

TO: Business Board

SPONSOR: Professor R. Paul Young, Vice-President, Research and Innovation

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DATE: October 26 for November 5, 2012

AGENDA ITEM: 4

ITEM IDENTIFICATION:

Application of Inventions Revenue to an Endowed Chair in Diabetes Research.

JURISDICTIONAL INFORMATION:

The responsibilities of the Business Board of the Governing Council include ensuring that resource allocations are responsible and cost-effective, and approving policy and major transactions in the business management of the University. Under the University’s *Inventions Policy*, the distribution of certain revenue received on account of the commercialization of inventions is subject to review by the Business Board.

The *Inventions Policy* allows University inventors to take personal ownership of their inventions. When they do, the inventor is obliged to pay the University a percentage of any Net Revenue, as defined in the policy, that the inventor receives from commercialization of the invention. The policy prescribes the distribution of such cumulative Net Revenue within the University (referred to as “**University Revenue**” in this memorandum) as follows:

	Cumulative Net Revenue		
	Up to \$100,000	\$100,000 to \$1,000,000	Over \$1,000,000
Inventor’s Division	20%	15%	Subject to review by the Business Board of Governing Council, upon the recommendation of the Vice-President, Research and relevant stakeholders.
Inventor’s Department	50%	15%	
University General Revenue	30%	0	
Connaught Fund	0	70%	

PREVIOUS ACTION TAKEN:

N/A

HIGHLIGHTS:

The Faculty of Medicine first made its mark in the world of scientific research almost 90 years ago with the discovery of insulin by Banting, Best, Collip and McLeod. Since that time, our university has

remained one of the key centres of diabetes research. With an aging, changing population, there is renewed urgency to find new, novel ways to control or combat diabetes.

Professor Daniel Drucker is at the vanguard of those researchers dedicated to helping solve one of the great chronic disease challenges facing this and future societies – the alarming rise in Type 2 diabetes. His innovations are not limited to the lab: he is also a pioneer in the important role commercialization can and will play in translating discoveries from the lab bench to the bedside. Under assignment from the University and the University Health Network, a number of Professor Drucker’s inventions (individually, a “Drucker Invention” and collectively, the “Drucker Portfolio”, as more particularly described in the attached Schedule 1) have been translated into novel treatments, therapies and research and development tools, including the following:

- Cell lines and knockout mice are licensed to over a dozen pharmaceutical and biotech companies around the world.
- His discovery of the dipeptidyl peptidase-4 (DPP-4) inhibitor – made jointly with Tufts University – is licensed to OSI Pharmaceuticals, which has in turn sublicensed the patents to companies which have developed DPP-4 inhibitors such as stagliptin.
- His discovery of the glucagon-like peptide GLP-2 has been licensed to Allelix, now known as NPS Pharmaceuticals Inc.

Building upon the success of Professor Drucker’s discoveries, the Faculty of Medicine wishes to facilitate additional research through the establishment of an endowment fund (the “University Fund”) in support of a Chair in Diabetes Research (the “Chair”). The Toronto General and Western Hospital Foundation has committed to establish a counterpart endowment fund of equal value in support of the Chair, to be capitalized with the University Health Network’s institutional revenue from the Drucker Portfolio. The name of the Chair may be determined at a future date, in accordance with the Policy on Naming.

The Faculty of Medicine wishes to capitalize the University Fund through the contribution of certain University Revenue received on account of the inventions in the Drucker Portfolio, as more particularly set out below. University Revenue is distributed under the Inventions Policy on a per-invention basis. Where University Revenue from a Drucker Invention remains under \$1 million, distribution of such University Revenue would continue as prescribed by the Inventions Policy and the Faculty of Medicine will direct its divisional and departmental shares thereof to the University Fund. When University Revenue from a Drucker Invention reaches and exceeds \$1 million, the Faculty of Medicine has requested that the University Revenue from that Drucker Invention over \$1 million be directed to the University Fund. The proposed distribution would remain in effect until University Revenue directed to the University Fund totals \$1,500,000. Schedule 1 sets out the current and proposed distribution of University Revenue from the Drucker Portfolio received to date.

