

## Monday, May 20<sup>th</sup>

- 10h00 Ouverture des enregistrements / Opening of registrations
- 11h30 -13h00 Visite VIP, Inauguration de la conférence et cocktail / VIP visit, Inauguration of the conference and cocktail
- 13h00 – 13h20 Introduction par le SGDSN (Secrétariat Général de la Défense et de la Sécurité Nationale) / SGDSN introduction
- 13h20 – 13h40 *Arnaud Fontanet* (Collège de France / Institut Pasteur): Pandémies d'origine infectieuses, nouvelles approches pour y répondre / New strategies for infectious pandemics
- 13h40 – 14h00 *Sébastien Braha* (OPCW): Défis actuels et priorités futures : l'OIAC à un tournant pour la mise en œuvre de la Convention d'Interdiction des Armes Chimiques / Current challenges and future priorities: the OPCW at a crossroad in implementing the Chemical Weapons Convention
- 14h00 – 14h20 *Patrick La Clemence* (Université Technologique de Troyes): Face au terrorisme : un équilibre entre vigilance et hypertension / How to balance vigilance and anxiety in front of terrorism
- 14h20 – 15h00 Coffee break, posters session, industrial and operators exposition*
- 15h00 – 15h20 *Bruno Bellier* (Agence de l'Innovation Défense): Le hasard et la nécessité : essai d'une biologie de l'Innovation / Chance and necessity: essay on innovation biology
- 15h20 – 15h40 *Emmanuel Houze* (Ministère de la Transition Ecologique et Solidaire): Décontamination des infrastructures : CISDI, la réponse française / Infrastructures decontamination: CISDI, the French response
- 15h40 – 16h00 *Hélène Callon* (Ministère de l'Agriculture et de l'Alimentation): Prévention et lutte contre l'agroterrorisme / Prevention and response to agroterrorism
- 16h00 – 16h40 Coffee break, posters session, industrial and operators exposition*
- 16h40 – 17h00 *Nathalie Faure* (DGSI): Menaces sur les sites industriels / Threats on industrial sites
- 17h00 – 17h20 *Raphaël Prenat* (UN1540 Committee): Lutte contre la prolifération des armes biologiques et chimiques / Fight against the proliferation of BC weapons
- 17h20 – 17h40 *Eric Schnell, Eric Fayemendy* (DGSCGC): Les missions à caractère NRBC du Groupement d'Intervention du Déminage de la Sécurité Civile / CBRN missions of the civil protection demining intervention group
- 18h30 Cocktail*

## Tuesday, May 21<sup>st</sup>

### DETECTION – NRC

- 08h30 – 08h55 [Keynote](#) *Klaus Mayer*: Nuclear Forensics – Integrating Research and Application
- 08h55 – 09h07 [Talk 1](#) *Kylie Vongsanga*: The development of a modular, lightweight and adaptable miniaturised sensor for airborne chemical threats
- 09h07 – 09h19 [Talk 2](#) *Genevieve Dennison*: Luminescence colour switching dyads for the detection of organophosphorus chemical warfare agents
- 09h19 – 09h31 [Talk 3](#) *Noemi Colozza*: An origami-like wearable electrochemical sensor for Sulphur mustard detection in liquid and aerosol phase
- 09h31 – 09h43 [Talk 4](#) *Cristiano L. Fontana*: First Results of the Field Trials of the Rapidly Relocatable Tagged Neutron Inspection System (RRTNIS) of the European H2020 C-BORD Project
- 09h43 – 09h55 [Talk 5](#) *Guillaume Montémont*: Recent advances in gamma-ray imaging using NuVISION device
- 09h55 – 10h15 [Flash presentations](#)

*Lukasz Szklarski*: Heterogeneous network of chemical sensors for improved situational awareness and reduced false alarm rate

*Frédéric Progent*: Development of Micro-Time-Of-Flight mass spectrometer for Chemical Threat in situ detection

