

Network of International Exchange of Microbes under the ACM (NIEMA)

—A transfer and exchange system of microbes for microbial resource centres
for non-commercial purposes according to the CBD and the Nagoya Protocol—

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The Asian Consortium for the Conservation and Sustainable Use of Microbial Resources (ACM) was established in 2004. Currently 23 organisations in 13 countries (Cambodia, China, India, Indonesia, Japan, Korea, Laos, Malaysia, Mongolia, Myanmar, Philippines, Thailand, and Vietnam) are members of the ACM. The objective of the ACM is to promote collaboration among governments and public organisations in Asian countries for enhancing conservation and sustainable use of microbial resources in Asia. Having recognized the importance of Microbial Resource Centres (MRCs) in the development of microbiology, a new scheme titled the 'Network of International Exchange of Microbes under the ACM (NIEMA)' has been developed by the Task Force of Management of Material Transfer (MMT-TF) in the ACM. This scheme proposes a legitimate and streamlined way of transferring and utilizing microbial resources in line with the Convention on Biological Diversity (CBD) and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity (NP).

Key words: CBD, code of conduct, microbial resource centre, Nagoya protocol, NIEMA

INTRODUCTION

The Convention on Biological Diversity (CBD) came into effect in December, 1993 (Convention on Biological Diversity, 1992). Thereafter, the 'Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity (NP)' was adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting (COP 10) held in Nagoya, Japan

in October, 2010 (Nagoya Protocol, 2011), and it enters into force on 12 October 2014. Upon effectuation of the NP, the utilization and transfer of genetic resources shall be subject to NP-related domestic laws or regulations enacted by each contracting party. On the other hand, as the Bonn Guidelines (E. Objectives, 11-l) (Bonn Guidelines, 2002) clearly state, such domestic laws or regulations should not hinder the taxonomic study; rather, the provider should promote access to the materials used for taxonomy. The users, on the other hand, should make available to the public all information obtained as a result of the taxonomic study.

It is beyond question that conservation of

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biological resources cannot be attained without the benefit of taxonomy. Today, it is extremely rare to have discoveries of new species of plants and animals. However, a large number of new species of microbes (=microorganisms) such as fungi and bacteria have been described every year and include about 930 new fungal species per year from 1943 to 2008 (Meredith Blackwell, 2011) and approximately 730 new bacterial species in 2013 (International Journal of Systematic and Evolutionary Microbiology, 2013-2014). Recent estimates based on high-throughput sequencing methods suggest that as many as 5.1 million fungal species exist, although only about 99,000 fungal species has been described to date (Meredith Blackwell, 2011). Thus, unlike animals and plants, a significant number of microbes still exist undiscovered on the earth. Therefore, microbial searches in various environments are still needed for the taxonomic and inventory studies of microbes. In the taxonomic study of microbes, type cultures and cultures *ex type* specimens of microbes play a substantial role as standards of various living organisms for identifying and describing new species. These microbial types are preserved in Microbial Resource Centres (MRCs), also known as culture collections.

MRCs are an essential part of the sustainable international scientific infrastructure underpinning biotechnology, human health, industry, agriculture, and other sectors (OECD Best Practice Guidelines for Biological Resource Centres, 2007). MRCs are also fundamental to *ex-situ* preservation for safely maintaining the world's biodiversity and genetic resources of microbes. They also play an important role in microbiology and serve as an essential element of the infrastructure for scientific investigation and research and development. Through their functions, they contribute significantly to the conservation and sustainable use of biological diversity. Currently approximately 673 MRCs exist in 70 countries, and various microbial resources, including types, are preserved in these MRCs (WFCC-MIRCEN World Data Centre for Microorganisms, 2012). Upon request, MRCs distribute microbial resources to researchers, both domestic and international, for the purpose of commercial use and non-commercial use. Moreover, the customary exchange of strains both domestically and internationally continues to take place.

However, the situation is about to change due to the effectuation of the NP. Because the national laws or regulations of the countries of origin will supersede precedent practices, if the laws require it, distribution and exchange of microbial resources might become substantially more time consuming, and in extreme cases, distribution might be inhibited. In other words, there is a possibility that such national laws or regulations may hamper the development of taxonomic research, microbiology, and science.

