

OFFLU Technical Activities / Projects / Resources (updated January 2018)

OFFLU focal point	Technical Activity and Leader	Purpose	Deliverables	Progress	Status
ACTIVE TECHNICAL ACTIVITIES					
GP/LW	Avian influenza virus TA (Ian Brown)	Proficiency testing exercise among OIE/FAO Reference Centres	Harmonisation of diagnostic protocols	AAHL, Australia leading the proficiency testing exercise among OIE/FAO Reference Centres for year 2017	ONGOING
		WHO Vaccine Composition Meeting contributions	Zoonotic avian influenza genetic and antigenic data	Biannual contribution of zoonotic AI data http://www.who.int/influenza/resources/documents/characteristics_virus_vaccines/en/	ONGOING
		Technical expertise and advice	Assess emergence of new strains, analysis in change of epidemiology	Experts convened through teleconferences for data and protocols. Technical advice and expertise shared for national laboratories	ONGOING
		Vaccination issues -Act as a source of scientific expertise and advice to OIE, FAO and WHO on matters relating to the design and assessment of AI vaccines and their use in poultry -Develop an international system for comparing vaccine antigens with field strains in regions or situations where vaccination is undertaken, and for recommending candidate antigens for inclusion in vaccines -Act as a source of scientific advice on vaccine efficacy -Act as a source of scientific advice for assessment of vaccine effectiveness in field situations	Monitoring of antigenic change Technical advice on vaccines and vaccination	OFFLU vaccination technical meeting was held at Beijing during 4 – 6 December 2013. Meeting documents including recommendations of the meeting are posted on the OFFLU website http://www.offlu.net/index.php?id=303 A technical meeting was organised at FAO Headquarters in March 2017 to engage participating laboratories for data compilation and analysis and to progress the process and methods for AI virus characterisation process http://www.offlu.net/index.php?id=330	ONGOING

GP	<p>Swine influenza virus TA</p> <p>(Marie Culhane / Taki Saito)</p>	<p>Coordinate and harmonise global swine influenza surveillance</p>	<p>Sharing of SIV data</p> <p>Research updates</p> <p>Technical advice as needed through meetings/teleconferences/emails</p> <p>Publications</p>	<p>Sixth annual meeting held at FAO Headquarters in March 2017 http://www.offlu.net/index.php?id=360</p> <p>Manuscript on "Review of influenza A virus in swine worldwide: a call for increased surveillance and research" was accepted for publication in Zoonoses and Public Health journal. http://onlinelibrary.wiley.com/doi/10.1111/zph.12049/pdf</p> <p>Global antigenic diversity of SIV https://elifesciences.org/content/5/e12217</p> <p>SIV H1 clade nomenclature search tool https://www.fludb.org/brc/influenza_h1clade_search_segment.spg?method=ShowCleanSearch&decorator=influenza</p>	ON GOING
GP	<p>Wildlife/wild bird influenza TA</p> <p>(Billy Karesh)</p>	<ul style="list-style-type: none"> - To provide a platform for discussion, coordination, and data sharing between key wildlife experts involved in influenza surveillance and research - Regular review of the OFFLU Research Priorities on Avian Influenza: Wild Birds - To review existing findings from 10 years of extensive wild bird surveillance and highlight the main outputs - To explore and answer specific technical questions - To decide whether there is a need to develop/coordinated a low-cost targeted wild bird surveillance strategy at a global level accounting for existing surveillance programmes - To provide OFFLU with technical expertise on influenzas in wild animals 	<p>Technical advice as needed through meetings/teleconferences/emails</p> <p>Publications</p>	<p>Teleconferences conducted at regular intervals to share the situation update and action items followed up.</p> <p>A concept note for global surveillance for influenza A viruses in wild birds developed</p>	ONGOING

GP	Equine influenza TA (Ann Cullinane)	To share field data and characteristics of virus isolated every year to assist in updating the vaccine recommendations for equine influenza every year	Vaccine recommendations	The group met in March 2017 to share data and update vaccine recommendations http://www.oie.int/en/our-scientific-expertise/specific-information-and-recommendations/equine-influenza/	ONGOING
SvD	Applied Epidemiology (Dirk Pfeiffer)	1. Identification of the pathways leading to the introduction, spread and maintenance of relevant avian influenza viruses in different eco-social system settings and estimate the risks associated with these pathways, within the context of structured risk assessments 2. Development of appropriate risk management options for relevant avian influenza viruses in different eco-social system settings, including the design of surveillance systems and their components	Technical advice as needed through meetings/teleconferences/emails Publications	Earlier Applied epidemiology group outputs: OFFLU animal influenza surveillance strategy document completed and posted on line http://offlu.net/OFFLU%20Site/OFFLUsurveillancePH1N1_180110.pdf A new applied epidemiology technical working group was formed and the members convened for their first meeting in June 2017 to finalise the terms of reference and work plan. http://www.offlu.net/index.php?id=376	ONGOING
PD	Socio-economics (Jonathan Rushton)	-Understanding of the social and economic impact of influenza viruses in animals and their impact on humans -The undertaking of analyses or studies to identify institutionalized behavioural blockages to changes in practices that could lead to better zoonotic influenza control, in any or all of society at large, commercial practices or regulatory agencies -Development of social and economic assessments to demonstrate the social and economic profitability or cost-effectiveness of any research or intervention programme proposed	Technical advice as needed through meetings/teleconferences/emails Publications	The concept note and membership of the technical activity drafted.	ABOUT TO START
Ad hoc activities as needed					
DS	OFFLU Research Agenda (David Swayne)	A comprehensive list of Research Priorities for equine, avian, and swine influenza surveillance		OFFLU – STAR IDAZ partnered to develop a global animal influenza research agenda in 2014 http://www.offlu.net/fileadmin/home/en/publications/pdf/300714/OFFLU_STAR-	Update as needed

