TECHNOLOGY READINESS MATRIX

RMIT UNIVERSITY

Technology Readiness Level & description	Examples of types of activity that would be needed to move to the next level	Indicative support provided for activities	Evidence required to submit application at this level	Output from the activity – demonstrate to support funding
TRL 0-1: Area of research being investigated NOTE: The R&I Portfolio *Innovation Proof of Concept Fund* supports TRL 0-1 proposals	• Database searches: literature and IP • Assessment of potential for impact • Assessment of unmet need, problem and fit of proposed solution • Assessment of potential applications	Up to $10,000 For some impact pathway mapping/analysis support and literature review	• In the event IP has been created, that it is owned by RMIT or is at least 50% owned by RMIT • IP needs to have been disclosed to the IP and Commercialisation team	• impact pathway/analysis report • Innovation and translation skills uplift • Literature review • IP landscape
TRL 1-2: scientific research is beginning and those results are being translated into future research and development plans.	• Early testing and viability studies • Early-stage prototyping and preliminary proof-of-concept demonstration • Initial in-vitro experiments for early validation of concept • Successful synthesis of new molecules/compounds • Early physicochemical characterisation	Up to $50,000	• IP owned or at least 50% share to RMIT • IP needs to have been disclosed to the IP and Commercialisation team • Industry partner co-funding (Preferable)	• Data from early-stage testing and viability assessment • statistical analysis, safety report (is proposed safer than conventional solution) • Project safety experimental data • Explore characteristics of solution in literature • Materials libraries synthesized

TECHNOLOGY READINESS MATRIX

TRL 2-3: once the basic principles have been studied and practical applications can be applied to those initial findings; there is little to no experimental proof of concept for the technology	• Experimental or numerical proof of concept for the technology, simulated proof • Advanced prototyping for minimal viable product (MVP) development • Further in-vitro and initial in-vivo experiments to further validate POC • Assessing viability of large-scale manufacturing, stability, and batch to batch consistency	Up to $50,000	• IP owned or at least 50% share to RMIT • IP needs to have been disclosed to the IP and Commercialisation team • Industry partner co-funding (Preferable)	• Needed to apply literature on a computer model to calculate feasibility • Solid data to become competitive in competitive grant funding applications
TRL 3-4: both analytical and laboratory studies are required at this level to see if a technology is viable and ready to proceed further through the development process. Often, a proof of concept is developed at this level	• Development of MVP • Formal pre-clinical studies in in-vivo models – safety, efficacy, pharmacokinetics etc • Selection of suitable available prototypes for modification and testing • Purchase test equipment suitable for the project • Modify current test equipment • Monitor and improve quality of equipment • Initial development of IP and potential formal protection	$50,000 (or more)	• IP owned or at least 50% share to RMIT • IP needs to have been disclosed to the IP and Commercialisation team • Industry partner co-funding (Preferable)	• Evidence of a working MVP in the lab • Preclinical data package for engaging with industry partners • Not fully functioning, but close • Possibility of IP protection explored

TECHNOLOGY READINESS MATRIX

TRL 4-5: Once the proof-of-concept technology is ready, the technology advances to TRL 4. During TRL 4, multiple component pieces are tested with one another	• Make modifications and develop the prototype to be applicable to specific end user • Partner with the end user to demonstrate the technology	$50,000 (or more) • Post-doc/RA support to make a tailored prototype and equipment purchase/modification 50K • Commercialisation personnel to negotiate a contract • Monitor IP developments and develop an IP strategy and a path to market strategy • Eg $30K for market related support	• IP owned or at least 50% share to RMIT • IP needs to have been disclosed to the IP and Commercialisation team • Industry partner co-funding (Preferable)	• Successful demonstration of MVP in a relevant environment