RECEPTOR PHARMACOLOGY
& OCCUPANCY

gifford
BIOSCIENCE LIMITED

OUR EXPERTISE AT YOUR
SERVICE

About Us

Receptor Pharmacology and Occupancy

Our Expertise At Your Service

Gifford Bioscience is a preclinical contract research organization (CRO) specializing in receptor pharmacology and occupancy studies for neurology, oncology, and metabolic diseases.

Our receptor-ligand assays provide quantitative insights that guide early-stage drug discovery and de-risk development by leveraging recombinant systems and endogenous tissue from animal to NHP to human tissue.

87%
Repeat Customers

Your Trusted Partners

Neurology
Therapeutics

Supporting research into complex disorders such as Alzheimer's and Parkinson's Disease through precise receptor assays

Oncology
Therapeutics

Empowering oncology research with binding assays, providing insights into target expression and antibody affinity

Metabolic Diseases
Therapeutics

Advancing treatments for metabolic disorders like diabetes through examination of receptor roles in cellular processes

✓ **Specialized Expertise**
Deep experience in receptor pharmacology for neurology and neuroscience, oncology and metabolic diseases.

✓ **Tailored Solutions**
Custom research models designed to fit your exact needs, delivering reliable, reproducible results.

✓ **Proven Techniques**
Generation of robust and dependable data is assured through use of human samples, animal tissue, recombinant proteins, cells and cell membranes.

✓ **Fast Turnaround**
Quick project delivery to accelerate your drug development and reduce time to market.
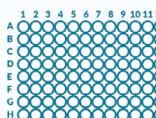
✓ **Frequent Updates & Feedback**
Frequent feedback and discussion with our expert scientists, fostering real collaboration.

Core Assays & Technologies

Determine receptor density, binding parameters and efficacy for your test compounds.

Radioligand Binding

Enable high-sensitivity quantification of receptor affinities and ligand-binding parameters.

Receptor Occupancy

Quantify drug-target interactions to guide dose selection and optimize potency in early-stage development. Ensure receptor selectivity to minimize off-target effects and improve therapeutic safety.

Cellular Uptake and Release

We determine intracellular drug accumulation and clearance, crucial for CNS-targeting therapies and bioavailability optimization.

SPR (Surface Plasmon Resonance)

SPR provides real-time, label-free kinetic analysis, crucial for identifying lead compounds with optimal binding properties.

Receptor Autoradiography

Map receptor distribution at a tissue level, confirming targeted engagement and minimizing unwanted interactions.

Functional Assays

Validate whether a drug activates or inhibits target receptors to confirm pharmacological efficacy.

Receptor-ligand binding assays are techniques used to study the interaction between a ligand and a target protein (receptor), crucial for identifying and optimizing test compounds by measuring binding affinity and kinetics.

Working With Us

Our partnership approach is built around rigorous science and transparent communication.

From initial consultation to detailed reporting, our expert scientists work closely with you to ensure each project milestone is met.

- ✓ A Clear Project Roadmap
- ✓ Tailored Solutions for every Customer
- ✓ Consistent Communication

Your Project's Roadmap

01

1. Inquire One of our scientists will respond in 24 Hours

02

2. Consult No obligation discussion with our team

03

3. Collabrotative Proposal defining the scope of the work

04

4. Proposal Execution An itterative confirmation process. Contact UK Human Tissue Banks (if required)

05

5. Project Initiation Usually within a week of receiving materials & test compounds

06

6. Experimental Work Weekly updates, colloaborative discussions and results

07

7. Debrief A two way review of the final data sets, analysis and interpretation

08
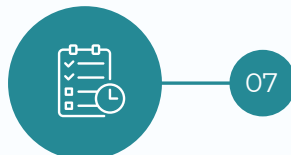
8. Final Report Detailed description of all methods implemented. Data summaries in tables / figures

