

Research Development Fund – 2020-2021 Application Template
SUBMISSION DEADLINE: **Monday – October 19, 2020 at 12 noon CDT** to rdf@tamu.edu

****Applications that exceed page limits for any section or do not follow template will not be reviewed****

Application Title: Increased capacity and service at TIGM to enhance TAMU Research

Lead contact for RDF Application:

Name: Ben Morpurgo

Department: TIGM

Email address: bmorpurgo@tigm.org

Phone number: 979-571-2214

Key Participating Units: AgriLife Research - TIGM

Anticipated Request Amount (\$): 200,000 per year for 2 years.

Executive summary of this application to utilize Research Development Funds:

Include the overall scope/objective of the application. What research infrastructure enhancement is proposed? How will research at Texas A&M be improved? Who (units) will benefit at the Brazos County locations? How will external funding be enhanced? What outcomes are anticipated? Explain clearly how this investment supports TAMU research infrastructure for broad campus benefit.

With the onset of the Covid19 pandemic and the work and travel restrictions that followed in March 2020, it became apparent the importance of a secure, safe, functioning transgenic facility on campus, which would be able to continue colony management, provide transgenic services, and provide mice for campus investigators.

During this period, TIGM continued operations, provided transgenic services, maintained, and expanded colonies and was able to supply various mice strains to TAMU investigators when they could not get those from outside vendors. Also, TIGM was able to cryopreserve and QC over 30 mouse lines for on and off campus customers.

Therefore, this application is designed to enhance our capabilities in two of those aspects: One is to increase our housing efficiency and capability by gradually moving to a more cost-effective housing system using high-density cages rather than micro isolator caging system. The other is to increase variety and capabilities of providing wild type mice from the most popular strains to TAMU investigators in about half the cost of outside vendors, without needing interstate shipping. In addition, most of these mice will be produced in our barrier core, which is cleaner and pathogen-free at a higher level than most vendor facilities.

So far in 2020, more than 20 TAMUS investigators maintain colonies at TIGM, and 22 Researchers have obtained wild type mice generated in our facility for their research. The funds requested will allow us to increase the supply and completely devoid using vendor-provided mice for our transgenic services. This by itself would reduce the cost for our internal customers for all other transgenic core products and services.