

## Paving the Way for Future Success

### *CIMIT's Clinical Impact Study*

Since its founding, CIMIT has focused on creating clinical impact. To quantify, study, and improve upon its methodology, CIMIT initiated a Clinical Impact Study during 2009. This comprehensive assessment examined the inputs and outcomes of 362 projects that CIMIT supported with grants initiated between 1998 and 2006. The study examined the accumulated collection of publications, project reports, grant submissions, personal narratives, and experiences by investigators in pursuing clinical adoption and/or commercialization of products. The evaluation of these inputs and outcomes informed the conclusions drawn in determining clinical impact, and it has since guided efforts to improve the overall CIMIT Model.

The study report was completed in spring 2010 and included the following output quantification:

- Clinical Adoption: >20% of project clusters have reached the point that they have received regulatory approval for human use.
- Commercialization: > 30% of project clusters have reached the point that they have a licensing agreement with a company or they have formed a NewCo.
- Enabled Funding: > 60% of project clusters have been able to generate some follow-on funding.
  - Direct to Investigators ~ 3 times CIMIT funding to PIs
  - + Commercial Inv ~ 6 times CIMIT funding to PIs
  - = Total >~9 times CIMIT funding to PIs
- Patents: > 15% of project clusters have at least one issued patent (a total of over 30)
- Publications: > 60% of project clusters have at least one peer reviewed article (a total of over 700)
- Academic Career Advancement: > 50% of project clusters report promotion or career/educational advancement of at least one investigator

Correlations between the input and output variables provided additional insights and learnings that CIMIT is making use of to further improve how it utilizes resources. Some examples of the key lessons learned include:

- CIMIT's greatest "bang-for-the buck" occurred in projects with funding in the \$100K to \$300K range. While more money created more clinical impact (as measured by the above metrics), this range is where CIMIT spends its monies most efficiently, with financial support by other organizations advancing the projects further.
- Projects conducted as part of a "cluster" of activities are more effective than those done in isolation. Clusters represent communities of interest, they are not managed by single person or group – but are effectively facilitated by peers, CIMIT staff and strong CIMIT Program Leaders.
- Junior faculty were as successful as more senior investigators working within the CIMIT model. Mentorship, raw talent and "fresh eyes" were cited as potential equalizing factors.

- Time alone did not correlate with a successful outcome, leading to the conclusion that projects could be prioritized according to their potential for rapid clinical implementation.
- Regardless of the size of the grant or the promise of the research, targeted and skilled facilitation is a powerful combination at any stage of the innovation cycle, from the pre-proposal phase onward.
- The more actively engaged in the CIMIT community a consortium institution's faculty and Site Miner, the more results these individuals were able to achieve for the institution.

These and other lessons from the study are now helping to refine CIMIT's specifications for selecting and supporting new initiatives with the greatest bang-for-the-buck potential in the near term. The study may also serve as a valuable guide for other groups interested in learning about optimal ways of executing translational research.

The implications of the Clinical Impact Study on CIMIT's future activities include: continued emphasis on pre- and post-award facilitation; discontinuation of larger grant options in favor of seed grants of \$100,000 or less, with additional "accelerator" funding of \$200,000 available for intensive facilitation to speed projects showing great promise of a commercial exit; and focus on newer investigators who would welcome facilitation and have fresh ideas with potential near-term impact.