ENGINEERING
- Display of Biologics
- Engineering Antibodies
- Machine Learning Part 2

TARGETS
- Antibody-Based Therapies
- Emerging Targets
- Membrane Protein Targets

BISPECIFICS
- Safety & Efficacy
- Advancing Multispecifics
- Engineering Bispecifics

IMMUNOTHERAPY
- Immunoengineering
- Innovative CAR Therapy
- Next-Gen Immunotherapies

ANALYTICAL
- Optimisation & Developability
- Analytical Characterisation
- Protein Stability & Formulation

EXPRESSION
- Leveraging Data Science
- Omtimising Expression
- Developing Workflows

MACHINE LEARNING
- Intro to Machine Learning
- Machine Learning Part 1
- Machine Learning Part 2

ONCOLOGY
- Antibody-Based Therapies
- Engineering ADCs
- Next-Gen Immunotherapies

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PLENARY DEEP DIVE

Future of Biologic Therapeutics: Will Half-Life Extended Peptides Replace Multispecific Antibodies?

MODERATOR:
Daniel Chen, MD, PhD
Synthetic Design Lab

PANELISTS:

Paul J. Carter, PhD
Genentech

G. Jonah Rainey, PhD
Eli Lilly and Company

Janine Schuurman, PhD
Lust for Life Science B.V.

ENGINEERING

11 NOVEMBER

Display of Biologics

FUTURE DISPLAY: HOW STRUCTURAL BIOLOGY GUIDES ML/AI DESIGN OF ANTIBODIES

Synergizing Cryo-EM and AI for Antibody Lead Optimization
Juan Carlos Mobarec, PhD, Head Computational Structural Biology; Associate Director, Mechanistic and Structural Biology, Discovery Sciences, R&D, AstraZeneca, Cambridge, UK

Finding Antibodies with Cryo-EM Maps
Chiara Rapisarda, PhD, Group Leader, Sanofi

PANEL DISCUSSION: *In silico* Design of Antibodies Present & Future Perspectives
PANEL MODERATOR:
Maria Groves, PhD, Director, AstraZeneca
PANELISTS: Andrew R.M. Bradbury, MD, PhD, CSO, Specifica, an IQVIA business
Andreas Evers, PhD, Associate Scientific Director, Antibody Discovery & Protein Engineering, Global Research & Development Discovery Technology, Merck Healthcare KGaA
Chiara Rapisarda, PhD, Group Leader, Sanofi
Juan Carlos Mobarec, PhD, Head Computational Structural Biology—Associate Director, Mechanistic and Structural Biology, Discovery Sciences, R&D, AstraZeneca, Cambridge, UK

TRANSLATING DISCOVERIES FROM DISPLAY PLATFORMS TO THE CLINIC

Are Recombinant Snakebite Antivenoms Close to the Clinic?
Andreas H. Laustsen, M.Sc.Eng, PhD, Center Director & Professor, Center for Antibody Technologies, DTU Bioengineering, Technical University of Denmark

Engineering Bicyclic Peptides (Bicycle) for New Classes of Precision-Targeted Medicines
James Cooke, PhD, Associate Director, Bicycle Therapeutics

ACCELERATING AND IMPROVING THERAPEUTIC PROTEIN DISCOVERY: COMBINING COMBINATORIAL PLATFORMS WITH DEEP SEQUENCING AND COMPUTATIONAL METHODS

Phage Display Enables Machine Learning Discovery of Cancer Antigen Specific TCRs
David Gfeller, PhD, Associate Professor, Oncology, University of Lausanne

High-Throughput Specificity Profiling of Antibody Libraries Using Ribosome Display and Microfluidics
Ellen Wagner, PhD, Director, Technology Development, GigaGen Inc.

Machine Learning–Enabled Development of a Highly-Functional Venom Library Platform with Fast Hits-to-Leads Workflow for Peptide Therapeutics Discovery
Yingnan Zhang, PhD, Senior Principal Scientific Manager, Biological Chemistry, Genentech, Inc.

ADVANCES IN LIBRARY DESIGN

One-Shot Optimisation of Antibody Affinity and Developability through Computational Design
Ariel Tennenhouse, Graduate Student, Biomolecular Sciences, Weizmann Institute Of Science

Applying Antibody Libraries in Complex Selections to Identify Potential Leads
Peter Kristensen, PhD, Associate Professor & Head of Biotechnology, Chemistry & Bioscience, Aalborg University

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Engineering Antibodies & Beyond

PLENARY DEEP DIVE

PANEL DISCUSSION: Future of Biologic Therapeutics: Will Half-Life Extended Peptides Replace Multispecific Antibodies?
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G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

IMPROVING ANTIBODY FUNCTION, PK AND INTRACELLULAR TARGETING

KEYNOTE PRESENTATION: **Antibody and Albumin-Based Designs with Tailored Effector Functions and PK Properties**
Jan Terje Andersen, PhD, Professor, Department of Pharmacology, University of Oslo; Research Group Leader, Department of Immunology, Oslo University Hospital

Turning Antibodies into Intracellular Biodegraders and Using Antibody Paratopes for Drug Discovery
Terence Rabbitts, FRS, FMedSci, Professor, Molecular Immunology, Center for Cancer Drug Discovery, Institute of Cancer Research

COMBINING EXPERIMENTAL APPROACHES AND MACHINE LEARNING IN T CELL ENGAGER DESIGN

Engineering T Cell Engagers for Complete On/Off Killing Selectivity through Machine Learning and High-Throughput Experimentation
James Field, PhD, CEO, LabGenius Therapeutics

Machine-Learning Prediction of Picomolar Affinity Soluble T Cell Receptors
Rodrigo Vazquez-Lombardi, PhD, Co-Founder & CSO, Engimmune Therapeutics AG

ETC-101: Designing a T Cell Receptor (TCR) Trispecific for Cancer Immunotherapy with Generative AI
Alfred WY Lim, PhD, Director, Lab Research, Etcembly Ltd.

Novel Recombination Technologies for Rapid Assembly and Screening of Multispecific Antibodies
Stefan Schmidt, CEO, evitria AG

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ENGINEERING THERAPEUTICS FOR AUTOIMMUNE AND CNS DISORDERS

Antibody Engineering to Maximise the Clearance of Redundant Targets
Karen Silence, PhD, Head, Preclinical Product Development, ArGEN-X

Targeting the High-Affinity Receptor for IgG in Autoimmunity
Jeanette Leusen, PhD, Professor AntibodyTherapy, University Medical Center Utrecht

Bispecific Complement Engagers (BiCEs)—Harnessing Complement Activation for Enhanced Antibody Therapy
Mikkel W Pedersen, PhD, CEO & CSO, Commit Biologics ApS

Targeted Immunoglobulin Degradation: A Novel Approach to Autoimmune Disease Treatment
Hitto Kaufmann, PhD, Chief R&D Officer, Hansa Biopharma

Engineered Antibodies for Delivery of Nucleic Acids to the Brain
Ulrich Brinkmann, PhD, Expert Scientist, Pharma Research & Early Development, Roche Innovation Center, Munich

13 NOVEMBER

Machine Learning for Protein Engineering Part 2

OPTIMISATION AND DEVELOPABILITY

Nonspecificity in the Clinical Landscape
Paolo Marcatili, PhD, Head, Antibody Design, Novo Nordisk

Antibody DomainBed: Out-of-Distribution Generalization in Therapeutic Protein Design
Natasa Tagasovska, PhD, Principal ML Scientist and Scientific Manager, Prescient Design, Genentech, Roche

Engineering Antibodies with Programmable Fc Functional Profiles
Edward B. Irvine, PhD, Postdoctoral Scientist, Sai Reddy Group, Laboratory for Systems and Synthetic Immunology, ETH Zürich

A Machine Learning Approach to Improving Antibody Developability
Paul MacDonald, PhD, Data Scientist, Protein Design Informatics, GSK

Talk Title to be Announced
Pietro Sormanni, PhD, Group Leader, Royal Society University Research Fellow, Chemistry of Health, Yusuf Hamied Department of Chemistry, University of Cambridge

BENCHMARKING AND DATA CURATION

KEYNOTE PRESENTATION
Charlotte M. Deane, PhD, Professor, Structural Bioinformatics, Statistics, University of Oxford; Executive Chair, Engineering and Physical Sciences Research Council (EPSRC)

Scaling Foundation Models for Protein Generation
Ali Madani, PhD, Founder and CEO, Profluent Bio