*Ladislava Navratilova*: Integrated C-sampling kit for field sampling

*Martijn de Koning*: Degradation and detection of the nerve agent VX by a chromophore functionalized zirconium MOF

*Laure Duvauchelle*: Evaluation of two innovative portable Air Samplers in field conditions on the US military facility Dugway Proving Ground

10h15 – 11h00 *Coffee break, poster session, industrials & responders exhibition*

### RISKS & CRISES MANAGEMENT

- 11h00 – 11h25 [Keynote](#) *Peter Blain, Steve Emmett*: Salisbury: lessons for diagnosis and treatment
- 11h25 – 11h37 [Talk 1](#) *Ruth Milton*: Public Health Response to Salisbury Poisoning Incident
- 11h37 – 11h49 [Talk 2](#) *David Russell*: Prioritising Public Health Risks Posed by the Accidental or Deliberate Release of Chemicals into the Atmosphere
- 11h49 – 12h01 [Talk 3](#) *Marian Kolencik*: CBRN Terrorist Planification - how to prevent an attack?
- 12h01 – 12h13 [Talk 4](#) *Grigore Havarneau*: CBRNE Threat Management in the Railway and Public Transport Sector
- 12h13 – 12h25 [Talk 5](#) *Elif Surer*: Serious Gaming in CBRNe Domain: A Survey on Use Expectations, Concerns and Suggestions
- 12h25 – 12h45 [Flash presentations](#)

*Jacek Beldowski*: Decision Aid tool for marine munitions management

*Stéphane Le Floch*: An innovative experimental device to assess the behavior of a chemical under controlled environmental parameters

*Samantha Lim Thiebot*: Emergency Situation Support Cell (CASU): Expertise in real time for chemical accidents

*Axel Lambert de Rouvroit*: The Economic Impact of Crises

*Rachele Brancaleoni*: Evaluation and improvement of HDP (Hospital Disaster Plan) for CBRN events: Gemelli Hospital perspective

12h45 – 14h15 *Lunch, poster session, industrials & responders exhibition - Workshop*

### MEDICAL COUNTERMEASURES - NRC

- 14h15 – 14h40 [Keynote](#) *Michael Abend*: Existing and developing triage tools to cope with a RN event
- 14h40 – 14h52 [Talk 1](#) *Diane Riccobono*: RI-MODS/MOF: development of preclinical models and innovative therapies at IRBA
- 14h52 – 15h04 [Talk 2](#) *Christine Linard*: Stromal vascular fraction for the treatment of the radiation-induced gastrointestinal syndrome
- 15h04 – 15h16 [Talk 3](#) *Marloes Joosen*: Role of anticholinergics in nerve agent treatment efficacy
- 15h16 – 15h28 [Talk 4](#) *Israel Silman*: Molecular Dynamics Simulations of the Interaction of Mouse and Torpedo Acetylcholinesterase with Covalent Inhibitors Explain Their Differential Reactivity: Implications for Drug Design
- 15h28 – 15h40 [Talk 5](#) *Kamil Musilek*: Novel butyrylcholinesterase reactivators for effective pseudo-catalytic scavenging of sarin and VX
- 15h40 – 16h00 [Flash presentations](#)
- Marco Valente*: Retrospective biological dosimetry, adapting to different lifestyles
- Nicolas Jullien*: Innovative strategy for muscular repair after high local dose radiations exposure: in vitro preliminary studies on a model of mouse myoblasts
- Tanja Popp*: Bardoxolone (CDDO-Me), a potential radioprotector for normal cells
- Julie Somkhit*: Role of microglia in seizure activity after organophosphate exposure
- Fanny Caffin*: Cognitive and emotional impairments induced by CEES after cutaneous intoxication in mice

16h00 – 16h45 *Coffee break, poster session, industrials & responders exhibition*

