



**TECHONOLOGY TRANSFER AND WEALTH CREATIION (T2WC) SURVEY FORM**

Please review the instructions and definitions on pages 11-14 before answering this questionnaire. In order to improve the comparability of information from survey respondents, it is very important for each respondent to do this.

A. Background Information

A1. Name of University: \_\_\_\_\_

A2. Name of Respondent: \_\_\_\_\_

Title/Designation: \_\_\_\_\_

—

Organization: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_ Fax number: \_\_\_\_\_

Email: \_\_\_\_\_

A3. Does your university have a medical school?  Yes  No  
Do your answers here include medical school data?  Yes  No

A4. Your university is a:  Public University  Private University

A5. National currency to be used for reporting monetary value in this survey form:

\_\_\_\_\_ currency symbol

\_\_\_\_\_

A6. Please indicate the definition of your fiscal year (FY) period for reporting annual statistics in this survey form: \_\_\_\_\_ (month) to \_\_\_\_\_ (month)  
(If your reporting period is April to March, then statistics for the period April, 2000 to March, 2001 should be given under FY 2000)

For FY 2000, please indicate:

a) Total number of Tenure Track Faculty Members :

\_\_\_\_\_

A7. b) Number of Tenure Track Faculty Members with PhD: \_\_\_\_\_

c) Total number of Students

Enrolled: \_\_\_\_\_

d) % of Student Enrollment in Graduate (Masters/PhD/Professional Doctorate)

Programs:

---

**B. Research, Invention Disclosure and Patenting**

	FY	FY	FY
<b>Annual Sponsored Research Expenditure</b>	1998	1999	2000
a) Total <b>Sponsored Research Expenditure</b> (currency unit: _____)	_____	_____	_____
b) Research Expenditure as % of University's Operating Budget	_____	_____	_____
c) % of Research Expenditures funded by:			
<b>Industrial Sources</b>	_____	_____	_____
<b>Government Sources</b>	_____	_____	_____
<b>Foundation/endowment</b>	_____	_____	_____
<b>Other</b> (please describe)	_____	_____	_____
<b>Other</b> (please describe)	_____	_____	_____
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
d) % of Research Expenditures performed by:			
Engineering School	_____	_____	_____
Physical Sciences	_____	_____	_____
Medical School (incl. Nursing)	_____	_____	_____
Life Sciences and Pharmacy	_____	_____	_____
Agriculture	_____	_____	_____
Others	_____	_____	_____
	<b>100%</b>	<b>100%</b>	<b>100%</b>
e) Are indirect costs included in the Total Sponsored Research Expenditures above? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes, what is the indirect cost rate (as a % of Total Sponsored Research Expenditures)? _____			
<b>B2. Invention Disclosures</b>			
a.) Does your university require disclosure to your Office of Inventions by your university			

researchers?  Yes  No

	FY	FY	FY
	1998	1999	2000
b) If Yes, please indicate			
Number of disclosures	_____	_____	_____

**B3. Patenting**

	FY	FY	FY
	1998	1999	2000
a) Number of <b>Patent Applications</b>			
<b>filed in Home Country</b>	_____	_____	_____
<b>filed in the U.S.</b>	_____	_____	_____
<b>filed in other countries</b>	_____	_____	_____
(please specify the two most important countries:			

\_\_\_\_\_ )

	FY	FY	FY
	1998	1999	2000
b) Number of <b>Patents Issued</b>			
<b>in Home Country</b>	_____	_____	_____
<b>in the U.S.</b>	_____	_____	_____
<b>in other countries</b>	_____	_____	_____
(please specify the two most important countries:			

\_\_\_\_\_ )

c) Total cumulative number of patents issued (in effect, not expired) as of the end of FY 2000			
<b>filed in Home Country</b>	_____	_____	_____
<b>filed in the USA</b>	_____	_____	_____
<b>filed in other countries</b>	_____	_____	_____

d) What approximate % of the cumulative non-expired patents issued as of the end of FY2000 were generated by researchers in the following schools (please estimate if necessary; please indicate N/A if a particular school does not exist in your university):



Physical Sciences	_____
Engineering	_____
Medicine (incl. Nursing)	_____
Life Sciences and Pharmacy	_____
Agriculture	_____
Others	_____
<b>TOTAL</b>	<b>100%</b>

**C. Technology Licensing**

C1. Please indicate the number of new technology licensing agreements executed by your university in the table below:

	Fiscal Years			Total Cumulative No. as of end of FY2000
	1998	1999	2000	
Number of <b>Licenses/Options Executed</b>	_____	_____	_____	_____
Number of <b>Licenses/Options Executed with Equity</b>	_____	_____	_____	_____

C2. Breakdown of new license agreements in Fy 2000 according to exclusivity  
 Number of **Exclusive Licenses** \_\_\_\_\_  
 Number of **Non-Exclusive Licenses** \_\_\_\_\_

C3. Breakdown of licensing agreements according to types of recipient organizations

	Fiscal Years			Total Cumulative No. as of end of FY2000
	1998	1999	2000	
Number of licenses to <b>Start-Up Companies</b>	_____	_____	_____	_____
Number of licenses to <b>Existing Companies</b>	_____	_____	_____	_____

C4. Licensing income  
 (please exclude income earned from licensing of trademarks)

	FY	FY	FY
	1998	1999	2000
Number of <b>Licenses/Options Yielding License Income</b>	_____	_____	_____
<b>License Income Received</b>	_____	_____	_____
<b>License Income Paid to</b>	_____	_____	_____

**Other Institutions**

C5. Breakdown of gross license income received in FY 2000(%)

<b>One-Time Royalty/Fees</b>	_____
<b>Running Royalties</b>	_____
<b>Cashed-in Equity</b>	_____
All other types	_____
<b>TOTAL</b>	<b>100%</b>

C6. **Research Funding Generated by Licensing:** Did any of your technology licensing over the past 3 years lead to new sponsored research grants to the University by the recipient company?  Yes  No

**D. Technology Transfer of Licensing Office**

D1. Does your university have a **Technology Transfer Office (TTO)** or equivalent organization responsible for technology transfer or licensing?  Yes  No

If yes, please indicate full names(s) of this **Technology Transfer Office (TTO)** equivalent organization: \_\_\_\_\_

If there is a website for this TTO, please provide its URL address: \_\_\_\_\_

D2. **TTO Program Start Date:**  
\_\_\_\_\_

D3. Please indicate the Range of Responsibilities of this TTO (please tick all applicable):

- |   |                                     |                                    |
|---|-------------------------------------|------------------------------------|
| Technology Transfer   | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| Trademark Licensing   | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| Industry Sponsored Research                                     | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| Spin-Off Company Formation                                      | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| Incubation  | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| Researcher Education (IP issues, working with industries, etc.) | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| Entrepreneurship  | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |
| Other (please describe:<br>_____<br>_____)                      | <input type="checkbox"/> <b>Yes</b> | <input type="checkbox"/> <b>No</b> |

D4. Number of Staff: Full-time \_\_\_\_\_ Part-time \_\_\_\_\_

D5. Is this organization  
 an internal office/department of the university



- part of a foundation
- a non-profit corporation
- a for-profit corporation

D6. Please indicate the reporting structure between the TTO organization and the Office of the President of your university:  
 (For example: TTO --> Office of Finance --> VP (Administration) --> President)

---

D7. Does this office have a mission statement  **Yes**  **No**

D8. If yes, please provide the statement below (please translate into English):

---



---



---

D9. Whether or not used for this purpose, would the **License Income Received** over the past three years equal the cost of the operation of the TTO office?  **Yes**  **No**

D10. Please indicate the relative importance of the following technology transfer objectives by allocating points among them (total number of points must add up to 100; assign zero points to objective(s) not applicable to your organization)

- number of inventions disclosed \_\_\_\_\_
- amount of licensing income generated \_\_\_\_\_
- number of inventions commercialized \_\_\_\_\_
- number of start-ups created \_\_\_\_\_
- amount of associated sponsored research grants generated \_\_\_\_\_
- contributions to prestige of the university \_\_\_\_\_
- contributions to local economic development \_\_\_\_\_
- service to the researchers \_\_\_\_\_
- transfer of technologies for the public good \_\_\_\_\_
- other (specify): \_\_\_\_\_



—  
TOTAL 100 points

**E. University Policies affecting Technology Transfer**

E1. Please reproduce below the official mission statement of your university (please translate into English): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

E2. Research Policies

a) Is corporate sponsorship and joint R&D with industry encouraged centrally within your University? (Do not include gift-generating office/"Development" office here.)  Yes  No

b) What % of research funds are centrally allocated/directed in your University? \_\_\_\_\_%

E3. Invention Policies

a) Who owns the patent rights to technologies developed by faculty, students and staff of your university in the course of their use of University facilities?