NEW METHODS TO UNCOVER NEW BIOLOGY AND DRUG TARGETS: SHIFTING FROM DISCOVERY TO DESIGN

Unraveling Structure-Function Relationships of Entire Protein Families Using Alphafold
Luigi Vitagliano, PhD, National Research Council Italy

Artificial Intelligence in the Creation of Precision Therapeutic Enzymes that Target Pathogenic Immunoglobulins
Nathan Higginson-Scott, PhD, CTO, Seismic Therapeutic

Structure-Guided Antibody and Immunogen Design
Monica L. Fernandez-Quintero, PhD, Staff Scientist, General Inorganic & Theoretical Chemistry, Scripps Research Institute

11 NOVEMBER

Antibody-Based Therapies

T CELL ENGAGERS AND IMMUNE CELL MODULATORS

Development of a First-in-Class, ADCC-Enhanced Bispecific NK Engager that Simultaneously Blocks EGFR Receptor-Ligand Interactions on Tumor Cells and Engages a Novel NK Activating Receptor
Hemanta Baruah, PhD, Founder & CEO, Aakha Biologics

ISB 2001, a First-in-Class Trispecific BCMA and CD38 T Cell Engager Designed to Overcome Mechanisms of Escape from Multiple Myeloma Treatments
Mario Perro, PhD, Head of Biologics Research, Ichnos Glenmark Innovation

High-Specificity pMHC scFv Antibodies: From Binder Discovery to Next-Generation T Cell Engagers
Stefan Warmuth, PhD, CTO, Technology & CMC, Numab Therapeutics AG

NEXT-GENERATION BISPECIFIC ANTIBODIES FOR IMMUNO-ONCOLOGY

Tumor-Targeted Costimulation via CD28 Bispecific Antibodies—Turning Immunotherapy "Cold" Tumor "Hot"
Dimitris Skokos, PhD, Vice President, Cancer Immunology, Regeneron Pharmaceuticals

Advancing Cancer Immunotherapy: Next-Phase Developments in Bispecific HER3 Antibodies
Giuseppe Roscilli, PhD, CTO & Director, Drug Evaluation & Monoclonal Antibody, Takis Srl

INCA33890: A Bispecific Antibody Targeting TGFbR2 and PD1
Horacio G. Nastri, PhD, Vice President, Protein Science and Technology, Incyte Corporation

RADIOPHARMACEUTICAL THERAPIES

Peptide Nucleic Acid-Mediated Pre-Targeting for Radionuclide Therapy
Amelie Eriksson Karlstroem, PhD, Professor & Head, Protein Science, School of Engineering Sciences in Chemistry, Biotechnology & Health, KTH Royal Institute of Technology

Engineered Antibodies for Pre-Targeted Radiotherapy
Alexander Haas, PhD, Head, Biologics Core Technologies, Roche Diagnostics GmbH

Harnessing the Power of DARPins as Radiopharmaceuticals
Francesca Malvezzi, PhD, Expert Scientist, Lead Generation, Molecular Partners AG

ANTIBODIES AND PROTEINS FOR THERAPEUTICS BEYOND CANCER

Engineering and Development of an IgE Degrading Protease for Treatment of IgE-Mediated Allergic and Atopic Diseases
Jyothsna Visweswaraiah, PhD, Director, Biotherapeutics, Drug Creation, Seismic Therapeutic

A Novel Long-Acting Relaxin-2 Fusion, AZD3427, Improves Cardiac Performance in Non-Human Primates with Cardiac Dysfunction
Monika Papworth, PhD, Principal Scientist, Biologics Engineering, AstraZeneca

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Emerging Targets for Oncology & Beyond

PLENARY DEEP DIVE

PANEL DISCUSSION: Future of Biologic Therapeutics: Will Half-Life Extended Peptides Replace Multispecific Antibodies?
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G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

INNOVATIVE APPROACHES FOR TARGET DISCOVERY

A High-Throughput Platform to Engineer Macrophage-Stimulating Bispecific Antibodies: Targeting CD47/SIRPa & Beyond
Kipp Weiskopf, MD, PhD, Whitehead Fellow, Whitehead Institute for Biomedical Research

B Cell TuLibs: Immortalised Tumour-Derived B Cell Libraries for the Interrogation and Unbiased Discovery of Novel Therapeutic Targets and Antibodies from Patients
Alessandra Villa, PhD, Director, Antibody Platform Development, Kling Biotherapeutics

NEW TARGETS AND APPROACHES FOR SOLID TUMOURS

Talk Title to be Announced
Marie-Eve Beaulieu, PhD, Co-Founder & CSO, Drug Development, Peptomyc SL

Engineering Soluble T Cell Receptor Bispecifics to Target HLA-Presented Viral Peptides
Jonathan Chamberlain, PhD, Senior Manager, Research, Protein Science Pipeline, Immunocore Ltd.

Engineering TIMP-2 Variants for Glioblastoma Treatment
Julia M. Shifman, PhD, Professor, Biological Chemistry, The Alexander Siblerman Institute for Life Sciences, The Hebrew University Jerusalem

Plasma Goldmine: *De novo* Sequencing Uncovers Functional Antibodies Missed by Traditional Methods by Rapid Novor Inc
Speaker to be Announced, Rapid Novor Inc

NOVEL TARGETS AND APPROACHES FOR INDICATIONS BEYOND CANCER

Identifying New Biology for TROP2: A Naked TROP2 Antibody Entering the Clinic
David Young, PhD, Co-Founder and CEO, KisoJi

Development of Antibody Therapeutics Targeting the "NLRP Inflammasome Platform" for the Treatment of Chronic Neurodegenerative Diseases
Mehdi Arbabi Ghahroudi, PhD, Senior Research Officer, Immunobiology & Human Health Therapeutics, National Research Council Canada

A First-in-Class Anti-Activin E Antibody Induces Fat-Selective Weight-Loss in Diet-Induced Obese Mice
Martin B. Brenner, PhD, CEO & CSO, iBio Inc.

Oral Nanofitin Targeting IL-13Rα2 to Restore Anti-TNFα Efficacy in Crohn's Disease
Mathieu Cinier, PhD, Scientific Director & CSO, Affilogic

Exploring Monocyte-Derived Macrophage Phenotypes as a Therapeutic Target in Cardiac Fibrosis
Daniel M. Simão, PhD, Head, Bayer Pharma Satellite Lab, iBET Instituto de Biologia Experimental Tecnologica

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Antibodies Against Membrane Protein Targets

EMERGING MODALITIES FOR MEMBRANE PROTEIN TARGETS

Bispecific Ligands against Membrane Protein Targets
Benjamin J. Hackel, PhD, Professor, Chemical Engineering & Materials Science, University of Minnesota

Engineering Affinity Attenuated and Effector CD8 Biased T Cell Engagers
Christopher Lloyd, PhD, Director, Biologics Engineering, AstraZeneca

Redefining CCR8-Targeted Cancer Therapeutics: Effector-Independent Treg Modulation with ABT-863
Mauro Mileni, PhD, Founder & CEO, Abilita Bio

DISCOVERY PLATFORMS AND ANTIGEN STRATEGIES

KEYNOTE PRESENTATION: **Proximity-Driven Site-Specific Cyclisation of Phage-Displayed Peptides**
Gonçalo Bernardes, PhD, Professor, Chemistry, University of Cambridge

Native Antigen Platforms (NAPs) for Membrane Protein Ab Discovery
Rajesh Sundaresan, PhD, Scientific Leader, Protein Cell and Structural Sciences, GlaxoSmithKline

LUNCHEON PRESENTATION: Pan-Reactive MAbs for Membrane Proteins to Enable Pre-Clinical Development in Underutilized Mammalian Models
Ross Chambers, Vice President of Antibody Discovery, Integral Molecular

FUNCTIONAL ASSAYS AND STRUCTURAL STUDIES

Selection of Functional Modulators of CB2R and GLP-1R GPCRs and Characterisation of Functional Effects in T Cell and Insulinoma Cell Models
David O'Connell, PhD, Associate Professor, Biomolecular & Biomedical Science, University College Dublin

Structural Insights into CXCR4 Modulation and Oligomerisation
Kei Saotome, PhD, Senior Principal Scientist, Structural Biology, Regeneron