### EXPLOSIVES DETECTION

- 16h45 – 17h10 [Keynote](#) *Augustus W Fountain*: Chemical Fingerprint Identification System: Beyond Concept and Towards Applications for Field Expeditionary Military Forensic Analysis
- 17h10 – 17h22 [Talk 1](#) *Christoph Kölbl*: Sensitive laser based stand-off system for mid-infrared explosive detection
- 17h22 – 17h34 [Talk 2](#) *Florent Christophe*: Imaging radar contributions to explosive detection
- 17h34 – 17h46 [Talk 3](#) *Guillaume Thomas*: Nanostructured and Functionalized Microcantilevers for Fast Detection of Explosives and Chemical Warfare Agents
- 17h46 – 18h06 [Flash presentations](#)
- Emanuela Gallo*: UV Raman Spectroscopy for Explosives Detection
- Lara Hettmanczyk*: Molecularly Imprinted Polymers (MIPs) as Sensor Elements for the Gas Phase Detection of Explosives
- Chrystel Ambard*: Particles sampling for explosives detection with the prototype device SYMOPREPTM
- Liliana Martelo*: Low-Cost Device for Detection of Explosives Vapours
- Céline Frenois*: Development of trace explosive detector: Issues around test and end-users evaluation
- Laurence Jeuniau*: Influence of the Synthesis Process of TATP and HMTD on their Sublimation Rate

## Wednesday, May 22<sup>nd</sup>

### MEDICAL COUNTERMEASURES – NRC

- 08h30 – 08h55 [Keynote](#) *Zrinka Kovarik*: Nerve agent bioscavengers based on an efficient oxime- assisted reactivation of cholinesterases
- 08h55 – 09h07 [Talk 1](#) *Brenda Marrero-Rosado*: Antiepileptic combination therapy to treat pharmaco-resistant seizures in soman-exposed carboxylesterase knockout mice
- 09h07 – 09h19 [Talk 2](#) *C. Linn Cadieux*: A novel genetically modified mouse model for evaluating nerve agent countermeasures
- 09h19 – 09h31 [Talk 3](#) *José Dias*: Design synthesis and in vitro evaluation of a promising new class of bifunctional uncharged hybrid reactivators for nerve agent-inhibited human acetylcholinesterase
- 09h31 – 09h43 [Talk 4](#) *Dennean Lippner*: Dimethyl trisulfide as an intramuscular cyanide medical countermeasure
- 09h43 – 09h55 [Talk 5](#) *Matthias Port*: Radionuclide decorporation strategies and required MCM resources after a “dirty bomb” attack
- 09h55 – 10h15 [Flash presentations](#)

*Alain Chapel*: Generation of hematopoietic stem cells from non-hematopoietic iPS in patients with acute irradiation syndrome an innovative therapeutic strategy of hematopoietic syndrome

*Julie Bensimon Etzol*: DosiKit, a new portable assay for fast external irradiation biodosimetry

*Leslie Dubrana*: New testing and screening in vivo zebrafish based methods to identify potential treatments for organophosphorous poisoning

*Sabine François*: Second effects of organophosphorus poisoning: Alteration of the hematopoietic compartment

*Julia Herbert*: COPD and asthma therapeutics for supportive treatment in organophosphate poisoning

10h15 – 11h00 *Coffee break, poster session, industrials & responders exhibition*

### DETECTION - B

- 11h00 – 11h25 [Keynote](#) *Brigitte G. Dorner*: Botulinum neurotoxins: new findings on receptor binding and how they translate into innovative detection approaches
- 11h25 – 11h37 [Talk 1](#) *Christine Rasetti-Escargueil*: Development of innovative BoNT antibodies and progress toward harmonization of the detection of BoNT toxins
- 11h37 – 11h49 [Talk 2](#) *Sylvia Worbs*: European programme for the establishment of validated procedures for the detection and identification of biological toxins (EuroBioTox)
- 11h49 – 12h01 [Talk 3](#) *Duarte Gouveia*: Phylopeptidomics: optimization for fast detection of cellular organisms in complex samples without any a priori
- 12h01 – 12h13 [Talk 4](#) *Stéphanie Simon*: Development of field Enzyme Immunoassays
- 12h13 – 12h25 [Talk 5](#) *Thomas Bordy*: Field tool for fast & sensible detection of B Agent
- 12h25 – 12h45 [Flash presentations](#)

