

CURTIN UNIVERSITY

INSTITUTIONAL BIOSAFETY COMMITTEE

Minutes of the Meeting 01/16 held at 1.00pm on Wednesday 24th February 2016 in the Executive Briefing Centre Boardroom, Building 100, Level 2

PRESENT:

Dr Beng Hooi Chua
Mr Gavin Waugh
Dr Rob Steuart (Chair)
Dr Katherine Zulak
Mr Frank Collins (until 2pm)
Mr Bevan Clark
Dr Peta Tilbrook
Professor Mark Gibberd

APOLOGIES:

Dr Josh Ramsay
Professor John Mamo
Assoc Professor David Groth

IN ATTENDANCE:

Dr Bernadette Bradley (Biosafety Advisor, Executive Officer)

1. Minutes of the Previous Meeting – 04/15

The Committee confirmed the Minutes were a correct record of proceedings of the IBC 04/15 9th December 2015.

RESOLVED IBC 01-16: Minutes of previous Meeting 04/15 confirmed.

2. Conflict of Interest

Professor Mark Gibberd is the Manager of both the Principle Investigators of the 4 GM Dealing Applications in Item 3.

3. Dealing Applications

3.1 Notifiable Low Risk Dealings NLRDs – for assessment.

- IBC 2016-02 Dr Rob Lee - Heterologous expression of genes derived from plant pathogen fungal species.

Decision: Approved

RESOLVED IBC 02-16: The IBC Approved IBC 2016-02.

- IBC 2016-03 Dr Rob Lee - Identification of fungal plant pathogenic pathogenicity factors.

Decision: Approved

RESOLVED IBC 03-16: The IBC Approved IBC 2016-03.

- IBC 2016-04 Dr Rob Lee - Screening of fungal pathogenicity genes by Agrobacterium-mediated transient expression of effector proteins in host plants.

Decision: Approved

RESOLVED IBC 04-16: The IBC Approved IBC 2016-04.

3.2 Dealing Not involving an Intentional Release (DNIR) – for assessment.

- IBC 2016-01 Prof Richard Oliver - Investigating the effect of mutations in fungicide target genes of pathogenic fungi: expression in the model fungus, *Parastagonospora nodorum*.

The IBC discussed this application in the context of the recent visit by the WA Gene Technology Interdepartmental Committee to assess the previous, related DNIR application 2015-20, and the 2015 request from the OGTR to pause the progress of NLRD 2015-07 and resubmit it as a DNIR.

The IBC decided the following related to the DNIR applications 2015-20 and 2016-01:

- The content of 2015-20 will be split into two new DNIR Applications, one containing the *in vitro* and *in vivo* effector work, and the other containing the *in vitro* and *in vivo* fungicide work.
- The use of the imported strains will be removed from both applications.
- The use of the malate-synthase mutants will be removed from both applications.
- Clarify the sentences identified by the WAGTIDC as being confusing, related to multiple fungicide resistance, increase/decrease fungicide tolerance, and transformation method.
- Write out the pertinent parts of the GT Guidelines rather than just referring to them.

The IBC decided that the malate-synthase mutant work should be submitted as an NLRD.

The following Actions arose:

Action 01-16: PT to send BB details of the previous DNIR application applied for by Murdoch University and assessed as suitable to be performed as an NLRD by the OGTR. BB to seek information from Murdoch and the OGTR of this precedential case.

Action 02-16: MG and KZ to seek information about other research groups around Australia that are doing similar GM and quarantined work at lower levels of required containment and Approval, and send to BB.

Decision: The CCDM will prepare the two new DNIR Applications. The IBC will be given 48 hours to comment on them out of session, then the Chair will make the final determination.

RESOLVED IBC 05-16: Application Withdrawn.

4. Review IBC charter.

The IBC discussed the Terms of Reference.

The IBC discussed whether to continue to assess applications out of session, and agreed to continue the practice, but requiring a Quorum of assessments, and the circulation of all questions to the whole Committee.

The Dealing Approval Letter will be copied to the Facility Manager(s).

The IBC will begin work on a set of Biosafety Guidelines.

Action 08-16: The IBC will begin work on a set of Biosafety Guidelines.