Article 8 (a) of the NP, 'Special Considerations', states as follows: 'In the development and implementation of its access and benefit-sharing legislation or regulatory requirements, each Party shall: (a) Create conditions to promote and encourage research which contributes to the conservation and sustainable use of biological diversity, particularly in developing countries, including through simplified measures on access for non-commercial research purposes, taking into account the need to address a change of intent for such research'. Moreover, Article 20 of the NP 'Codes of Conduct, Guidelines and Best Practices and/or Standards' states as follows: 1. Each Party shall encourage, as appropriate, the development, update and use of voluntary codes of conduct, guidelines and best practices and/or standards in relation to access and benefit-sharing; and 2. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall periodically take stock of the use of voluntary codes of conduct, guidelines and best practices and/or standards and consider the adoption of specific codes of conduct, guidelines and best practices and/or standards. Thus, the Parties to the Protocol shall not hinder the taxonomic study, which contributes substantially to the conservation of biological diversity and sustainable use of its components as well as to the publication of new species of microbes. Providers should thus facilitate the acquisition of the microbes to be utilized for the taxonomic studies. Then, researchers should make relevant information on such microbes available to the public.

In October 2004, the Asian Consortium for the Conservation and Sustainable Use of Microbial Resources (ACM) was established by organisations from 12 Asian countries (Cambodia, China, Indonesia, Japan, Korea, Laos, Malaysia, Mongolia, Myanmar, Philippines, Thailand, and Vietnam) in

Tsukuba, Japan (Asian Consortium for the Conservation and Sustainable Use of Microbial Resources (ACM), 2013). The objectives of the ACM are to strengthen the relationships among and between member organisations, as well as to encourage and facilitate research and development, including industrial use of microbial resources, which involves their international transfer. With the participation of India in 2012, 23 organisations from 13 countries are members of the ACM as of August 2014 (Table 1).

In October 2006, ACM 3 was held in Beijing, China. ACM members agreed to work together toward the establishment of a common rule for exchanging microbial resources among MRCs of the ACM member organisations. Then, at ACM 4, held in November 2007 in Cibinong, Indonesia, a Task Force on Management of Material Transfer (MMT-

TF) was created and initiated the discussion on MRC management in compliance with the CBD. Furthermore, in response to the NP adopted by COP 10 in 2010, the MMT-TF agreed to discuss practical ways to manage MRCs in compliance with the NP at ACM 8 held in October 2011 in Kuala Lumpur. Here it was decided to develop a new scheme to facilitate the international transfer of microbes in light of the principles of the CBD and the NP that recognize the sovereign rights of States over their genetic resources.

Since 2007, the MMT-TF of the ACM has been engaged in debate on how to operate the MRCs in compliance with the CBD. In addition, since 2011, the MMT-TF has voluntarily initiated studies on how to operate MRCs in compliance with the NP.

Having been inspired by the concept of the International Plant Exchange Network (IPEN)

Table 1 List of ACM Member Organisations

National Steering Committee for Biosafety, Ministry of Environment (MOE), Cambodia
Institute of Microbiology, Chinese Academy of Sciences (IMCAS), China
Microbial Type Culture Collection and Gene Bank (MTCC), Institute of Microbial Technology (IMTECH), Council of Scientific and Industrial Research (CSIR), India
Indonesian Institute of Sciences (LIPI), Indonesia
Biological Resource Center, National Institute of Technology and Evaluation (NBRC), Japan
Japan Collection of Microorganisms (JCM), RIKEN BioResource Center (RIKEN BRC), Japan
Microbial Culture Collection (MCC), National Institute for Environmental Studies (NIES), Japan
Korean Collection for Type Cultures/BRC, Korea Research Institute of Bioscience and Biotechnology (KCTC), Korea
Korean Agricultural Culture Collection, National Academy of Agricultural Science (KACC), Korea
Korean National Research Resource Center (KNRRC), Korea
Research Institute of Science (RIS), Science Technology and Environment Agency (STEA), Laos
Malaysian Agricultural Research and Development Institute (MARDI), Malaysia
Institute of Biology, Mongolian Academy of Sciences (IB-MAS), Mongolia
Botany Department, Patheingyi University, Myanmar
Philippine National Collection of Microorganisms (PNCM), National Institute of Molecular Biology and Biotechnology (BIOTECH), University of the Philippines Los Baños, Philippines
Ecosystems Research Development Bureau (ERDB), Department of Environment and Natural Resources (DENR), Philippines
Microbiological Research and Services Laboratory, Natural Sciences Research Institute (NSRI), University of the Philippines, Diliman (UPD), Philippines
University of Santo Tomas Collection of Microbial Strains (USTCMS), Thomas Aquinas Research Complex, Philippines
National Center for Genetic Engineering and Biotechnology (BIOTEC), National Science and Technology Development Agency (NSTDA), Thailand
Microbiological Resource Center (MIRCEN), Thailand Institute of Scientific and Technological Research (TISTR), Thailand
Biodiversity-Based Economy Development Office (PO), The Government Complex Commemorating His Majesty, Thailand
Department of Science and Technology Management, Ministry of Science and Technology (MOST), Vietnam
Institute of Microbiology and Biotechnology, Vietnam National University, Hanoi (VTCC), Vietnam

