

ELSEVIER SUBSCRIPTION AGREEMENT

This agreement ("Agreement") is entered into as of 03 May 2016 by and between **Mahidol University**, 999 Bhudhamonthon 4, Salaya, Nakorn Pathom, 73170, Thailand (the "Subscriber"), and **Elsevier B.V.**, Radarweg 29, 1043 NX Amsterdam, The Netherlands ("Elsevier").

The parties hereto agree as follows:

SECTION 1. SUBSCRIPTION.

1.1 Subscribed Products.

Elsevier hereby grants to the Subscriber the non-exclusive, non-transferable right to access and use the products and services identified in Schedule 1 ("Subscribed Products") and provide the Subscribed Products to its Authorized Users (as defined herein) subject to the terms and conditions of this Agreement.

1.2 Authorized Users/Sites.

Authorized Users are the full-time and part-time students, faculty, staff and researchers of the Subscriber and individuals who are independent contractors or are employed by independent contractors of the Subscriber affiliated with the Subscriber's locations listed on Schedule 2 (the "Sites") and individuals using computer terminals within the library facilities at the Sites permitted by the Subscriber to access the Subscribed Products for purposes of personal research, education or other non-corporate use ("Walk-in Users").

1.3 Authorized Uses.

Each Authorized User may:

- access, search, browse and view the Subscribed Products;
- print, download and store a reasonable portion of individual items from the Subscribed Products for the exclusive use of such Authorized User
- incorporate links to the Subscribed Products on the Subscriber's intranet and internet websites and in electronic coursepacks, reserves and course management systems and instructor websites, provided that the appearance of such links and/or statements accompanying such links will be changed as reasonably requested by Elsevier;
- provide print or electronic copies of individual items from the Subscribed Products to other Authorized Users and to third-party colleagues for their scholarly or research use;
- store individual journal articles from the ScienceDirect Subscribed Products in the private library of a social networking site for the Authorized User's own personal use only;
- share individual journal articles from the ScienceDirect Subscribed Products with third party colleagues individually for their scholarly or research use;
- share individual journal articles from the ScienceDirect Subscribed Products with a limited number of third party colleagues as part of an invitation only working group on non-commercial platforms or tools, for personal, scholarly or research use; and
- access, search, browse, view, print, make electronic copies and store for the exclusive use of such Authorized User or, if the Authorized User is a librarian/information specialist, for the exclusive use of another Authorized User certain journal articles and book chapters from the

ScienceDirect® online service that are not subscribed to as part of the Subscribed Products, with each twenty-four (24) hour access period for a selected article or chapter, a "Transaction".

The Subscriber may:

 print and deliver journal articles from Subscribed Titles (as defined herein) and, if any, book chapters from the ScienceDirect Subscribed Products to fulfill requests as part of the practice commonly known as "interlibrary loan" from non-commercial libraries located within the same country as the Subscriber.

The Subscriber:

(i) may extract and index Data (as defined below) from the articles authored by Authorized Users included in the Subscribed Products, to index in the user interface of the Subscriber's product by implementing both the SD Search API and the SD Article Entitlement API (see http://dev.elsevier.com/sd_apis.html), and store in perpetuity in the Subscriber's secure database system that the Subscriber uses to collect, preserve and disseminate information about the intellectual output of the Subscriber's institute(s) ("Institutional Repository") and to publically display Snippets (as defined below), provided that:

(a) the display of any Data will at all times include (if available) the associated Digital Object Identifier ("DOI"), and

(b) links are incorporated in the Data to the relevant article landing page in the Subscribed Product from which such Data was extracted by which such link to the Subscribed Product is displayed more prominently than the links to other versions of the article, and

(c) the indexes only include Data and no other parts of the full text articles, and

(d) the Subscriber will provide on a monthly basis to Elsevier complete and accurate usage data reports on the Subscriber's Institutional Repository usage activity in a mutually agreed upon format which will at a minimum specify preprint and author manuscripts usage, during the pilot period of six (6) months.

