- Breaking News
  - A ‘side-ways’ mechanism of detection in CD1a and γδ T cell receptor interactions
  - A first-in-human antibody–drug conjugate: Hope for patients with advanced solid tumours?
  - A Hidden Haven: how Leishmania parasites hide in our cells
  - A link: Atopic Dermatitis and Inflammatory Bowel Disease
  - A map of the immune system
  - A mechanism for severe COVID-19 in patients with obesity and diabetes?
  - A nail in the coffin of (hydro)chloroquine treatment against COVID-19?
  - A nanoparticle based vaccine for SARS-CoV-2 neutralization and protection
  - A new cell type contributing to inflammatory skin diseases
  - A new protein may be key in placental health
  - A new target for TB treatment with great potential
  - A new TB vaccine – is it cost-effective and efficient?
  - A new tool fight SARS-CoV-2: an ACE2-blocking antibody
  - A new tool for predicting COVID-19 severity and prognosis
  - A novel immunogene CD47-targeting therapy inhibiting tumour growth
  - A novel inhibitor of dengue virus
  - A novel pathway of immune and host cell evasion by Mycobacterium tuberculosis
  - A positive sign for prostate cancer treatment
  - A potential cure for HIV may exist in stem cell
transplantation – however...

- A potential end to peanut allergies?
- A potential mRNA vaccine for SARS-CoV-2 Omicron variant
- A potential new biomarker for Preeclampsia
- A potential new vaccine for rabies
- A serological assay to detect SARS-CoV-2 seroconversion in humans
- A skin patch for peanut allergy
- A sugar-enzyme link to tumour growth suppression
- A vaccine for brain cancer?
- A vaccine with a dual threat to cancer
- Accelerating Tuberculosis Vaccine Development: Insights from BCG Studies
- Ad26.COV2.S is safe and immunogenic
- Ad26.CoV2.S vaccine significantly boosts pre-existing SARS-CoV-2 specific antibodies but not CD4 T cell immune responses
- Adaptations of tissue-resident memory T cells
- Advancements in CAR T-Cell Therapy: A Promising Clinical Outlook
- Aged Neutrophils support tumor metastasis
- Aging & COVID-19
- AI and vaccine development for gonorrhea
- Aiding Tuberculosis vaccine studies with the use of a mycobacterial growth inhibition assay
- Allergen sensitization – insights into atopic dermatitis and other skin disorders
- Alzheimer’s Disease – a potential vaccine?
- An exuberant inflammatory host response to SARS-CoV-2 leads to COVID-19.
- An inflammatory pathway linked to autoimmune diseases
- An inventory of the vaccine candidates to SARS-
CoV-2

- An update on the Shock and kill HIV cure strategy
- Animal models to measure mucosal innate immunity: zebrafish vs mice.
- Anti-tumour T-cell activation from B-cells
- Antibodies from cows may provide protection from Mycobacterium avium subsp. paratuberculosis
- Antibody diversity – new insights
- Antibody profile in response to SARS-CoV-2 – serological profile and specificity of maternal and neonatal cord blood
- Antibody response to vaccination post-COVID-19 infection
- Antiretroviral therapy influences tumour development in patients with HIV
- Antiviral pathways induced in the RV144 vaccine trial
- Are blood groups associated with severe COVID-19 respiratory failure?
- Are CD8+ and DN MAIT cells distinct populations?
- Are current putative COVID-19 vaccines effective against the B.1.351 variants?
- Are distinct monocyte subsets associated with severe Chagas diseases?
- Are Lung microbial products driving hyperinflammation in severe COVID-19?
- Are MAIT cells detectable in lymph?
- Are neutrophils in the tumor microenvironment friend or foe?
- Are polymorphisms in the ACE2 locus important for COVID-19 severity?
- ATLAS – describing SARS-CoV-2 variant T-cell responses
- Atopic dermatitis and the skin microbiome
- Atypical B cells as biomarkers of renal complication in lupus patients
- Auto-antibody responses to type I IFNs is a clue
to severe COVID-19

- Autoantibodies in Systemic Autoimmune Diseases
- Axon regeneration in the adult nervous system – immune modulation
- B cell lymphomas and the role of TET enzymes
- B cell signalling deficiencies – new insights into treatments
- B cells and PCOS
- B-cell immunity against SARS-CoV-2 in unexposed individuals
- B-cell immunity following SARS-COV-2 mRNA vaccination – 6 months on...
- B1.351 (501Y.V2) induces cross-reactive Ab responses to other SARS-CoV-2 variants.
- BCG & COVID-19
- BCG induced trained immunity & COVID-19
- BCG reduces all-cause infectious diseases in the first 6 weeks of life in infants!
- BCG vaccination reduces infection in the elderly
- Bifonazole – a potential treatment for SARS-CoV-2 infection
- Biomarkers to identify Mycobacterium tuberculosis-infection: finding the needle in a haystack
- Blocking of an important coronavirus enzyme with natural compounds
- Blocking SARS-CoV-2 infection – new insights
- Blood clotting – insights into sepsis
- BNT162b2 and ChAdOx1 nCoV-19 COVID-19 vaccine efficacy results
- Boosting of antibody responses against the V2 and V3 region of the HIV-1 Env
- Breath of life – immune insights
- Broad-spectrum Antiviral Inhibits SARS-CoV-2
- C5a-C5aR1 axis plays a role in cobra venom immunopathology.
- Can a Chimpanzee vector vaccine prevent SARS-CoV-2 pneumonia?
Can a vaccine prevent ZIKV associated fetal abnormalities?
Can anti-HIV drugs, Lopinavir and Ritonavir, be used to treat patients with severe COVID-19?
Can anti-α4β7 really “cure” SIV infection in ART interrupted NHPs?
Can BCG vaccination reduce mortality and morbidity from COVID-19?
Can fat help us combat infection?
Can intravenous-BCG prevent M.tb infection?
Can neonates born to mothers with COVID-19 acquire maternal infection?
Can neutrophils adopt antigen-presenting cell functions, and if so how?
Can reprogramming CD8 T-cells contribute to a cure for a HIV?
Can saliva be used to test for antibodies to SARS-CoV-2?
Can some Tfh cells produce IFN-γ?
Can the Cytokine Release Syndrome in COVID-19 patients be treated using CCR5 blocking antibody therapy?
Can two FDA-approved drugs be re-purposed to clear SARS-CoV-2 infection?
Can vaccinating cats against their own proteins reduce cat allergies in humans?
Can we use cannabinoids to block SARS-CoV-2 viral entry?
Cancer, collagen the microbiome and immunity – a link!
Cannabidiol – a potential tool for fighting SARS-CoV-2
Career Advice from IDA faculty that were once previous IDA Scholars
CD229 CAR: New therapy for multiple myeloma
CD27 expression identifies Th17 cells with high stemness properties
CD8 T-cell mediated vaccine protection against SARS-CoV-2
ChAdOx1 nCoV-19 vaccine is safe and immunogenic
Changes in SARS-CoV-2 Omicron variant spike protein
Chloroquine treatment and COVID-19
Chronic transplant rejection – new insights
Cigarette smoke triggers increased ACE-2 expression in the lung
Class-switch recombination of antibodies occurs prior to germinal center formation.
Clear cell renal cell carcinoma – new “spatial,” insights
CNS-neuroinflammation: not all myeloid cells are responsible
Comparing four COVID-19 vaccines
Contributions to the understanding of the cellular immune response elicited by Brucella canis
Convalescent plasma therapy for COVID-19 is safe.
Convalescent sera option for containing COVID-19
Could blood groups influence COVID-19 disease severity?
Could infection with other viruses provide protection from SARS-CoV-2?
Course Highlight: 5th Vaccinology in Course
COVID-19 – Cytokine storm syndromes and immunosuppression
COVID-19 – creating a vaccine that can change with the virus
COVID-19 & GIT symptoms
COVID-19 & Multisystem inflammatory syndrome in children
COVID-19 and HIV – how antibody responses are affected
COVID-19 and idiopathic pulmonary fibrosis (IPF)
COVID-19 and the brain – new insights
COVID-19 and the innate immune system – long term
effects

- COVID-19 Antibody Immunology Video
- COVID-19 in vitro studies: Use the right cell line
- COVID-19 is associated with increased MAIT cell activation and cytotoxicity
- COVID-19 mortality and genetic predisposition
- COVID-19 spurs interest in preprints and improves scientific collaboration
- COVID-19 vaccination may offer cancer protection
- COVID-19 vaccines: can alum based adjuvants improve induction of nAbs?
- COVID-19 Vaccinology Videos
- COVID-19: antigen-specific T cell response and immuno-metabolomic signatures
- COVID-19: extending or relaxing distancing control measures
- Cracking the Code of Implant Rejection – new insights
- Critically ill COVID-19 patients show evidence for extrafollicular B cell activation
- Cytokine Release Syndrome & COVID-19
- Cytomegalovirus – new insights into immune protection
- Decoding HIV – insights from an animal model
- Defining more roles for Natural Killer cells
- DENV-infection induces two major CD8 T cell memory subsets
- Detection of autoantibodies in patients with multisystem inflammatory syndrome in children (MIS-C)
- Detection of SARS-CoV-2 nAbs in cats
- Developing an oral polio vaccine that does not cause vaccine-associated polio
- Developing monoclonal antibodies against SARS-CoV-2
- Developing new tools to combat COVID-19
- Development and use of cellular behavioural
landscapes to describe inflammatory states

- Development of a potent SARS-CoV-2 nAb using llamas
- Development of a serological diagnostic of Johne’s Disease
- Development of an inactivated vaccine candidate for SARS-CoV-2
- Development of inactivated SARS-CoV-2 vaccines
- Development of natural murine model of Cryptosporidiosis
- Did you know neutrophils can help to form gallstones?
- Discovery of novel cancer signalling mechanism
- Distinct antibody responses as biomarkers to monitor cancer immunotherapies
- Do lipid bodies play a role in innate immunity?
- Do mutations in SARS-CoV-2 variants reduce the functional activity of mRNA-vaccine elicited Abs?
- Do mutations in the SARS-CoV-2 spike protein enhances viral infectivity?
- Do neutrophils play a role in age-associated increase in flu mortality?
- Do NK cells play a role in vaccine induced humoral immunity?
- Do NK cells play an important role in anti-Trypanosomiasis immunity?
- Do SARS-CoV-2-specific T cells confer long-lived protection?
- Do we have more T cell immunity to SARS-CoV-2 than we think?
- Do your genetics make you more susceptible to infections?
- Does ACE2 expression & cytotoxic lymphocyte levels indicate a risk factor for COVID-19?
- Does B.1.351 SARS-CoV-2 variant escape T cell immune responses?
- Does BCG improve de novo malaria immunity?
Does breast milk contain SARS-CoV-2?
Does cancer immunoediting occur in humans?
Does COVID-19 have a seasonal pattern?
Does dysbiosis of the GIT microbiome enhance the neutrophils survival and chronic inflammation in HIV+ individuals?
Does HIV superinfection induce an additive or synergistic Ab effect?
Does HIV-env vaccination strategy affect the recognition pattern of IgG responses?
Does mucosal BCG vaccination induce “protective” immunity?
Does mumps immunity induced by 2 doses of MMR wane in adulthood?
Does S. mansoni treatment affect HIV susceptibility?
Does serial administration of HIV-specific VRC01 bnAbs prevent HIV acquisition?
Does the D614G mutation in SARS-CoV-2 spike protein result in the virus being more susceptible to neutralization by the host?
Does the timing of granuloma formation affect TB control?
Does whole cell pertussis vaccination skew infection induced Ab profiles?
Dual BCR and TCR co-expressing lymphocyte could play a role in T1D pathogenesis.
Dual bNAb therapy can maintain HIV viral suppression
Early loss of a parent may impact our immune systems
Efficacy and Safety of the mRNA-1273 SARS-CoV-2 Vaccine
Elders’ vs new-borns and children – insights into immune phenotypes
Eliminating metastatic breast cancer in mice – immunotherapy insights
- Enhanced production of effective and personalised vaccines for cancer
- Enhancing B Cell Memory: The Role of Autophagy and the RUBCN Protein
- Enhancing the immune response: skin bacteria and the smallpox vaccination
- Enhancing the immune system to fight TB infection
- Epstein-Barr virus – novel insights into the immune response to the virus
- Epstein-Barr Virus found to trigger Multiple Sclerosis
- Evaluating a Peptide-Based T-Cell Activating COVID-19 vaccine – Insights from a Phase I/II Trial
- Evolution of flu-vaccine induced B cell responses
- Exaggerated immune response to Covid-19
- Exhaustion of antiviral NK and CD8 T cells in SARS-CoV-2 infection
- Exploratory study investigates the relationship between recent vaccinations and SARS-CoV-2 infection rates.
- Exploring characteristics of COVID-19 to guide public health policies & therapeutic interventions.
- Faecal shedding of SARS-CoV-2
- Fat cells and tumour growth
- Fever: A positive regulator of Th17 mediated inflammation
- First COVID-19 vaccination may affect booster shot efficacy
- First report on Effectiveness of HPV Vaccination in LMICs – Rwanda and Bhutan
- Flynn Webinar: Immune features associated natural infection
- Flynn Webinar: What immune cells play a role in protection against M.tb re-infection?
- Food allergies and cardiovascular health
• Formation of tertiary lymphoid tissue: fighting chronic inflammation
• Further Support of the Emerging “Immunologic” Hypothesis in Mood and Eating Disorders
• Gene editing as a potential sickle cell disease immunotherapy.
• Genetically modified Lactococcus lactis - A potential microbial therapeutic for acute colitis?
• Genetics and allergies
• Germline mutations in innate immunity associated with the risk for breast cancer: case of C-reactive protein
• Getting to the guts of SARS-CoV-2 infection
• GLA-SE promotes superior Tfh expansion than Alum
• Global ImmunoTalk on dissecting the interaction of parasites with the immune system
• Global Immunotalks Highlight: Immune responses after dengue virus infection: friend or foe?
• Granuloma formation during S. mansoni infection: protective or pathogenic?
• Gut Inflammation Linked to a Debilitating Skin Condition
• Hair growth and our immune system
• Harmful blood in the brain – immune insights
• Have you heard of Mycetoma?
• Have you heard of the ESAT-6 free IGRA?
• Helminths and Vaccine responses
• Hematopoietic stem cell transplantation cures HIV
• HIV and its mechanisms of drug evasion
• HIV complications: inflamma-aging or increased activation?
• HIV RV144 vaccine induces better responses in SA compared to Thailand
• HIV vaccine progress
• HIV Viral reservoir: quality rather quantity matters
• HIV-1 and TB coinfection skews the SARS-CoV-2 T
cell response

