



# Biophotonics Technology Center

## Co-directors

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The primary focus of the BTC will be to foster research collaboration amongst its members, as well with non-member faculty who collaborate with a BTC member. Additionally, the translation to the private sector of discoveries made by member of the BTC will be a major objective. Several mechanisms will be used to achieve these goals.

First, the BTC will provide funding for innovative pilot projects that are too early to garner funding from conventional venues (government, foundations, industry, etc.). These “spark” awards will be in the range of \$50K-100K/year direct costs for one or two years. It is anticipated that 2-4 awards can be made each year. The funds can be used for graduate student and postdoctoral fellow support, but not for faculty salaries. The type of projects funded will generally deal with mechanisms of photon interaction with biological systems, the use of photons to manipulate cells and or tissues, and the application of photons in clinical diagnostic or therapeutics systems.

Second, to foster collaboration and interchange, there will be an annual one-day symposium devoted to oral presentations in the field of biophotonics. It is anticipated that the speakers will be a mix of internal (UCSD) and external presenters from industry and other San Diego area research institutions. The intention of the symposium is to foster collaboration—not to brag about our latest paper in Nature or Science.

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Third, mechanisms to foster collaboration will unfold with the success of the BTC program and will be in the form of either program project grants, IGERT awards, or grants from agencies where multidisciplinary collaboration is emphasized. A current DOD announcement for funding has \$150M appropriated for basic research biophysics of electromagnetic radiation that will fund up to six faculty researchers per award. Formation of the BTC will place UCSD in a good competitive position for this and other photonic-based interdisciplinary awards.

In summary, the formation of a Biophotonics Technology Center under the umbrella of the Institute for Engineering in Medicine (IEM) will establish a campus focus that matches a national priority, foster collaboration between faculty, faculty and the surrounding private sector, attract top students and post docs, and eventually garner funds from other sources (government, foundations, industry, and donors).