Decision: The IBC Approved the Terms of Reference, with the changes listed.

RESOLVED IBC 06-16: The IBC Approved The Terms of Reference.

The IBC also discussed reviewing the Safety and Health Representatives Inspection Checklist to try to include items of biosafety monitoring.

Action 03-16: Review the Safety and Health Representatives Inspection Checklist to try to include items of biosafety monitoring.

The IBC discussed getting BSCIIIs and autoclaves included in the Properties maintenance schedule.

Action 04-16: Try to get BSCIIIs and autoclaves included in the Properties maintenance schedule.

5. OGTR Monitoring Visit.

The IBC discussed the outcomes of the visit.

Action 05-16: BB to pull the content of the OGTR report out into a table, analyse how Curtin addresses with each section, advise how Curtin could address some sections more thoroughly, and present it to the next meeting.

6. Biological sample inventory.

The IBC discussed various kinds of commercially available biotracking software.

Action 06-16: BB to draft a Sponsor Document for Curtin to centrally purchase biotracking software. BB to ask Kristy Kahl for a copy of the one she used for her new software.

7. IBC Chair's Report

Dr Katherine Zulak is leaving the University, and thus the IBC. The Chair thanked Katherine for her service on the IBC.

BB asked MG to nominate another member of his Centre to sit on the IBC.

Action 07-16: MG to nominate a member of his Centre to sit on the IBC.

8. Biosafety Advisor's Report.

The Committee accepted the written report.

9. Physical Containment Facility Managers' Reports.

BHC advised that the cold room in B300 had been fixed on the same day that it had broken, and that none of the contained biological materials had been moved out of the facility.

RS advised that there had been two false alarms in B305 lately – one when concrete dust from grinding set off a particulate sensor, and another that was a sensor malfunction.

BB asked RS to find out who has authority over the B308:140 lab.

PT advised that the autoclave in B311 is has now passed its testing on the 45 minute quarantine run, and is now available to process biocontainment material.

BB advised that all facilities had come through the record heat wave with their airconditioning intact.

10. Matters arising from previous meetings

Action 02-12: IBC Chair and Biosafety Advisor to take a look at section 14.2.B of the Gene Technology Act to see how it applies to Curtin.

RESOLVED IBC 07-16: Closed unresolved.

Action 03-13: Biosafety Advisor will review the application/notification forms and present drafts to the IBC for consideration. Action 01/14: Biosafety Advisor to look at questions commonly asked by the IBC about Applications, and include them in future versions of the Application Form.

RESOLVED IBC 08-16: Closed.

Action 04-13: Develop a faster, electronic process for assessment and approval, with the ability to give approvals out of session.

RESOLVED IBC 09-16: Closed.

Action 10/13: Biosafety Advisor to draft letters to be used to liaise with other IBCs about Curtin staff and students doing dealings in external facilities, and external people doing dealings in Curtin facilities.

Ongoing.

Action 04/14: That the Biosafety Advisor investigate how Risk Group 2 microorganisms are handled in industry (on the bench or in biosafety cabinets).

Ongoing.

Action 01/15: Take the need for sample-tracking software to the IBHMEGC.

RESOLVED IBC 10-16: Closed.

Action 02/15: Scope the project about documenting vaccination management.

Ongoing.

11. Any Other Business

None

Meeting ended 3.10 pm.

