against the GSK compound collections. Bursaries will be available to cover costs of travel for you or a member of your team should you wish to work alongside GSK scientists to discover active compounds.

***If you have....***

- A clear therapeutic hypothesis***  
We are looking for a clear and supportable hypothesis for the development of a medicine that would provide therapeutic benefit to particular groups of patients
- A defined target and/or pathway***  
You should have identified a specific drug target linked to disease and be able to propose ways of modulating this to provide an effective therapy
- Enabling Expertise***  
The Discovery Fast Track UK Golden Triangle Challenge is a collaboration. You should have generated data which provide proof of concept for your proposal and, ideally, have already developed key reagents and assays

***...then we would like you to apply!***

**Applications close 28<sup>th</sup> October 2016**

Terms and conditions at [www.gsk.com/discoveryfasttrack](http://www.gsk.com/discoveryfasttrack)

# Enter the 2016 Discovery Fast Track: UK Golden Triangle Challenge *for a chance to collaborate with GSK*

You are eligible to apply if your academic or research institution is within a 50 mile radius of the GSK Medicines Research Centre in Stevenage.

## GSK Capabilities

### Reagents and Assays

Reagents and assays are customised to identify quality chemical tools. A wide range of biochemical, biophysical, cellular and phenotypic assays can be exploited and scaled to meet drug discovery needs.

### HTS

High Throughput Screening (HTS) enables the testing of millions of pure compounds using a diverse set of technologies in both cellular and biochemical assays. The GSK HTS chemical library consists of around 2 million compounds selected to enhance the success in finding high-quality molecules for lead optimisation programmes. Our expertise in miniaturisation, robotics and data analysis together with years' worth of experience, makes HTS a fast and high-quality process. Results are analysed with sophisticated chemical tool selection algorithms that include robust statistics, chemical clustering, data mining and physicochemical properties.



If you are interested in applying please contact Tamsin Sayer ([tamsin.sayer@admin.cam.ac.uk](mailto:tamsin.sayer@admin.cam.ac.uk)).



### Encoded Library Technology (ELT)

ELT is an affinity-based selection methodology for hit identification. This technology is based on the synthesis and screening of a highly diverse collection of DNA-encoded small molecules. In a simple affinity selection experiment, libraries containing millions of compounds are exposed to the target. Bound molecules are then recovered and de-convoluted using next-generation sequencing. This technology has minimal protein requirements and has been successfully applied to a range of enzyme, protein-protein and receptor targets, including proteins isolated from patients.

### Hit Qualification Support

Selecting the optimal tool compound(s) from the hundreds or thousands of raw screening hits typically requires the use of a range of assays, along with computational chemistry approaches to identify emergent structure-activity relationships. To accomplish this, GSK operates a holistic computational and experimental approach. We provide both the relevant measurements and the interpretational guidance, ensuring the selected compounds possess the best physical-chemical properties and interact with the target via a desired modality.

### Out of Scope

If you wish to propose a biopharmaceutical (e.g. antibody) as a therapeutic, you may want to reach out to GSK's [Discovery Partnerships with Academia \(DPAC\)](#) team. If you wish to propose a vaccine, technology or delivery system, follow the link for these opportunities at [GSK Partnerships](#). For proposals centred on Diseases of the Developing World, our centre of expertise is based in Tres Cantos; follow the link to [Neglected Tropical Diseases](#).