- How are CD8 responses against the malaria liver stage antigens primed?
- How DNA outside cells can be targeted to prevent the spread of cancer
- How do immune cells invade tissue?
- How does BCG affect early innate immune responses?
- How does group A Streptococcus evade immunity?
- How does IL-27 attenuate autoimmune neuroinflammation?
- How does plasmodial hemozoin contribute to cerebral malaria pathogenesis?
- How does SARS-CoV-2 evade the immune defences?
- How does the complement cascade result in pore formation in Lampreys
- How does vitamin A enter our intestinal immune cells and what are the implications?
- How effective is Dexamethasone for the treatment of patients with COVID-19?
- How immune cells fight chronic infection or disease – new insights
- How melanoma evades the immune system
- How metabolic rewiring influences macrophage function
- How neutrophils can be used to fight cancer
- How Sickle-trait hemoglobin protects against severe Plasmodium falciparum malaria
- How some individuals with immunodeficiency defend themselves against infection
- How the brain slows us down when we are sick
- How the Regulator is Regulated: Insight into immune-related Protein holds therapeutic value
- How the rice blast fungus “eats” its own cell wall to launch an attack
- How to boost immunotherapies against B-cell leukemia
- HPV & HIV infection are associated with high
levels of activated CD4 T cells in the cervix uteri

- Human M1 macrophages champion the control of TB disease
- Human-derived 3D model for Alzheimer’s disease – immune insights
- Hypothetical pathogenesis of SARS-CoV-2 infection in humans
- ICOS: is it essential for Treg-IL10 expression in the colon?
- IDA Highlight: CD4 T cells in HIV infection
- IDA Highlight: Current state of malaria vaccines
- IDA Highlight: Immune responses to TB vaccines
- IDA Highlight: Not all levels of malaria exposure induce the same anti-malarial immunity
- IDA Highlight: Possible barriers and opportunities for HIV cure
- IDA Highlight: Scanning the TCR repertoire to inform new TB vaccine targets
- IDA Highlight: What’s New in anti-HIV humoral immunity.
- Identification of D6R and C5aR2 as key molecules with the potential to combat inflammatory diseases
- Identification of two B cell epitopes that induce neutralising Ab in COVID-19 patients
- IL-25 blockade as a therapeutic strategy for asthma
- IL-7Rαlo KLRG1hi cells are not always short lived effector cells
- Immune memory in the intestine: new insights into “innate memory”
- Immune response diversity driven by B cells
- Immune system evasion – the HIV-infected cell
- Immunity in centenarians – keys to life?
- Immuno-Algeria 2020: Cellular components of the allergic response
- Immuno-Algeria 2020: Introduction to allergy and
molecular diagnosis
- **Immuno-Algeria: Allergic activity of IgE binding molecules**
- **Immuno-Algeria: Drug hypersensitivity in TB/HIV endemic settings**
- **Immuno-Algeria: IgE & its receptors as a pharmacological targets**
- **Immuno-Algeria: Microbial dysfunction & allergy**
- **Immuno-Algeria: Non-invasive allergy biomarkers & next-gen immunotherapies**
- **Immuno-Colombia: Anti-cytokine therapies (Part 1)**
- **Immuno-Colombia: Anti-cytokine therapies (Part 2)**
- **Immuno-Colombia: Checkpoint Blockade-based Therapies (Part 1)**
- **Immuno-Colombia: Checkpoint Blockade-based Therapies (Part 2)**
- **Immuno-Colombia: MDSCs promote tumour growth and escape**
- **Immuno-Colombia: Overview of immunotherapy**
- **Immuno-Colombia: Therapeutic cancer vaccines**
- **Immuno-Colombia: Tumour infiltrating lymphocyte therapy (Part 1)**
- **Immuno-Colombia: Tumour infiltrating lymphocyte therapy (Part 2)**
- **Immuno-Ethiopia: Anti-leishmania Immunity**
- **Immuno-Ethiopia: Fungal epidemiology and immunology**
- **Immuno-Ethiopia: Genetics of Fungal Immunology**
- **Immuno-Ethiopia: Malaria Highlight 1**
- **Immuno-Ethiopia: Malaria Highlight 2**
- **Immuno-Ethiopia: Sand flies & Leishmaniasis**
- **Immuno-Ethiopia: Xenodiagnosis of Leishmaniasis**
- **Immuno-Jaipur Highlight: MHC and Transplantation Immunology**
- **Immuno-Jaipur Highlight: Day 4**
- **Immuno-Jaipur Highlight: Part 2 of Day 4**
- **Immuno-Jaipur Highlight of talks by Abul Abbas**
• Immuno-Jaipur Highlight: Clinical viral immunity
• Immuno-Jaipur Highlight: Insights into innate and adaptive immunity
• Immuno-Jaipur Highlight: Part 2 of Day 3
• Immuno-Jaipur Highlight: Primary immunodeficiencies
• Immuno-metabolism and cognitive decline
• Immunodiagnostic of onchocerciasis: do we have the right tool to end the game?
• Immunogenicity of heterologous SARS-CoV-2 vector vaccine prime-mRNA vaccine boost vaccination strategy
• Immunoinformatics Mexico 2019: Immunologic plasticity, defense lines.
• Immunoinformatics Mexico 2019: Part One
• Immunoinformatics Mexico 2019: Part Two
• Immunopaedia goes to the XIII World Immune Regulation Meeting
• Immunopathogenesis of Autoimmune Hepatitis
• Immunoregulation in the brain – new insights
• Immunosenescence: how does it affect vaccine Ab responses?
• Immunotherapy – new insights into how CD8+ T cells become unresponsive to treatment
• Impact of intermediate hyperglycaemia and diabetes on immune dysfunction in TB
• Improved cancer treatment response in those with COVID vaccination
• Improving Chagas disease diagnosis and treatment
• Improving existing malaria vaccines – new insights
• Improving pancreatic cancer therapy – insights
• Improving treatments for autoimmune diseases
• Improving vaccine immunity against fungal pneumonia
• Inclusion of non-spike proteins in SARS-CoV-2 vaccines may be important for the induction of protective T cell memory.
• Increased activity of Neutrophil Elastase in sera of SLE patients during the COVID-19 pandemic

• Indian population could have intrinsic immunity to resist COVID-19 challenge

• Infection in the brain – defenses and consequences

• Inflammaging – new insights

• Inflammation in soft gums – insights

• Inflammatory bowel disease – mapping the immune system of the gut

• Inhibiting Mycobacterium tuberculosis infection

• Innate T cells & severe COVID-19

• Insights into the development of the blood and immune systems in prenatal bone marrow

• Insights into the mechanism lung cancers use to evade the immune system

• Insights into the regulation of inflammation

• Investigating Ebola immunity using single cell technologies

• Investigating the HIV viral reservoir during acute infection

• Investigating the immunological composition of the Kidney

• Investigating the role of surfactants during TB using the lung-on-a-chip model

• Is a self-amplifying RNA SARS-CoV-2 lipid nanoparticle a good vaccine candidate?

• Is blocking inflammatory cell movement using chemokine receptor antagonists the way to go?

• Is COVID-19 an endothelial disease?

• Is salt bad for you? Starving immune regulators of energy

• Is the rapid generation of neutralizing antibodies to SARS-CoV-2 good news for preventing reinfection?

• Is there a role of T cells in immune protection to SARS-CoV-2 infection and COVID-19?

• Is there a SARS-CoV-2 receptor (ACE2) expression
Is there a difference between males and females?

- Is trained immunity impacted by revaccination or BCG dose?
- Is tumour circulating DNA a better tool for cancer diagnostic and prognostic than immunological biomarkers?
- Is Yellow fever vaccination safe for HIV+ individuals?

IUIS Beijing ICI 2019

- IUIS Webinar: COVID-19 & Immune Compromise
- IUIS Webinar: COVID-19 in South Africa
- IUIS Webinar: COVID-19 Monoclonal Abs
- IUIS Webinar: Global outbreaks – Interferons as 1st responders
- IUIS Webinar: HIV prevention- antibodies and vaccine development (part 1)
- IUIS Webinar: HIV prevention- antibodies and vaccine development (part 2)
- IUIS Webinar: Impairment of the immunological and neurological synapses by respiratory viruses
- IUIS Webinar: Involvement of C5a-C5aR1 axis in COVID-19 pathology
- IUIS Webinar: Longitudinal COVID-19 Immune Profiling
- IUIS Webinar: Predicting survival and severity of COVID-19
- IUIS Webinar: Respiratory Immunity and COVID-19
- IUIS Webinar: Role of cellular responses in COVID-19
- IUIS Webinar: Seeking correlates of COVID-19 protection and pathology
- IUIS Webinar: Stress dampens anti-viral immunity
- IUIS Webinar: Tracking SARS-CoV-2 in Ghana
- IUIS Webinar: Trained immunity and BCG vaccination: a tool against COVID-19?
- IUIS Webinar: Understanding Infection and Immunity
of SARS-CoV-2