ACTION LIST FOR MEETING 01/16

No.	Action required	Person responsible	Target date	Completed
10-13	Action: Biosafety Advisor to draft letters to be used to liaise with other IBCs about Curtin staff and students doing dealings in external facilities, and external people doing dealings in Curtin facilities.	Biosafety Advisor	2/10/2013	Ongoing
04-14	That the Biosafety Advisor investigate how Risk Group 2 microorganisms are handled in industry (on the bench or in biosafety cabinets).	Biosafety Advisor	10/09/2014	Ongoing
02-15	Scope the project about documenting vaccination management.	Biosafety Advisor	30/06/2016	
01-16	PT to send BB details of the previous DNIR application applied for by Murdoch University and assessed as suitable to be performed as an NLRD by the OGTR. BB to seek information from Murdoch and the OGTR of this precedential case.	Peta Tilbrook	20/04/2016	
02-16	MG and KZ to seek information about other research groups around Australia that are doing similar GM and quarantined work at lower levels of required containment and Approval, and send to BB.	Mark Gibberd and Katherine Zulak	20/04/2016	
03-16	Review the Safety and Health Representatives Inspection Checklist to try to include items of biosafety monitoring.	Biosafety Advisor	20/04/2016	
04-16	Try to get BSCIs and autoclaves included in the Properties maintenance schedule.	Biosafety Advisor	1/06/2016	
05-16	BB to pull the content of the OGTR report out into a table, analyse how Curtin addresses with each section, advise how Curtin could address some sections more thoroughly, and present it to the next meeting.	Biosafety Advisor	20/04/2016	
06-16	BB to draft a Sponsor Document for Curtin to centrally purchase biotracking software. BB to ask Kristy Kahl for a copy of the one she used for her new software.	Biosafety Advisor	20/04/2016	
07-16	MG to nominate a member of his Centre to sit on the IBC.	Mark Gibberd	20/04/2016	
08-16	The IBC will begin work on a set of Biosafety Guidelines.	IBC	20/04/2016	

RUNNING TOTAL SUMMARY 2016

Resolutions

Resolution No	Resolution Date	Description	Decision
IBC 01-16	24/2/2016	Minutes of previous Meeting 04/15 confirmed.	Confirmed
IBC 06-16	24/2/2016	The IBC Approved The Terms of Reference.	Approved
IBC 07-16	24/2/2016	Closed unresolved.	Closed
IBC 08-16	24/2/2016	Closed.	Closed
IBC 09-16	24/2/2016	Closed.	Closed
IBC 10-16	24/2/2016	Closed.	Closed

Applications/Notifications Approved

Resolution No	Project No	Resolution Date	Description	Applicant	Decision
IBC 02-16	IBC 2016-02	24/2/2016	The IBC Approved IBC 2016-02.	Robert Lee	Approved
IBC 03-16	IBC 2016-03	24/2/2016	The IBC Approved IBC 2016-03.	Robert Lee	Approved
IBC 04-16	IBC 2016-04	24/2/2016	The IBC Approved IBC 2016-04.	Robert Lee	Approved
IBC 05-16	IBC 2016-01	24/2/2016	Application Withdrawn.	Richard Oliver	Withdrawn

Incidents

Incident/Notification Date	Resolution Date	Description
Feb	Feb	In B305, incompatible chemical residues in a sharps bin interacted to produce fumes.
Feb	Feb	In B300, the cold room malfunctioned, and was fixed the same day.
Feb	Feb	In B305 there had been two false alarms – one when concrete dust from grinding set off a particulate sensor, and another that was a sensor malfunction.