COMPUTATIONAL DESIGN AND OPTIMISATION

***De novo* Design of Epitope-Specific Antibodies against Soluble and Multipass Membrane Proteins with High Specificity, Developability, and Function**
Connor Blankenship, PhD, Senior Scientist, Nabla Bio Inc

Function-First Generative Design of GPCR Agonist Antibodies Targeting GLP1 Biology and Beyond
Marcin Paduch, PhD, Vice President, Head of Platform Biology, Metaphore Biotechnologies

Discovery, Design, and Optimisation of Antibody Modalities against a GPCR Target
Catharina Steentoft, Senior Scientist, Antibody Technology, Novo Nordisk

A Data-Driven Computational Pipeline for Screening HexElect Antibody Perturbations Using Cell Painting
Leon Van Gurp, PhD, Senior Data Scientist, Discovery Data Science, Genmab BV

BISPECIFICS

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Safety and Efficacy of Bispecific Antibodies, ADCs, and Combination Therapies

SAFETY AND EFFICACY OF BISPECIFICS AND ADCs

Safety of Bispecifics, ADCs, and Combination Therapies
Rakesh Dixit, PhD, DABT, President & Founder, Bionavigen Oncology, LLC and Regio Biosciences

Cancer Immunotherapy Using Bispecific γδ-T Cell Engagers
Hans van der Vliet, MD, PhD, CSO, Lava Therapeutics

From BsAbs to BsADCs: Achieving High Titer and Purity Across Complex Formats
Jiansheng Wu, Senior VP and Head of CRO Services, CRO Services, WuXi Biologics USA LLC

EMERGING ADC MODALITIES

Targeting Transferrin Receptor to Transport Antisense Oligonucleotides across the Blood-Brain Barrier
Padma Akkapeddi, PhD, Scientist, Antibody Discovery & Protein Engineering, Denali Therapeutics, Inc.

Advancing the Cancer-Targeting Radio-Antibody Drug Conjugate 177Lu-AKIR001 to Clinical Trials
Marika Nestor, PhD, Professor, Immunology, Genetics, and Pathology, Uppsala University

LUNCHEON PRESENTATION: How Specific are Antibody Drugs? Revealing insights from a new generation of specificity assays
Rachel Fong, Senior Director, MPA Commercial Operations, Integral Molecular

APPROACHES TO ADDRESS SAFETY AND EFFICACY OF T CELL ENGAGERS

Engineering Approaches to Address Safety and Efficacy Challenges of T Cell Engagers
Javier Chaparro-Riggers, PhD, Executive Director, BioMedicine Design, Pfizer Inc.

Machine Learning-Guided Design of Logic-Gated and Avidity-Driven T Cell Engagers for Solid Malignancies
Ryan Henrici, MD, PhD, Vice President, Discovery Medicine, BigHat Biosciences

Taking T Cell Engagement to the Next Level: Generating CD8-Selective T Cell Engagers with the TITAN Framework
Simon Dovedi, PhD, Executive Director, Head of Discovery Immune Cell Engagement (UK), ICC, Oncology R&D, AstraZeneca

12 NOVEMBER

Advancing Multispecific Antibodies and Combination Therapy to the Clinic

PLENARY DEEP DIVE

PANEL DISCUSSION: Future of Biologic Therapeutics: Will Half-Life Extended Peptides Replace Multispecific Antibodies?
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G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

ADDRESSING CLINICAL UNMET NEEDS WITH MULTISPECIFIC ANTIBODIES

Multispecific Antibodies to Treat Brain Disorders: Enhancing Blood-Brain Barrier Shuttling and Brain Retention
Maarten Dewilde, PhD, Assistant Professor, Therapeutic & Diagnostic Antibodies, Catholic University Leuven

Using Antibody Constructs to Target Antigen to Dendritic Cells for Optimal Immune Responses
Martijn Verdoes, PhD, Associate Professor, Chemical Tumor Immunology, Radboud University Nijmegen

Molecular Imaging to Support the Development of Multispecific Cancer Antibodies
Marjolijn N. Lub-de Hooge, PhD, Hospital Pharmacist, University Medical Center Groningen; Clinical Pharmacy and Pharmacology, Nuclear Medicine and Molecular Imaging, University of Groningen

Bridging Immune Repertoires with Mammalian IgG Display for Rapid Therapeutic Antibody Discovery
Peter Slavny, CTO, FairJourney Biologics

APPROACHES TO MASKING STRATEGIES AND TISSUE-SPECIFIC TARGETING

Advancing a Next Generation of T Cell Engagers to Tackle Solid Cancers
Aude Segaliny, PhD, Senior Director, Head, Research & Development, Amberstone Biosciences

A Novel ATP-Dependent FcγRs Affinity-Enhanced Anti-CTLA-4 Switch Antibody for Tumour-Selective Enhancement of Anti-Tumour Immunity
Hiroki Hayashi, Researcher, Discovery Pharmacology, Chugai Pharmaceutical Co Ltd

INNOVATING DESIGN AND USE OF T CELL ENGAGERS FOR THERAPY

KEYNOTE PRESENTATION: Innovating T Cell Engager Therapy
Mark Cobbold, PhD, V.P, Oncology Early Discovery, AstraZeneca Pharmaceuticals

Assessing Depth of Tissue B-Cell Depletion upon Different B-Cell Targeting Strategies
Carlo Tur, MD, University Hospital Erlangen, Medicine 3, Friedrich Alexander University Erlangen-Nuremberg

ADDRESSING CLINICAL UNMET NEEDS

Advancing T Cell Engager Therapies: Mechanistic Insights and Translational Perspectives on Glofitamab
Marina Bacac, PhD, Head, Cancer Immunotherapy, Roche Innovation Center, Zurich

HexaBody-OX40: A Novel Fcγr Crosslinking-Independent OX40-Targeting Antibody with Agonistic Activity *in vitro* and Antitumour Activity *in vivo*
Kristel Kemper, PhD, Scientist, Translational Research, Genmab BV

PANEL DISCUSSION: Understanding Non-Responders vs Responders for Multispecifics
PANEL MODERATORS:
Tariq Ghayur, PhD, Tariq Ghayur Consulting, LLC; Entrepreneur in Residence, FairJourney Biologics
G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
PANELISTS: Marina Bacac, PhD, Head, Cancer Immunotherapy, Roche Innovation Center, Zurich

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Engineering the Next Generation of Bispecific Antibodies

IMPROVING THE NEXT GENERATION OF BISPECIFIC ANTIBODIES

Integrated Machine Learning (ML) and Molecular Dynamics (MD) Model to Predict the Developability Profiles of Full-Length Multispecific Antibodies
Fernando Garces, PhD, Co-Founder and CEO, BioGlyph

Advances in Engineering TfR1 Brain Shuttles for Enhanced Safety and Efficacy in Targeted Biologic Delivery to the CNS—Revolutionising Treatment for Neurological Disorders
Pawel Stocki, PhD, Vice President Research, Ossianix

EFFECTOR CELL REDIRECTION

Recent Advances in Multispecific Antibodies in Oncology and Beyond
Nathan D. Trinklein, PhD, Co-Founder and President, Rondo Therapeutics

Modulation of BTN3A-Mediated Vγ9Vδ2 T Cell Agonism through Immune Checkpoint Engagement in a Bispecific Format
Carla Cano, PhD, Research Director, Lead Discovery, ImCheck Therapeutics SAS

Novel Anti-CD3 Heavy Chain-Only Antibodies for Use in T Cell–Engaging Therapeutics
Eric Krauland, PhD, President & CSO, Adimab LLC

IMMUNOCYTOKINES AND MULTIFUNCTIONAL ANTIBODIES

Multispecific Antibodies and Avidity Engineering
Paul Parren, PhD, CSO, Gyes; Professor, Molecular Immunology, Leiden University Medical Center

Tailor-Made Immunocytokines: Comparison of Antibody-Cytokine Fusion Strategies with VHH-Derived Surrogate Agonists
Harald Kolmar, PhD, Professor and Head, Institute for Organic Chemistry and Biochemistry, Technische Universität Darmstadt
Stefan Zielonka, PhD, Senior Director, Antibody Discovery and Protein Engineering, Merck Healthcare KGaA & Professor of Biomolecular Immunotherapy, Technische Universität Darmstadt

Immunocytokines with Target Cell-Restricted IL-15 Activity for Treatment of Lymphoid Malignancies and AML
Boris Klimovich, PhD, Senior Scientist, R&D, BiconY Therapeutics