- IUIS Webinar: Utilising Ramos B cell engineering to measure SARS-CoV-2 Ab responses
- IUIS Webinar: What cancer immunologists are doing about COVID-19?
- IUIS-IIS-FIMSA-Immuno-Jaipur Report
- IUIS-Immunopaedia-Frontiers Webinar on Immunology taught by P. falciparum
- IUIS-Immunopaedia-Frontiers Webinar: Clinical representation of hyperinflammation
- IUIS-Immunopaedia-Frontiers webinar: Getting to the “bottom” of arthritis
- IUIS-Immunopaedia-Frontiers Webinar: Immunopathology of COVID 19 lessons from pregnancy and from ageing
- IUIS-Immunopaedia-Frontiers webinar: In-depth characterisation of immune cells in Ebola virus.
- IUIS/Immunopaedia-Frontiers Webinar on Immunoregulation and the tumor microenvironment
- JoAnne Flynn: BCG IV vaccination induces sterilising M.tb immunity.
- Key discovery in our battle against HIV
- Key immune threshold identified for SARS-CoV-2
- kidney-on-a-chip – cancer and immune insights
- Kinetics of Immune Response in a Mild COVID-19 Patient
- Lack of interference by type I interferons leads to severe COVID-19
- Lack of sleep and your immune system
- Leaky gut in COVID-19 and its impact on Neutrophil Extracellular Trap formation
- Leukemia linked T cells may drive autoimmune diseases
- Lipid profiles key step to preventing breast cancer metastasis through epithelial-mesenchymal transition
- Lupus and the microbiome – the flare
- M.tb resistors: M.tb uninfected or atypical IFN-γ-independent M.tb immune responses?
- Macrophages and Cervical Cancer: What’s going on with the microenvironment?
- MAIT cells — a new target for future immunotherapies and vaccines
- Making cancer immunotherapy safer
- Malaria vaccine — positive results within a Tanzanian cohort
- Malaria Vaccine Breakthrough: Shaking or Stirring the Field?
- Male and female immune responses to SARS-CoV-2 substantially differ.
- Mapping macrophage diversity in liver diseases
- Mask wearing to reduce the spread of COVID-19
- Maternal immunity: how mothers “remember” their babies and understanding pregnancy pathology
- Measles induced immunological amnesia
- Meningeal-IgA+ plasma cells contribute to CNS-immunity
- Microbes prime foetal immune cells during early human development
- Microbial fitness and IgA — a balancing act for the intestinal flora
- Microglial cells — immune cells of the CNS breaking down harmful proteins in the brain
- miRNA carried by NETs modulate macrophage function
- Mitochondrial disorder linked to a weaker immune response
- Modelling the brain — new insights
- Molecular mimicry: perfect match propels pathologies
- More robust immune systems in children from rural areas
- More SARS-CoV-2 variants?
- More than a gut feeling: The implication of gut microbiota in the pathology of Alzheimer’s Disease
- mRNA Vaccine against SARS-CoV-2 induces robust Ab responses
- MS, inflammation and the brain – new insights
- Multi-organ damage is a hallmark of severe COVID-19
- Murine model of coeliac disease
- Mutation in the Spike protein may explain higher infectivity of SARS-CoV-2 and accelerated disease.
- Mutations in SARS-Cov-2 B.1.351 variant reduces vaccine induced Ab neutralisation
- Mycobacteria have an albumin binding capacity – possible implications
- Mycobacterium tuberculosis – cord formation and antibiotic resistance
- Myeloid-derived suppressor cells: drivers of severe COVID-19 disease?
- Nasal spray immunisation: potential use against HIV and SARS-CoV-2 shown in an animal models
- Neurological effects of COVID-19
- Neutrophil dominance leads to protection from P. falciparum blood-stage merozoites
- Neutrophilic aid – extracellular traps to enhance macrophage directed bacterial killing
- Neutrophils – new insights for clinical studies
- Neutrophils as biomarkers for COVID-19 and recovery
- Neutrophils as potential early indicators of tuberculosis severity
- New biomarker for vascular dementia
- New fungus-derived antibiotic: relief in sight for immunocompromised people
- New hope – a potential new treatment for sepsis
- New imaging agent – improved prediction of HER2 positive metastatic breast cancer
- New insights – drug resistance malaria
- New insights into inflammation
- New insights into mechanisms of HIV infection
• **New insights into mosquito-to-human viral transmission**
• **New Insights into the diagnosis, prognosis and monitoring of Multiple Myeloma: What’s the role of the Heavy/Light Chain Assay?**
• **New insights into the interferon response to SARS-CoV-2**
• **New insights into the role of HPV oncoproteins and immune response in cervical cancer**
• **New insights: hypertension-induced dementia**
• **New TB drug regimen may not work against TB meningitis**
• **New technique for targeted immunotherapy shows promise in mice**
• **Newly discovered IFN-γ role in Metabolic reprogramming to support Tumor Evasion**
• **News 2014**
  • **A link between penicillin treatment in newborn infants and obesity**
  • **A link between the gut microbiome and brain function?**
  • **A systematic review and meta-analysis of long-term immune responses to vaccination in HIV**
  • **Activation of HIV transcription in latently infected cells**
  • **Agonistic induction of PPARγ shown to reverse emphysema**
  • **Airborne origins for Kawasaki disease**
  • **Antibiotic treatment failure in four common infections- A primary care 1991-2012: longitudinal analysis**
  • **ART in acute infection limits viral reservoirs**
  • **Beta-catenin–regulated myeloid cells determine wound healing**
  • **Broad-spectrum anti-biofilm peptide targets**
cellular stress response
  - Can environmental non-TB mycobacteria interfere with immunity to TB?
  - Cannabidiol-possible treatment option for acne
  - CD45 ligation expands Tregs by promoting interactions with dendritic cells
  - Characteristics of memory B Cells following HPV vaccination Immunity
  - Characterization of pandemic influenza immune memory after vaccination or infection
  - Clec12a regulates inflammation in response to cell death
  - Club cells – identified in Influenza pathogenesis
  - Control of Malaria-Induced Inflammation in Children is Dependent on Exposure.
  - Dissecting tumor myeloid compartments to reveal APC critical for T Cell immunity
  - EBV specific cytotoxic T Cell clones can transiently control EBV infection
  - Efficacy of HPV vaccination in HIV positive adolescents and young adults
  - Efficient 1-step radiolabeling of monoclonal antibodies for targeted radioimmunotherapy treatment of cancer
  - Eradication of metastatic mouse cancers by suppression of myeloid-derived cell
  - First-line boosted protease inhibitor regimen remains effective after virologic failure
  - Fruit Bats and Flu
  - Group B Strep selected and fixed through use of tetracycline
  - Histone Deacetylase Inhibitors mark the ability of cytotoxic T cells to eliminate HIV
- HIV integration into the host DNA is not a random event.
- HIV sexual transmission risk among serodiscordant couples
- Immune-suppressant vaccine can blocks SIV infection in macaques
- Infectious Disease in Africa Symposium
- Inhibition of calcineurin abrogates whereas inhibition of mTOR promotes Regulatory T Cells
- Is there a link between Infertility and promotion of Sexually transmitted Infections?
- Kaposi Sarcoma treated with pegylated interferon
- Lopinavir/Ritonavir-based ART vs Efavirenz-based ART for the prevention of malaria in pregnancy
- Memory regulatory T cells reside in human skin
- Microbiota helps regulate behaviour in Autism Spectrum Disorders
- Mother–Infant HIV Transmission a review on antibody protection
- Mucosal and endotracheal delivery of RSV peptide prevents nasopulmonary infection
- Neuronal ferritin heavy chain and opiate abuse affect HIV-associated cognitive dysfunction
- Neutrophil crawling in capillaries- a novel response to MRSA
- New experimental vaccine looks promising for Dengue Fever
- New model for treatment of RSV
- New TB drug combination to enter late-stage testing
- Normalizing glycosphingolipids restores CD4+
T cells function in lupus patients

- Prostate cancer incidence among HIV-positive and HIV-negative men
- Protein kinase D2 amplifies T cell receptor–stimulated signaling in naïve CD8+ T cells
- Reliability and clinical relevance of HIV drug-resistance testing at low viraemias
- Renal function of participants in tenofovir study- Thailand
- Results from a novel flu vaccine
- Risk of Melanoma in People with HIV/AIDS
- Sex difference noted in response to influenza vaccine
- Short-term changes in HIV viral load and CD4+ cell count
- South African treatment guidelines should use viral load, not CD4 count for greater success
- Streptococcus pneumoniae forms microlesions in myocardium, disrupting cardiac function
- T cell differentiation regulated by methyltransferase G9A during murine intestinal inflammation
- T cell repertoire following autologous stem cell transplantation for multiple sclerosis
- T. gondii ligand shown to promote inflammatory monocytes and provide resistance to bacterial infection
- The role of Cas1 and 2 proteins and immunity
- Thibela TB study – a trial of mass Isoniazid preventive therapy for tuberculosis control
- TLR5-mediated sensing of gut microbiota has a role in response to flu vaccine
- Together muscularis macrophages and enteric neurons regulate gastric motility
- Tolerance or resistance to HIV infection?
Which is it?

- Treating rheumatoid arthritis with peptide-specific CD8+ regulatory T cells
- Tumor-associated neutrophils stimulate T cell responses in early-stage human lung cancer
- Understanding molecular evolution of HIV and ART
- Using immunomics to find vaccine antigens for schistosomiasis
- UTI treatment requires a coordinated phagocytic response
- Vaccine-induced myeloid cell population dampens protective immunity
- Varicella Zoster Virus infection: Bad in adults
- Viral reservoirs limited by ART

News 2015

- A new marker denotes exhausted CD8+ T cells during chronic viral infections
- A new reservoir of HIV found within peripheral Vδ2 T cells
- A new theory to explain autoimmunity: The Altered Glycan Theory of Autoimmunity
- Associations between infant chubbiness and Dengue Haemorrhagic Fever
- Can wearing silver damage your health?
- Diversity of lipid envelopes in Mycobacterium tuberculosis
- Do we need to re-think vaccine strategies to elicit anti-HIV antibodies?
- Extracellular vesicles as a vaccine candidate against Staphylococcus aureus infections
- Genetically modified commensal bacteria used as a possible HIV vaccine adjunct
- Herd Immunity: immunology meets public
health

- Immune and viral events leading up to acute Infectious Mononucleosis
- Is Adipose Tissue a viral reservoir?
- Levels of PD-L1 Expression on target cells helps to establish viral latency
- Microbial Gut diversity predicts immune status during HIV-1 infection
- New antibodies that target sugars on the HIV-1 envelope
- New Mechanism underlying Rheumatoid Arthritis Pathogenesis
- Novel model provides quantitative explanation of CD4+ T Cells pathway in vivo
- Pregnancy Induces Activation of Aged Dormant Muscle Progenitor Cells
- Prevention of Mother-to-Child HIV transmission in African children in the first year of life
- Protecting Mucosal immunity in HIV positive people with combined CCR5/Integrase Inhibitors
- SIV infection of Tfh Cells in monkeys
- Stasis of CD8+ T Cells in the brain is a Signature of Cerebral Malaria
- Success of passive HIV immunization?
- The microbes within us – the microbiological niche of the lungs
- Trivalent Inactivated Poliovirus Vaccine (IPV) is Non-Superior to Live-Attenuated Oral Poliovirus Vaccine
- Why older people may succumb more readily to pneumonia
- World AIDS Day Message