Certified Facilities

Cert No.	type	Cert to	Inspected	Status	Facility Name	Notes
Cert-3489	PC2 Lab	1-8-2017	17/02/2016	Certified	Rms 219-242, 219A, 222A, 227A, Corridors C208 and C209, L2, East Wing, Biosciences Research Building 305	
Cert-3490	PC2 Lab	1-8-2017	17/02/2016	Certified	Rms 201-215, Corridors C202-C204, L2, West Wing, Biosciences Research Building 305	
Cert-1745	PC2 Lab	5-8-2013	25-1-2013	Surrendered	Rm D399, Molecular Immunology Laboratory, L3, Medical Research Foundation Building RPH	
Cert-1746	PC2 Lab	5-8-2013	N/A	Surrendered	Rm 397, Molecular Genetics Research Unit, L3, Medical Research Foundation Building RPH	
Cert-3203	PC2 Lab	12-12-2015	25-1-2013	Surrendered	Room D3101.1, Microbiology Laboratory, L3, Medical Research Foundation Building RPH	
Cert-2541	PC3 Lab	30-9-2017	19/02/2016	Certified	Rms 126-130, L1, Teaching and Research Facility, B300	
Cert-2406	PC2 Anim	20-4-2017	19/02/2016	Certified	Rms 104-107, 109, 131-140, 142-144, Clean Corridors 1 and 4 and Dirty Corridor, L1, B300, Teaching and Research Facility	
Cert-2407	PC2 Lab	20-4-2017	19/02/2016	Certified	Rms 111-123 and Clean Corridors 2 and 3, L1, B300, Teaching and Research Facility,	
Cert-3085	PC2 Lab	11-5-2020	19/02/2016	Certified	Rm 155, Teaching and Research Facility, L1, B300	
Cert-3086	PC2 Plant	11-5-2020	19/02/2016	Certified	Rms 147 and 148, Teaching and Research Facility, L1, B300	
Cert-1744	PC2 Lab	6-8-2005	N/A	Surrendered	Rm 254, Biomedical Sciences Building	
Cert-1747	PC2 Lab	5-8-2008	N/A	Surrendered	Rms 135 and 136, L1, Biomedical Sciences/Accord Diagnostics Building, BMS Tech Park	
Cert-1748	PC2 Lab	N/A	N/A	Withdrawn	Rm 134, L1, BMS Tech Park, Biomedical Sciences/Accord Diagnostics Building (#601)	
Cert-1749	PC2 Lab	5-8-2013	N/A	Surrendered	Rms 105, 107-113, 116-121, 134-136 and Associated Corridors, L1, Biomedical Sciences/Accord Diagnostics Building, BMS Tech Park	Users moved to B305.

Cert-3370	PC2 Plant	15-12-2016	23/02/2016	Suspended	Rms 1 and 2 and Anteroom, Ground Floor, Plant Glass House Facility (B126)	Suspended until needed for GM work.
Cert-2405	PC2 Lab	20-4-2017	17/02/2016	Suspended	Rooms 140-144 and lobby, B308, WABRI Molecular Sciences, LG Biomedical Sciences	Suspended while damage from leak fixed.
Cert-3832	PC2 Lab	6-4-2019	23/02/2016	Certified	Rooms 101-107, Conviron Facility, Ground Floor, Conviron Building 126K, Field Trials Area	

Curtin's NLRDs

OGTR's NLRD ID	Curtin's IBC NLRD ID	Title	Principle Investigator	Status	Expiry
NLRD-1458		Storage of GMOs that meet the criteria for a Notifiable Low Risk Dealing.	David Williams	Complete	
NLRD-1459		Analysis of genetic determinants in staphylococci associated with resistance to cationic compounds.	David Townsend	Complete	
NLRD-1462		Characterisation of the esp gene and VanB resistance determinant of Enterococcus faecium.	Frances O'Brien	Complete	
NLRD-1463		Characterisation of antibiotic resistance and pathogenicity of methicillin-resistant Staphylococcus aureus.	Frances O'Brien	Complete became 3351	
NLRD-1908		Construction of relaxable bacteria plasmids	David Townsend	Complete	
NLRD-2465		Storage of infectious poliovirus clone that meets the criteria for a NLRD	David Williams	Complete	
NLRD-2466	IBC 2007/02	Characterisation of the immune response of acellular pertussis vaccine [ACV] vaccinated mice subjected to intranasal vaccination with an aromatic-dependent B pertussis mutant	TK Mukkur	Complete	31 March 2015
NLRD-3351	IBC 2008/06	Characterisation of antibiotic resistance and pathogenicity of methicillin resistant staphylococcus aureus	Frances O'Brien	Complete	31 August 2016
NLRD-3352	IBC 2008/09	Assessing the role of B cells in an anti-CD40-based tumour immunotherapy using B cell deficient mice	Delia Nelson	Complete	31 August 2016
NLRD-3353	IBC 2009/04	Driving tumours to become their own vaccine site: understanding the role of tumor specific T cell using TCR mice	Delia Nelson	Current	31 August 2016