*Julien Enche*: Identification of Ricin by Immunocapture Extraction and LC-MS/MS or LC-MS/HRMS Analysis

*Rómulo Aráoz*: Bioassays for detection and identification of marine neurotoxins

*Fabienne Gas*: Recombinase Polymerase Amplification combines with Lateral Flow Strip for detection of Biothreat agents

*Jean-Maxime Roux*: An automated microfluidic cartridge for field multiplex preparation and identification in a biological threat detection chain

*Berivan Boran*: Organization of a Proficiency Test to Evaluate the Ability of International Laboratories to Detect Staphylococcal Enterotoxin Type B (SEB)

12h45 – 14h15 *Lunch, poster session, industrials & responders exhibition – Workshop*

## EPIDEMIOLOGY & DIAGNOSIS

14h15 – 14h40 [Keynote](#) *Alexandra Mailles*: The surveillance of infectious diseases and its application to early detection of biological threats

14h40 – 14h52 [Talk 1](#) *Lionel Koch*: Outbreaks and bioterrorism: two sides of the same threat

14h52 – 15h04 [Talk 2](#) *Emmanuelle Billon-Denis, Jean Nicolas Tournier*: Vaccine for biodefense: back to the future

15h04 – 15h16 [Talk 3](#) *Toscane Fourié*: Tracking Rift Valley fever in French Forces: from Mali to Europe, 2016

15h16 – 15h28 [Talk 4](#) *Stéphanie Watier-Grillot*: Challenging Investigation of a foodborne disease outbreak caused by phytohaemagglutinin, a bean lectin - 2018, Brittany, France

15h28 – 15h40 [Talk 5](#) *Håkan Wingfors*: Characterization and assessment of military smoke and health implications

15h40 – 16h00 [Flash presentations](#)

*Frédéric Ducancel*: Development of a preclinical non-human primate model of ricin intoxication, assays for plasmatic dosage of ricin, and identification of a transcriptomic signature for exposure to ricin.

*Olivier Ferraris*: Distribution of orthopoxvirus circulation, 2012-2018

*Hervé Volland*: Innovative Point-of-Care device for the Direct Detection of Antibiotic Resistance

*Maellys Kevin*: Hierarchical classification of *Francisella tularensis* ssp. *holarctica*: a One-Health approach for epidemiological surveillance of tularemia in France

16h00 – 16h45 *Coffee break, poster session, industrials & responders exhibition*

## PROTECTION - DECONTAMINATION

16h45 – 17h10 [Keynote](#) *Robert Chilcott*: Decontamination and management of hair following a CBRN incident

17h10 – 17h22 [Talk 1](#) *Anne Van der Meer*: Ex vivo model for skin decontamination following actinide external contamination

17h22 – 17h44 [Talk 2](#) *Masaru Watanabe*: Hydrothermally synthesized lignocellulose-derived flexible carbon functionalized for protein decomposition and ion adsorption

17h44 – 17h56 [Talk 3](#) *Greta Camilla Magnano*: The Nanoceria - a new strategy for skin decontamination of Organophosphorus compound

17h56 – 18h08 [Talk 4](#) *Marie-Laure Cointot*: Efficiency protection assessment of protective clothes against organophosphates liquid contaminations

18h08 – 18h20 [Talk 5](#) *Diana Ferreira*: CBRNe military protection: the potential of natural fibres and metal oxide nanoparticles

18h20 – 18h45 [Flash presentations](#)

*Julien Claudot*: Modelling of the adsorption of contaminants in activated carbons

*David Farrusseng*: Innovative MOF adsorbent at scale for performing protective filters

*Laurent Verdier*: Thermal destruction of toxics

*Lina Thors*: Skin penetration and decontamination following in vitro human skin exposure to fentanyl