- News 2016
  - A combination of worms and bacteria may be good for your health
A new genetic approach for diagnosing Common Variable Immunodeficiency
A New Rapid Antigen Test for Human Bocavirus 1 (HBoV1)
A novel immune mechanism of killing HIV infected cells
A potential target for HIV reactivation discovered
A promising new treatment for systemic lupus erythematosus (Lupus)
AIDS 2016: Towards an HIV Cure
Antibodies from Ebola survivor have potent anti-viral activity
Antigen Delivery to the Draining Lymph Nodes is a Key to Intradermal Vaccination Efficacy
Can we tolerate an inhaled vaccine as a way to improve BCG efficacy?
Changes in CD8 T cells during viral infection
Characteristics of HIV which affect antibody recognition
Chikungunya virus vaccine using an insect virus
Combination Antibiotic and Pidotimod Therapy against Pneumonia
Do Mosquito bites help viral infections?
Does Chlamydia infection result in increased HIV susceptibility?
Ebola vaccine confirmed to be highly effective
Financing the Response to HIV: Show Us the Money
Gut microbiota influences pathogenesis of Parkinson’s disease
Gut microbiota suppress liver cancer
HIV R4P Highlights: New antibody lineages against HIV high mannose-patch
- HIV R4P Highlights: BV increases risk of HIV acquisition through neutrophils
- HIV R4P Highlights: Children frequently make HIV-specific broad antibody responses
- HIV R4P Highlights: Dendritic cells which capture HIV in Female Reproductive Tract
- HIV R4P Highlights: HIV superinfection does not increase antibody breadth
- HIV R4P Highlights: Inducing T cells in an HIV Vaccine
- HIV R4P Highlights: Interview with Prof Thumbi Ndung’u
- HIV R4P Highlights: α4β7 antibody and ART: a novel HIV therapy
- HIV uniquely impacts on gut microbial metabolism
- ICI 2016 – Parasitic worms in the treatment of chronic asthma
- ICI 2016 – Potential new diagnostic tool for TB in children
- ICI 2016 – Reversing Schistosomiasis Tissue Fibrosis
- ICI 2016 – The Future of a More Effective HIV Vaccine?
- ICI 2016 – The role of complement in fighting malaria in pregnancy
- ICI 2016 – What is the link between house dust mites and allergic disease?
- ICI 2016 – What leads to HIV progression in children?
- ICI 2016- Mycobacterium tuberculosis at the granuloma level in the human lung
- IgA antibodies found in women taking PrEP
- Immune Ontogeny and the microbiome
- Immunological memory in the Mucosa
- Immunopaedia goes to the 21st International AIDS Conference
- Infants can produce anti-HIV antibodies with minimal somatic hypermutation
- Inflammatory markers during pregnancy is linked with autism
- Injection drug use and susceptibility to HIV and co-morbidities
- Insights into how hemolysis leads to susceptibility to infection
- Intact Ovine Immunoglobulin (EBOTAb) to Treat Ebola Virus Infection?
- Is an HIV vaccine possible?
- Is there a link between loneliness and Inflammation?
- Mosquitos with fungus are more susceptible to malaria parasites
- Mycobacterium tuberculosis tricks body into autoimmunity
- Neutrophils and radiation therapy working together to fight cancer
- Nucleoside reverse-transcriptase inhibitors (NRTIs) as first-line ART in African Children
- Possibility of one vaccine to prevent Zika and Dengue viruses
- Possible mother-to-child transmission route for Zika virus discovered
- Progress in HIV Vaccines and the Road to the Clinic
- Reflecting on AIDS 2016
- Regulation of IL-25 levels provides protection against Clostridium difficile infection
- Solving the 50-year-old riddle: the link between Plasmodium falciparum Malaria and Endemic Burkitt’s Lymphoma
- Targeting essential TB enzyme may lead to novel treatments
Th1 response leads to effective antibodies against influenza
The adverse effects of Zika virus on infants
The link between malaria and cancer
The microbiome has anti-tumor effects
The role of TNF and aging in susceptibility to infection
Toll-like receptor helps nematodes avoid pathogens
Treating AIDS in 2016: New drugs for the future
Treating helminth infections boosts immune system
Treating HIV with the power of an antibody
Understanding the organization of TB-associated granulomas
Understanding the skin phenotype of children with eczema
Unique T cells compartmentalize in lymphoid sites
Using CARs to kill HIV
Using cell-specific knock-outs to study the function of genes
Using nanoparticles in HIV immunogen design
Vaccine: Protective Measures Against Chlamydia Discovered
What causes the high mutation rates of HIV-1 in the human body?

News 2018
Potential treatment for metastatic colorectal cancers: T cell engaging bispecific antibodies
2018: The year of hope for TB vaccines
5GFTB Highlights: Can we immunologically distinguish LTBI, EPTB and PTB
5GFTB Highlights: Can we induce BCG-mediated long term innate immunity
• 5GFTB Highlights: Human TB Challenge, is this possible?
• 5GFTB Highlights: MTBVAC potential BCG replacement
• 5GFTB Highlights: Recombinant BCG-Esx1 can induce CD8 T cell responses
• 5GFTB Highlights: Why is a new vaccine against TB important?
• A novel function of the antihelminthic drug Praziquantel: new strategy for combatting schistosomiasis
• ALAI/SMI congress: Hosts a Nobel Laureate and the 1st Iberoamerican Flow Cytometry Meeting
• ALAI/SMI Highlight: Have you heard of IL-40?
• Another use for BCG, potential Diabetes cure?
• Antibodies and TLR7 agonist delays HIV viral rebound
• Antibody-based vaccine protects against 31% of HIV isolates
• Are alveolar macrophages M1 or M2 polarised?
• Article Highlight: Differentially Expressed Host linc RNA and mRNA in HIV-1 and HIV-2 Infection (Santanu et al., 2018)
• Can antibiotic treatment improve Rotavirus immunogenicity?
• Can B cell responses predict resolution of Lyme Disease?
• Can CXCL4 contribute to autoimmune pathology?
• Can platelets directly kill Plasmodium sp.?
• Can profiling CD8 T cell responses from Ebola Survivors improve vaccine design?
• Can testosterone regulate B cell numbers?
• Can viral Immunogenicity govern DENV
epidemiological fitness?
- Cancer Immunotherapy is associated with changes in innate immunity
- CD32: marker of HIV reservoir?
- CD4 T cell positioning in TB granulomas matters
- CD45.1 vs CD45.2 B6 mice more than an isoform difference.
- Characterisation of porcine conventional DC subsets
- Clade C RV144-like vaccine is immunogenic.
- Commensal bacteria leverage IgA during colonisation
- Comparing H56 responses in NHP and humans using mathematical modelling.
- Cyto2018 Highlight: Immune Clock of Pregnancy
- Cyto2018 Highlight: Phenotyping DCs using 30 markers.
- Dengue specific-CD8 T cell responses but not Abs provide protection against Zika
- Do monocytes contribute to haemolytic uremic syndrome?
- Does CXCL17 contribute to protection against herpes?
- E-cigarettes may not be a healthier alternative to traditional cigarettes.
- ECTS2018 – Where scientific research and clinical practice meet
- Engineering IL-2 cytokine-receptor complexes to improve cancer immunotherapy
- Fatal SFTSV is associated with defective B cell responses
- First Animal Model of Rasmussen’s encephalitis
- H5VLP-GLASE unlike H5VLP-alum induces both Ab and T cell responses
- Harmless γδ T cells associated with Corynebacterium sp. can be harmful during immune dysregulation.
- Have you heard of analytic treatment interruption of HIV ART?
- Have you heard of TPMs?
- Have you heard of trained immunity?
- HIV Env immunogens elicit broad antibody responses in animal models.
- HIV vaccine induces similar responses in humans and rhesus macaques.
- How do mesenchymal stem cells alleviate severe asthma symptoms?
- How do tuft cells induce Type 2 Responses?
- How do γδ T cells control humoral immunity?
- How does alum block induction of Th1 cells?
- How does anti-TNF treatment affect TB granuloma formation?
- How does bacterial-viral co-infection impact anti-viral immunity?
- How does hyperglycemia lead to aggressive cancer?
- Human mAbs protects against Zika Neuropathology in Mice
- IDA Highlight: TB is a complex disease
- IDA Highlights: HIV Immunity
- IDA Highlights: Immune responses at mucosal sites
- IDA Highlights: Innate signatures of HIV vaccines
- IDA Highlights: Malaria
- IDA Highlights: TB vaccines
- Identifying disease-associated populations in the age of big data
- IgD: the lesser known antibody
- ILCs homeostasis in Psoriatic Arthritis
- Immunological T and B cell Diversity of the
Human Penis

- Immunopaedia goes to the Latin American Immunology Congress
- Immunoregulatory effects of Vitamin B5 during M.tb infection
- Improved T cell detection by Peptide-MHC dodecamers compared to tetramers
- Improved tetramer staining protocol detects functional T cells with low affinity TCRs
- Influenza-specific lung resident CD8+ T cells maintain diverse TCR profiles
- Influenza-specific lung TRM maintain diverse TCR profiles
- Initial Immune Responses to TB in the Human Lung
- Intestinal helminth co-infection promotes control against lung migrating parasites
- Is CD153 essential for M.tb control?
- Is kick-and-kill HIV cure strategy achievable?
- Latin American Immunology Congress, a cocktail of scientific breaking news.
- Local signals matters: implication for CD8 T cell function against Leishmania
- Lower efficacy of tumour immunotherapy in obesity is due to elevated Leptin
- MAIT cell dysfunction during primary sclerosing cholangitis
- MAITs respond differently to ZIKV and DENV
- Measuring T cell proliferation using the "Warburg" effect.
- Metabolic reprogramming: Novel strategy to improve cancer immunotherapy
- MGIAs: potential role of trained immunity?
- Natural infection improves breadth of vaccine induced memory
- New Hope for TB Vaccines
● New hope from chronic HBV patients: non-replicative Ad-HBV vaccine
● Non-cytotoxic function of HIV-specific rectal CD8+T cells
● Not all RV144 vaccine induced IgA responses are bad.
● Omentin-1 rescues inflammation-induced osteoporosis
● Ontogeny of MAITs
● Oral vs intradermal BCG, what’s the difference?
● Organ specific replenishment of tissue resident macrophages
● Paratuberculosis in Cattle: Differences in WC1+ γδ T cells responses to stimulation with PPD-J
● Patho-physiological implication of NET in COPD patients
● Phase 1 Zika vaccine trial shows promise
● Plasmablast formation: which T helper phenotype is important?
● Potential therapeutic use of H. pylori for asthma
● Profiling MAITs during Multiple Myeloma
● Public Antibody Clonotypes observed in HIV+ individuals.
● Re-developed live attenuated Cholera vaccine, is it safe?
● Reduced Flu severity due to high fibre diet
● Resident CD8+ T cells restrain HIV replication in elite controllers
● SAHGP Pilot: Southern Africans are more diverse than expected
● Serum IgA induced by commensal microbes protects against sepsis
● T follicular helper cells are essential for generating nAb during chronic-infection.
- T-bet expression negatively affects T cell lung homing during TB
- TLR-agonist and Salmonella are potential antimelanoma immunotherapy
- Tuft cell tropism may aid norovirus pathogenesis
- Understanding follicular CD8 T cells during SIV infection
- Vaccine induced monocyte activation contributes to decreased risk of SIV acquisition
- We are at the IDA this Week
- We need new HAB/HBV vaccine strategies for HCV/HIV infected individuals.
- What is the incubation period of TB?
- What’s behind Eosinophilic Esophagitis?
- Where do uterine NK cells during pregnancy come from?
- Which cells contribute to immunity against vaginal Zika infection?
- α4β7-MAdCAM interaction promotes HIV replication.
- NIH COVID-19 lecture on SARS-CoV-2 mRNA vaccine
- NIH COVID-19 lecture on SARS-CoV-2 neutralising antibodies
- NIX is essential for systemic metabolic reprogramming of immune cells mediating tuberculosis protection
- No evidence that BCG vaccination can protect against SARS-CoV-2 infection.
- Non-invasive tumour immune cell monitoring
- Not all SARS-CoV-2 mutations lead to reduced antibody neutralisation capacity
- Novel HIV-1 variant found in Netherlands: the implications
- Novel immune cells unveil potential trigger for severe asthma
- Novel insights – regulating skin inflammation
- Novel insights into the treatment of lupus
- Novel insights: immunotherapy responses in lung cancer
- Novel protein linked to rheumatoid arthritis pathogenesis
- Novel therapy to reduce immune rejection of transplant cells
- Novel treatment approach for asthma without negative immune system effects
- Novel vaccines induce neutralising antibodies against Epstein-Barr virus in mice
- Our immune system...in space
- Our natural defence to skin cancer – new insights
- Ovarian cancer and immune evasion
- P. falciparum secretes extracellular vesicles with functional 20S proteasomes to prime RBCs for parasite invasion
- Parkinson’s disease – new insights into immune cell landscape
- PD-1/PDL1 pathway in the maintenance of maternal-foetal immunotolerance
- Pfizer and BioNTech COVID-19 vaccine
- Phase 2a trial provides evidence for potential pancreatic cancer immunotherapy
- Phosphatidylserine-positive extracellular vesicles – boosting effector CD8+ T cell responses
- Placental protection of the fetus – new insights
- Possible new treatment for rheumatoid arthritis
- Potent neutralising antibodies against SARS-CoV-2 variants of concern.
- Potent neutralizing antibodies isolated from COVID-19 patients
- Potential SARS-CoV-2 & COVID-19 Vaccines
- Potential vitiligo immuno-therapeutic: antigen-specific CAR-Tregs
- Pre-clinical evaluation of a vaccine that induces
both SARS-Cov-2 and yellow fever virus immunity.  
- Predicting patient responses to COVID-19 immunotherapies  
- Predicting response to immunotherapy in patients with clear cell renal cell carcinoma (ccRCC)  
- Predicting tissue graft outcomes using immune markers  
- Predicting transplant rejection using proteoforms  
- Pregnancy and its influence on the immune response to SARS-CoV-2  
- Pregnant women show elevated levels of anti-inflammatory glycosylation patterns of IgG antibodies  
- Priming the immune response with ginger  
- Prior exposure to common virus may protect the fetus  
- Promising new insights: the immune response following a stroke  
- Promotion of protective anti-tumour CD8+ T cell immunity – a new treatment for tumours  
- Propagation of α-synuclein from the gut to brain – new causation for Parkinson’s disease?  
- PSGL-1 regulates CD8+ T Cell Exhaustion  
- Rapid decay of IgG to SARS-CoV-2 in people with mild COVID-19  
- Rebound to COVID-19 – not from impaired immunity  
- Recurrent Strep throat: when TFH cells “turn on” you  
- Regulatory T cells – new insights  
- Reprogramming Brain’s Defense Cells into Neurons Aids Stroke Recovery  
- Reprogramming the Tumour Microenvironment – Improving Cancer Survival  
- Repurposing of a drug for alcoholism to treat cancer  
- Researchers may have found a way to “cure” cat allergies?
Resistance to key antimalarial drug?
Respiratory disease and viral shedding in rhesus macaques inoculated with SARS-CoV-2
Respiratory infections – common (in) cold (temperatures)
Respiratory Syncytial Virus (RSV) infection – the role of T cells
Rethinking HIV remission strategies: end of the road for anti-α4β7?
RNA-based vaccine BNT162b1 induces robust IgG and T cell immunity
Roles of different anti-SARS-CoV-2 antibodies in COVID-19 disease and protection
Safety and immunogenicity of Sputnik V vaccine
Safety and immunogenicity of the SARS-CoV-2 mRNA-1273 vaccine candidate in older age.
Safety considerations in laboratory practice when testing specimens from patients suspected or infected with SARS-CoV-2
SAIS/Immunopaedia Webinar on BCG & COVID-19
SAIS/Immunopaedia Webinar: Antibody responses and serology testing
SAIS/Immunopaedia Webinar: COVID-19 Vaccines
SAIS/Immunopaedia Webinar: Immunothrombosis & COVID-19
Saliva viral load could be a potential correlate of severe COVID-19
SARS-CoV-2 – a weakness?
SARS-CoV-2 and mucosal immunity
SARS-CoV-2 and partial resistance to remdesivir
SARS-CoV-2 and T-cell escape
SARS-CoV-2 can infect adipose tissue
• SARS-CoV-2 found in semen.
• SARS-CoV-2 infection following vaccination – more robust immunity
• SARS-CoV-2 infection in young children and Kawasaki-like disease.
• SARS-CoV-2 monkey model shows protection from re-infection.
• SARS-CoV-2 monoclonal antibodies as potential COVID-19 treatment.
• SARS-CoV-2 mRNA-1273 vaccine shows signs of potential efficacy
• SARS-CoV-2 omicron variant hardly evade neutralization by S309
• SARS-CoV-2 Omicron variant in hamsters is not as deadly as we think
• SARS-CoV-2 serological assay on-a-chip.
• SARS-CoV-2 transmission and mask wearing.
• SARS-CoV-2 transmission exploits existing secretory pathways in the nasal cavity: a vaccine/drug target?
• SARS-CoV-2-specific IgG and IgM in asymptomatic individuals wane quickly
• SARS-CoV-2-specific Memory B cells persist up to 8 months post infection.
• SARS–CoV-2 infection of the placenta
• Scientific Response to COVID-19 Video
• SEPSIS is WANTED!
• Severe COVID-19 may change your innate immune system
• Sex associated differences to flu vaccination: role of estradiol?
• Should we consider aerosol vaccines for COVID-19
• Should we consider SARS-CoV-2 human challenge models for vaccine testing?
• Single cell profiling at the maternal-fetal interface – insights
• Single-cell RNA sequencing – new insights into
cancer