NLRD-4490	IBC 2010/25	Identification of pathogenicity factors in fungal plant pathogens	Richard Oliver	Complete	31 August 2016
NLRD-4491	IBC 2010/26	Inactivation of Adenylate Cyclase of the aroQ Bordetella pertussis vaccine candidate	TK Mukkur	Complete	31 August 2016
		Genetic Characterisation of Murray Valley Encephalitis virus	David Williams	Converted to an Exempt Dealing by Dr Beng Chua.	
NLRD-5856	IBC 2013/01	Fungicide use in broad acre cropping	Richard Oliver	Current	5 February 2018
NLRD-5989	IBC 2013-03	Understanding and applying macrophage-mediated effects on liver progenitor cells to treat liver disease.	Caryn Elsegood	Current	2 April 2018
NLRD-6141	IBC 2013-06	Determination of the mutagenic potential of commonly marketed Ghanaian medicinal plant formulations using the bacterial reverse mutation assay [AMES test].	TK Mukkur	Complete	4 June 2018
NLRD-6325	IBC 2013-09	Investigating gene regulation in bacteria.	Joshua Ramsay	Current	30 July 2018
NLRD-6406	IBC 2013-10 – renewal of IBC 2010-04	Identification of fungal plant pathogenicity factors.	Richard Oliver	Complete – superseded by 2014-03	27 August 2018
NLRD-6407	IBC 2013-11 - renewal of IBC 2010-25	Heterologous expression of genes derived from plant pathogen fungal species.	Richard Oliver	Complete – superseded by 2014-04	27 August 2018
NLRD-6483	IBC 2013-16	Construction of genetically detoxified live attenuated Bordetella pertussis and evaluation of its immune-protective potential against whooping cough.	Trilochan Mukkur	Complete	1 October 2018
NLRD-6556	IBC 2013-17	Fungicide Use in Viticulture.	Richard Oliver	Current	30 October 2018
	IBC 2014-03	Identification of fungal plant pathogenicity factors. This is an update to 2013-10.	Richard Oliver	Current	27 August 2018
	IBC 2014-04	Heterologous expression of genes derived from plant pathogen fungal species. This is an update to 2013-11.	Richard Oliver	Complete – superseded by 2015-04	27 August 2018

	IBC 2014-05	A bacterial type 3 secretion assay for effector delivery into plants.	Kar Chun Tan	Complete – superseded by 2015-12	26 October 2019
	IBC 2014-06	Assessing the impact of human PXR expression and statin treatment on the murine gut microbiota and the development of Type 2 diabetes.	Philip Newsholme	Complete	9 September 2019
	IBC 2015-01	Genetic manipulation of <i>Giardia</i> .	Robert Steuart	Current	5 March 2020
	IBC 2015-02	Gene transfer and regulation of biofilm formation in <i>Staphylococcus aureus</i> .	Joshua Ramsay	Current	17/05/2020
	IBC 2015-03	Identification of genetic factors that confer host resistance to fungal phytopathogens.	Mark Derbyshire	Current	25/05/2020
	IBC 2015-04 (update of 2014-04)	Heterologous expression of genes derived from plant pathogen fungal species.	Richard Oliver	Current	24/05/2020
	IBC 2015-05	Putative neurological effects of exaggerated secretion of enterocytic lipoprotein-associated beta-amyloid in a transgenic mouse model expressing human beta-amyloid limited to the absorptive epithelial cells of the small intestine.	John Mamo	Current	16/06/2020
	IBC 2015-07	Analysis of the contribution of mutations to antifungal compound resistance in filamentous fungi.	Francisco Lopez-Ruiz	Current	25/06/2020
	IBC 2015-09	Identification of fungal plant pathogenic pathogenicity factors.	Kar-Chun Tan	Current	16/08/2020
	IBC 2015-12	A bacterial type 3 secretion assay for effector delivery into plants.	Kar-Chun Tan	Current	2/9/2020
	IBC 2015-10	Identification of fungal plant pathogenic pathogenicity factors.	Mark Derbyshire	Current	3/11/2020
	IBC 2015-11	Heterologous expression of genes derived from plant pathogen fungal species.	Mark Derbyshire	Current	3/11/2020
	IBC 2015-13	Heterologous expression of genes derived from plant pathogen fungal species.	Kar-Chun Tan	Current	3/11/2020
	IBC 2015-14	Heterologous expression of genes derived from plant pathogen fungal species.	Caroline Moffat	Current	3/11/2020