• (ii) is obligated to remove illicit versions of full text articles upon Elsevier's request and allow Elsevier to review the implementation of the Data into the Institutional Repository. Elsevier will have the right to suggest improvements to the display and ranking of the search results for the articles that are available in ScienceDirect.

"Data" will be limited to the following: index terms, bibliographic information, headers, references, digital object identifiers, footnotes, acknowledgements, keywords, author affiliation, Snippets (as defined below) and abstracts, or any other data when included, of the full text articles. Abstracts may only be displayed on the abstract records on the Subscriber data's websites, all other services of the Institutional Repository, such as (but not limited to) alerts, e-mail services and API's may only display Snippets but not abstracts.

"Snippets" mean a first page PDF preview of the full text article or short contextually relevant query-dependent text or data which may include bibliographic metadata as well as a maximum of 120 words of query-dependent text from individual full text articles.

1.4 *Restrictions on Use of Subscribed Products.*

Except as expressly stated in this Agreement or otherwise permitted in writing by Elsevier, the Subscriber and its Authorized Users may not:

- abridge, modify, translate or create any derivative work based on the Subscribed Products, except to the extent necessary to make them perceptible on a computer screen to Authorized Users;
- remove, obscure or modify in any way any copyright notices, other notices or disclaimers as they appear in the Subscribed Products;
- use any robots, spiders, crawlers or other automated downloading programs, algorithms or devices to continuously and automatically search, scrape, extract, deep link, index or disrupt the working of the Subscribed Products;
- substantially or systematically reproduce, retain, redistribute or disseminate online the Subscribed Products; or
- post individual items from the Subscribed Products on social networking sites.

Authorized Users who are individuals who are independent contractors or are employed by independent contractors may use the Subscribed Products only for the purposes of the contracted research work for the Subscriber.

1.5 Intellectual Property Ownership.

The Subscriber acknowledges that all right, title and interest in and to the Subscribed Products remain with Elsevier and its suppliers, except as expressly set forth in this Agreement, and that the unauthorized redistribution or dissemination online of the Subscribed Products could materially and irreparably harm Elsevier and its suppliers.

Notwithstanding anything to the contrary contained in this Agreement, more extensive usage terms might be permitted for open access content in the Subscribed Products as identified in the individual journal article as stated in the applicable user (e.g. CC) license.

SECTION 2. ELSEVIER PERFORMANCE OBLIGATIONS.

2.1 Access to Subscribed Products.

Elsevier will make the Subscribed Products accessible to the Subscriber and its Authorized Users from the internet address set forth on Schedule 1 or as may be otherwise set forth herein.

2.2 Quality of Service.

Elsevier will use reasonable efforts to provide the Subscribed Products with a quality of service consistent with industry standards, specifically, to provide continuous service with an average of 98% up-time per year, with the 2% down-time including scheduled maintenance and repairs performed at a time to minimize inconvenience to the Subscriber and its Authorized Users, and to restore service as soon as possible in the event of an interruption or suspension of service.

2.3 Withdrawal of Content.

Elsevier reserves the right to withdraw from the Subscribed Products content that it no longer retains the right to provide or that it has reasonable grounds to believe is unlawful, harmful, false or infringing.

2.4 Usage Data Reports.

Elsevier will make usage data reports on the Subscriber's usage activity accessible online on a monthly basis to the librarians/administrators employed by the Subscriber for internal use only. Such reports may be accessed by vendors or other third parties retained by the Subscriber only with the express written permission of Elsevier and for the purpose of usage analysis of the Subscriber.

SECTION 3. SUBSCRIBER PERFORMANCE OBLIGATIONS.

3.1 Authentication.

Access to the Subscribed Products will be authenticated by the use of Internet Protocol ("IP") address(es) and/or usernames and passwords and/or a delegated authentication mechanism requiring at least two different credentials, as identified on Schedule 2. Distribution of usernames, passwords, credentials or otherwise providing remote access to the Subscribed Products by Authorized Users who are Walk-in Users is not permitted.

