

18th TNF Meeting, October 10 - 14th 2021.
Les Diablerets, Switzerland



18th TNF Superfamily Meeting
 LES DIABLERETS | SWITZERLAND

Sunday, October 10th, 2021

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|------------------|-----------------------------------|
| 13h00 | Arrival and registration |
| 18h00 | Dinner (Eurotel Victoria) |
| 19h00 - 21h00 | Conference centre |
| KEYNOTE LECTURES | |
| 19h30 | Welcome address |
| 19h40 | Peter VANDENABEELE Belgium |
| 20h20 | George KOLLIAS Greece |
| 21h00 | Welcome drink (Eurotel Victoria) |

Chair: **Manolis PASPARAKIS**

TNF, a small history on many ways to die and to survive - is ferroptosis an immunogenic cell death modality?
 Fibroblasts as orchestrators of immunity and inflammation

Monday, October 11th, 2021

08h30 - 12h00 Conference centre

SESSION 1: TNFR SIGNALING IN CELL DEATH

Chairs: **Wei-Lynn WONG** and **Domagoj VUCIC**

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|-------|--------------------------------------|
| 08h30 | Pascal MEIER UK |
| 09h00 | Andrea UJEVIC Czechia |
| 09h15 | Hannah SCHUENKE Germany |
| 09h30 | Scott LAYZELL UK |
| 09h45 | Mathieu BERTRAND Belgium |
| 10h15 | Break |
| 10h45 | David WALLACH Israel |
| 11h15 | Ludec LAURIEN Germany |
| 11h30 | Bo Kyouna KIM Switzerland |
| 11h45 | 4 flash talks |
| 12h15 | Lunch (Eurotel Victoria, 6 min walk) |

Ubiquitin-mediated regulation of necroptosis
 Adaptors TANK and NAPI1 control TNF-induced cell death
 OTULIN prevents skin inflammation by inhibiting RIPK1-mediated keratinocyte necroptosis
 NF- κ B induced A20 expression in activated T cells controls IKK dependent repression of RIPK1-induced cell death
 Identification of a new detoxification mechanism in the TNF pathway

Endosomal targeting of MLKL by site-specific ubiquitination facilitates lysosomal destruction of intracellular pathogens
 Ligand-independent oligomerization of TAC1 is controlled by the transmembrane domain and regulates proliferation of B cells
 The role of RIPK1 auto-phosphorylation in cell death and inflammation
 OPTN protects RIPK1-dependent cell death in the retina by selective autophagy
 Stefanie Rufli / Sebastian Kupka / Ximena Hildebrandt / Carmela Casale

13h30 - 17h30 Conference centre

SESSION 2: STRUCTURE FUNCTION ANALYSIS OF TNFR SIGNALING

Chairs: **Ana GARCIA SAEZ** and **Henning WALCZAK**

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|-------|-----------------------------------------|
| 14h00 | Marion MacFARLANE (online) UK |
| 14h30 | Inna LAVRIK Germany |
| 14h45 | Alessandro ANNIBALDI Germany |
| 15h00 | Laurent GAGNOLUX-PALACTOS France |
| 15h15 | Ana J GARCIA-SAEZ Germany |
| 15h45 | Break |
| 16h15 | Hao WU (online) USA |
| 16h45 | Cristian SHELUSKI Argentina |
| 17h00 | 5 flash talks |
| 18h00 | Dinner (Eurotel Victoria) |
| 20h00 | Poster session 1 (Conference centre) |

Molecular architecture of FADD: Caspase-8 signalling complexes - from assembly to coordinated control of cell fate
 The development of small molecule FLIPin for targeting extrinsic apoptosis network
 Physiological role of c-FLIP cleavage in TNF signalling pathway
 Control of Fas endosomal trafficking by Sorting Nexin 27 regulates its signaling capacity
 Regulation of MLKL activity in necroptosis

Inflammasomes: the next frontier
 Ligand-independent oligomerization of TAC1 is controlled by the transmembrane domain and regulates proliferation of B cells
 Francesca Maremonti / Alexia Belavgeni / Fatma Isil Yapici / Sharmila Biswas / Linda van den Berk