	IBC 2015-15	Identification of fungal plant pathogenic pathogenicity factors.	Caroline Moffat	Current	3/11/2020
	IBC 2015-18	Identification of fungal plant pathogenic pathogenicity factors.	Simon Ellwood	Current	22/11/2020
	IBC 2015-19	Mouse models of Alzheimer's disease and diabetes.	Giuseppe Verdile	Current	12/11/2020
	IBC 2015-06	Heterologous expression of genes derived from plant pathogen fungal species.	Richard Oliver	Current	8/12/2020
	IBC 2015-17	Heterologous expression of genes derived from plant pathogen fungal species.	Simon Ellwood	Current	8/12/2020
	IBC 2016-02	Heterologous expression of genes derived from plant pathogen fungal species.	Rob Lee	Current	23/2/2021
	IBC 2016-03	Identification of fungal plant pathogenic pathogenicity factors.	Rob Lee	Current	23/2/2021
	IBC 2016-04	Screening of fungal pathogenicity genes by Agrobacterium-mediated transient expression of effector proteins in host plants.	Rob Lee	Current	23/2/2021

Import Permits

Permit Number	Permit Holder	Materials	Building	Permit conditions
IP14007918	Elizabeth Watkin	Microorganism <i>Brochothrix thermosphacta</i>	B305	
IP14008061	Kasia Clarke	Nucleic acids from plant pathogens	B300	
IP14009283	Elizabeth Watkin	Microorganisms low risk lab strains	B305	
IP14010320	Pat Metharom	Cell lines from animals and humans, purified lab reagents, antibodies	B305	
IP14011552	David Groth	Genetic material and vectors	B305	
IP14014224	Kevin Keane	Purified lab reagents	B305	
IP14015992	Judith Lichtenzveig	Microorganisms <i>Ascochyta</i> and <i>Phoma</i> species	B300	Must remain under quarantine in W1540 B300 only.
IP14017568	Richard Oliver	Prohibited seeds, plant pathogens, nucleic acids from plant pathogens	B300	Must remain under quarantine in W1540 and W1684 B300 only.
IP14018385	Elizabeth Watkin	Microorganisms	B305	
IP14018575	Madeline Tucker	Nucleic acids from plant pathogens	B300	
IP14019327	Pat Metharom	Fluids, tissues and cell lines from humans and animals, genetic material and vectors, purified lab reagents, and antibodies	B305	
IP15004052	Mark Derbyshire	Seed <i>Arabidopsis thaliana</i>	B300	
IP15004293	Patricia Price	Fluids, tissues and cell lines from humans and animals, genetic material and vectors, diagnostic kits	B305	
IP15007757	Elizabeth Watkin	Microorganisms	B305	
IP15010453	Simon Ellwood	Nucleic acids from plant pathogens, microorganisms, proteins	B300	Must remain under quarantine in W1684 B300 only.
IP15011838	Joshua Ramsay	Microorganisms, genetic material from microorganisms, antibodies, lab reagents	B305	
IP15011871	Elizabeth Watkin	Microorganisms	B305	
IP15012450	Michael Bunce	Genetic material, fossils, soil/water samples, animal samples, herbal medicine	B311	Must remain under quarantine in W1318 B206:203 and W1828 B311 only.

IP15015048	Warren Grubb	Microorganisms	B305? RPH?	
IP15016327	Centre for Crop and Disease Management	Plant pathogens, genetic material from plant pathogens, restricted seed	B300	Must remain under quarantine in W1540 and W1684 B300, or W1829 B126K and W1830 B126G only.
IP15007864	Belinda Cox	Plant material	B300	Must remain under quarantine in W1540 B300 only.
P 0000243859	Curtin University – Bob Webb	Soil and water samples		Gamma irradiated at ChemCentre for ARRC
IP15003970	Hla Aye Saw	unknown		
IP14013521	Nerissa Ho	Lab reagents	B400	
IP14006367	Peter Ross Edwards	Unknown – asking Gwyn Hughes		
IP14002383	Laura Machuca Suarez	unknown		
IP14000644	John Mamo	unknown		
IP13022721	Angelina Jane Rossiter	unknown		
IP13020572	Bill Bateman	unknown		