

Post Doctoral Fellows - Human T lymphocyte / CAR-T cells: *Cartherics Pty Ltd Melbourne*

Position Description

Cartherics is seeking Post-Doctoral Fellows to help implement its very active research program in Chimeric Antigen Receptor (CAR)-T based immunotherapies. The successful applicants will have a strong background in human T cell biology with experience in isolation, cell culture and phenotypic and functional characterisation. They will have a desire to succeed in a competitive environment and relish the challenge of helping to implement new technologies and equipment as necessary; the rewards will be substantial. They will report directly to the Chief Scientific Officer of Cartherics but also liaise regularly with the other research scientists and relevant Laboratory personnel.

The project has multiple programs incorporating in vitro activation and numerical expansion of TCR-cancer specific T cells; gene transfection with viral constructs; induction of T cells from pluripotential stem cells. Accordingly the successful applicant will have extensive experience in immunology-based research techniques with relevance to one or more of the key research platforms:

1. The isolation and functional expansion of human blood T cells with a TCR specific for a nominal cancer antigen; this will require extensive knowledge of tetramer based flow cytometry, cell sorter, cytokine arrays, ultra-sterile tissue culture ultimately in GMP/GLP conditions
2. The transfection of human T cells or iPSC with viral (retroviral or lenti) constructs (these will contain Chimeric Antigen Receptor specification)
3. The induction of T cells from CAR-T/ TCR specific stem or progenitor cells in vitro using mimics of thymus –based T cell genesis; functional analysis of safety and specificity. This involves tissue culture, animal husbandry and handling, flow cytometry, immunohistochemistry, in vitro and in vivo T cell cytotoxicity assays

In particular they will:

- (i) Have demonstrated scientific knowledge and experience with a proven track record for performing highest quality research including publications in leading journals;
- (ii) Have advanced analytical skills with proven experience in human lymphocyte biology
- (iii) Ensure smooth running of the laboratory environment;
- (iv) Have well developed organizational skills required for data management and documentation of standard operating procedures; the ability to set priorities, manage time, work to meet deadlines and work effectively under pressure.
- (v) Have excellent problem-solving abilities including appraisal and improvement of laboratory technologies and practices
- (vi) Understand the requirements and confidentiality for corporate funded research;

Education/Qualifications

The appointees will have a PhD and 3+ years Postdoctoral experience in T cell biology from a recognized university or research institute.

Company Description

Cartherics Pty Ltd is an exciting new Melbourne-based start-up biotechnology company, developing the next generation immune therapeutic approach to treat cancer. The Company's objective is to combine the best weapons of the immune system that have evolved so effectively to combat infections, to now target and destroy cancer. The essence is to identify and expand T cells with their own cancer recognizing T Cell Receptors (TCRs), then use sophisticated molecular engineering to empower these cells with additional cancer-specific recognition and activation molecules ("Chimeric Antigen Receptors": CAR-T) that can not only track down the cells but also deliver a supercharged "killer blow". Furthermore we will use stem cell technology to exponentially expand these "cancer smart" killer cells, thereby enabling a quantum increase in the destructive power of a patient's immune system. The ultimate goal, is to give Cartherics an international leadership position in immune cell and stem cell therapies. Cartherics, in association with the Hudson Institute for Medical Research, is expected to be located within the new facilities of the Monash Health Translation Precinct, Monash Medical Centre, Clayton Road, Clayton (Melbourne), Victoria, Australia

Send application with C.V including potential referees to:

Professor Richard Boyd

Chief Scientific Officer,

Cartherics, Pty Ltd.

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