Engineering Cytokine Selectivity: A PD-1-Directed IL-21 Proximity-Activated Cytokine
Patrizia Murer, PhD, Head, Protein Engineering, Anaveon AG

Next Generation of Multifunctional ANKETs for Cancer Therapy
Éric Vivier, DVM, PhD, CSO, Innate Pharma

IMMUNOTHERAPY

11 NOVEMBER
Advances in Immunoengineering

MODULATING THE TUMOUR MICROENVIRONMENT

A Molecular Platform of Reconstructive 3D-Cell Models of Tumour Microenvironments to Evaluate Antibody-Based Therapies
Catarina Brito, PhD, Principal Investigator, Head, Advanced Cell Models Lab Animal Cell Technology Unit, iBET

Antibody Therapies for Solid Tumours Informed by Studying Patient Immunity
Sophia N. Karagiannis, PhD, Professor, Translational Cancer Immunology & Immunotherapy, Kings College London

Interrogation of Hypoxia-Induced Effects on the Tumour Microenvironment Using Live Imaging in 3D Spheroid Models
Bushra Husain, PhD, Director of Assay, Profiling, and Pharmacology, AstraZeneca

ENGINEERING CAR T

Engineering Caffeine-Responsive Molecular Switches to Control CAR T Cell Function *in Vivo*
Michael TraxImayr, PhD, Group leader, CD Laboratory for Next-Generation CAR T Cells, University of Natural Resources & Life Sciences

MONITORING IMMUNE RESPONSES AND OVERCOMING RESISTANCE

Type 2 Immunity May Hold Key to Long-Term Cancer Remission
Li Tang, PhD, Associate Professor, Institute of Bioengineering (IBI) & Institute of Materials Science & Engineering (IMX), École Polytechnique Fédérale de Lausanne (EPFL)

HLA-Agnostic T Cell Receptor Recognition of Cancer
Andrew Sewell, PhD, Distinguished Research Professor & Wellcome Trust Senior Investigator, Division of Infection and Immunity, Cardiff University School of Medicine

NOVEL APPROACHES IN TUMOUR BIOLOGY

How Immunopeptidomics May Contribute to the Next Paradigm Shift in Immunology and Immunotherapy
Etienne Caron, PhD, Assistant Professor, Immunobiology, Yale School of Medicine

Microbiome-Derived Postbiotics Enforce Cellular Immunotherapy
Maik Luu, PhD, Assistant Professor, Cellular Immunotherapy, University Hospital Wuerzburg

Location, Location, Location: Spatial Analysis of the Tumour Immune Microenvironment
Yvonne Vercoulen, PhD, Associate Professor, Center for Molecular Medicine, University Medical Center Utrecht

12 NOVEMBER
Innovative CAR Therapy

PLENARY DEEP DIVE

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G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

INNOVATIVE CAR CELL THERAPIES

KEYNOTE PRESENTATION: **iNKT Cell-Based Immunotherapy Programme**
Anastasios Karadimitris, PhD, MRCP, FRCPath Langmuir Chair in Haematology and Consultant Haematologist Co-Director, Centre for Haematology Director, Hugh and Josseline Langmuir Centre for Myeloma Research Centre for Haematology, Department of Immunology and Inflammation, Imperial College London Department of Haematology, Hammersmith Hospital Imperial College Healthcare NHS Trust

Use of CAR-Treg Therapy to Induce Immunological Tolerance
Alberto Sanchez Fueyo, PhD, Professor, Hepatology, Inflammation Biology, Kings College London

PANEL DISCUSSION: Current Roadblocks to Developing Autologous CAR Therapies and Potential Solutions to Overcome Them
PANEL MODERATOR:
Galatea Paredes, PhD, Associate Director, Technology Project & Portfolio Management, T Charge Cell Therapies, Novartis Pharma AG
PANELISTS: Lantz Mackey, PhD, Director, CAR T Process Development, Galapagos BV
Margarida Rodrigues, Global Apheresis Technical Steward CGT, Novartis Pharma Stein AG

REMOVING LIMITATIONS TO CAR THERAPY

KEYNOTE PRESENTATION: **Delivering the Breakthrough with CAR T in Solid Tumours**
Michael Hudecek, MD, Professor, Cellular Immunotherapy of Malignant Diseases, University of Wuerzburg

Engineering T Regulatory Cells for Type 1 Diabetes and Celiac Disease
Yannick Muller, PhD, Assistant Professor, Allergology & Innovative Immunological Therapies, CHUV

Systematic Identification of Targets for T Cell Resistance to Host Immune Rejection
Laurie Menger, PhD, Researcher, Immunity & Cancer, Institut Curie

A Scalable Platform for Human Macrophage Production from iPSCs in Tumour Applications and Beyond
Nico Lachmann, PhD, Head, Klinik für Pädiatrische Pneumologie, Allergologie und Neonatologie, Medizinische Hochschule Hannover

mRNA-Based CAR T Cells for Glioblastoma
Valerie Dutoit, PhD, Assistant Professor, Immunotherapy, University of Geneva

13 NOVEMBER
Next-Generation Immunotherapies

CAR-T ENGINEERING

Blended Immunotherapies of CAR-T Plus CAR Macrophages to Treat Cancer and Infection
Katrin Mestermann, PhD, Scientific Project Manager, Fraunhofer Institute for Cell Therapy & Immunology IZI

Generation of a Triple Antigen Targeting CAR-T Cell Therapy for AML—Why Use VHHs?
Reyisa Bughda, PhD, Research Associate, CAR-T Cell Therapies, Autolus

IMMUNE CHECKPOINT INHIBITORS

Myeloid Checkpoint Blockade in Combination with IgA for Acute Lymphoblastic Leukemia
Thomas Valerius, MD, Professor, Stem Cell Transplantation & Immunotherapy, Christian Albrechts University of Kiel

Positive Allosteric Modulation of Immune Checkpoint Complexes with Nanobodies as a New Mode of Therapeutic Intervention in Immunotherapy
Jan Steyaert, PhD, Francqui Research Professor, Vrije Universiteit Brussel (VUB); Director, VIB-VUB Center for Structural Biology, VIB

IMMUNOCYTOKINES AND IMMUNOCONJUGATES

Talk Title to be Announced
Ivana Djuretic, PhD, Founder & CSO, Asher Biotherapeutics

Preclinical Pharmacology and Translational Aspects of a Cis-acting PD-1/IL-15 Mutein-based Immunocytokine SOT201
Anna Jirovec, PhD, Scientist, SOTIO Biotech a.s.

Talk Title to be Announced
Johannes vom Berg, PhD, CSO, InCephalo Therapeutics AG; Group Leader Immunotherapy, Lab Animal Science, University of Zurich

Next-Generation of PD1-based Immunoconjugates: Platform to Patients
Vijaya Pattabiraman, PhD, Co-Founder & CTO, Bright Peak Therapeutics

Click-Clevable ADCs and Radioimmunoconjugates
Marc S Robillard, PhD, CSO & Founder, Tagworks Pharmaceuticals

VIRAL IMMUNOTHERAPIES AND CANCER VACCINES

KEYNOTE PRESENTATION: **Reprogramming the Immune System by Multimodal Biological Immunotherapy for the Treatment of Solid Tumours**
Paul Peter Tak, MD, PhD, FMedSci, President & CEO, Candel Therapeutics

TROCEPT: A Novel Immuno-Virotherapy Platform for Tumour-Localized Expression of Potent Drugs via Intravenous Delivery
David Cole, Head of Research, Accession Therapeutics Inc, and Honoary Prof, Cardiff University

XCR1+ Dendritic Cell (DC) Role in Anti-Tumoural Response to Anti PD-L1 Antibody: Data from the Phase Ib/II Trial of DC Vaccination in Small Cell Lung Cancer Patients
Maria Gonzalez Cao, PhD, Chair, Melanoma Medical Oncology Unit, Oncology Institute Dr Rosell, Dexeus University Hospital

ANALYTICAL

11 NOVEMBER

Optimisation & Developability

MACHINE LEARNING AND AI APPROACHES

KEYNOTE PRESENTATION: AI-Driven Optimisation of Antibody Properties: Opportunities and Challenges
Andreas Evers, PhD, Associate Scientific Director, Antibody Discovery & Protein Engineering, Global Research & Development Discovery Technology, Merck Healthcare KGaA