- Single-cell RNA-Seq of BAL samples from COVID-19 patients
- Skin aging – IL-17 a role player
- Smallpox vaccine for mpox?
- SOLIDARITY TRIAL: Testing existing drugs to treat COVID-19
- SOLIDARITY TRIAL: WHO COVID-19 treatment trial
- Solving the puzzle of IgG4-related disease, the elusive autoimmune
- Specific B cell targeting to treat lupus
- Statins: improved survival rates and reduced mortality rate in COVID-19 patients.
- Stopping inflammation in its tracks
- Strain specific host restriction of recurrent UTIs
- Stress mediated stirring up of the immune system
- Sugar and autoimmune diseases: what are the risks?
- Susceptibility of domestic animals to SARS-Cov-2
- T cell activation as a potential surrogate marker for TB treatment efficacy.
- T cell exhaustion- new insights
- T cell lineage fate is driven by CD4 and CD8 co-receptor gene loci
- T cells altered by CRISPR may be safe to use in cancer patients
- T cells and melanomas – a potential predictive tool
- T cells and skin disease
- T cells and type 1 diabetes prevention
- T-cell protection against pneumococcal disease
- T-cell response to SARS-CoV-2 Omicron
- TAK-003 induces functional DENV cross-reactive cellular immunity
- Targeting COVID-19 immunopathology using rapamycin
- Targeting the metabolic profile of latently infected macrophages as a potential treatment for HIV
• TB and HIV – an enhanced antibody response
• TB biomarker based on anti-Ag85B and 4 inflammatory molecules.
• TB diagnosis in children: metabolite biomarkers
• TB episode following PD-1 blockade
• TB treatment with diabetes comorbidity: new insights
• Testing potential neonatal sepsis drugs using a murine neonatal sepsis.
• Th17 and Multiple Sclerosis (MS)
• The “topology” of the immune response to COVID-19
• The (Un)usual Suspect-Novel Coronavirus Identified
• The antibody response to SARS-CoV-2 501Y.v2 variant and vaccine implications
• The battle against Herpes – insights
• The current status of COVID-19 immunology
• The different clinical characteristics of COVID-19 between children and adults.
• The early stages of HIV infection – new insights
• The emergence of inflammatory monocytes as the leukemia anteroom.
• The emerging role of IL-26 in fighting against intracellular microbes
• The humoral response as a marker in patients with chronic obstructive pulmonary disease
• The Immune Function of Osteoclasts
• The immune system – new insights
• The immune system and liver disease – new insights
• The immune system and obesity
• The immune system during old age
• The interplay between LRRC15+ myofibroblasts and anti-tumour immunity
• The landscape of human cornea – immune cells
• The opportunity to boost antiretroviral therapy interventions through maternal vaccination
• The Origin of SARS-CoV-2
• The potential benefit of high-dose intravenous Ig
The potential of T cell activation markers for TB diagnostic development
The role of complement in COVID-19 pathogenesis.
The role of emergent food allergies in rethinking vaccine strategies
The role of Galectin-3 in the tumor microenvironment
The role of JAK inhibitors in inflammation – new insights
The role of T cells in Alzheimer’s disease – novel insights
The role of the PD-1 blockade in Mycobacterium tuberculosis infection
The Vaccinology course, if you are in the vaccine-world, you shouldn’t miss it!
Time of day for COVID-19 vaccination does not matter
Tissue tolerance in COVID-19
Toothpaste – a trigger for gut inflammation
Toxoplasma gondii-Induced Neutrophil Extracellular Traps Activate Neutrophils and promote T cell recruitment
Trained Immunity in Dogs.
Treating COVID-19 with immunoglobulins, should we be cautious?
Treatment with interferon-λ confers protection from SARS-CoV-2 variants – Beta and Omicron
Triple-negative breast cancer – a potential treatment on the horizon
Tumor associated macrophages: the future targets for anti-melanoma immunotherapy?
Type I interferon co-stimulation of MAIT cell function
Uncertainty is hampering doctors’ ability to treat COVID-19
Understanding gut inflammation using caterpillars
- Understanding the immune system and COVID-19: New insights
- Unique genes: the innate immune response and tuberculosis
- Unlocking the secrets of the thymus: a window into immune system aging
- Unveiling Zika Virus’ Multi-Purpose Enzyme: A Potential Therapeutic Target
- Use of future liposomal cancer oncology treatment
- Using a virus to treat Pancreatic Cancer
- Using bacteria to fight cancer
- Using gamma T cells to fight TNBC
- Using immune cells to predict flu
- Using lab grown organs to test vaccines
- Using lipid nanoparticles for cancer treatment
- Using viruses to fight cancer
- Uterine NK cell differentiation during the menstrual cycle and pregnancy.
- Vaccine development – new insights from epitopes
- Vaccine elicitation of engineered HIV-specific B cells: inducing bnAbs
- Vaccine-associated enhanced respiratory disease in hamsters vaccinated against COVID-19
- Vaccines and respiratory viruses
- Variations in leukocytes – three months following mild COVID-19 infection
- Vimentin and its role in COVID-19 infection
- Viral dynamics in mild vs severe COVID-19
- We need innovative tools to diagnose Coeliac disease
- Webinar on harnessing innate immunity from cancer therapy to COVID-19
- What can ZIKV-CD8 T cells do?
- What determines COVID-19 disease persistence and severity?
- What does HIV infection have to do with T follicular regulatory cells (TFRs)?
• What does HLA-DR expression on CD4 T cells indicate?
• What drives allergic asthma? New insights
• What effect does anti PD-1 therapy have on responses to the influenza vaccine?
• What evidence is there for pre-existing antibody responses to SARS-CoV-2?
• What happens to your cilia during SARS-CoV-2 infection?
• What other disease affect individuals with olive pollen allergies?
• What role do CD137L and CD4 T-cells have in B-cell lymphoma immuno-surveillance?
• Where did SARS-CoV-2 come from?
• Where do memory B cells get reactivated?
• Where is single cell genomics taking the field of Immunology?
• Which COVID-19 vaccine will be the most effective?
• Why are hypertension and diabetes patients at high risk of severe COVID-19?
• Why do people with the Dantu blood group have a lower risk of developing malaria?
• Why is COVID-19 so mild in children?
• Why is flu vaccine induced immunity short-lived?
• Why is SARS-CoV-2 Omicron less severe than Delta?
• Why prematurely born babies are more susceptible to infection
• Why we lose our smell – COVID-19
• Wild is better: in-bred mice born to wild mice resemble human responses
• Will the COVID-19 pandemic result in significant neuropsychiatric sequelae?
• WNT7A: The new marker for resting T cells
• World Hepatitis Day: proof of concept HCV nanoparticle vaccine
• WORLD TB DAY: COVID-19 & TB
• Your gut microbiome and white blood cells
• News 2017
  • 2nd Annual International Remote Conference: Science and Society
  • A Broad Overview of HIV Treatments and Cures
  • Alere HIV Combo Rapid Test
  • Allergy and asthma across generations
  • Antibodies protect against cytomegalovirus infection
  • Antibodies with incomplete neutralization protect against SHIV
  • Antibody cocktail to prevent Zika infection in pregnant women
  • Antibody resistance does not play a role in mother-to-child-transmission
  • Antibody that can control HIV replication
  • Antibody-drug dual combination to fight cancer
  • Application for CRISPR in muscular dystrophy
  • Asthma increases susceptibility to influenza
  • Asymptomatic Zika virus infection protects from re-infection
  • Block-and-lock strategy to cure HIV
  • Breastfed children less susceptible to asthma attacks
  • Broad antibodies from HIV-infected individuals
  • Cancer-killing viruses: the future of cancer therapy?
  • Candidate heroin vaccine effective in primate model
  • CD161+CD4+ T cells depleted at the Cervix during HIV Infection
  • CD8 T cells are important for Zika virus control
  • Cell-to-cell HIV transmission evades antibody responses
  • Cerebral cavernous malformations enhanced by
microbiome