(International Plant Exchange Network, 2003), here we set forth a model scheme called the 'Network of International Exchange of Microbes under the ACM (NIEMA)' and its draft codes of conduct that are designed for smooth and legitimate transfers of microbes from MRCs for the purpose of non-commercial research in line with the principles of the CBD and the NP. Based on this NIEMA scheme, MRCs and their employees will be able to contribute to achieving the objectives of the CBD and the NP.

QUALIFICATION OF NIEMA MEMBERSHIP

MRCs that belong to the ACM and satisfy all of the following conditions may apply for NIEMA membership.

1. Registered in the World Data Centre of Microorganisms (WDCM)¹;
2. Possesses an acquisition and preservation system for microbes;
3. Possesses a distribution system for microbes to third parties; and
4. Possesses a database system to manage the MRC's tasks.

It is further imperative that MRCs and their employees are prepared to commit themselves to the NIEMA Code of Conduct for NIEMA membership.

An MRC belonging to the ACM that wishes to become a member of the NIEMA shall register online and submit the signed registration form (Annex 1: Online Registration Form for NIEMA Membership) to the NIEMA Clearing-House (NIEMA-CH) and the NIEMA secretariat. Determinations on membership will be deliberated in the annual meeting of the ACM. After approval, the MRC receives a certificate of NIEMA from the NIEMA secretariat and is registered in the database of NIEMA Member MRCs in the NIEMA-CH.

If any NIEMA MRC violates the NIEMA Code of Conduct, the NIEMA secretariat shall have the right to exclude the MRC from the NIEMA MRC by giving written notice to the MRC of such breach and of the intention of exclusion. Unless the MRC remedies such breach after receipt of the written notice, the MRC shall be automatically excluded

from the NIEMA MRCs. Also, the NIEMA MRC shall inform the NIEMA secretariat without undue delay when the MRC can no longer comply with the NIEMA Code of Conduct. Upon receipt of that information, the NIEMA secretariat shall remove the MRC concerned from the member list and the database of NIEMA Member MRCs in the NIEMA-CH.

DESCRIPTION OF THE NIEMA

The basis of the NIEMA is a common policy for all NIEMA MRCs: the NIEMA Code of Conduct for Microbial Resource Centres. The Code of Conduct consists of the four obligations listed below:

1. Acquisition and entering microbes into the NIEMA framework;
2. Transfer of NIEMA strains from a Primary-MRC to a NIEMA MRC;
3. Distribution of NIEMA strains from a NIEMA MRC to third parties; and
4. Maintaining a NIEMA Clearing-House Mechanism.

The Code of Conduct covers the transfer of microbial strains for non-commercial research purposes and complies with the provisions of the CBD and the NP. The NIEMA-CH shall store and make available any data on transfer information of NIEMA microbial strains between NIEMA MRCs.

**NIEMA Code of Conduct (Draft)
for Microbial Resource Centres governing
the acquisition, distribution,
and transfer of microbial strains**

Under this Code of Conduct, the Network of International Exchange of Microbes under the ACM (NIEMA) member Microbial Resource Centre (MRC) (hereafter NIEMA MRC) commits to the acquiring, distributing, and transferring of microbial strains to act on the basis of the principles of the 'Convention on Biological Diversity (CBD)' and the 'Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the CBD (NP)'. In addition,

¹World Directory of Culture Collections (sixth version, 2014), Culture Collections Information Worldwide, WDCM, available at <http://www.wfcc.info/ccinfo/> (accessed 30 September 2014)

the MRC will comply with relevant national and international laws and regulations.