100%
PhD Level Scientists

Gifford Bioscience provides receptor pharmacology expertise globally

53%
North America

33%
Europe

14%
Asia Pacific/ RoW

Over the past eight years we have undertaken hundreds of collaborations worldwide
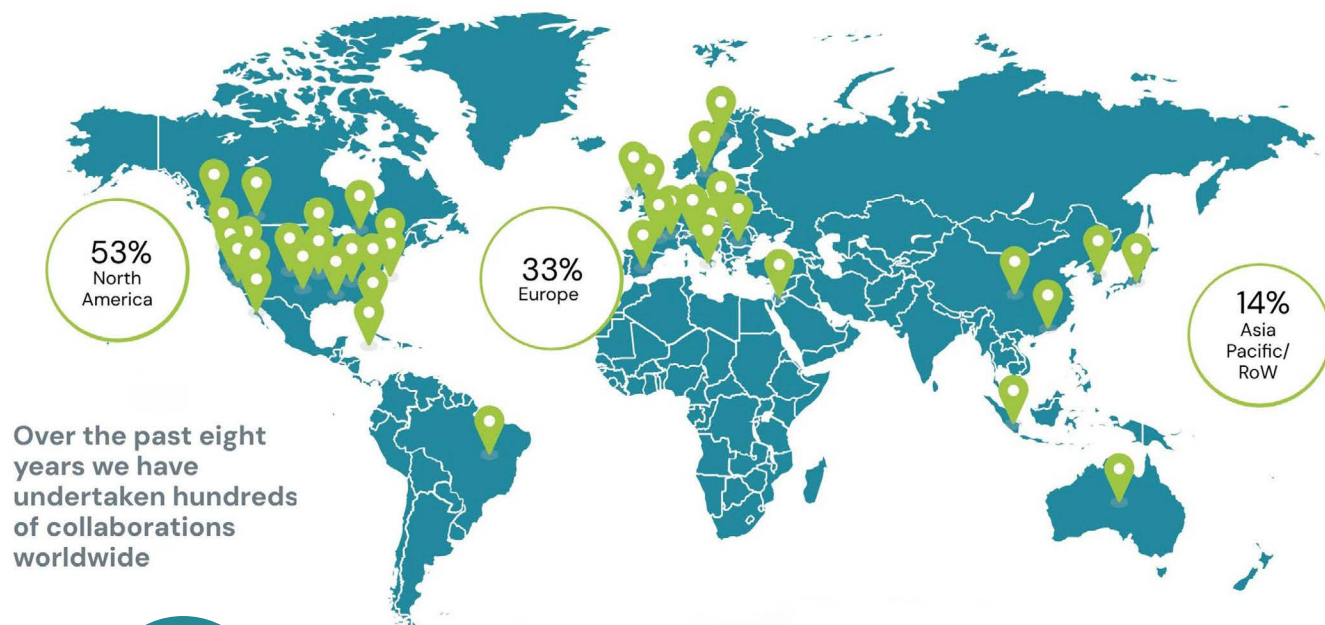
Why Choose Us

✓ **Industry-Leading Expertise**: We specialize in receptor pharmacology and occupancy, with 100% of scientists holding PhDs.

✓ **Collaboration and Customization:** We work closely with our customers to design tailored solutions, ensuring each study meets their specific research goals with precision and flexibility

✓ **Proven Techniques across Multiple Systems** Our trusted ligand-binding assays utilize expression systems and endogenous tissue, working closely with the UK's network of tissue banks.

Gifford Bioscience is based at the University of Birmingham's research park. This strategic location places us at the heart of an academic and research hub, enabling us to foster strong collaborations with the University and access advanced facilities such as the Human Biomedical Resource Centre and Protein Expression Facility.

Hear from our
Customers

"Hi Becky, I want to sincerely thank you and your team the thoughtful, professional way you're handling everything. It's truly uncommon to see such integrity and care from a commercial company, and I deeply appreciate it. Thanks again for your incredible support."

Research Associate, Boston Charitable Foundation, Apr 2025

"5 stars across the board! Working with Gifford was a very rewarding experience – great science, great culture, great communication."

SVP, East Coast Biotech, Dec 2024

I'm very happy with the work GiffBio has done. Every study I have requested has been done quickly, at a reasonable cost, and both the resulting data and study reports have been high quality. Furthermore, everyone I have interacted with has been responsive and very professional. Regarding the survey, five stars on all questions."

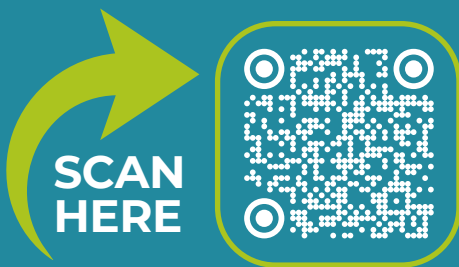Associate Director, New Jersey Biotech, Dec 2024

Ready to Accelerate Your Drug Discovery?

Contact us today to discuss how Gifford Bioscience can support your research needs with precision assays and expert guidance.

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SCAN HERE

Ready to accelerate your drug discovery?
Partner with Gifford Bioscience specialized
assays and expert guidance.

Contact us today to discuss your project needs
and talk directly to one of our scientists.