



Industry-Academia Collaborations in
Bioinformatics

General information
(distribute freely)
July 2025

GeneVia
Technologies

Prof. Matti Nykter, Founder, Chief Scientific Officer

Prof. Nykter also leads the Computational Biology Group at Tampere University, Finland, focusing on computational cancer research (tumor evolution, treatment resistance, circulating tumor DNA)



Dr. Matti Nykter

Professor, Tampere University
CSO, Genevia Technologies

• Selected publications

- Sipola, J. et al. (2025). **Plasma Cell-Free DNA Chromatin Immunoprecipitation Profiling Depicts Phenotypic and Clinical Heterogeneity in Advanced Prostate Cancer.** *Cancer research*, 85(4), 791–807. <https://doi.org/10.1158/0008-5472.CAN-24-2052>
- Kiviaho, A. et al. (2024). **Single cell and spatial transcriptomics highlight the interaction of club-like cells with immunosuppressive myeloid cells in prostate cancer.** *Nature communications*, 15(1), 9949. <https://doi.org/10.1038/s41467-024-54364-1>
- Nurminen, A. et al. (2023). **Cancer origin tracing and timing in two high-risk prostate cancers using multisample whole genome analysis: prospects for personalized medicine.** *Genome medicine*, 15(1), 82. <https://doi.org/10.1186/s13073-023-01242-y>
- Herberts, C. et al. (2022). **Deep whole-genome ctDNA chronology of treatment-resistant prostate cancer.** *Nature*, 608(7921), 199–208. <https://doi.org/10.1038/s41586-022-04975-9>
- Vandekerkhove, G. et al. (2021). **Plasma ctDNA is a tumor tissue surrogate and enables clinical-genomic stratification of metastatic bladder cancer.** *Nature communications*, 12(1), 184. <https://doi.org/10.1038/s41467-020-20493-6>
- Dufva, O. et al. (2020). **Immunogenomic Landscape of Hematological Malignancies.** *Cancer cell*, 38(3), 380–399.e13. <https://doi.org/10.1016/j.ccell.2020.06.002>
- Woodcock, D. J. et al. (2020). **Prostate cancer evolution from multilineage primary to single lineage metastases with implications for liquid biopsy.** *Nature communications*, 11(1), 5070. <https://doi.org/10.1038/s41467-020-18843-5>
- Latonen, L. et al. (2018). **Integrative proteomics in prostate cancer uncovers robustness against genomic and transcriptomic aberrations during disease progression.** *Nature communications*, 9(1), 1176. <https://doi.org/10.1038/s41467-018-03573-6>
- Annala, M. et al. (2018). **Circulating Tumor DNA Genomics Correlate with Resistance to Abiraterone and Enzalutamide in Prostate Cancer.** *Cancer discovery*, 8(4), 444–457. <https://doi.org/10.1158/2159-8290.CD-17-0937>
- Gao, Q. et al. (2018). **Driver Fusions and Their Implications in the Development and Treatment of Human Cancers.** *Cell reports*, 23(1), 227–238.e3. <https://doi.org/10.1016/j.celrep.2018.03.050>
- Wyatt, A. W. et al. (2017). **Concordance of Circulating Tumor DNA and Matched Metastatic Tissue Biopsy in Prostate Cancer.** *Journal of the National Cancer Institute*, 109(12), djx118. <https://doi.org/10.1093/jnci/djx118>
- Urbanucci, A., et al. (2017). **Androgen Receptor Deregulation Drives Bromodomain-Mediated Chromatin Alterations in Prostate Cancer.** *Cell reports*, 19(10), 2045–2059. <https://doi.org/10.1016/j.celrep.2017.05.049>
- Wyatt, A. W., et al. (2016). **Genomic Alterations in Cell-Free DNA and Enzalutamide Resistance in Castration-Resistant Prostate Cancer.** *JAMA oncology*, 2(12), 1598–1606. <https://doi.org/10.1001/jamaoncol.2016.0494>
- Cancer Genome Atlas Research Network (2015). **The Molecular Taxonomy of Primary Prostate Cancer.** *Cell*, 163(4), 1011–1025. <https://doi.org/10.1016/j.ccell.2015.10.025>
- Gundem, G. et al. (2015). **The evolutionary history of lethal metastatic prostate cancer.** *Nature*, 520(7547), 353–357. <https://doi.org/10.1038/nature14347>

Genevia Technologies

What we do best:

