Services offered by DCRA to its collaborators



If you are a researcher interested in collaborating with the Diabetes Cure Research Association (DCRA), here's how we can assist you:

1. Reducing Effort in Obtaining Results



DCRA conducts the agreed-upon laboratory techniques in its facilities as part of the collaboration. This includes covering costs associated with labour and basic consumable materials. Additionally, we provide expert advice at every stage of the research.

This allows your research group to significantly reduce economic costs, accelerate results within the same time frame, and more effectively overcome challenges during the process.

2. Increasing scientific publications

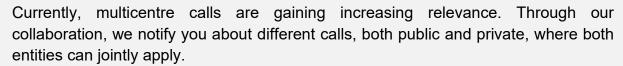


We prepare a detailed report with the results obtained at DCRA to facilitate subsequent publication. Additionally, we analyze your research line and propose new ideas based on the latest published scientific advancements.

If your research group works in a field other than diabetes, we explore how to apply your expertise to study this disease. Finally, we are open to providing our research materials, enriching your lines of work.

This enables your research group to generate more results, incorporate new ideas, and increase the ease of publishing scientific articles.

3. Support in obtaining funds





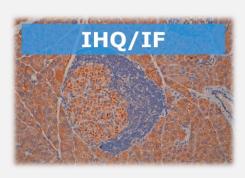
Some calls value the inclusion of certificates issued by external organizations and the scientific dissemination of results. Therefore, we analyze your research project and issue a favourable report to support the application. We also commit to disseminating scientific results through our social networks.

Finally, we assist in connecting with other research groups to jointly manage grant applications. All of this helps increase your chances of securing funding for your research.

4. Techniques performed at DCRA



- ❖ Paraffin Embedding and Histological Cutting: Preparation of tissues via paraffin embedding and obtaining precise sections for analysis.
- Conventional and Specialized Staining: Techniques like hematoxylin-eosin and others to highlight cellular and tissue structures.
- Detailed Histological Analysis: Morphological and quantitative tissue evaluations to obtain relevant data.
- Insulitis Calculation: Identification and quantification of inflammation in pancreatic islets.
- Measurement of Specific Areas: Analysis of pancreatic endocrine area and adipocyte size for metabolic studies.



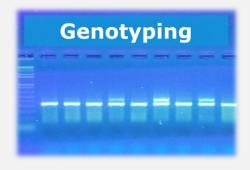
- ❖ Simple or multiple immunohistochemistry (IHC) using reagents like DAB, AEC, or BCIP/NBT.
- Simple or multiple immunofluorescence (IF), contrasted with DAPI.
- Photography and quantification of IHC/IF: Results for precise analyses.



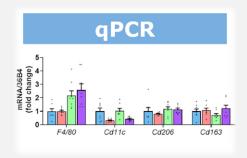
- Cell line growth for cellular and experimental studies.
- Characterization of treatment effects on specific cell lines.
- **Co-cultures** for investigating cellular interactions and multicellular studies.



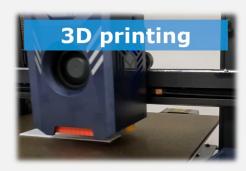
- ❖ Absorbance Measurement in assays like ELISA, BCA and fatty acids.
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- Cytotoxicity and cell proliferation assays to evaluate viability and cell growth.



- Genetic material extraction from various biological samples.
- Gene identification and mutation analysis using advanced techniques.
- Photography and Interpretation of Results for precise visualization and analysis.



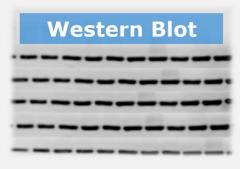
- mRNA extraction and retrotranscription to cDNA for genetic analysis.
- ❖ Real-time Gene Expression Quantification. Panels for inflammation, proliferation, metabolism...
- ❖ Analysis and interpretation of results to obtain precise gene expression data.



- 3D Design of Custom Pieces tailored to project needs.
- 3D printing using materials such as PLA or ABS.
- Design of specific pieces for cell cultures, adapted to experimental conditions.



- **Ethical protocols** adapted to animal welfare regulations and research standards.
- Procedures with animals for models of obesity, diabetes, GTT, ITT, among others.
- Relevant organs for research.



- Protein extraction from biological samples for analysis.
- Antigen detection using techniques such as DAB for specific visualization.
- Quantification and interpretation of results for precise protein expression analysis.

5. Contact us