3.2 Protection from Unauthorized Access and Use.

The Subscriber will use reasonable efforts to:

- limit access to and use of the Subscribed Products to Authorized Users and notify all Authorized Users of the usage restrictions set forth in this Agreement and that they must comply with such restrictions;
- issue any passwords or credentials used to access the Subscribed Products only to Authorized Users, not divulge any passwords or credentials to any third party, and notify all Authorized Users not to divulge any passwords or credentials to any third party;
- provide true, complete and accurate IP addresses, as identified on Schedule 2, (if any) for the exclusive use by the Subscriber (including, if requested by Elsevier, written confirmation by the relevant third party internet service provider) and proactively inform Elsevier of any changes to the Subscriber IP addresses, including the addresses no longer being used exclusively by the Subscriber; and
- promptly upon becoming aware of any unauthorized use of the Subscribed Products, inform Elsevier and take appropriate steps to end such activity and to prevent any recurrence.

In the event of any unauthorized use of the Subscribed Products, Elsevier may suspend the access and/or require that the Subscriber suspend the access from where the unauthorized use occurred upon notice to the Subscriber. The Subscriber will not be liable for unauthorized use of the Subscribed Products by any Authorized Users provided that the unauthorized use did not result from the Subscriber's own negligence or willful misconduct and that the Subscriber did not permit such unauthorized use to continue after having actual notice thereof. The Subscriber will be responsible for the adherence to the terms and conditions of this Agreement by a third party provider the Subscriber engages, in particular, if such third party provider supplies and manages IP addresses.

3.3 Compliance with Sanction Laws.

Elsevier reserves the right to deny access to the Subscribed Products to any person or entity who is the target of any sanctions or embargoes laws (hereinafter "Sanctions Laws"), and who does not fall under an exemption or for which a general license has been granted under the Sanctions Laws.

SECTION 4. FEES AND PAYMENT TERMS.

The Subscriber will pay to Elsevier the fees set forth in Schedule 1 (the "Fees") within sixty (60) days of date of invoice. Late payments will be subject to interest charges of 1% per month on the unpaid balance. The Fees will be exclusive of any sales, use, value added, withholding or similar tax and the Subscriber will be liable for any such taxes in addition to the Fees.

SECTION 5. TERM.

5.1 Term.

The term of this Agreement will commence on 01 January 2016 and continue until 31 December 2016

("Initial Term").

5.2 Renewal.

After the Initial Term, this Agreement will be automatically renewed for successive one-year terms (each a "Renewal Term"), subject to the Fees being mutually agreed upon by both parties, unless either party gives notice to the other by 1 August prior to the end of the then current term that it does not intend to renew. The Initial Term and each Renewal Term are collectively the "Term".

SECTION 6. ELSEVIER WARRANTIES AND INDEMNITIES.

6.1 Warranties.

Elsevier warrants that use of the Subscribed Products in accordance with the terms and conditions herein will not infringe the intellectual property rights of any third party.

6.2 *Indemnities*.

Elsevier will indemnify, defend and hold harmless the Subscriber and its Authorized Users from and against any loss, damage, costs, liability and expenses (including reasonable attorneys' fees) arising from or out of any third-party action or claim that use of the Subscribed Products in accordance with the terms and conditions herein infringes the intellectual property rights of such third party. If any such action or claim is made, the Subscriber will promptly notify and reasonably cooperate with Elsevier. This indemnity obligation will survive the termination of this Agreement.