1. Analysis of NGS, mass spectrometry and other omics data
2. Data integration (multi-omics analysis, machine learning)
3. Supporting academic biomedical researchers from idea stage to publication



Genevia Technologies

Relevant experience:

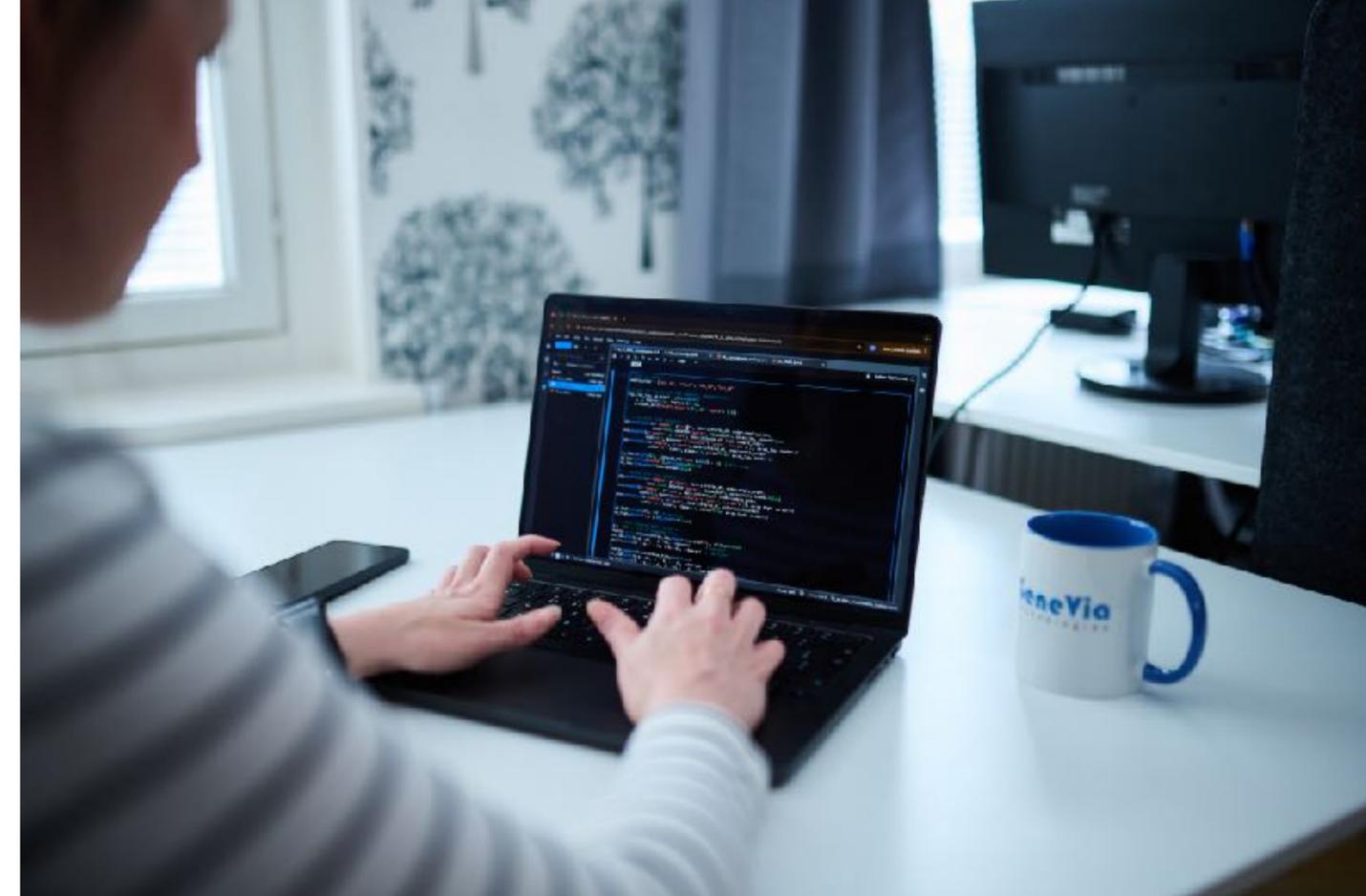
- 14 years of service
- 18 PhD computational biologists
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- Hundreds of publications (company H-index: 81)
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Your bioinformatics core