- Changes in gut microbiome in Inflammatory Bowel Disease
- Characterization of novel antibody that recognizes HIV trimer
- Child maintains HIV remission without drugs
- Combination of 2 antibodies controls HIV replication
- Conventional antibody can neutralize HIV
- Cow immunizations generate broad HIV antibody responses
- Cross-reactive antibodies for Ebola vaccine
- CXCL13 predicts development of HIV-specific antibodies
- Deletion of TB protein eliminates cell heterogeneity
- Diabetes vaccine in sight
- Different gut microbes present depending on diet
- Dorsal foreskin cutting for effective HIV prevention
- Dysfunctional B cell subsets in TB patients
- Early Introduction of Peanuts Prevents Allergies
- Effect of BCG vaccination on HIV-exposed infants
- Effective mechanism to kill human viruses
- Elevated Th17 cells in “healthy” overweight children
- Engineered CD8 T cells flush out HIV reservoirs
- Environmental factors associated with asthma development
- Evidence for antibodies in control of HIV infection
- Expression of CD40L by CD8 T cells promotes autologous activation and differentiation
• Functional antibody immunity 40 years post Ebolavirus exposure
• Functional B cells needed to prevent preterm birth
• Garlic treats dengue virus inflammation
• Glycosylation consensus to aid HIV immunogen design
• GM-CSF and neuroinflammation
• Gonorrhoea superbug on the rise globally
• Gut bacteria induce pro-inflammatory response in MS
• Helminth protection by innate Type 2 immunity
• High salt intake linked to graft rejection
• Highlights from the Infectious Disease (ID) Week 2017 Conference
• Histamine releasing factor makes host vulnerable to malaria
• HIV escapes by novel mechanisms
• HIV immunogen based on precursor antibodies
• HIV Nef protein implicated in cardiomyopathy
• HIV PrEP Linked to Kidney Function
• HIV vaccine design with less mutated antibodies
• How effective are anti-TNF-α agents in treating sarcoidosis?
• How Tregs control liver damage
• HPV E7 protein downregulates antitumour immunity
• HPV-positive cancer cells are dormant in low oxygen conditions
• Identical viruses form HIV reservoir
• IL-10+ Th1 T cells associated with reduced malaria parasitemia
• IL-17RA deficiency and susceptibility to pathogens
• IL-4-producing B cells shift T cells to Th2
responses
- Immunomodulatory effect of lactic acid on the female reproductive tract
- Immunopaedia, the Official IUIS Learning Site
- Important role for antibodies in TB infection
- Inflammation associated with chronic fatigue syndrome
- Insight into immune activation caused by Ebola virus
- Interaction between microbiome and urogenital schistosomiasis
- International Remote Conference Highlights: Antibody response to malaria in Burkina Faso
- International Remote Conference Highlights: Can HAART be used to cure HIV?
- International Remote Conference Highlights: Establishment of memory CD8 cells to influenza
- Investigating HIV RNA expression during antiretroviral therapy
- Is HIV becoming more resistant over time?
- Lab mice may be too clean to use in studies
- Langerhans cells affect HIV transmission
- Link between schistosomiasis and HIV susceptibility
- Lung on a chip model recapitulates lung cancer pathology and therapy
- Malaria vaccine trial with promising results
- Malaria-induced anaemia reinforced by treatment
- Marginal zone B cells in cholesterol control
- Marijuana May Decrease ART Adherence
- Meat Allergy Develops from Tick Bite
- Mechanism behind malaria-induced autoimmunity
• Memory responses are not restricted to immune cells
• MHC Ib molecule protects against TB infection
• Microbiota in T cell survival
• Microorganisms in the eye protect against infection
• Microvilli in T cell activation
• mTOR implicated in the onset of asthma
• Mucosal cells enhance HIV entry into CD4 T cells
• Multi-site injections enhance immune responses
• Mycobacterium tuberculosis diversity
• MyD88-mediated cells against C. rodentium identified
• Neutrophils aid in immune tolerance during pregnancy
• New autoimmune disease driven by thymic tumour
• Next-generation RTS,S-like malaria vaccine
• No correlation between Vitamin D levels and vaccine responses
• No role for CD4 T cells in shift from latent to active TB
• Not all CD8 T cells have cytotoxic effects
• Novel cell population reduces response to tumours
• Novel mechanism for anti-cancer drug
• Novel mechanism reveals how leishmania evades immune system
• Optimizing HIV immunization strategies
• PD-1-based immunotherapy affected by gut microbiome
• Pharmacological treatment of lymphedema
• Plasmodium infection promotes bone loss
• Polyfunctional antibodies in the control of
HIV
- Potential serological test capable of distinguishing Zika from Dengue infections
- Pre-diabetes associated M.tb-specific T cell dysfunction
- Preterm births alter ATP production and immunity
- Probiotic lotion as eczema treatment
- Probiotics induce double-positive intraepithelial lymphocytes
- Rapid evolution of the infant microbiome after birth
- Reason why immunotherapy does not work for all cancers
- Recycling of B cells in the humoral immune response
- Regulatory T cells delay clearance of malaria through CTLA-4
- Regulatory T cells help prevent CMV reactivation
- Reprogrammed T cells kill cancer
- Resident T cells improve melanoma prognosis
- Road to an effective HIV immunogen
- Role of horsepox in smallpox vaccine
- Role of IL-7 receptor in tuberculosis
- Role of T cells in Zika virus infection
- RTS,S/AS01E induces robust central memory responses to HBsAg but not to CSP
- Sensitive Zika virus diagnostic method using whole blood
- Severity of leishmania infection depends on time of day
- Short chain fatty acids improve inflammation of the eye
- Targeting an integrin as a potential HIV therapeutic
- Terminal differentiation of T cells during
CMV & HIV infection
- The nutritional consequence of HIV-helminth coinfection
- Traits associated with the production of broadly neutralizing antibodies
- Transphagocytic CD4+ T cells are true APC capable of inducing functional CD8 memory cells
- Trispecific antibody for HIV therapy
- Type I interferons are important in anti-helminth Th2 immunity
- Type III IFNs in Hepatitis E persistence
- Using chemokine CXCL13 as a biomarker of germinal centre activity
- Vaccine induced T cell immunity, antigen localisation in bacterial vector matters
- Vaginal Microbiome Affects HIV Prevention
- Zika virus persists in cerebrospinal fluid and lymph nodes
- Zika virus replication in female genital tract
- Whole M.tb inherently induce highly differentiated T cells compared to H56 vaccination
- Kai 1 and Kai 2, new Dog Erythrocyte Antigens: implications for clinical practice

- Calendar Donations
- Contact Us
- Donate Now
- Events
- Immunopaedia – Free Immunology Education
- Immunopaedia – IUIS 2023
- Immunopaedia Newsletter
- Latest Interviews
  - Audio Interviews
    - Clara Gorodezky Interview
    - Eleanor Fish Interview
• Georg Hollander Interview
• Günter Fröeschl Interview
• Guido Ferrari Interview
• Heather Jaspan Interview
• Henry Mwandumba Interview
• Ido Amit Interview
• Jeffery Dorfman Interview
• Olivera J. Finn Interview
• Reto Guler Interview
• Richard Koup Interview
• Susan K Pierce Interview
• Timothy Ray Brown Interview
• Wendy Burgers Interview

• Immunologist of the Month – 2016
  • Adam Penn-Nicholson Interview
  • Penny Moore Interview

• Immunologist of the Month – 2017
  • Bob Hancock Interview
  • Dhafer Laouini Interview
  • Eltahir Awad Gasim Khalil Interview
  • Faith Osier Interview
  • Gary Entrican Interview
  • Hatem Masmoudi Interview
  • Jean-Philippe Julien Interview
  • Juan Carlos Zúñiga-Pflücker Interview
  • Michelle Letarte Interview
  • Mohlopheni Jackson Marakalala Interview
  • Narinder Mehra Interview
  • Rajesh Ringe Interview

• Immunologist of the Month – 2018
  • Jacqueline Marvel Interview
  • Jean-Marc Cavaillon Interview
  • Luis F. García Interview
  • Manuel A. Franco Interview
  • María Moreno Interview
  • Nashied Peton Interview
  • Olivier Boyer Interview
- Pascale Kropf Interview
- Paul W. Kincade Interview
- Pierre Van Damme Interview
- Sarah C. Gilbert Interview
- Stanley Plotkin Interview
- Immunologist of the Month – 2020
  - Andreas Bergthaler
  - Caroline T Tiemessen
  - Dr Heena Ranchod Interview
  - Interview with Professor Magez
  - Jude Uzonna
  - Zaza Ndhlovu
- Immunologist of the Month – 2021
  - Anca Flavia Savulescu
  - Carlos Alberto Fossati
  - Caroline Beltran
  - Fatoumatta Darboe
  - Gerhard Walzl
  - Martin Herrmann
  - Martin Rumbo
  - Simon G. Kimuda
  - Takafira Mduluza
  - Wasihun Hailemichael
- Immunologist of the Month – 2022
  - Abdallah Badou
  - Catherine Kegakilwe Koofhethile
  - Martyna Scibiorek
  - Melissa Murphy
  - Michael Betts
  - Pauline Johnson
  - Reinhold Schmidt Obituary
  - Thomas Murooka
- Immunologist of the Month – 2023
  - Andrea Cossarizza
  - Bettina Nadorp
  - Clive Gray
  - Ismail Sebina
- Lorna Gcanga
- Matt Witkowski
- Michelle Letarte Tribute
- Nicholas Woudberg
- Omalla Allan Olwenyi
- Paul Ogongo
- Pedro Moraes-Vieira
- Rose Nabatanzi

• Immunologist of the Month - 2019
  - Babacar Mbengue Interview
  - Collins Ouma Interview
  - Dennis Burton Interview
  - Faatima Laher Interview
  - ImmunoInformatics Faculty Focus: Lenin Domínguez Ramírez
  - Jayne Sutherland Interview
  - Luka Cicin-Sain Interview
  - Lyle McKinnon Interview
  - Monika M Esser Interview
  - Virginie Rozot Interview

• Video Interviews
  - ALAI/SMI Special Video Interviews
  - Carla Rothlin and Elina Zuniga
  - Claire J Hoving Interview
  - David Sacks
  - Erica L Johnson
  - Fabienne Tacchini-Cottier Interview
  - Gama Bandawe Interview
  - Hans-Martin Jäck Interview
  - Immunoinformatics 2019 Course
  - Michele A. Miller Interview
  - Olabanji Surakat
  - One B. Dintwe Interview
  - Simon J. Draper Interview
  - Virginie Rozot
  - Yaw Bediako

• Our Profile
Infectious Diseases

- I have spots and my skin burns
- A case of a 10 year old boy with a 3 week history of diarrhoea, vomiting and cough
- A case of fever and general malaise
- A case of persistant hectic fever
- A case of sudden rapid neurological deterioration in an HIV positive 27 year old female
- A case of swollen hands
- An unusual cause of fulminant hepatitis
- Case of a right axillary swelling
- Case of giant wart
- Case of recurrent meningitis
- Case of repeated apnoea and infections in a premature infant
- Case of sudden onset of fever, rash and neck pain
- Doctor, my sister is confused
- Eight month old boy with recurrent infections
- Enlarged Testicles
- Failure to thrive despite appropriate treatment
- Right Axillary Swelling
- Severe anaemia in HIV positive child
- The case of a floppy infant
- Two year old with spiking fevers and depressed level of consciousness
- 17 year old male with fever and decreased level of consciousness
3 TB Vignettes
- A 10 year old girl with a hard palate defect
- A case of decreased joint function, fever and rash

Immunotherapy
- Keep up while the storm is raging

Autoimmune Conditions
- Fireworks of autoimmunity from birth
- My eyes cross at twilight
- A case of a 3 month old infant with bloody urine and stools
- A case of scaly annular plaques
- Case of eye injury and decreased vision
- My head hurts and I cannot speak?
- TB or not TB: a confusing case
- A 7 year old with severe muscle weakness and difficulty walking
- Why can I not walk today?
- 14 year old with severe hip pain
- A 9 year old girl presents with body swelling, shortness of breath and backache

Drug Responses
- A sudden turn of events after successful therapy
- Declining CD4 count, despite viral suppression?
- Defaulted treatment
- 25 year old female presents with persistent flu-like symptoms

Gastrointestinal Disorders
- A case of persistent bloody diarrhoea

Hypersensitivity
- I’ve been coughing for so long
- A case of acute fever, rash and vomiting
- Adverse event following routine vaccination