ML Models for Nanobody Developability Trained on a Purpose-Built Multi-Readout Dataset
Lasse M Blaabjerg, PhD, Scientist, Genmab

A Lead Optimisation Analytic Screening Cascade for the Development of Trispecific Immune Engagers
Michael Dyson, PhD, Vice President, Antibody Discovery & Engineering, Ichnos Glenmark Innovation

DyAb: Sequence-Based Antibody Design and Property Prediction in a Low-Data Regime
Jen Hofmann, PhD, Senior ML Scientist, Prescient Design, Genentech

***In silico* Developability for Biologics Engineering: Challenges and Successes**
Isabelle Sermadiras, Associate Principal Scientist, AstraZeneca

Meet Aunty, the Queen of High-Throughput Protein Stability
Speaker to be Announced, Unchained Labs

DEVELOPABILITIY AND IMMUNOGENICITY ASSESSMENT IN BIOLOGICS DRUG DESIGN

Unlocking Developability: A Holistic Approach to Determine Structural-Functional Relationship for Drug Candidates
Paul Wassmann, PhD, Senior Principal Scientist, NIBR Biologics Center, Novartis

Computational Strategies for Mono- and Multi-Valent VHH/Nanobody Developability Assessment
Norbert Furtmann, PhD, Head, Computational and High-Throughput Protein Engineering, Large Molecule Research, Sanofi

Assessment and Incorporation of *in vitro* Correlates to Pharmacokinetic Outcomes in Antibody Developability Workflows
Tushar Jain, PhD, Principal Scientist, Computational Biology, Adimab LLC

Humanisation and Engineering of Therapeutic Antibodies—Integrating CDR Grafting, Framework Region Modification, and *de novo* Design to Enhance Clinical Success
Nathan Robertson, PhD, Scientific Director, Biologics Discovery & Development, LifeArc

Immunogenicity Risk Assessment for Biologics Drug Discovery & Development at AstraZeneca
Olga Obrezanova, PhD, Principal Scientist, Biologics Engineering, Oncology R&D, AstraZeneca

12 NOVEMBER

Analytical Characterisation of Biotherapeutics

PLENARY DEEP DIVE

PANEL DISCUSSION: Future of Biologic Therapeutics: Will Half-Life Extended Peptides Replace Multispecific Antibodies?
PANEL MODERATOR:
Daniel Chen, MD, PhD, Founder & CEO, Synthetic Design Lab
PANELISTS: Paul J. Carter, PhD, Genentech Fellow, Antibody Engineering, Genentech
G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

ADVANCES IN MASS SPECTROMETRY APPROACHES

Automated Sample Fractionation and Non-Reduced Multi-Enzyme Digestion Coupled with Nanoflow LC-MS/MS for Comprehensive Characterisation of Antibody-Drug Conjugates
Dan Bach Kristensen, PhD, Scientific Director, Symphogen

Miniaturised Target Protein Affinity Chromatography-Mass Spectrometry for Structure-Function Characterisation of Therapeutic Antibodies
Christian Graf, PhD, Fellow, Scientific Office, Novartis Technical R&D Biologics

Identification and Quantification of Mispaired Species of Asymmetric Monovalent Bispecific IgG1 Monoclonal Antibody Format Using Reverse-Phase Polyphenyl Chromatography-Coupled Electrospray Ionisation Mass Spectrometry
Ryte Poskute, Senior Scientist, Analytical Sciences, AstraZeneca

Advanced MS-Based Characterization of Host Cell Proteins in Biotherapeutic Purification Workflows
Somar Khalil, PhD, Principal Scientist, Analytical Research & Development, GSK

LUNCHEON PRESENTATION: Comprehensive Analysis of mAbs and Bioconjugates Using LC-MS and LC-MALS: From Early-Stage Determination to Quality Control and the Adoption of Advanced Analytics
Nick Pittman, Senior Marketing Manager, Waters

NOVEL APPROACHES FOR CHARACTERISING COMPLEX BIOLOGICS

New Approaches for Process Analytics—From mAbs to Multispecifics
Dirk Haubert, PhD, Associate Director, Biologics, Novartis Pharma AG, Switzerland

Biomarker-Driven Development and Characterisation of ELN27—A Novel Bispecific soloMER—For the Treatment of IBD
Julia Martinez Fraile, PhD, Senior Scientist, Elasmogen Ltd.

Assessment of Adeno-Associated Virus Purity by Capillary Electrophoresis-Based Western
Julyana Acevedo, PhD, Scientist II, Analytical Development, Sangamo Therapeutics, Inc.

Flow-Induced Dispersion Analysis Opens New Avenues for Peptide Screening
Marie Østergaard Pedersen, PhD, Principal Scientist, R&D, Novo Nordisk AS

STRUCTURE-FUNCTION ANALYSIS

The Complex Binding Mode of IgGs to the Fc Receptor Neonatal
Tilman Schlothauer, PhD, Senior Principal Scientist, Roche Diagnostics GmbH

Comparative Analysis of Ala-scan, HDX, and Cryo-EM for Epitope Determination
Anand Kumar, PhD., Senior Scientist, Bio Structure and Biophysics, Integrated Drug Discovery, Sanofi

13 NOVEMBER

Protein Stability & Formulation

NEW APPROACHES FOR STABILITY PREDICTION OF THERAPEUTIC MODALITIES

Statistical and AI Approaches to Predict Long Term Stability
David J. Brockwell, PhD, Professor, School of Molecular and Cellular Biology, University of Leeds

Prediction of Protein Biophysical Traits from Limited Data: A Case Study on Nanobody Thermostability through NanoMelt
Pietro Sormanni, PhD, Group Leader, Royal Society University Research Fellow, Chemistry of Health, Yusuf Hamied Department of Chemistry, University of Cambridge

Predicitve Stability for Biologics: Opportunities & Challenges
Andrea Junyan Ji, PhD, Senior Scientist, Pharmaceutical Development, Genentech, Inc.

***In vivo* Disulfide Bond Stability - A Critical Factor for PK and PD Profiles of Insulins**
Christian N. Cramer, Senior Principle Scientist, Discovery ADME, Novo Nordisk A/S

OVERCOMING ANALYTICAL CHALLENGES IN CHARACTERISING COMPLEX PRODUCTS

Challenges of Using Ultralow Concentrated Clinical Products in MABEL Studies
Karoline B. Bechtold-Peters, PhD, Director, Science & Technology, Drug Product Develoment Biologics, Novartis Pharma AG

Strategy of Forced Degradation Study and Practical Uses of the Samples for Characterisation of the Products
Shusuke Nambu, PhD, Chief Scientist, Analytical Development Department, Chugai Pharmaceutical Co. Ltd.

Droplet Microfluidic Platform for Characterisation of Precipitation and Phase Separation of Biologics
Nikolai Lorenzen, PhD, Scientific Director, Biophysics and Injectable Formulation, Novo Nordisk AS

FORMULATION DEVELOPMENT AND DELIVERY CHALLENGES

Formulation Development and Delivery Challenges for Novel Bispecifics
Jordan W Bye, PhD, Sr Formulation Development Scientist II, CMC, Immunocore Ltd

Analytical Methods for Developing Co-formulated Biopharmaceutical Dosage Forms: A Case Study
Ramesh Kumar Shanmugam, PhD, MBA, Associate Director, Biopharmaceutical Development, AstraZeneca

MITIGATING IMMUNOGENICITY RISKS

Mitigation of Immunogenicity during Drug Design
Sophie Tourdot, PhD, Immunogenicity Sciences Lead, BioMedicine Design, Pfizer

The Connection Between Liquid-Liquid Phase Separation, Protein Particle Formation and Immunogenicity
Vito Foderà, PhD, Associate Professor, Biophysics, University of Copenhagen

EXPRESSION

11 NOVEMBER

Leveraging Data Science for Enhanced Expression and Production

DECODING GENETIC RULES TO BOOST EXPRESSION

Sequence Discovery and Optimisation with Machine Learning
Diego A. Oyarzun, PhD, Reader in Computational Biology, Informatics Forum, University of Edinburgh

Decoding the Rules of Genetic Syntax to Improve Transgene Design
Jarrod Shilts, PhD, R&D Lead Scientist, ExpressionEdits Ltd.