I support the Faculty of Medicine’s request and am presenting this proposal to the Business Board for review as required by the Inventions Policy. If and when University Revenue directed to the University Fund exceeds \$1,500,000, I will make a further submission to the Business Board. Options for future distribution may include the Connaught Fund or other initiatives identified following appropriate consultation.

RECOMMENDATION:

THAT, University Revenue from the Drucker Portfolio be directed in support of the University Fund on the following terms:

1. Beginning on July 1, 2008 and continuing until University Revenue directed to the University Fund totals \$1,500,000:
 - (a) until University Revenue from a Drucker Invention reaches \$1 million, the Faculty of Medicine will direct its divisional and departmental shares of such University Revenue from that Invention to the University Fund, with the remainder of University Revenue from that invention distributed as prescribed by the *Inventions Policy*; and,
 - (b) once University Revenue from a Drucker Invention exceeds \$1,000,000, all University Revenue from that invention shall be directed to the University Fund.

When University Revenue directed to the University Fund totals \$1,500,000, distribution of University Revenue shall be determined in accordance with the *Inventions Policy*.

2. Payments of University Revenue will continue to be made to the attention of the Intellectual Property Officer, Office of the Vice-President, Research to facilitate the attribution of University Revenue to each Drucker Invention and to ensure the orderly distribution of funds.
3. The University Fund shall be managed with the intent that its real capital value will be maintained in perpetuity in accordance with the *Policy on Endowed Chairs, Professorships, Lectureships and Programs*, the *Long Term Capital Appreciation Pool Policy* and the *Policy for the Preservation of Capital of Endowment Funds*.
4. The annual income from the University Fund, less the portion added to the capital base as protection against inflation, will be made available to support diabetes research.

SCHEDULE 1

Drucker Portfolio

As of the date hereof, the Drucker Portfolio comprises the following inventions:

University Ref. No.	Invention Title	Cumulative University Revenue Received to Date (CAD)		
		Before July 1, 2008	After July 1, 2008	Total
10000020	Glucagon-like peptide2 (GLP-2) and its therapeutic use	123,793.31	1,169,428.18	1,293,221.49
10000361	The GLUTag enteroendocrine cell line	66,688.11	74,968.13	141,656.24
10000376	The GLP-1 receptor -/- mouse	57,404.03	10,942.14	68,346.17
10000677	Method for regulating glucose metabolism and reagents (Tufts DPP-4) related thereto	20,788.98	170,883.09	191,672.07
10000716	Nucleotides encoding exendin and novel actions of exendin	0	0	0
10000851	The UVIK (SNARK) protein kinase	7,481.00	0	7,481.00
10001263	GLP-2 receptor knockout mouse	0	5,246.50	5,246.50
10001379	GLP1-R-/-:Pdx-1-GLP-1R mice	0	0	0
10001380	GLP-1R-/-:GIPR-/- mice (DIRKO mice)	0	2,047.50	2,047.50
10001557	Enhancement of GLP-2 activity	0	0	0

Distribution of Cumulative University Revenue Received to Date

As proposed and prescribed by *Inventions Policy*:

University Ref. No.	Inventor's Division	Inventor's Department	General Revenue	Connaught Fund	University Fund (Chair)	Total
10000020	155,00.00	185,000.00	29,999.99	630,000.00	293,221.49	1,293,221.49
10000361	26,248.43	56,248.44	29,999.99	29,159.38		141,656.24
10000376	13,669.24	34,173.08	20,503.85	0		68,346.17
10000677	33,750.36	63,747.66	29,997.30	64,176.75		191,672.07
10000851	1,496.20	3,740.50	2,244.30	0		7,481.00
10001263	1,049.30	2,623.25	1,573.95	0		5,246.50
10001380	409.50	1,023.75	614.25	0		2,047.50
Total	231,623.03	346,556.68	114,933.63	723,336.13	293,221.50	1,709,670.97