6.3 Disclaimer.

EXCEPT FOR THE EXPRESS WARRANTIES AND INDEMNITIES STATED HEREIN AND TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE SUBSCRIBED PRODUCTS ARE PROVIDED "AS IS" AND ELSEVIER AND ITS SUPPLIERS EXPRESSLY DISCLAIM ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND WITH REGARD TO THE SUBSCRIBED PRODUCTS AND ANY OTHER DATA, DOCUMENTATION OR MATERIALS PROVIDED IN CONNECTION WITH THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO ANY ERRORS, INACCURACIES, OMISSIONS, OR DEFECTS CONTAINED THEREIN, AND ANY IMPLIED OR EXPRESS WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

6.4 *Limitation of Liability.*

Except for the express warranties and indemnities stated herein and to the extent permitted by applicable law, in no event will Elsevier or its suppliers be liable for any indirect, incidental, special, consequential or punitive damages including, but not limited to, loss of data, business interruption or loss of profits, arising out of or in connection with this Agreement, or will the liability of Elsevier and its suppliers to the Subscriber exceed a sum equal to the Fees paid by the Subscriber hereunder during the twelve (12) month period immediately preceding the date on which the claim arose, even if Elsevier or any supplier has been advised of the possibility of such liability or damages.

SECTION 7. GENERAL.

7.1 Force Majeure.

Neither party's delay or failure to perform any provision of this Agreement as a result of circumstances beyond its control (including, but not limited to, war, strikes, fires, floods, power failures, telecommunications or Internet failures or damage to or destruction of any network facilities or servers) will be deemed a breach of this Agreement.

7.2 Severability.

The invalidity or unenforceability of any provision of this Agreement will not affect any other provisions of this Agreement.

7.3 Entire Agreement.

This Agreement contains the entire understanding and agreement of the parties and replaces and supersedes any and all prior and contemporaneous agreements, communications, proposals and purchase orders, written or oral, between the parties with respect to the subject matter contained herein.

7.4 Modification.

No modification, amendment or waiver of any provision of this Agreement will be valid unless in writing and signed by the parties.

7.5 Assignment.

The Subscriber will not assign, transfer or license any of its rights or obligations under this Agreement unless it obtains the prior written consent of Elsevier, which consent will not unreasonably be withheld.

7.6 *Privacy*.

Elsevier will not, without the prior written consent of the Subscriber, transfer any personal information received by Elsevier from the Subscriber under this Agreement to any non-affiliated third party, except (i) to applicable service providers to the extent necessary to perform their functions for Elsevier in support of this Agreement; (ii) where reasonably necessary to address security, safety, fraud or other legal issues; and (iii) if the Subscribed Products are acquired by another company, or use it for any purpose other than as described in this Agreement.

7.7 Notices.

All notices given pursuant to this Agreement will be in writing and delivered to the party to whom such notice is directed at the address specified below or the electronic mail address as such party will have designated by notice hereunder.

If to Elsevier: Elsevier B.V. c/o Regional Sales Office, Elsevier (Singapore) Pte Ltd., 3 Killiney Road, #08-01, Winsland House I, 239519, Singapore.

If to the Subscriber: Mahidol University, Faculty of Science, Stang Mongkolsuk Library, Rama VI Road, Bangkok, 10400, Thailand.

7.8 Confidentiality.

The Subscriber and its employees, officers, directors and agents will maintain as confidential and not disclose to any non-affiliated third party without Elsevier's prior written consent the financial terms and commercial conditions of this Agreement. Elsevier may only disclose such information (i) to applicable service providers to the extent necessary to perform their functions in support of this Agreement and (ii) where reasonably necessary to address security, safety, fraud or other legal issues, and share the Subscriber's IP address ranges and holdings information (ISSN/ISBN, access start and end date) with internet search engine providers for the sole purpose of displaying to Authorized Users in their internet search results links to full-text articles and books available in the Subscribed Products.

7.9 Execution.

This Agreement and any amendment thereto may be executed in counterparts, and signatures exchanged by facsimile or other electronic means are effective to the same extent as original signatures.

IN WITNESS WHEREOF, the parties have executed this Agreement by their respective, duly authorized representatives as of the date first above written.