Malignancies
- A case of cough, wasting and lymphadenopathy
A case of lymphadenopathy and night sweats
Case of enlarged hard tongue
In the Red
Mother to Child Transmission
A high risk pregnancy
Primary Immunodeficiencies
A four year old with immunodeficiency
Young girl with recurrent history of mycobacterial disease
Immunodeficiency and failure to thrive
Case of recurrent infections
An 8 year old boy with recurrent respiratory infections
4 year old boy with recurrent bacterial infections
Secondary Immunodeficiencies
Is this treatment failure or malnutrition
Online Courses
Core Immunology Modules
1. A Snapshot of the Immune System
2. Ontogeny of the Immune System
3. The Innate Immune System
4. MHC & Antigen Presentation
5. Overview of T Cell Subsets
6. Thymic T Cell Development
7. gamma/delta T Cells
8. B Cell Activation and Plasma Cell Differentiation
9. Antibody Structure and Classes
10. Central and Peripheral Tolerance
UIS Courses
UIS-ALACI-SMI-ASOCHIN Immuno-Chile 2023
Introduction to Immuno-Chile 2023
Core Modules
Gut Mucosal Immunity
The Microbiome
Gut Inflammation
- Viral Infections and Mucosal Immunity
- Colorectal Cancer
- Inflammatory Bowel Disease
- Equity, Diversity, Inclusion in Academia
- Grant Writing

- IUIS-FIMSA-IIS Immuno-India 2023
  - Immuno-India 2023 Introduction
  - Core Modules
  - Principles of Epigenetic Regulation
  - Epigenetics Research in Systems Immunology
  - Epigenetic (De)regulation in Non-Malignant Diseases
  - Epigenetic (De)regulation in Immunodeficiency and Malignant Diseases
  - Immunometabolism and Therapeutic Applications of Epigenetic Modifiers
  - Grant Writing

- IUIS-SMI-FAIS Immuno-Morocco 2023
  - Immuno-Morocco 2023 Introduction
  - Core Modules
  - Cancer Cellular Therapies
  - Cancer Antibody Therapies
  - Cancer Vaccines
  - Immunobiology of Leukemia & Therapies
  - Immune Landscape of the Tumour
  - Targeting the Tumour Microenvironment
  - Flow Cytometry
  - Grant Writing

- IUIS-FAIS-SANTHE-ISZ Immuno-Zambia 2022
  - Immuno-Zambia 2022 Introduction
  - Core Modules
  - Immunity to Viral Infections
  - Immunity to SARS-CoV2
  - Basic Immunology of HIV
• Immunity to Tuberculosis
• Immunity to Malaria
• Immunity to Schistosomiasis
• Immunity to Helminths
• Equity, Diversity and Inclusion in Academia
• Grant Writing

**IUIS-ALACI-ASCAI2 Immuno-Argentina 2022**
• Immuno-Argentina 2022 Introduction
• Core Modules
• Dendritic Cells
• Trained Innate Immunity
• Gamma-Delta T cells
• B cells
• Natural Killer Cell Memory
• Innate Immunity in Viral Infections
• Lectures – Innate Immunity
• T cells and Beyond
• Lectures – Cellular Immunity
• Strategies for Vaccine Design
• Lectures – Humoral Immunity
• Lectures – Vaccine development
• Lectures – Panel and Posters

**IUIS-FAIS-STI Immuno-Tunisia 2021**
• Immuno-Tunisia 2021 Introduction
• Core Modules
• Basics of Anti-infectious Immunity
• Inborn Errors of Immunity and Infections
• Infection and Auto-Immunity
• Pathogen-Induced Immune Dysregulation & Cancer
• Understanding of Host-Pathogen Interaction & Applications (SARS-CoV-2)
• Day 1 – Basics of Anti-infectious Immunity
- **Day 2 – Inborn Errors of Immunity and Infections**
- **Day 3 – Infection and Auto-immunity**
- **Day 4 – Pathogen-induced Immune Dysregulation and Cancer**
- **Day 5 – Understanding of Host-Pathogen Interaction and Applications**
- **Student Presentations**
- **Roundtable Discussions**
- **Orientation Meeting**
- **Poster Information**
  - **IUIS-Immunopaedia-ALACI Immuno-Cuba 2022**
    - Immuno-Cuba 2022 Introduction
    - Poster and Abstract Examples
  - **IUIS-ALACI-ACAAI Immuno-Colombia 2021**
    - Immuno-Colombia Introduction
    - Core Modules
    - Core Modules Meeting
    - Overview of Immunotherapy
    - Check-Points Blockade Based Therapies
    - Cancer Immunotherapy with γδ T cells
    - CAR-T, armored CARs and CAR-NK therapies
    - Anti-cytokines Therapies
    - Tumor-infiltrating Lymphocytes (TIL)
    - MDSC Promote Tumor Growth and Escape
    - Cancer Vaccines
    - Immunological lab methods for patient’s follow-up
    - Student Orientation Meeting
  - **IUIS-FAIS Immuno-Algeria 2020**
    - Introduction to Immuno-Algeria 2020

- **IUIS-Immuno-Colombia**
- **Abstract Examples**
- **Core Modules**
- **Core Modules Meeting**
- **Overview of Immunotherapy**
- **Check-Points Blockade Based Therapies**
- **Cancer Immunotherapy with γδ T cells**
- **CAR-T, armored CARs and CAR-NK therapies**
- **Anti-cytokines Therapies**
- **Tumor-infiltrating Lymphocytes (TIL)**
- **MDSC Promote Tumor Growth and Escape**
- **Cancer Vaccines**
- **Immunological lab methods for patient’s follow-up**
- **Student Orientation Meeting**
- **Lectures – Week 1**
- **Lectures – Week 2**
- **Student Presentations**
- **Research Project**
- **Closing and Social**
- **IUIS-FAIS Immuno-Algeria 2020**
  - **Introduction to Immuno-Algeria 2020**
- **Core Modules**
- **Hypersensitivity Reactions**
- **Immuno-Algeria Programme**
- **Online Lectures – Week 1**
- **Online Lectures – Week 2**
- **Student Presentations – Week 1**
- **Student Presentations – Week 2**

  - **IUIS-FAIS Immuno-Ethiopia 2020**
  - **Introduction to Immuno-Ethiopia 2020**
  - **Core Modules**
  - **Neutrophils**
  - **Leishmaniasis – Transmission and Epidemiology**
  - **Leishmaniasis – Immune Responses**
  - **Leishmaniasis – Treatment and Vaccines**
  - **Immunity to Helminth Infections**
  - **Helminth immunomodulation on co-infections**
  - **Immunity to Malaria**
  - **Malaria Vaccine Progress**
  - **Immunity to Fungal Infections**
  - **How to be successful scientist**
  - **How to prepare a good academic CV**

- **Previous IUIS Courses**
  - **IUIS-FAIS Immuno-Benin**
    - **Introduction to Immuno-Benin**
    - **Core Modules**
    - **Dendritic Cells**
    - **Immune Regulation in Pregnancy**
    - **Immunity in infants and consequence of preeclampsia**
    - **Schistosome infections and impact on Pregnancy**
    - **Infant Immunity and Vaccines**
    - **Regulation of Immunity & the Microbiome**
    - **TGF-beta superfamily in infections and**
diseases

- Infectious Diseases in the Global Health era
- Immunity to Malaria
- Malaria Vaccine Progress
- Immunity to Toxoplasma gondii
- Immunity to Helminth Infections
- *A. melequeta* inhibits inflammatory responses during Helminth Infections
- Helminth immunomodulation on co-infections
- Host immune modulation by Helminth-induced products
- Immunity to HIV
- Immunity to Ebola
- Immunity to TB
- Genetic susceptibility in Tuberculosis
- Plant Extract Treatment for Diabetes
- Grant Writing

- **IUIS-IDA Immuno-South Africa 2019**
  - Introduction to Immuno-South Africa 2019
  - Core Modules
  - Immunity to HIV
  - Immunity to TB
  - Immunity to Malaria
  - Models for Testing Vaccines
  - Immune Responses to Vaccination
  - Grant Writing
  - IDA 2019 Quiz

- **IUIS-IIS-FIMSA Immuno-Jaipur**
  - Introduction to Immuno-Jaipur
  - Core Modules
  - Inflammation and autoinflammation
  - Central and Peripheral Tolerance
  - Autoimmunity and Chronic Inflammatory Diseases
- Autoimmunity & Dysregulation
- Novel Therapeutic strategies for Autoimmune Diseases
- Strategies to apply gamma/delta T cells for Immunotherapy
- Immune Responses to Cancer
- Tumour Microenvironment
- Cancer Immunotherapy
- Origin and perspectives of CAR T cells
- Metabolic checkpoints regulating immune responses
- Transplantation
- Primary Immunodeficiencies
- Regulation of Immunity & the Microbiome
- Growing up with Herpes virus

**IUIS-ALAI-MEXICO-IMMUNOINFORMATICS**
- Core Modules
- Introduction to IUIS-ALAI-Mexico-ImmuoInformatics
- Cancer Immunotherapy
- Introduction to Immunization Strategies
- Introduction to Immunoinformatics
- Omics Technologies
- Computational Modeling
- Machine Learning Methods

**IUIS-FAIS Immuno-Kenya**
- Introduction to Immuno-Kenya
- Core Modules
- Viruses hijacking host immune responses
- IFNs as 1st responders to virus infections
- HBV/HCV & Hepatocellular Carcinoma
- Cytokines as biomarkers for HCV
- HTLV & T cell Leukemia
- HCMV and Cancers
- HPV and Cancers
- EBV-induced Oncogenesis
- Adenoviruses
- Immunity to HIV
- KSHV and HIV
- Cancer Immunotherapy
- Ethics in Cancer Research
- Sex and gender in Immunity
- Flow Cytometry
- Group Work

- IUIS-ISIA Immuno-Iran
  - Introduction to Immuno-Iran
  - Core Modules
  - Cancer Immunotherapy
  - Tumour Microenvironment
  - Immune Regulation in Pregnancy
  - Introduction to Immunization Strategies
  - Immunity to Leishmaniasis
  - Primary Immunodeficiencies
  - Breaking Tolerance: Autoimmunity & Dysregulation

- IUIS-FAIS-SMI Immuno-Morocco
  - Introduction to Immuno-Morocco
  - Core Modules
    - Overview of the Immune System
    - Inflammation and autoinflammation
      - T lymphocyte mediated immunity
      - Conventional alpha-beta T cells
      - gamma/delta T Cells
  - Cancer Epidemiology and Aetiology
  - Immune Responses to Cancer
  - Tumour Microenvironment
  - Pathogens and Cancer
  - Cancer Immunotherapy
• Flow Cytometry
• How to be successful scientist
• How to prepare a good academic CV
• Immunodeficiency and Cancer

• IUIS-ALAI Immuno-Brazil
  • Introduction to Immuno-Brazil
  • Core Modules
  • 1. Systems Vaccinology
  • 2. Vaccine Development
  • 3. Adjuvants
  • 4. DNA Vaccines
  • 5. Mucosal Vaccines
  • 6. Vaccines for Neurodegenerative Diseases
  • Grant Writing

• IUIS-FAIS Immuno-Gambia
  • Introduction to Immuno-Gambia
  • Immuno-Gambia Photos
  • 1. Infant Immunity and Vaccines
  • 2. Dendritic Cells
  • 3. Conventional T Cells
  • 4. gamma/delta T Cells
  • 5. Immunity to Viral Infections
  • 6. Immunity to Helminth Infections
  • 7. Immunity to TB
  • 8. Immunity to Malaria
  • 9. Flow Cytometry

• IUIS-IDA Immuno-South Africa 2017
  • Introduction to Immuno-South Africa
  • Core Modules
  • 1. Introduction to Immunization Strategies
  • 2. Immune Responses to Vaccination
  • 3. Models for Testing Vaccines
  • 4. Immune Escape
  • 5. Grant Writing

• IUIS-FAIS Immuno-Ethiopia
- Introduction to Immuno-Ethiopia
  - 1. Neutrophils
  - 2. Dendritic Cells
  - 3. Exosomes
  - 4. gamma/delta T Cells
  - 5. Immunity to Leishmania
  - 6. Immunity to HIV
  - 7. Immunity to Helminth Infections
  - 8. Immunity to TB
  - 9. Grant Writing