INTEGRATING LEARNINGS OF PROTEIN FORM AND FUNCTION

The SGC and Target2035: Generating Proteins and Ligands to Enable Machine Learning
Nicola Burgess-Brown, Professor, Professorial Research Fellow, UCL, London; COO, Protein Sciences, Structural Genomics Consortium

Severe Deviation in Protein Fold Prediction by Advanced AI: Case Studies
Jacinto López Sagaseta, PhD, Head, Protein Crystallography and Structural Immunology Unit, Navarrabiomed

Closed Loop Autonomous Learning for Protein Engineering
James D. Love, PhD, Vice President, Automation & Process Optimization, Novo Nordisk AS

BUILDING AND LEVERAGING EXPRESSION PREDICTION MODELS

FEATURED PRESENTATION: **FAIR Data to Predict Recombinant Protein Expression**
Lovisa Holmberg Schiavone, PhD, Director, Protein Sciences, Structure & Biophysics, Discovery Sciences, R&D, AstraZeneca

Utilizing Learnings from High-Throughput Protein Expression Platforms to Enhance Delivery of Fit-for-Purpose Reagents
Helena Maja Firczuk, PhD, Group Leader, Protein and Cellular Sciences, GSK

12 NOVEMBER

Optimising Expression Platforms

PLENARY DEEP DIVE

PANEL DISCUSSION: Future of Biologic Therapeutics: Will Half-Life Extended Peptides Replace Multispecific Antibodies?
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G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

SELECTING, ENGINEERING, AND OPTIMISING HOSTS

FEATURED PRESENTATION: **Baculovirus Expression Vector System: Old Dog, New Tricks**
Imre Berger, PhD, Professor of Chemistry and Biochemistry, Max Planck Centre Director, University of Bristol

Reimagining CHO Cell Metabolism
Hooman Hefzi, PhD, Associate Professor, Advanced Mammalian Cell Engineering Group, Department of Biotechnology and Biomedicine, Technical University of Denmark

Unleashing the Power of Cell-Free: PURExfrex for Protein Engineering and Discovery
Takashi Ebihara, COO, GeneFrontier Corporation

GeneFrontier

ENHANCING EXPRESSION OF COMPLEX PROTEINS

Optimizing Vector Design for High-Quality Multispecific Antibody Production
Jose Escandell, PhD, Principal Scientist, Sanofi Satellite Lab & Animal Cell Technology Unit, iBET

Antibodies as Chaperones for Enhancing Protein Production
Opher Gileadi, PhD, Head, Protein Science, Structural Genomics Consortium (SGC), Karolinska Institute

Improvement on the Detection of High-Risk Host Cell Proteins with Optimized CHO SWATH-MS Spectral Library
Sochi Ogbonna, PhD, Postdoctoral Researcher, Biochemical Engineering Laboratory, Department of Biotechnology, Osaka University

Producing Human Membrane Proteins in High-Throughput and Large-Scale
David B. Sauer, PhD, Principal Investigator, Membrane Protein Structural & Chemical Biology, University of Oxford

Biopharma Meets Glycosylation: Strategies for Targeted Molecule Sweetness in Biopharmaceutical Development
Speaker to be Announced, FyoniBio

Fyoni Bio

ENHANCING EXPRESSION PROTEIN COMPLEXES

Chaperone Co-Expression to Improve Production of Recombinant Proteins and Protein Complexes in Eukaryotic Cells
Dominic Esposito, PhD, Director, Protein Sciences, Frederick National Laboratory

Preparation of Human Multi-Protein Assemblies for Structural Investigations: Recombinant Expression or Purification from Endogenous Sources?
Arnaud Poterszman, PhD, Research Director, Integrated Structural Biology, IGBMC

Insect Cell-Based Virus-Like-Particle Technologies for Antibody Generation
Maren Schubert, PhD, Research Group Leader, Department of Biotechnology, Technical University of Braunschweig

Virus-Like-Particle Production and Characterisation for Use in Biologics Discovery Campaigns
Amberley Stephens, PhD, Senior Protein Scientist, Biologics Engineering, AstraZeneca

13 NOVEMBER

Developing BioPharmaceutical Workflows

STREAMLINING PRODUCTION WORKFLOWS

FEATURED PRESENTATION: **Streamlining Gene Expression Workflows: The Use of Baculovirus-Mediated Gene Expression in Mammalian Cells for Recombinant Protein Production**
Kim Remans, PhD, Head, Protein Expression & Purification Core Facility, EMBL Heidelberg

Artificial Expression System for High-performance Production of Biomedicines: From Concepts to Reality
Philippe H Jais, MD, PhD, President & CSO, Eukarys SAS

Hinge-Engineering the Antibody with Expression First in Mind
Zahra Jawad, PhD, CEO & Founder, Creasallis

Producing Challenging Protein Targets for Drug Discovery
Hazel Mak, PhD, Senior Research Scientist, Protein Science & Structural Biology & Biophysics, AstraZeneca

TRANSFORMING PURIFICATION WORKFLOWS

Enabling Mode of Action Studies of TEAD1 Ligands through Hydrogen Deuterium Exchange Mass-Spectrometry and Tailored Protein Purification Workflows
Alessio Bortoluzzi, PhD, Scientist, Merck Healthcare Satellite Lab, iBET Instituto de Biologia Experimental Tecnologica

Elevating Success, Throughput, and Efficiency: Advancing Protein Purification with Platform Technologies and Automation
Sandeep K. Talapatra, PhD, Leader Protein Science, Protein Cell & Structural Sciences, GSK

AUTOMATING WORKFLOWS

Accelerating Recombinant Protein Labelling Workflows using *in vivo* Biotinylation in Different Host Platforms
Christopher Cooper, PhD, Director and Head of Protein Sciences, CHARM Therapeutics

An End-to-End Automated Workflow for Characterization of Next Generation Biotherapeutics
Miroslav Nikolov, PhD, Senior Scientist & Laboratory Head,Roche Pharma Research and Early Development pRED, Roche

From Expression to Insight: Automating Protein Workflows for Modeling
Sarah Westarp, Group Lead, Applied Biocatalysis, Bioprocess Engineering, Technische University Berlin

MACHINE LEARNING

11 NOVEMBER

Training SEMINARS
By Cambridge Healthtech Institute

Introduction to Machine Learning for Biologics Design

This course offers an introduction to concepts, strategies, and machine learning methods used for biologics design. It includes presentations and demonstrations of the methods used in the field, covering techniques such as triaging sequences, modulating affinity, and designing antibody libraries, along with increasing manufacturability. The course is directed at scientists new to the field and protein engineers wanting an introduction to how machine learning can aid in guiding biologics design.

Seminar Highlights:

- Basics of machine learning and where does it fit into drug discovery
- Modern homology modeling and structure prediction
- Predicting antibody affinity and specificity modulation
- Generative design in biologics: Library design and language models
- Machine learning applications of T cell and B cell immunogenicity
- Methods and application of ML for chemical, folding, solution stabilities

INSTRUCTOR:
Francis Gaudreault, PhD, Associate Research Officer, Human Health Therapeutics, National Research Council Canada

12 NOVEMBER

Machine Learning for Protein Engineering Part 1

EXPANDING AND OPTIMISING THE ML MODEL AND ALGORITHM TOOLKIT

To What Extent Can Large-Language Models Represent 3D Information?
Isaac Ellmen, Researcher, Oxford Protein Informatics Group, University of Oxford

Lab-in-the-Loop Application for Clinically Relevant Antigen Targets
Nathan Frey, PhD, Senior Machine Learning Scientist, Prescient Design, a Genentech Company

Evaluation of Digital Protein Design Tools in an Industry Setting
Karin Hrovatin, Bioinformatic Scientist, Merck KGaA
Stephanie Linker, PhD, Senior Computational Biochemist, Merck Group

Maximize AI Potential in Biologics Discovery and Development: From Model Training to Consumption
Nicola Bonzanni, CEO, ENPICOM

KEYNOTE PRESENTATION: EXPLORING **Log-Likelihood Scores for Ranking Antibody Sequence Designs**
Talip Ucar, Senior Director, AI Research, AstraZeneca

ACTIVE LEARNING AND TRAINING DATA GENERATION

Designing and Analysis of a Large Library-on-Library Dataset to Reveal Insights on Protein Stability across Different VHH:Antigen Complexes
Jurrian de Kanter, PhD, Data Scientist, Genmab

Active Learning for Antibody Pairwise Epitope Binning
Akila I Katuwawala, PhD, Scientist II, Computational Biology, Adimab LLC

PLENARY DEEP DIVE

PANEL DISCUSSION: Future of Biologic Therapeutics: Will Half-Life Extended Peptides Replace Multispecific Antibodies?
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G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

NEXT-GENERATION APPLICATIONS FOR AI AND MACHINE LEARNING

Towards a Unified Approach for Biomolecular Interaction Modeling: Boltz-1 and the Future of Biomolecular Foundation Models
Gabriele Corso, Researcher, MIT Computer Science & Artificial Intelligence Laboratory
Jeremy Wohlwend, Researcher, MIT Computer Science & Artificial Intelligence Laboratory

AI-Guided Discovery and Engineering of a Dual-Specific scFv
Ryan Emerson, PhD, Vice President, Data Science, A Alpha Bio Inc.