MAHIDOL UNIVERSITY (Subscriber)

1

Name: Assistant Professor Tanakorn Osotchan, Ph.D. Title: Deputy Dean for Research, Faculty of Science, Mahidol University

ELSEVIER B.V. (Elsevier) er Name: Gino Ussi

Title: Executive Vice President Research Solution Sales

No. 1-8931861212

ELSEVIER SUBSCRIPTION AGREEMENT Schedule 1 Subscribed Products/Access/Fees

MAHIDOL UNIVERSITY

No. 1-8931861212

Subscribed Products – publisher	Access	2016 USD
ScienceDirect® online – Elsevier B.V.	sciencedirect.com	
Complete Collection		
• Total Electronic Subscription		\$186,678.05
• Total Subscription Turnover		\$186,678.05
• Electronic Subscription Fee (10% discounted)		\$168,010.27
• *Content Fee Refer to Office of the Higher Education Commission (Consortium Agreement)		\$14,000.85
TOTAL FEES		\$168,010.27

* Subscriber is a member of a consortium headed by the Office of the Higher Education Commission ("Consortium") under a separate agreement. The Consortium has agreed to pay the Content Fees due as specified in the Fee table in Schedule 1 of this Agreement only for the list of Titles specified Annex A of this Agreement, on behalf of the Subscriber and such Content Fees will be invoiced directly to the Consortium. However, if for any reason the Subscriber is no longer a member of the Consortium or the Consortium Agreement is not renewed upon expiry, the Subscriber shall then be liable to pay for any such Content Fees as specified in the Fee table in Schedule 1 of this Agreement within the timelines set forth in Section 4. Elsevier reserves the right to suspend the Subscriber's access to the Subscribed Products until such time that the outstanding Content Fee is paid in full.

Journal Collection(s)

The Subscriber's Journal Collection(s) is described in Schedule 1.1.

Transaction Fee

The Subscriber may purchase pre-paid Transactions ("PPT") upon mutual agreement of the parties in writing. Unused PPT will be forfeited one (1) year after issue or upon termination of this Agreement, whichever is earlier.

ELSEVIER SUBSCRIPTION AGREEMENT Schedule 1.1 Journal Subscription

Journal Collection(s):

Complete Collection: Electronic access to the full text of all articles from the Elsevier journal titles published since 1 January 1995 identified on Annex A to Schedule 1.1.

Option to Substitute Subscribed Titles

The Subscriber may substitute any of the subscribed journal titles identified on Annex A to Schedule 1.1 ("Subscribed Titles") with one or more journal titles of total comparable value (in current year list price) once annually upon notice to Elsevier by 1 August prior to the start of the next calendar year or at any time upon mutual agreement of the parties in writing.

Option to Substitute or Refund Withdrawn Subscribed Titles

The Subscriber may substitute any withdrawn Subscribed Titles with one or more journal titles of total comparable value (in current year list price) at any time upon notice to Elsevier. In the event that no substitute journal title is available, Elsevier will refund to the Subscriber the amount of the Fees paid for the withdrawn Subscribed Titles for the remainder of the Term.

Transferred Titles

Society journal titles for which the Subscriber holds an electronic subscription through a third-party publisher whose publication rights are transferred to Elsevier and made accessible on ScienceDirect during the Term ("Transferred Titles") will be deemed Subscribed Titles effective as of the date of transfer and for the then current publication year and the publication years previously paid unless and until the Subscriber notifies Elsevier that it no longer wishes to continue such electronic subscription on ScienceDirect. The option to substitute Subscribed Titles does not apply to Transferred Titles.