- IUIS-ALAI-SMI Immuno-Mexico
  - Introduction to ONCOIMMUNOLOGY-MEXICO
  - ONCOIMMUNOLOGY-MEXICO Photos
  - 1. Cancer Epidemiology and Etiology
  - 2. T lymphocyte mediated immunity
  - 3. Immune Responses to Cancer
  - 5. Tumor Microenvironment
  - 6. Pathogens and Cancer
  - 7. Cancer Immunotherapy
  - 8. Flow cytometry approaches in cancer

- IUIS-FAIS Immuno-Tunisia
  - Introduction to the Immunology Course
  - Immuno-Tunisia Photo
  - 1. Overview of the Immune System
  - 2. Role of cytokines in Immunity
  - 3. Tolerance and autoimmunity
  - 4. Genetics, Epigenetics and immunoregulation
  - 5. Microbes and immunoregulation
  - 6. Inflammation and autoinflammation
  - 7. T cell mediated autoimmune diseases
  - 8. Antibody-mediated autoimmune diseases

- IUIS-IDA IMMUNO-SOUTH AFRICA
  - Introduction to the Immunology
Symposium
- Immuno-South Africa Photo
- 1. Antibody Generation by B cells
- 2. Mucosal Immunity
- 3. Immunity to TB
- 4. Immunity to Malaria
- 5. Immunity to HIV
- 6. Defining a Biomarker
- 7. Grant Writing Exercise

UIS-ALAI Immuno-Colombia
- Introduction to the Immunology Course
- Immuno-Colombia Photo
- 1. Overview of Complement
- 2. Transplantation
- 3. Immune Regulation in Pregnancy
- 4. Breaking Tolerance: Autoimmunity & Dysregulation
  - Autoimmunity
    - Dysregulation of the Immune Response and the Loss of Tolerance
- 5. Mucosal Immunity & Immunopathology
  - An Example of Peripheral Tolerance — Regulation of Mucosal Immunity
    - Inductive Roles of DCs, T Effector Cells, and Treg Cells in Determining Anti-Inflammatory or Proinflammatory Responses to Commensal and Pathogenic Bacteria and Soluble Proteins
    - The Immunoregulatory Role of Vitamin A and Retinoic Acid in the Mucosal Immune System
6. Regulation of Immunity & the Microbiome
   - Mucosal Immunopathology
7. Epigenetics & Modulation of Immunity
   - Immunomodulatory Agents
8. Primary Immunodeficiencies
9. Anti-tumour Immunity
   - Bidirectional communication – tumors and immunity
   - Mechanisms of Tumor Cell Evasion of the Immune Response
   - Specific Immunosuppressive Mechanisms that Have Been Identified in Recent Years
10. Cancer Immunotherapy
    - Immunotherapy for human malignancy
    - Adoptive Cell Therapy

Other Courses
   - 11th IDA 2022
     - 11th IDA 2022 Introduction
     - A Snapshot of the Immune System
     - The Innate Immune System
     - MHC & Antigen Presentation
     - Overview of T Cell Subsets
     - B Cell Activation and Plasma Cell Differentiation
     - Antibody Structure and Classes
     - Immunity to COVID-19
     - Immunity to TB
     - Immunity to HIV
     - Immunity to Malaria
     - Grant Writing
   - AfriBop 2022
     - Fundamentals of Immunology
- Fundamentals of Infection
- Integrating Immunology & Infection
- Infectious Diseases Symposium
- EULAR Symposium
- Grant Writing

- **SUN Honours**
  - SUN Honours Introduction
  - A Snapshot of the Immune System
  - Ontogeny of the Immune System
  - The Innate Immune System
  - MHC & Antigen Presentation
  - Overview of T Cell Subsets
  - B Cell Activation and Plasma Cell Differentiation
  - Antibody Structure and Classes
  - Cellular Immunity and Immunological Memory
  - Infectious Diseases Immunology
  - Vaccinology
  - Immune Regulation in Pregnancy
  - Mucosal Immunity & Immunopathology
  - Central & Peripheral Tolerance
  - Regulation of Immunity & the Microbiome
  - Epigenetics & Modulation of Immunity
  - T cell and Ab-mediated autoimmune diseases
  - Transplantation
  - Immunology of COVID-19 Vaccines
  - Biomarkers
  - Flow Cytometry

- **AfriBop 2021**
  - AfriBop 2021 Introduction
  - Fundamentals of Immunology
  - Adaptive Immunity
  - Fundamentals of Infection
  - Fundamentals of Infection 2
- **Fundamentals of Infection 3**
- **CHIM**
- **EULAR Symposium**
- **Host pathogen Interaction 1**
- **Host pathogen Interaction 2**
- **Vaccines**
- **Career**
- **Student 3 minute Presentations**
- **Grant Writing**

**10th IDA 2021**
- 10th IDA 2021 Introduction
- **Core Modules**
- **Immunity to HIV**
- **Immunity to Malaria**
- **Immunity to TB**
- **Immunity to COVID-19**
- **Day 1 – Lectures**
- **Day 2 – Lectures**
- **Day 3 – Lectures**
- **Day 4 – Lectures**
- **Student Presentations**

**Immunity to Pathogens**
- **Core Modules**
- **Immune Escape by Pathogens**
- **Immunity to TB**
- **Immunity to Malaria**
- **Immunity to Viral Infections**
  - Introduction
- **Flu, Ebola & SARS**
- **Immunity to HIV**
- **HCMV**
- **HPV**
- **HTLV**
- **HBV/HCV**
- **Biomarkers**

**Afribop 2020**
- **Afribop 2020 Introduction**
- Fundamentals of Immunology
- Adaptive Immunity
- Fundamentals of Infection
- WT PhD School Lectures 1
- EULAR symposium
- WT PhD School Lectures 2
- Host pathogen interaction 1
- Host pathogen interaction 2
- Vaccines
- Bioinformatics
- Grant Writing
- Career
- Student Presentations

- VACFA AAVC 2020
  - Introduction to VACFA Vaccinology 2020
  - Overview of Vaccinology
  - Basic Principles of Immunity
  - Adverse Events Following Immunization
  - Targeted Immunization
  - Challenges Facing Vaccination
  - Vaccine Stakeholders
  - Vaccination Questions Answered
  - Malaria Vaccines

- UCT Advanced Immunology
  - A Snapshot of the Immune System
  - Ontogeny of the Immune System
  - The Innate Immune System
  - MHC & Antigen Presentation
  - Overview of T Cell Subsets
  - Thymic T Cell Development
  - B Cell Activation and Plasma Cell Differentiation
  - Antibody Structure and Classes
  - Central and Peripheral Tolerance
  - Immune Escape
  - Immunity to Viral Infections
  - Immunity to TB
- Immunity to Helminth Infections
- Introduction to Immunization Strategies
- Immune Responses to Vaccination
- Infant Immunity and Vaccines
- Breaking Tolerance: Autoimmunity & Dysregulation
- Primary Immunodeficiencies
- Genetics, Epigenetics and Immunoregulation
- Immunity to Fungal Infections
- Regulation of Immunity & the Microbiome
- Flow Cytometry

- IDA 2018
  - IDA 2018 Introduction
  - Immunity to HIV
  - Regulation of Immunity & the Microbiome
  - Antibody Structure and Classes
  - B Cell Activation and Plasma Cell Differentiation
  - Immunity to TB
  - Immunity to Malaria
  - Vaccine Development
  - Models for Testing Vaccines
  - Immune Responses to Vaccination
  - Grant Writing

- TIGRIS
  - Semester 1
    - Ontogeny of the Immune System
    - The Innate Immune System
    - MHC & Antigen Presentation
    - Overview of T Cell Subsets
    - Thymic T Cell Development
    - B Cell Activation and Plasma Cell Differentiation
• Antibody Structure and Classes
• Central and Peripheral Tolerance
• Basic Immunology of HIV
• Immunity to HIV
• Antiretroviral Drug Treatments
• Responsible Conduct in Research
• Methods for Enhancing Reproducibility

Semester 2

Immunology

The Basics of the Immune System

1. A Snapshot of the Immune System
2. Ontogeny of the Immune System
3. The Innate Immune System
4. MHC & Antigen Presentation
5. Overview of T Cell Subsets
6. B Cell Activation and Plasma Cell Differentiation
7. Antibody Structure and Classes
8. CD Nomenclature

Advanced Immunology

1. Transplantation
2. Central & Peripheral Tolerance
3. Immune Regulation in Pregnancy
4. Breaking Tolerance: Autoimmunity & Dysregulation
5. Mucosal Immunity & Immunopathology
6. Regulation of Immunity & the Microbiome
7. Epigenetics & Modulation of Immunity
8. Inflammation and autoinflammation
9. T cell mediated autoimmune diseases
10. Antibody-mediated autoimmune diseases

Special Focus Area

1. Primary Immunodeficiencies
2. Cancer & Tumours
   • Cancer Epidemiology and Aetiology
   • Immune Responses to Cancer
   • Cancer Stem Cells and Tumour-
initiating Cells
  • Tumour Microenvironment
  • Pathogens and Cancer
  • Cancer Immunotherapy
  3. Immunity to TB
  4. Immunity to Malaria
  5. Immunity to HIV
  6. Tolerance and Autoimmunity
  • Historical Fun Facts
  • Discovery of the Thymus as a central immunological organ
  • History of Immune Response
  • History of Immunoglobulin molecules
  • History of MHC – 1901 – 1970
  • History of MHC – 1971 – 2011
  • Webinars
  • SAIS/Immunopaedia Webinars 2022
  • IUIS – Immunopaedia – Frontiers Webinars 2022
    • Metabolic control of T cell differentiation during immune responses to cancer
    • Microbiome control of host immunity
    • Shaping of anti-tumor immunity in the tumor microenvironment
    • The unusual COVID-19 pandemic: the African story
    • Immune responses to SARS-CoV-2
    • Adaptive Immunity and Immune Memory to SARS-CoV-2 after COVID-19
  • IUIS – Immunopaedia – Frontiers Webinars
    • HIV prevention- antibodies and vaccine development (part 2)
    • HIV prevention- antibodies and vaccine development (part 1)
    • Immunopathology of COVID 19 lessons from pregnancy and from ageing
    • Clinical representation of hyperinflammation
    • In-depth characterisation of immune cells in
Ebola virus
- Getting to the “bottom” of arthritis
- Immunoregulation and the tumor microenvironment
- Harnessing innate immunity from cancer therapy to COVID-19
- Flynn Webinar: Immune features associated natural infection
- Flynn Webinar: What immune cells play a role in protection against M.tb re-infection?
- JoAnne Flynn: BCG IV vaccination induces sterilising M.tb immunity
- IUIS-Immunopaedia-Frontiers Webinar on Immunology taught by P. falciparum

SAIS/Immunopaedia Webinars
- COVID-19 Cytokine Storm & Paediatric COVID-19
- Immunothrombosis & COVID-19
- Severe vs mild COVID-19 immunity and Nicotinamide pathway
- BCG & COVID-19
- COVID-19 Vaccines
- Antibody responses and serology testing

Collaborations

Treatment & Diagnostics
- Interactive Technique Courses
  - ELISA
  - Flow Cytometry Part 1
  - Flow Cytometry Part 2
  - Flow Cytometry Part 3
  - Lateral Flow
  - SDS-PAGE
- Diagnostic Tools
- Diagnostic Tests
- HIV Infection & Treatment
  - HIV Life Cycle
  - ARV Drug Information
- ARV Mode of Action
- ARV Drug Resistance
- Declining CD4 count
- TB Drugs
- Influenza Guidelines
- Meningococcal Disease Guidelines
- Rituximab

- Glossary

- Our Ambassadors
  - Ambassador of the Month – 2023
  - Africa
  - Asia
  - Europe
  - North America
  - Oceania
  - South America
  - Ambassador of the Month – 2022
  - The Day of Immunology 2022
  - AMBASSADOR SCI-TALKS
  - The Day of Immunology 2021
  - Ambassador of the Month – 2021
  - Ambassador of the Month-2020
  - Ambassador of the Month – 2019
  - Ambassador of the Month – 2018
  - Ambassador of the Month – 2017

- Course Applications