University  Inventor(s)  Other (specify): \_\_\_\_\_

b) How is the University's net income from patented (and unpatented) technologies split among:

	<u>Royalties</u>	<u>Equity</u>
Inventor(s)	_____	_____
University	_____	_____
Inventor's Department/School	_____	_____
Technology Transfer Office	_____	_____
Other (specify) _____	_____	_____
Total Net Income	100%	100%

c) Which year was this income split policy adopted: \_\_\_\_\_

(Note: If your University has more than one net income division policy in effect, please respond to this question for the most recently introduced policy.)

d) Please attach any policy statement your university has regarding your university's invention policies.

**E4. Start-Up Company Policies**

a) Can a tenure-track faculty member of your university

	<b>Yes</b>	<b>No</b>	<b>Yes, but need approval</b>
Serve on board of directors of existing companies	_____	_____	_____
Serve on the board of directors of a new start-up company to commercialize his/her invention	_____	_____	_____
Take no-pay leave to be involved in a new start-up company to commercialize his/her invention	_____	_____	_____
Engage in consulting for industry	_____	_____	_____

b) Please attach any policy statement your university has regarding faculty member involvement in outside businesses (please translate into English): \_\_\_\_\_

---

**E5. a) Assistance provided by your university to start-up companies:**

- Entrepreneurship Center providing entrepreneurship-related education and outreach events  Yes  No
- University can take equity in start-up companies  Yes  No
- University-based incubator facility/services  Yes  No
- University-affiliated research/science park  Yes  No
- Direct investment from university endowment fund in start-up companies  Yes  No
- "Prototyping" fund  Yes  No
- Government commercialization grants advisement  Yes  No

- Aid in recruiting management team     Yes     No  
 Facilitation of access to venture capital     Yes     No  
 Mentoring and business advisory services     Yes     No  
 Business plan competition     Yes     No  
 Other (specify) \_\_\_\_\_

b) If there are incubator(s) and/or research/science parks based in or affiliated with your university, please attach information about these facilities and provide its URL.

c) If there is an Entrepreneurship Center providing entrepreneurship-related education and outreach activities, please attach information about the center's educational and outreach activities and provide its URL.

- E6. a) Does your university have a written policy statement on Conflict of Interest concerning faculty member involvement with business/industry?  
 Yes  No

b) If yes, please attach the policy statement document. Please also include any written policy governing the terms under which a faculty member can receive any form of externally sponsored research funding.

- E7. Does your university have an equity management policy pertaining to start-up companies that received technology licensing from your university?  
 Yes  No  
 If yes, please

a) indicate if the equity is managed by

- Internal university committee                       University treasury  
 University controlled holding company                       Other \_\_\_\_\_

b) attach a copy of your equity management policy

**F. Economic Impact and Wealth Creation**

- F1. Does your university track the number of start-up companies by:

a) University faculty members?  
 Yes  No

if Yes, please indicate the cumulative number of such start-up companies as of the end of FY 2000

With technology licensing from your university \_\_\_\_\_



Without technology licensing from your university \_\_\_\_\_  
 (please provide information on how the above statistics are defined and collected)

b) University alumni?

Yes  No

if Yes, please indicate the cumulative number of such start-up companies as of the end of FY 2000

With technology licensing from your university \_\_\_\_\_

Without technology licensing from your university \_\_\_\_\_

F2. Does your university track the following indicators of economic impact or wealth creation effects of start-up companies by university professors and alumni?

	Start-ups with tech.licensing from university	Start-ups without tech. licensing from university
Number of Jobs Created	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
External Investment Received	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Sales Revenue Generated	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other Indicators (please specify):		
1. _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

If you answered Yes to any of the above, please

a) provide the latest estimates you have on any of the above indicators

b) attach any report/studies that your university has conducted on the economic impact or wealth creation effects of start-up companies by professors or alumni of your university, including methodologies used

F3. Besides start-up companies, does your university track the economic impact or wealth creation effects of other technology transfer activities of your university?  
 If yes, please provide information on the indicators used.

---



---

**G. Challenges and Concerns related to Technology Transfer**

G1. Please identify the three biggest challenges facing the Technology Transfer Office of your



university now and over the next two years:

1.