Poster session 1

Tuesday, October 12th, 2021

08h30 - 11h45 Conference centre

SESSION 3: TNFR SUPERFAMILY AND INFLAMMATION

Chairs: **Kate LAMBERTSEN** and **Pascal MEIER**

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|-------|---------------------------------------|
| 08h30 | Hamid KASHKAR Germany |
| 09h00 | Ekaterina GUBERNATOROVA Russia |
| 09h15 | Viola GOGOLEVA Russia |
| 09h30 | Wei-Lynn WONG Switzerland |
| 09h45 | John SILKE (online) Australia |
| 10h15 | Break |
| 10h45 | Alexander POLTORAK USA |
| 11h15 | Jilina JURER Germany |
| 11h30 | Maria Elena MACCARI Germany |
| 12h00 | Lunch (Eurotel Victoria) |

The catalytic activity and scaffold function of cell death enzymes in inflammation
 TNF receptors differentially contribute to acute and chronic intestinal inflammation
 Lymphotoxin-dependent modulation of immunosuppressive myeloid cells by microbiota
 cIAP1 regulates stem cell fitness in response to inflammation
 Inflammation in the skin - how much do we really know?

TRIF mediates TNF toxicity
 SPAT2 and CYLD independently control pro-inflammatory signaling and B cell homeostasis
 Limited impact of reduced functional Fas ligand trimers: lessons from patients with autoimmune lymphoproliferative syndrome

13h15 - 16h30 Trip Glacier 3000 or free time

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|-------|--------------------------------------|
| 13h15 | Meet in front of hotel & walk to bus |
| 13h22 | Bus departure |
| 13h29 | Arrival at cable car |
| 13h53 | Ride up with cable car |
| 14h13 | Arrival Glacier 3000 |
| 15h33 | Ride down with cable car |
| 16h02 | Bus departure |
| 16h23 | Arrival in Les Diablerets |

Peak walk, view point, hike, etc.

16h30 - 19h00 Conference centre

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|-------|--------------------------------------|
| 16h45 | Geert VAN LOO Belgium |
| 17h15 | Aymeric ZADORONZNY France |
| 17h30 | Leslie CHAVEZ-GALAN Mexico |
| 17h45 | Paola BETANCUR USA |
| 18h00 | Veit HORNING Germany |
| 18h30 | 5 flash talks |
| 19h00 | Dinner (Eurotel Victoria) |
| 20h30 | Poster session 2 (Conference centre) |

Chairs: **David WALLACH** and **Sergei NEDOSPASOV**

OTULIN in inflammation, cell death, and disease
 Characterization of cIAP1 oncogenic functions: cIAP1 and TRAF2 ubiquitin ligases interplay in tumor growth
 Soluble TNFR1 and ADAM17 are increased in severe covid-19 patients, and they are related to mortality
 The TRAIL to understanding dramatic lung tissue damage in SARS-Cov2
 New insights into TNF shedding
 Carolina di Benedetto / Mila Daoud / Sofya Tishina / Valentina Pegoretti / Sonia Schüpbach

Poster session 2

Wednesday, October 13th, 2021

08h30 - 12h15 Conference centre

SESSION 4: TNFR SUPERFAMILY IN TISSUE ORGANOGENESIS AND REMODELING

Chairs: **Carlo PINCELLI** and **Pascal SCHNEIDER**

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|-------|--------------------------------------|
| 08h30 | Carlo PINCELLI Italy |
| 09h00 | Carl DE TREVZ Belgium |
| 09h15 | Aime MARTENS Belgium |
| 09h30 | Anna MARTIN VILLALBA Germany |
| 10h00 | Break |
| 10h30 | Denis HEADON UK |
| 11h00 | Stefano RAFFAELE Italy |
| 11h15 | Tegawani KAKUNJRI France |
| 11h30 | Dimiteris ISIANTOULAS Austria |
| 11h45 | Holm SCHNEIDER Germany |
| 12h15 | Lunch (Eurotel Victoria) |