OpenFold 3 Capabilities and Use Cases
Christina Floristean, Researcher, AlQuraishi Laboratory, Colombia University

New Specificities and Ultra-High Affinities: Can Sequence-Trained LLMs Predict Labels They Have Never Seen?
Tzvika Hartman, PhD, Senior Vice President, Computational, Biolojic Design Ltd.

AI-Powered Immune Repertoire Mining and Multi-objective Antibody Engineering
Mary Ann Pohl, Dir Alliance Mgmt, Alliance Mgmt, Ailux Biologics by XtalPi

13 NOVEMBER

Machine Learning for Protein Engineering Part 2

OPTIMISATION AND DEVELOPABILITY

Nonspecificity in the Clinical Landscape
Paolo Marcatili, PhD, Head, Antibody Design, Novo Nordisk

Antibody DomainBed: Out-of-Distribution Generalization in Therapeutic Protein Design
Natasa Tagasovska, PhD, Principal ML Scientist and Scientific Manager, Prescient Design, Genentech, Roche

Engineering Antibodies with Programmable Fc Functional Profiles
Edward B. Irvine, PhD, Postdoctoral Scientist, Sai Reddy Group, Laboratory for Systems and Synthetic Immunology, ETH Zürich

A Machine Learning Approach to Improving Antibody Developability
Paul MacDonald, PhD, Data Scientist, Protein Design Informatics, GSK

Talk Title to be Announced
Pietro Sormanni, PhD, Group Leader, Royal Society University Research Fellow, Chemistry of Health, Yusuf Hamied Department of Chemistry, University of Cambridge

BENCHMARKING AND DATA CURATION

KEYNOTE PRESENTATION
Charlotte M. Deane, PhD, Professor, Structural Bioinformatics, Statistics, University of Oxford; Executive Chair, Engineering and Physical Sciences Research Council (EPSRC)

Scaling Foundation Models for Protein Generation
Ali Madani, PhD, Founder and CEO, Profluent Bio

NEW METHODS TO UNCOVER NEW BIOLOGY AND DRUG TARGETS: SHIFTING FROM DISCOVERY TO DESIGN

Unraveling Structure-Function Relationships of Entire Protein Families Using Alphafold
Luigi Vitagliano, PhD, National Research Council Italy

Artificial Intelligence in the Creation of Precision Therapeutic Enzymes that Target Pathogenic Immunoglobulins
Nathan Higginson-Scott, PhD, CTO, Seismic Therapeutic

Structure-Guided Antibody and Immunogen Design
Monica L. Fernandez-Quintero, PhD, Staff Scientist, General Inorganic & Theoretical Chemistry, Scripps Research Institute

ONCOLOGY

11 NOVEMBER

Antibody-Based Therapies

T CELL ENGAGERS AND IMMUNE CELL MODULATORS

Development of a First-in-Class, ADCC-Enhanced Bispecific NK Engager that Simultaneously Blocks EGFR Receptor-Ligand Interactions on Tumor Cells and Engages a Novel NK Activating Receptor
Hemanta Baruah, PhD, Founder & CEO, Aakha Biologics

ISB 2001, a First-in-Class Trispecific BCMA and CD38 T Cell Engager Designed to Overcome Mechanisms of Escape from Multiple Myeloma Treatments
Mario Perro, PhD, Head of Biologics Research, Ichnos Glenmark Innovation

High-Specificity pMHC scFv Antibodies: From Binder Discovery to Next-Generation T Cell Engagers
Stefan Warmuth, PhD, CTO, Technology & CMC, Numab Therapeutics AG

NEXT-GENERATION BISPECIFIC ANTIBODIES FOR IMMUNO-ONCOLOGY

Tumor-Targeted Costimulation via CD28 Bispecific Antibodies—Turning Immunotherapy "Cold" Tumor "Hot"
Dimitris Skokos, PhD, Vice President, Cancer Immunology, Regeneron Pharmaceuticals

Advancing Cancer Immunotherapy: Next-Phase Developments in Bispecific HER3 Antibodies
Giuseppe Roscilli, PhD, CTO & Director, Drug Evaluation & Monoclonal Antibody, Takis Srl

INCA33890: A Bispecific Antibody Targeting TGFbR2 and PD1
Horacio G. Nastri, PhD, Vice President, Protein Science and Technology, Incyte Corporation

RADIOPHARMACEUTICAL THERAPIES

Peptide Nucleic Acid-Mediated Pre-Targeting for Radionuclide Therapy
Amelie Eriksson Karlstroem, PhD, Professor & Head, Protein Science, School of Engineering Sciences in Chemistry, Biotechnology & Health, KTH Royal Institute of Technology

Engineered Antibodies for Pre-Targeted Radiotherapy
Alexander Haas, PhD, Head, Biologics Core Technologies, Roche Diagnostics GmbH

Harnessing the Power of DARPins as Radiopharmaceuticals
Francesca Malvezzi, PhD, Expert Scientist, Lead Generation, Molecular Partners AG

ANTIBODIES AND PROTEINS FOR THERAPEUTICS BEYOND CANCER

Engineering and Development of an IgE Degrading Protease for Treatment of IgE-Mediated Allergic and Atopic Diseases
Jyothsna Visweswaraiah, PhD, Director, Biotherapeutics, Drug Creation, Seismic Therapeutic

A Novel Long-Acting Relaxin-2 Fusion, AZD3427, Improves Cardiac Performance in Non-Human Primates with Cardiac Dysfunction
Monika Papworth, PhD, Principal Scientist, Biologics Engineering, AstraZeneca

12 NOVEMBER

Engineering Antibody-Drug Conjugates

PLENARY DEEP DIVE

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G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company
Janine Schuurman, PhD, Biotech Consultant, Lust for Life Science B.V.

NEXT-GENERATION ADC PAYLOADS AND MOAs

Dual-Site-Specific Antibody Conjugation for Targeted Delivery of Different Payloads
Gonçalo Bernardes, PhD, Professor, Chemistry, University of Cambridge

Discovery and Characterisation of AZD5335, a FRα-Targeted TOP1i-Loaded ADC
Roger B Dodd, PhD, Dir, Biologics Engineering, AstraZeneca

Antibody-Oligonucleotide Conjugates: Design, Developability, and Activity
Maximilian Hartl, PhD, Scientist & Lab Manager, Pharma Research & Early Development, Roche Diagnostics GmbH

ATACs: A New Payload Provides New Options in Cancer Therapy
Aniko Palfi, Dir Biochemistry & Cell Biology, Biochemistry & Cell Biology, Heidelberg Pharma Research GmbH

A Novel Kinase Degrader Antibody Conjugate for the Treatment of mCRPC
Joost Uitdehaag, PhD, Head of Biology, Crossfire Oncology

ALTERNATIVE FORMATS AND NEW ADVANCES IN ADC ENGINEERING

Combining Recombinant Antibody Fragment Engineering and Bespoke Linker-Payload Design to Produce Next-Generation ADCs
Mahendra P. Deonarain, PhD, Chief Executive & Science Officer, Antikor Biopharma Ltd.

Shedding Light on ADCs: A Fluorogenic Platform for Real-Time Imaging of Payload Release
Ferran Nadal-Bufi, PhD, Postdoctoral Research Fellow, Centre for Inflammatory Research, The University of Edinburgh

PRECLINICAL UPDATES

VBC108: A First-in-Class CDH17/CLDN18.2 Targeted Bispecific Antibody Drug Conjugate (ADC) to Overcome Tumour Heterogeneity of Gastrointestinal Cancers
Jing Li, PhD, CEO, R&D, VelaVigo

SOT109: A CDH17 Targeting ADC With Best-in-Class Potential Activity for the Treatment of CRC and other GI Cancers
Martin Steegmaier, PhD, CSO, SOTIO Biotech a.s.