*Marie-Theres Pfalzgraf*: FLED2 - The Forward Light Element for Decontamination of Patients and Personnel

*Célia Lepeytre*: BioChemGEL-Sys® RBC gel for the infrastructure decontamination

## Thursday, May 23<sup>rd</sup>

### MEDICAL COUNTERMEASURES – BC

08h30– 08h55 [Keynote](#) *Sina Bavari*: Emerging viral diseases: viral replication to vaccines and therapeutics

08h55 – 09h07 [Talk 1](#) *Daniel Gillet*: Retro-2, broad-spectrum inhibitor of intracellular pathogens: in vivo POC, improved analogues and intracellular target

09h07 – 09h19 [Talk 2](#) *Mitali Sarkar-Tyson*: Evaluation of novel inhibitors against the macrophage infectivity potentiator in biowarfare agents

09h19 – 09h31 [Talk 3](#) *Sonia Mion*: Quenching bacterial communication in order to decrease their virulence and increase their sensitivity to antimicrobial treatments

09h31 – 09h43 [Talk 4](#) *Rasha Hammamieh*: Systems Biology Approaches to characterize host responses to Soman

09h43 – 09h55 [Talk 5](#) *Oksana Lockridge*: Purification of human butyrylcholinesterase from frozen Cohn fraction IV-4 by ion exchange and Hupresin affinity chromatography

09h55 – 10h07 [Talk 6](#) *Amanda McGuire*: Clinical efficacy and pharmacokinetics of intranasal or intramuscular naloxone in working dogs

10h07 – 10h30 [Flash presentations](#)

*Frédéric Rivière*: Toward a better comprehension of the physiopathology of a potential biological weapon through characterization of pulmonary immune mechanisms following infection of murine model with Influenza virus

*Clémence Rougeaux*: Early detection of active edema and lethal factors during pulmonary anthrax

*Laura Cochrane*: The Trobigard™ auto-Injector atropine/obidoxime co-formulation is efficacious against sarin exposure in guinea pigs

*Lionel Koch*: The role of efflux pumps in biofilm's synthesis in *Yersinia pestis*

*Jessica Denis*: High specificity and sensitivity of Zika EDIII-based ELISA diagnosis highlighted by a large human reference panel

*Irène Pitard*: Interaction of Edema factor from *Bacillus anthracis* with thiophen ureidoacids

10h30 – 11h00 *Coffee break, poster session, industrials & responders exhibition*

### DETECTION – FORENSICS

11h00 – 11h25 [Keynote](#) *Marcel Van der Schans*: Time of Flight Mass spectrometry for chemical detection

11h25 – 11h37 [Talk 1](#) *Graeme Clark*: Toxin detection; capabilities and challenges for agent identification and attribution

11h37 – 11h49 [Talk 2](#) *Anne Puustinen*: sample preparation and analysis of saxitoxin from human urine

11h49 – 12h01 [Talk 3](#) *Daan Noort*: Point-of-care diagnostics for exposure to low volatility nerve agents

12h01 – 12h13 [Talk 4](#) *Franck Marescal*: The CBRNE Forensic Response Team of the French Gendarmerie: the GRID

12h13 – 12h25 [Talk 5](#) *Li Xiao Sen*: A New Evidence for Detection of Tabun Adducts to Human Serum Albumin Via Fluoride Reactivation by Gas Chromatography tandem mass spectrometry

12h25 – 12h37 [Talk 6](#) *Sheena Young*: Gas Chromatography Tandem Mass Spectrometry Monitoring of Sulfur Mustard Exposure in Humans through the Conversion of Protein Adducts to Free Sulfur Mustard

12h37 – 12h49 [Talk 7](#) *Florine Hallez*: Development of immobilized-trypsin reactors coupled to liquid chromatography and tandem mass spectrometry (LC-MS/MS) for the analysis of long-lived adducts of sulfur mustard with hemoglobin in blood samples

12h50 – 14h00 *Farewell lunch*