---

---

2.

---

---

3.

---

---

G2. Please identify the most important initiatives that the Technology Transfer Office intends to introduce over the next two years (if funding is made available):

---

---

---

---

---

---



## **GENERAL INSTRUCTIONS**

1. Please kindly answer and return the questionnaire **latest by March 1, 2002** to:

Ms Finna Wong  
Research Analyst  
Centre for Entrepreneurship  
14 Prince George's Park  
Singapore 118412  
Tel. No. 65-874-3046  
Fax No. 65-775-0216  
Email: [finnawong@nus.edus.sg](mailto:finnawong@nus.edus.sg)

Please return the completed survey and the requested university policy statements and brochures via air mail (express courier, please) and return the completed survey by email attachment.

2. If you have any questions, please contact Ms. Finna Wong or Dr. Rosanne Dutton at [<dutton@usc.edu>](mailto:dutton@usc.edu) for clarification.
3. Please provide your answers in English. If some of the information requested is in your native language, please translate it into English or provide a **summary statement** of the document in English.
4. Where monetary values are requested, please provide your answer in your own national currency.
5. In various places in the survey form, we have requested annual statistics for the last three fiscal years (1998, 1999 and 2000). Please report your annual statistics under these headings according to the following fiscal year (FY) period definitions

<b>Fiscal Year period:</b>	<b>To report under:</b>
Jan. to Dec. 2000	FY 2000
April, 2000 to March, 2001	FY 2000
July, 2000 to June, 2001	FY 2000
Sept. 1999 to Aug. 2000	FY 2000

6. If your university does not yet have a formal technology licensing program, please provide your best estimates to the various questions in this survey and indicate that these are estimates with an (e) notation or in an accompanying cover note.
7. Please attach any additional documentation that provides more details on your university's technology transfer policies, or provide the URL address of your university website(s) where additional information on your university's technology transfer policies can be found.



## Definitions

Please refer to the definitions provided below when answering specific questions involving technical terms highlighted in **boldface**.

For purposes of general comparability of data, APRU has obtained authorization from the AUTM (Association of University Technology Managers) to use AUTM definitions in this APRU Survey wherever appropriate. The terms in the APRU survey with AUTM definitions are shown in **boldface italic font** below.

Definitions are listed in alphabetical order.

***CASHED-IN EQUITY:*** This includes the amount received from cashing in equity holdings, resulting in a cash transfer to the institution. *The amount reported should be reduced by the cost basis, if any, on which the equity was acquired.* Excluded from this amount is any type of analysis or process whereby a value for the equity holdings is determined but a cash transaction does not take place through the sale of these holdings. An internal sale (e.g. to the endowment) will constitute cashing-in if the transaction results in cash being made available for internal distribution.

***EXCLUSIVE LICENSE:*** The assignment of a license as exclusive or non-exclusive should adhere to the terms of the license agreement. If a license is designated as exclusive in the license agreement, it should be assigned to exclusive licenses under this Survey, including licenses that are designated as exclusive by field of use, territory, or otherwise.

***INVENTION DISCLOSURES:*** These include the number of disclosures, no matter how comprehensive, that are made in the year requested and are counted by the institution.

***LICENSE INCOME PAID TO OTHER INSTITUTIONS:*** LICENSE INCOME PAID TO OTHER INSTITUTIONS is a subset of LICENSE INCOME RECEIVED and should not be subtracted from the total. This number will be used to better define the double-count of LICENSE INCOME reported under this Survey. It includes the amounts paid to other institutions under inter-institutional agreements.

***LICENSE INCOME RECEIVED:*** LICENSE INCOME RECEIVED includes: license issue fees, payments under options, annual minimums, running royalties, termination payments, the amount of equity received when cashed-in, and software and biological material end-user license fees equal to \$1,000 or more, but not research funding, patent expense reimbursement, a valuation of equity not cashed-in, software and biological material end-user license fees less than \$1,000, or trademark licensing royalties from university insignia. License Income also does not include income received in support of the cost to make and transfer materials under Material Transfer Agreements.



