

By prioritizing partnership agreements, 59th Medical Wing ORTA makes a big impact in a short time

U.S. Air Force, 59th Medical Wing Science & Technology

Established in late 2016, the 59th Medical Wing (59 MDW) Office of Research and Technology Applications (ORTA) has quickly demonstrated its commitment to collaboration, executing a total of 83 active partnership agreements before its fifth birthday. And the five-person team's collaborative momentum is increasing, as the majority of those agreements have been inked in the last two years.

The 59 MDW ORTA is a small team of five professionals committed to helping establish collaborative partnerships with businesses, academia, and other organizations to address military medical needs with the best solutions possible. The team also promotes bilateral transfer of technology between federal, state, private, public, and nonprofit organizations.

In the past two years, this small team's accomplishments include:

- More than doubling the number of active cooperative research and development agreements (CRADAs) from 17 to 49, with the value increasing by \$26.9 million. These included five active CRADAs with the University of Virginia's Center for Addiction Prevention Research, a research effort to assess addiction-related health risk behaviors and develop interventions to improve outcomes.
- Increasing the number of active Material Transfer Agreements (MTAs) from 16 to 26 active agreements, with the value increasing by \$816,000. These included an MTA with the Wyss Institute of Harvard University to share novel compounds for a collaborative research effort at Brooke Army Medical Center, working to limit the damaging impacts of critical limb injuries by inducing metabolic stasis to "buy time" for definitive care.
- Coordinating three licensing inquiries with Air Force legal staff, with four issued patents, seven pending patents, and one licensing agreement (two others are in negotiations). These included a negative pressure mask that allowed for oronasal access, to protect COVID-19 caregivers during patient transport while



Above: The chart shows active technology transfer agreements with total research values bu execution uear with Air Force and collaborator contribution comparison.

allowing for intubation.

- Providing training in 2020 to 25 individuals on the importance of identifying and securing potential intellectual property (IP), which resulted in a doubling of patent inquiries in 12 months.
- Initiating a new Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) process that enabled \$5.5 million in awards to six small businesses and universities for developing commercially available medical products required by the Department of Defense. They also supported submissions for eight additional projects that may result in awards of \$6 million to other small businesses and universities.

To promote and support collaboration, the team began compiling a monthly report of government medical research and development funding opportunities and sharing it with the San Antonio Economic Development Council (SAEDC) for distribution to an assortment of local small businesses, universities, non-profit organizations, and other groups.

Finally, looking to improve the processes they manage and the quality of support they provide, the 59 MDW team conducted a quality improvement review in the spring of 2021. This evolved into the team's first-ever strategic plan, which will guide the process of enhancing operations over the next several years.