STATE OF NEW YORK

6393

2025-2026 Regular Sessions

IN ASSEMBLY

March 4, 2025

Introduced by M. of A. PEOPLES-STOKES -- read once and referred to the Committee on Higher Education

AN ACT to establish a Center for Transplantation and Immunology Research at the University at Buffalo and Erie County Medical Center; and making an appropriation therefor

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Legislative determinations. Kidney disease in the United States is fast becoming epidemic in character. Due to the increasing incidence of both diabetes and hypertension in the general population, chronic renal disease affects an estimated 16.8% of adults aged 20 years and older. As of 2008, there were over 500,000 people on dialysis more than 300,000 of who have diabetes and hypertension as their underlying cause. The cost to society of treating end-stage renal disease (ESRD) in 2008 was 39.46 billion dollars. The cost to the individual patient is a higher mortality and shorter life span at all ages compared to the general population. In the absence of effective therapies for chronic kidney disease, patients are left with the choice of either dialysis or transplantation.

Kidney transplantation has become the treatment of choice for patients with end stage renal disease (ESRD) providing improved survival rates and a better quality of life. In addition, transplantation represents the most cost-effective form of ESRD therapy once the allograft survives more than 3 years. As immunosuppressive therapies for kidney transplantation evolved to include more potent and specific therapies, short-term (1 year) patient and graft survival rates have continuously improved. It is not unusual to expect 1 year success rates of over 90%. However, these short term improvements have not translated into improved longer survival rates. The expected survival of kidney transplants for living donors remains at 18-20 years and for deceased donor organs 8-10 years; rates which have not significantly improved over the past 20 years.

EXPLANATION--Matter in *italics* (underscored) is new; matter in brackets [-] is old law to be omitted.

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Currently, the most important challenge in renal transplantation is promoting the long-term kidney allograft function. Eventually many, if not all, transplanted kidneys develop a progressive fibrotic process that affects both the interstitium and vasculature. This renal fibrosis eventually leads to renal failure, an increased rate of cardiovascular disease and mortality and the need for reinstituting dialysis. Today, the most rapidly increasing group of patients requiring a new kidney transplant is those whose previous transplant has failed.

It is becoming increasingly clear that there is no single cause of kidney transplant fibrosis rather this process culminates from a myriad of etiologies. One of the major challenges to delivering effective transplant care is the difficulty in assessing an individual's particular requirements for adequate immunosuppression. In of itself, too much immunosuppressive therapy in the form of calcineurin inhibitors leads to renal fibrosis and is felt to be a major cause of long-term graft failure. On the other hand, too little immunosuppression is now being recognized as a leading cause of unrecognized and slowly progressive rejection which also leads to allograft fibrosis indistinguishable from calcineurin toxicity. Moreover, subtherapeutic dosing of immunosuppressive drugs may lead to the formation of antibodies directed against the newly transplanted kidney which may be the cause of over 50% of late graft failures. Thus, understanding the biological effects of available therapies, their effects on renal fibrosis and their optimal therapeutic "windows" would greatly advance our ability to promote long-term kidney transplant survival.

The mission of the Center for Transplantation and Immunology Research established pursuant to this act is to advance the longevity of kidney organ transplants through improved knowledge of immunology, pathology and therapeutics.

§ 2. Center for Transplantation and Immunology Research. 1. There shall be established a Center for Transplantation and Immunology Research (CTIR) at the University at Buffalo and Erie County Medical Center. The CTIR shall allow for collaborations amongst laboratories to provide insights and approaches to understanding and improving renal fibrosis. The CTIR shall provide a vehicle for educational experiences for undergraduates as well as graduate students at the University of Buffalo. The CTIR shall include both basic and clinical scientists working together with practicing physicians and surgeons. The CTIR shall also serve as a means to compete for extramural funding through individual investigator's grants or through larger program projects in transplantation.

2. Research by the CTIR shall include but not be limited to:

(a) Immunology and understanding the role of B cells in transplantation.

(b) Pathology and understanding the progression of renal graft fibrosis.

(c) Therapeutics and individualizing immunosuppressive therapy.

3. There shall be an administrative director responsible for coordinating the research activities amongst the individual laboratories as well as preparing and submitting grants.

4. In addition to the funding received pursuant to this act, the CTIR shall apply for funding through philanthropic sources earmarked for the development of transplantation at Erie County Medical Center.

5. Funds appropriated pursuant to this act shall be administered through the University of Buffalo Foundation Services Inc. with desig-

nated administrators at Erie County Medical Center acting as responsible directors.

§ 3. Appropriation. The state of New York shall appropriate during each fiscal year for three years to the Center for Transplantation and Immunology Research an amount of $227,333.34 from the general fund to pay the expenses of the Center for Transplantation and Immunology Research including but not limited to the salary of the administrative director and lab technicians, animal costs, luminex assays, laboratory supplies and equipment.

§ 4. This act shall take effect immediately.