**LICENSES/OPTIONS EXECUTED:** Count the number of LICENSE or OPTION AGREEMENTS that were executed in the FY indicated for all technologies. Each agreement, exclusive or non exclusive, should be counted separately. Licenses to software or biological material end-users of \$1,000 or more may be counted per license, or as 1 license, or 1/each for each major software or biological material product (at manager's discretion) if the total number of end-user licenses would unreasonably skew the institution's data. Licenses for technology protected under U.S. plant patents (US PP) or plant variety protection certificates (U.S. PVPC) may be counted in a similar manner to software or biological material products as described above, at manager's discretion. Material Transfer Agreements are not to be counted as Licenses/Options in this Survey.

**LICENSES/OPTIONS EXECUTED WITH EQUITY:** The number of LICENSES/OPTIONS that were executed in the year surveyed that included EQUITY, where EQUITY is defined as an institution acquiring an ownership interest in a company.

**LICENSES/OPTIONS YIELDING LICENSE INCOME:** The number of LICENSES/OPTIONS that generated LICENSE INCOME RECEIVED in the year requested.

**NON-EXCLUSIVE LICENSE:** The assignment of a license as exclusive or non-exclusive should adhere to the terms of the license agreement. If a license is designated as non-exclusive in the license agreement, it should be assigned to non-exclusive licenses under this Survey.

**ONE-TIME ROYALTIES/FEES:** For the purposes of this Survey, ONE-TIME ROYALTIES/FEES are defined as royalties earned on a one-time, up-front basis, independent of the actual sale of products. Included in this number are license issue fees and payments under options. Excluded from this amount is CASHED-IN EQUITY, and others such as termination payments and annual minimum payments not supported by sales, which should be reported separately.

**PATENT APPLICATIONS FILED IN HOME COUNTRY:** This includes any filing made in the home country during the year requested, including provisional applications, provisional applications that are converted to regular applications, new filings, CIPs, continuations, divisionals, reissues, and plant patents. Applications for certificates of plant variety protection may also be included.

**PATENT APPLICATIONS FILED IN U.S.:** This includes any filing made in the U.S. during the year requested, including provisional applications, provisional applications that are converted to regular applications, new filings, CIPs, continuations, divisionals, reissues, and plant patents. Applications for certificates of plant variety protection may also be included.



**PATENT ISSUED IN THE U.S.:** This includes the number of U.S. patents issued or reissued to your institution in the year requested. A certificate of plant variety protection issued by the U.S.D.A. may also be included.

**PROGRAM START DATE:** PROGRAM START DATE refers to the year in which at least 0.5 PROFESSIONAL Full Time Equivalent was devoted toward TECHNOLOGY TRANSFER ACTIVITIES.

**RESEARCH EXPENDITURES: GOVERNMENT SOURCES:** These include expenditures made in each FY by the institution in support of its research activities that are funded by all government sources, including the federal government, state government or local municipal authorities.

**RESEARCH EXPENDITURES: INDUSTRIAL SOURCES:** These include expenditures made in each FY by the institution in support of its research activities that are funded by for profit *corporations*, but not expenditures supported by other sources such as foundations and other nonprofit organizations.

**RESEARCH EXPENDITURES: FOUNDATION/ENDOWMENT:** These include expenditures made in each FY by the institution in support of its research activities that are funded by sources such as foundations, endowment and other nonprofit organizations.

**RESEARCH FUNDING GENERATED BY LICENSING:** This also includes the total amount of research and development support committed to your institution (even if the funds are to be spent over several years) that was related to LICENSE/OPTION AGREEMENTS executed by your institution.

**RUNNING ROYALTIES:** For the purposes of this Survey, RUNNING ROYALTIES are defined as royalties earned on the sale of products. Excluded from this number are license issue fees, payments under options, termination payments, and the amount of annual minimums not supported by sales. Also excluded from this amount is CASHED-IN EQUITY, which should be reported separately.

**SPONSORED RESEARCH EXPENDITURES:** These include the total expenditures made in each FY by the institution in support of its sponsored research activities.

**START-UP COMPANIES:** As used in this Survey, START-UP COMPANIES are companies that were dependent upon licensing the institution's technology for initiation. If a technology was licensed to an existing start-up company, but not to a START-UP COMPANY (as defined here), this company should be counted as an existing company when responding to Question C3, as opposed to a START-UP COMPANY. START-UP COMPANIES, as used in this Survey, will continue to refer only to those companies that were dependent upon your institution's technology for initiation.



***TECHNOLOGY TRANSFER OFFICE:*** The office(s) that manages and performs the TECHNOLOGY TRANSFER ACTIVITIES of your institution. May be referred to as a technology licensing office in some institutions.