				IDAZ Executive Summary final.pdf OFFLU research agenda developed in 2010 An editorial was prepared for publication in Influenza and other Respiratory Viruses journal.	
LW/GP	Biosafety (Bev Schmitt)	To provide guidance on minimum standards for handling AI viruses in veterinary laboratories	Practical biosafety guidelines	Biosafety guidance for handling HPAI viruses – published in OIE Diagnostic Manual and OFFLU website http://offlu.net/OFFLU%20Site/biosafety.pdf Biorisk management guidelines for handling avian influenza A(H7N9) viruses in veterinary laboratories http://www.offlu.net/fileadmin/home/en/guidance/pdf/Biosafety_guidelines_H7N9.pdf	Update as needed.
PD	MTAs and Code of Conduct and PIP framework (Peter Daniels)	Working group to develop a code of conduct for virus and information sharing (alternative to MTAs) focussing on collegial values and trust Working group involves with WHO and CDC to study the PIP framework implications for animal health laboratories	A user friendly alternative to MTAs Implications of WHO PIP framework on sharing of influenza biological material between animal health laboratories and WHO GISRS laboratories	http://www.offlu.net/index.php?id=169 http://www.offlu.net/fileadmin/home/en/resource-centre/pdf/MTA.pdf	Discussion with WHO if needed
LW	Training (Giovanni Cattoli)	- draw lessons learnt in terms of AI testing training - develop/select e-learning systems and define the possible applications (eg. pre-requisite for an international training) - develop recommendations on AI training	Training material Recommendations	Following activities carried out: (i) A specific training tab was created in the OFFLU website to post various influenza related training materials that may be endorsed by OFFLU executive committee (ii) Posted videos on AI sampling procedures and lab techniques (IZSve-FAO)	Update as needed

		<ul style="list-style-type: none"> - develop a train the trainers program - develop/compile common OFFLU training material (including videos) - develop a database of trainees (to be managed then by the OFFLU secretariat) - identify training needs based on overall PT results - envisage perspectives of common human health/animal health training and lab/epi training 		<ul style="list-style-type: none"> (iii) Collection and posting of training materials available and potentially useful: <ul style="list-style-type: none"> - e-learning course (Flu-Train), - several books - DVDs - other web-based trainings freely accessible (iv) Development and posting of the influenza chapter of an FAO glossary of new and updated diagnostic assays. Proposed as future OFFLU document 	
Historical technical activities, projects and other activities					
GP	RNA standard (Timm Harder)	<ul style="list-style-type: none"> • To develop an RNA standard 	Universally usable RNA standard initially for H5 avian influenza virus targeted PCR assays	<p>FLI have developed an RNA standard. To obtain RNA standard contact tim.harder@fli.bund.de or Christian.grund@fli.bund.de and ask for RNA standards. Material can be supplied as run-off RNA transcripts at a fixed copy number (which may decrease upon shipping) or as plasmids for own production of run-off RNA. RNA is provided for the Spackman M1.2, the AHVLA recommended H5 and the FLI developed N1, NP and H7 assays.</p>	COMPLETED
GP	<p>Evaluation of a modified LAMP specific for H5-gene and testing its suitability under field conditions</p> <p>(Anja Globig)</p>	<p>Evaluation and validation of a modified LAMP in ready-to-go tubes with lyophilized Mastermix (provided by IAEA) with different H5-strains</p> <p>Further evaluation by boiling instead of conventional extraction and by use of water bath and SYBR Green for visualization</p> <p>Testing the efficacy of the LAMP in regional laboratories, e.g. Nepal, Ghana by use of region-specific H5-strains including training</p>	Robust and cheap diagnostic technology	<p>This OIE funded project started on 1 December 2010 and the final report submitted in October 2013.</p> <p>Final report posted on the website</p> <p>http://www.offlu.net/fileadmin/home/en/offlu-projects/pdf/offlu-lamp-final_report.pdf</p>	COMPLETED

		of lab-staff			
DS	An assessment of components of global avian influenza control programmes (David Swayne)	A comprehensive evaluation to identify the strengths and weaknesses of control strategies used in different countries and regions in varying contexts. A frame work describing which components should be considered for future control strategies.	Scientific and technical review and recommendations	Project completed. Findings presented to OFFLU. Two manuscripts on the project published in the OIE Scientific and Technical Review http://web.oie.int/boutique/extrait/18swayne839870.pdf http://web.oie.int/boutique/extrait/02pavade661671.pdf	COMPLETED
Other activities					
GP/TB/LW	OFFLU information brochure	Leaflet to introduce about OFFLU and its activities	Nice colourful informative brochure	Completed http://www.offlu.net/fileadmin/home/en/about-us/pdf/OFFLUleaflet.pdf	Update as needed
GP	OFFLU annual report	To summarise OFFLU activities every year for wider dissemination	Annual report of OFFLU	2016 report published. http://www.offlu.net/fileadmin/home/en/publications/pdf/OFFLU_Annual_Report_2016.pdf	Annual update