1. Acquisition and Entering of Microbes into the NIEMA Framework

The biological resources subject to the NIEMA will be restricted to microbial strains including bacteria, archaea, fungi, algae, etc. The microbial strains under the NIEMA that are to be distributed by NIEMA MRCs to third parties shall be used for non-commercial research purposes only.

A. Criteria of NIEMA Strains

Each microbial strain entering the NIEMA must be a microbe with a clearly identified country of origin and must be acquired without restrictions in respect to its use or its distribution to third parties in order to enter the NIEMA and be exchanged within MRCs.

B. Registration of NIEMA Strains

The MRC that initially registers a microbial strain with the NIEMA system will be referred to as the Primary-MRC of the NIEMA strain. There are two types of registrations for a NIEMA strain. One is an internal registration of a NIEMA strain and the other is an external registration of a NIEMA strain. In the internal registration, the microbial strain to be registered to the NIEMA should originate from the same country as the Primary-MRC. In the external registration, the microbial strain to be registered to the NIEMA should originate from a country other than that of the Primary-MRC.

B-1 Internal Registration of NIEMA Strains

The Primary-MRC that wishes to register a preserved strain into the NIEMA system shall register the strain using the Internal Registration Form for a NIEMA Strain (Annex 2), and submit the signed form online to the NIEMA Clearing-House (NIEMA-CH). The strain will be generated automatically and listed in the database of the NIEMA Strain Catalogue in the NIEMA-CH and made available to the public.

B-2 External Registration of NIEMA Strains

1. If an organisation such as institute, university, etc. is located in a country where no functional MRC exists, but would like to

register its strain into the NIEMA system, it shall send the strain to a NIEMA MRC with related data regarding the strain along with authorized permission that states that the deposited strain will be a NIEMA strain and may be distributed to third parties under the NIEMA system, confirming the laws and regulations of the country of origin of the strain.

2. A NIEMA MRC shall become the Primary-MRC of the deposited strain and shall register it as a NIEMA strain according to the procedures of the Internal Registration of NIEMA Strains.
3. After the registration of the strain, the Primary-MRC shall inform the institute or university regarding the registered NIEMA strain in the Confirmation of NIEMA Strain Registration in which a new NIEMA strain number will be assigned.
4. The Primary-MRC shall report to the organisation that deposited the NIEMA strain regarding information concerning the user who received the NIEMA strain.

C. Numbering the NIEMA strain

The Primary-MRC must assign a NIEMA number to the strain. The NIEMA number consists of the NIEMA headline (NIEM), an acronym of the country of origin (ISO 3166 Alpha-2 code, a two-letter code), an acronym of the Primary-MRC (Code used in the World Data Centre for Microorganisms, Word Federation for Culture Collection), and an identification number of the strain used in the Primary-MRC. Example: NIEM JP NBRC 105312.

2. Transfer of NIEMA Strains from a Primary-MRC to a NIEMA MRC

1. When a NIEMA strain is transferred from a Primary-MRC to a NIEMA MRC upon request from the MRC using the Online Request Form of a NIEMA Strain for a NIEMA MRC (Annex 3), such strain shall be transferred to the MRC with a Transfer Form from a Primary-MRC to a NIEMA MRC (Annex 4). Then, the recipient MRC shall send an online Receipt from the MRC to the Primary-MRC with the strain number of the recipient MRC to the Primary-MRC and

the NIEMA-CH within 3 weeks of receipt of the requested strain. The transfer record of the NIEMA strain transfer from the Primary-MRC to the NIEMA MRC shall be reflected in the database of the NIEMA-CH and made available to the public.

2. A NIEMA strain shall be transferred ONLY from its Primary-MRC to a NIEMA MRC. The Primary-MRC shall not transfer NIEMA strains to non-NIEMA Member MRCs. Under the NIEMA system, the NIEMA MRC shall not transfer NIEMA strains to other NIEMA MRCs.
3. Upon receipt of the requested NIEMA strain from its Primary-MRC, the recipient NIEMA MRC shall register the NIEMA strain in its own catalogue with both the NIEMA strain number and the new strain number assigned by the recipient NIEMA MRC.