Post Termination Access to Subscribed Titles

Upon termination of all of the Subscriber's annual subscriptions on ScienceDirect online, the Subscriber may, at its option, (1) acquire, load and technically format on a server that enables access and use by Authorized Users an electronic copy of all or part of its Subscribed Titles for the publication years paid for cost and/or (2) continue to access such Subscribed Titles online for an annual access fee based on the number of full-text articles downloaded from such titles during the prior twelve (12) months at a rate of US\$0.081 per download, with a minimum annual fee of US\$500 (adjusted annually for inflation and cost increases) for the Subscriber's access to the platform, in accordance with the usage provisions of this Agreement, which provisions will survive the termination of the Agreement. Elsevier will make available for inspection by a duly authorized auditor of the Subscriber, at the Subscriber's sole expense, the records concerning the calculation of the annual access fee once per year during regular business hours upon thirty (30) days written notice to Elsevier. If an electronic copy is selected, the Subscriber will for a period of five (5) years from delivery of the electronic copy provide, on a monthly basis, to Elsevier complete and accurate usage data reports on the Subscriber's on-site usage activity in a mutually agreed upon format. Elsevier will be entitled to inspect the Subscriber's records of usage once per year during regular business hours upon reasonable notice to the Subscriber. The electronic copy may not contain links and other features and functionality associated with the online version. If a particular Subscribed Title is withdrawn by Elsevier or not renewed by the Subscriber, but the Subscriber remains a ScienceDirect online subscriber, the Subscriber may continue to access online, at no additional charge, such formerly Subscribed Title for the publication years paid provided that Elsevier continues to hold the electronic rights thereto.

Annex A to Schedule 1.1 Subscribed Titles

MAHIDOL UNIVERSITY

Product ID	ISSN	Subscribed Title (online only)
07505	0006-2952	Biochemical Pharmacology
05145	0009-2614	Chemical Physics Letters
05031	0014-2999	European Journal of Pharmacology
00237	0278-6915	Food and Chemical Toxicology
05041	0378-1119	Gene
05111	0168-1656	Journal of Biotechnology
08033	0378-8741	Journal of Ethnopharmacology
12615	0022-2836	Journal of Molecular Biology
07538	0024-3205	Life Sciences
07741	0025-5564	Mathematical Biosciences
05066	0166-6851	Molecular and Biochemical Parasitology
12664	0890-8508	Molecular and Cellular Probes
00273	0031-9422	Phytochemistry
08045	0168-9452	Plant Science
03078	0032-3861	Polymer
00233	0040-4039	Tetrahedron Letters
00232	FS00-0232	Tetrahedron (Including Tetrahedron: Asymmetry)
00937	0957-4166	Tetrahedron: Asymmetry
00942	0040-4020	Tetrahedron
05431	FS00-5431	Trends in Analytical Chemistry Including Compendium
05189	0165-9936	Trends in Analytical Chemistry
05429	0167-2940	Trends in Analytical Chemistry (Library Edition)
02119	0167-7799	Trends in Biotechnology
02116	0166-2236	Trends in Neurosciences
02117	0165-6147	Trends in Pharmacological Sciences

ELSEVIER SUBSCRIPTION AGREEMENT Schedule 2 Sites/Authentication/Contacts

Subscriber: Mahidol University

Sites:	#Auth. Users:	Authentication:
999 Bhudhamonthon 4, Salaya, Nakorn Pathom, 73170, Thailand	25,000	202.28.128.0 - 202.28.193.255 202.28.2.0 - 202.28.2.255 202.28.252.0 - 202.28.255.255 202.44.139.0 - 202.44.139.255 203.144.248.0 - 203.144.248.255

Estimated total number of Authorized Users for ScienceDirect: 25,000

For the avoidance of doubt, other institutions and organizations that reside or do business at the above locations (including without limitation companies that are owned wholly or in part by, or affiliated with, the Subscriber) are not Sites, unless expressly stated above.

The Subscriber will promptly notify Elsevier of any material changes in the number of Authorized Users, which changes may result in Elsevier terminating the Agreement at the end of the year for which the Fees were paid unless the parties are able to agree to appropriate fee adjustments for any subsequent years of the Term, and may add, withdraw or substitute authentication mechanisms upon mutual agreement of the parties in writing.

Primary Contact	
Name:	Ruchareka Wittayawuttikul
Title:	Deputy Dean for Information
Name/Address (if different from Section 7.7):	
E-mail:	ruchareka.wit@mahidol.ac.th
Phone:	
Billing Contact	
Name:	Ruchareka Wittayawuttikul
Title:	Deputy Dean for Information
Name/Address (if different from Section 7.7):	
E-mail:	ruchareka.wit@mahidol.ac.th
Phone:	

The Subscriber will promptly notify Elsevier of any changes to any of the contact information above.