13 NOVEMBER

Next-Generation Immunotherapies

CAR-T ENGINEERING

Blended Immunotherapies of CAR-T Plus CAR Macrophages to Treat Cancer and Infection
Katrin Mestermann, PhD, Scientific Project Manager, Fraunhofer Institute for Cell Therapy & Immunology IZI

Generation of a Triple Antigen Targeting CAR-T Cell Therapy for AML—Why Use VHHs?
Reyisa Bughda, PhD, Research Associate, CAR-T Cell Therapies, Autolus

IMMUNE CHECKPOINT INHIBITORS

Myeloid Checkpoint Blockade in Combination with IgA for Acute Lymphoblastic Leukemia
Thomas Valerius, MD, Professor, Stem Cell Transplantation & Immunotherapy, Christian Albrechts University of Kiel

Positive Allosteric Modulation of Immune Checkpoint Complexes with Nanobodies as a New Mode of Therapeutic Intervention in Immunotherapy
Jan Steyaert, PhD, Francqui Research Professor, Vrije Universiteit Brussel (VUB); Director, VIB-VUB Center for Structural Biology, VIB

IMMUNOCYTOKINES AND IMMUNOCONJUGATES

Talk Title to be Announced
Ivana Djuretic, PhD, Founder & CSO, Asher Biotherapeutics

Preclinical Pharmacology and Translational Aspects of a Cis-acting PD-1/IL-15 Mutein-based Immunocytokine SOT201
Anna Jirovec, PhD, Scientist, SOTIO Biotech a.s.

Talk Title to be Announced
Johannes vom Berg, PhD, CSO, InCephalo Therapeutics AG; Group Leader Immunotherapy, Lab Animal Science, University of Zurich

Next-Generation of PD1-based Immunoconjugates: Platform to Patients
Vijaya Pattabiraman, PhD, Co-Founder & CTO, Bright Peak Therapeutics

Click-Clevable ADCs and Radioimmunoconjugates
Marc S Robillard, PhD, CSO & Founder, Tagworks Pharmaceuticals

VIRAL IMMUNOTHERAPIES AND CANCER VACCINES

KEYNOTE PRESENTATION: **Reprogramming the Immune System by Multimodal Biological Immunotherapy for the Treatment of Solid Tumours**
Paul Peter Tak, MD, PhD, FMedSci, President & CEO, Candel Therapeutics

TROCEPT: A Novel Immuno-Virotherapy Platform for Tumour-Localized Expression of Potent Drugs via Intravenous Delivery
David Cole, Head of Research, Accession Therapeutics Inc, and Honoary Prof, Cardiff University

XCR1+ Dendritic Cell (DC) Role in Anti-Tumoural Response to Anti PD-L1 Antibody: Data from the Phase Ib/II Trial of DC Vaccination in Small Cell Lung Cancer Patients
Maria Gonzalez Cao, PhD, Chair, Melanoma Medical Oncology Unit, Oncology Institute Dr Rosell, Dexeus University Hospital

SHORT COURSES* AND TRAINING SEMINARS

All short courses will take place in-person only from 14:00 – 17:00 on 10 November. Our short courses are designed to be instructional, interactive, and provide in-depth information on a specific topic. They allow for one-on-one interaction between the participants and instructors to facilitate the explanation of the more technical aspects that would otherwise not be covered during our main presentations.

Novel Payloads and Conjugation Strategies – Building on Lessons Learned to Inform Next-Generation ADC Design
Lenka Sadilkova, PhD, Head, Preclinical R&D, Mablink

Best Practices and Advanced Applications for Label-Free Interaction Analysis in Therapeutic Antibody Discovery
Yasmina Abdiche, PhD, Senior Vice President, Exploratory Research, OmniAb Inc.

***In silico* and Machine Learning Tools for Antibody Design and Developability Predictions**
Rahmad Akbar, PhD, Senior Data Scientist, Antibody Design, Novo Nordisk
Vinodh B. Kurella, PhD, Biotherapeutic Computational Modeler, Takeda Pharmaceuticals, Inc.
Ben Williams, PhD, Research Software Engineer, Department of Statistics, University of Oxford

Developability of Bispecific Antibodies
Nimish Gera, PhD, Vice President, Biologics, Mythic Therapeutics

Best Practices for Targeting GCPRs, Ion Channels, and Transporters with Monoclonal Antibodies
Ross Chambers, PhD, Vice President, Antibody Discovery, Integral Molecular, Inc.

** Separate registration required for Short Courses*

Training SEMINARS By Cambridge Healthtech Institute

Cambridge Healthtech Institute Training Seminars offer real-life case studies, problems encountered, and solutions applied, along with extensive coverage of the academic theory and background. Each training seminar offers a mix of formal lecture and interactive discussions and activities to maximize the learning experience. These training seminars are led by experienced instructors who will focus on content applicable to your current research and provide important guidance for those new to their fields.

MONDAY, 10 NOVEMBER 2025

Introduction to Multispecific Antibodies: History, Engineering, and Application
G. Jonah Rainey, PhD, Associate Vice President, Eli Lilly and Company

AI-Driven Design of Biologics: A Hands-on Guide to Using State-of-the-Art ML Protein Models
David P. Nannemann, PhD, Vice President, Rosetta Commons Foundation

TUESDAY, 11 NOVEMBER 2025

Introduction to Immunogenicity
Chloé Ackaert, PhD, Senior Scientist, Immunogenicity, IQVIA Laboratories
Sofie Pattijn, Founder & CTO, IQVIA Laboratories

Introduction to Analytical Characterisation and Quality Control for Biological Products
Kevin Zen, PhD, Principal Consultant, Biologics CMC Consulting

Introduction to Machine Learning for Biologics Design
Francis Gaudreault, PhD, Associate Research Officer, Human Health Therapeutics, National Research Council Canada

Hotel & Travel Information

Conference Venue:
Lisbon Congress Center
Pracas Das Industrias
Lisbon, 1300-307, Portugal

Host Hotels:
Pestana Palace Lisboa
Rua Jau, 54
1300-314, Lisbon, Portugal
Tel: +351 213 615 600

Please visit the pegsummiteurope.com/travel for reserving hotel accommodations and for additional Information.

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PODIUM PRESENTATIONS - AVAILABLE WITHIN MAIN AGENDA!

Showcase your solutions to a guaranteed, targeted audience through a 15- or 30-minute presentation during a specific conference program. Package includes exhibit space, on-site branding, and access to cooperative marketing efforts by CHI. Presentations do sell out early.

ONE-ON-ONE MEETINGS

Work with us to identify your target prospects and we will schedule meetings for you. Think of us as your inside sales team with all your hottest leads in close reach. Opportunities sold on a very limited basis.

INVITATION-ONLY DINNER / HOSPITALITY SUITE

Sponsors will select their top prospects from the conference preregistration list for an evening of networking at the hotel or at a choice local venue. CHI will extend invitations, conduct follow-up and confirm attendees. The evening will be customized to meet with your specific objectives.

EXHIBIT BOOTH SPACE (sold as part of sponsorship packages only)

Exhibitors will enjoy facilitated networking opportunities with over 1,500+ qualified delegates, making it the perfect opportunity to launch a new product, collect feedback, and generate new leads from around the world.

ADDITIONAL SPONSORSHIP & BRANDING OPPORTUNITIES INCLUDE:

- Hotel Room Keys
- Track Receptions
- Game Card
- Footprint Trails
- Conference Tote Bags
- Literature Distribution (Tote Bag Insert or Chair Drop)
- Padfolios
- Conference Material Advertisement

HOW SPONSORING PROMOTES & BENEFITS YOUR BUSINESS:

- Generate qualified leads consisting of actual decision-makers from within your focus area
- Network with over 1,500+ senior-level professionals and generate leads during dedicated exhibit hall hours, lunches, etc.
- Promote your company's participation in the conference materials
- Increase your brand awareness and drive organic traffic to your website through our various marketing campaigns
- Increase Dedicated Networking Time in the Exhibit Hall

FOR ADDITIONAL INFORMATION REGARDING SPONSORSHIP AVAILABILITY, PLEASE CONTACT:

COMPANIES A-K
Jason Gerardi
Sr. Manager, Business Development
781-972-5452 | jgerardi@healthtech.com

COMPANIES L-Z
Ashley Parsons
Manager, Business Development
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