3. Distribution of NIEMA strains from a NIEMA MRC to third parties

1. The Material Transfer Agreement (MTA) is an integral part of the Online Request Form for Users (Annex 5). Users, named 'Recipients' in the MTA, who agree with all the terms and conditions in the provisions of the MTA may make an online request for the distribution of a NIEMA strain directly to a NIEMA MRC by submitting the completed Request Form.
2. The MRC shall confirm the status of the requested NIEMA strain and send the strain to the user with a Distribution Form from a NIEMA MRC to the user.
3. The user shall send an online Receipt from the user to the provider NIEMA MRC within 3 weeks after receipt of the NIEMA strain. Then, the provider MRC shall send a copy of the receipt to the strain's Primary-MRC once a year. In a case where the Primary-MRC is also the provider MRC, the Primary-MRC does not have to send a copy of such receipt.
4. In the event of any emerging commercialization prospects, including application for patents or other intellectual property rights arising from the use of the distributed NIEMA strain, the users, on their own, shall obtain Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT)

based on the national laws or regulations of the country of origin. This event is outside the scope of the NIEMA system.

4. NIEMA Clearing-House

1. For the purposes of conserving biological diversity, supporting scientific study, education and benefit-sharing, the NIEMA MRCs will use their best efforts to ensure the preservation and distribution of the microbial strains entrusted to them and to securely maintain relevant information, especially the records under which the microbial strains were acquired.
2. The NIEMA-CH is hereby established in the ACM as part of its clearing-house to share information related to the transfer of microbial strains between the Primary-MRC and the NIEMA MRC. There are three principal databases: a database of NIEMA Member MRCs, a database containing the NIEMA Strain Catalogue, and a database of transferred NIEMA Strains in the NIEMA-CH. Without prejudice to the protection of confidential information, each of the NIEMA MRCs shall make available to the NIEMA-CH any information required by this Code of Conduct.
3. The NIEMA-CH shall provide an annual report to the NIEMA secretariat in the ACM, to the ACM annual meeting, and make it available to the public. The report shall include information such as: (1) a member list of NIEMA MRCs, (2) new NIEMA strains deposited, and (3) NIEMA strains transferred from Primary-MRCs to NIEMA MRCs.
4. At the ACM annual meeting, each NIEMA MRC shall report on the number of NIEMA strains distributed that year from the MRC to third parties.

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ACMを基盤とする微生物の国際移動ネットワーク (NIEMA)
—生物多様性条約並びに名古屋議定書に則した微生物資源センターにおける
非商業目的のための微生物の移動・交換システム—

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微生物資源の保全と持続可能な利用のためのアジアコンソーシアム (ACM) が2004年に設立された。近年、13カ国 (カンボジア、中国、インド、インドネシア、日本、韓国、ラオス、マレーシア、モンゴル、ミャンマー、フィリピン、タイ、ベトナム)、23機関がACMのメンバーとなっている。ACMの目的は、アジアにおける微生物資源の保全と持続可能な利用を高めるために、アジア諸国における政府や公的機関間の協力を促進することにある。微生物学の発展において微生物資源センター (MRC) の重要性を認識し、ACMにおいて設立された材料移転管理作業部会 (MMT-TF) において新しいスキーム「ACMを基盤とする微生物の国際移動ネットワーク (NIEMA)」が開発された。このスキームは、生物多様性条約 (CBD) 並びに生物の多様性に関する条約の遺伝資源の取得の機会及びその利用から生ずる利益の公正かつ衡平な配分に関する名古屋議定書 (NP) に則した微生物資源の移動と利用の適法と簡素化の方策を提供するものである。

Annex 1 Online Registration Form for NIEMA Membership

To NIEMA secretariat
(Address)

(E-mail address)

Registration Form
for
Membership in the Network of International Exchange of Microbes under the
ACM (NIEMA)

_____ (Name of MRC) _____, (WDCM Number) _____ declares its intent to comply with the
NIEMA Code of Conduct and applies for membership to the NIEMA.

Date: _____

Name of MRC: _____

Address: _____

Name: _____

Title: _____

Signature: _____

Annex 2 Online Internal Registration Form for a NIEMA Strain

Internal Registration Form for a NIEMA Strain

Dear NIEMA secretariat

(Name of Primary-MRC) has registered the microbial strain(s) shown below. The strain(s) has been preserved in the (Name of Primary-MRC) with a NIEMA registration number.