The p75 neurotrophin receptor (CD271) in healthy and diseased skin
 ILC3s control splenic cDC homeostasis via lymphotoxin signaling
 A20 critically controls RANK-dependent osteoclastogenesis
 A systems biology approach towards understanding the role of CD95 in cancer cells

EDAR signaling in the generation of epithelial appendage diversity
 Unraveling the contribution of TNFR2 in the pro-remyelinating properties of microglia after stroke
 A proliferation inducing ligand (APRIL) as a neuroregenerative agent in brain injuries
 APRIL limits atherosclerosis via binding to heparan sulfate proteoglycans
 Short-term correction of deficient ectodysplasin A signaling with a replacement protein: long-term results in nine patients

14h00 - 17h45 Conference centre

SESSION 5: TNFR SUPERFAMILY IN DISEASE

Chairs: **Anna MARTIN VILLALBA** and **Richard SIEGEL**

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|-------|---------------------------------------|
| 14h00 | Kate Lykke LAMBERTSEN Denmark |
| 14h30 | Haritha DESU USA |
| 14h45 | Natalia ORTI-CASAN Netherlands |
| 15h00 | Denise FAUSTMANN USA |
| 15h15 | Henning WALCZAK UK, Germany |
| 15h45 | Break |
| 16h15 | Domagoj VUCIC USA |
| 16h45 | Sebastian CAROTTA Austria |
| 17h00 | Monica YARBEL Germany |
| 17h15 | Gail BISHOP USA |
| 19h30 | Conference dinner (Eurotel Victoria) |
| 21h00 | Evening |

TNF-mediated neuroinflammation: impact on outcome in stroke and spinal cord injury
 TNFR2 regulates the response of oligodendrocyte precursor cells to neuroinflammation
 Systemic administration of a TNFR2 agonist improves neuropathology and cognitive functions in an Alzheimer's disease model
 TNFR2 agonism and antagonism: indications for autoimmunity and cancer
 TRAIL: back on track to the cancer clinic

RIP1 is a key mediator of TNF induced death in inflammatory diseases
 TNF as the bottle neck: rational combination of STING agonist and Smac mimetic therapy
 XIAP restrains tnfr-driven intestinal inflammation and dysbiosis by promoting immune responses of paneth and dendritic cells
 TRAF3 as a regulator of T and B cell antigen receptor signaling and function

Thursday, October 14th, 2021

08h30 - 12h30 Conference centre

SESSION 6: TNFR SUPERFAMILY AND (AUTO)IMMUNITY

Chairs: **Jannie BORST** and **Burkhard LUDEWIG**

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|-------|--------------------------------------|
| 08h30 | Richard SIEGEL Switzerland |
| 09h00 | Anna MENNELLA (on line) Italy |
| 09h15 | Bertrand HUARD France |
| 09h30 | Olex DEMIDOV France |
| 09h45 | Rana HERRRO USA |
| 10h15 | Break |
| 10h45 | Burkhard LUDEWIG Switzerland |
| 11h15 | Mark MENSINK Netherlands |
| 11h30 | Julian STAEKEL Germany |
| 11h45 | Mahya ESLAMI Switzerland |
| 12h00 | Andrea CERUTTI Spain |
| 12h30 | Lunch (Eurotel Victoria) |

TNF inhibits mitophagy, driving mt-DNA release and cGAS/STING-dependent IFN responses that support inflammatory arthritis
 Unabated type I interferon expedites B-cell autoimmunity and anti-drug antibody formation during anti-TNF therapy
 APRIL binding enables plasma-cell tumors to develop in the bone marrow
 DDR phosphatase Wipi1 regulates cytokines of the TNF family
 Targeting TLR4/DR3 signaling offers a therapeutic advantage to neutralizing IL13/IL4Ra in muco-secretory fibrotic disorders

Lymphoid organ fibroblasts
 Thymus-derived regulatory T cells display a unique glycolytic program upon TNFR2 costimulation
 Non-apoptotic Fas signaling controls mTOR activation and balances extrafollicular versus germinal center fate in human B cells
 The many surprises of studying endogenous forms of BAFF and APRIL in humans
 Gut T cell-independent IGA responses to commensals require B cell signals from the TAC1 receptor