Date: _____
 Name of Primary-MRC: _____
 Address: _____
 Name: _____
 Title: _____
 Signature: _____

	NIEMA Number	Original Strain Number	Name of Microbe
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

NIEMA Strain Minimum Data Requirement

The microbe specified below has been added to the NIEMA collection of (Name of Primary-MRC) on (Date).

1. NIEMA number:
2. Taxon: (Bacteria, Archaea, Fungi, Algae, or Other)
3. Scientific name with citation of author(s) and year:
4. Type or ex Type:
(Herbarium specimen's number and location: _____)
5. Country of origin:
6. History since original isolation:
←Depositor ←
7. Deposited to MRC by (name, position, and organisation):
Date of deposit:
8. References for this strain:
9. Growth condition.
Medium:
Temperature: °C Oxygen relationship:
Special requirements:
10. Recommended long-term preservation method:
11. Is this strain known to be or likely to be pathogenic?
Yes (human, animal, or plant), No, or Unknown
If yes, please specify host organism(s):
(Scientific name: _____)
Biosafety Level: (L1, L2, or L3)
12. Please describe other relevant information.
Declaration of compliance:
I declare that I have fulfilled all requirements herein.

By _____ (Signature)
 Name: _____
 Title: _____

Annex 3 Online Request Form of a NIEMA Strain for a NIEMA MRC

Online Request Form of a NIEMA Strain for a NIEMA MRC

Dear (Name of Primary-MRC)

(Name of NIEMA MRC) requests a transfer of the NIEMA strain(s) shown below from (Name of Primary-MRC), the Primary-MRC of the NIEMA strain(s).

Date: _____
 Name of NIEMA MRC: _____
 Address: _____
 Name: _____
 Title: _____
 Signature: _____

	NIEMA Number	Original Strain Number	Name of Microbe
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Annex 4 Transfer Form from a Primary-MRC to a NIEMA MRC

Transfer Form of a NIEMA Strain from a Primary-MRC to a NIEMA MRC

Dear (Name of recipient NIEMA MRC)

This is to notify that (Name of Primary-MRC), (Name of country), as the Primary-MRC of the strain(s), has transferred the NIEMA strain(s) shown below to a NIEMA MRC (Name of recipient NIEMA MRC) , (Name of country), upon request from the (Name of recipient NIEMA MRC).

Date: _____
 Name of Primary-MRC: _____
 Address: _____

 Name: _____
 Title: _____
 Signature: _____

	NIEMA Number	Name of Microbe
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Annex 5 Online Request Form for Users

Online Request Form of NIEMA Strain for Users

Dear (Name of NIEMA MRC).

The RECIPIENT requests the NIEMA strain(s) shown in the table below to a (Name of NIEMA MRC, Name of country). The RECIPIENT agrees with the terms and conditions of the Material Transfer Agreement (MTA) stipulated herein for the use of the requested NIEMA strain(s).

RECIPIENT: Organisation: _____
 Address: _____
 _____ (Country)
 Phone Number: _____
 E-mail address: _____
 Name: _____
 Title: _____
 Signature :

	NIEMA Number	Strain Number of MRC	Name of Microbe
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Material Transfer Agreement (MTA)

1. The RECIPIENT agrees to comply with the NIEMA Code of Conduct.
2. The RECIPIENT shall use the NIEMA strain(s) for non-commercial research purposes ONLY.
3. The RECIPIENT shall assume full responsibility for complying with all national and international laws, regulations, and guidelines applicable to the NIEMA strain(s).
4. The RECIPIENT shall not transfer the NIEMA strain(s) and any material(s) originating from the NIEMA strain(s) to any third party without prior written permission of the provider NIEMA MRC.
5. The RECIPIENT shall take full responsibility for the receipt, handling, storage, disposal, transfer, and use of the NIEMA strain(s).
6. The RECIPIENT shall acknowledge the provider NIEMA MRC, the NIEMA number, and the country of origin in any publication presenting scientific results and related information resulting from the use of the NIEMA strain(s).
7. The RECIPIENT shall agree that the provider NIEMA MRC will inform the Primary-MRC of the strain(s) regarding the distribution of the NIEMA strain(s), the name of the RECIPIENT's organisation and the distribution date of the NIEMA strain(s).
8. The RECIPIENT shall inform the provider NIEMA MRC of the termination of the use of the NIEMA strain(s) as early as practicable; in the event the RECIPIENT has destroyed the NIEMA strain(s), whether intentionally or unintentionally.