You choose the content

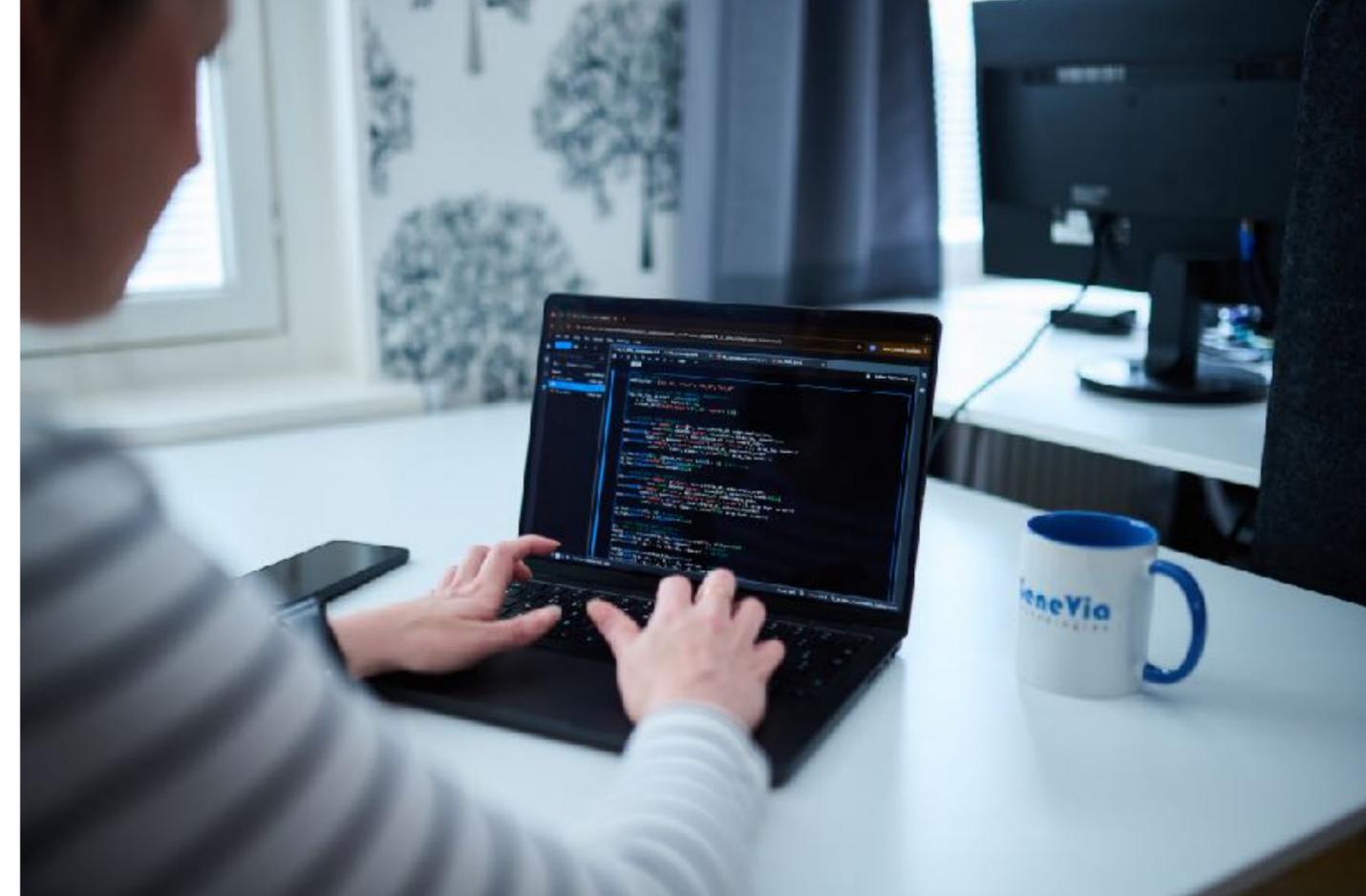
- Support my grant application
- Advise on experiment design / data generation
- Teach, consult & co-supervise my student / postdoc
- Analyse *any* type of omics data:
 - Conduct primary analysis with gold standard protocols
 - Integrate multiple levels of data
 - Interpret results and innovate downstream analyses
 - Draft visually stunning figures and crisp text
- Identify, re-analyse or integrate public data sets
- Develop re-usable bioinformatics pipelines
- Conceptualise & co-author manuscripts with my researchers



Your bioinformatics core

You choose how you want to work

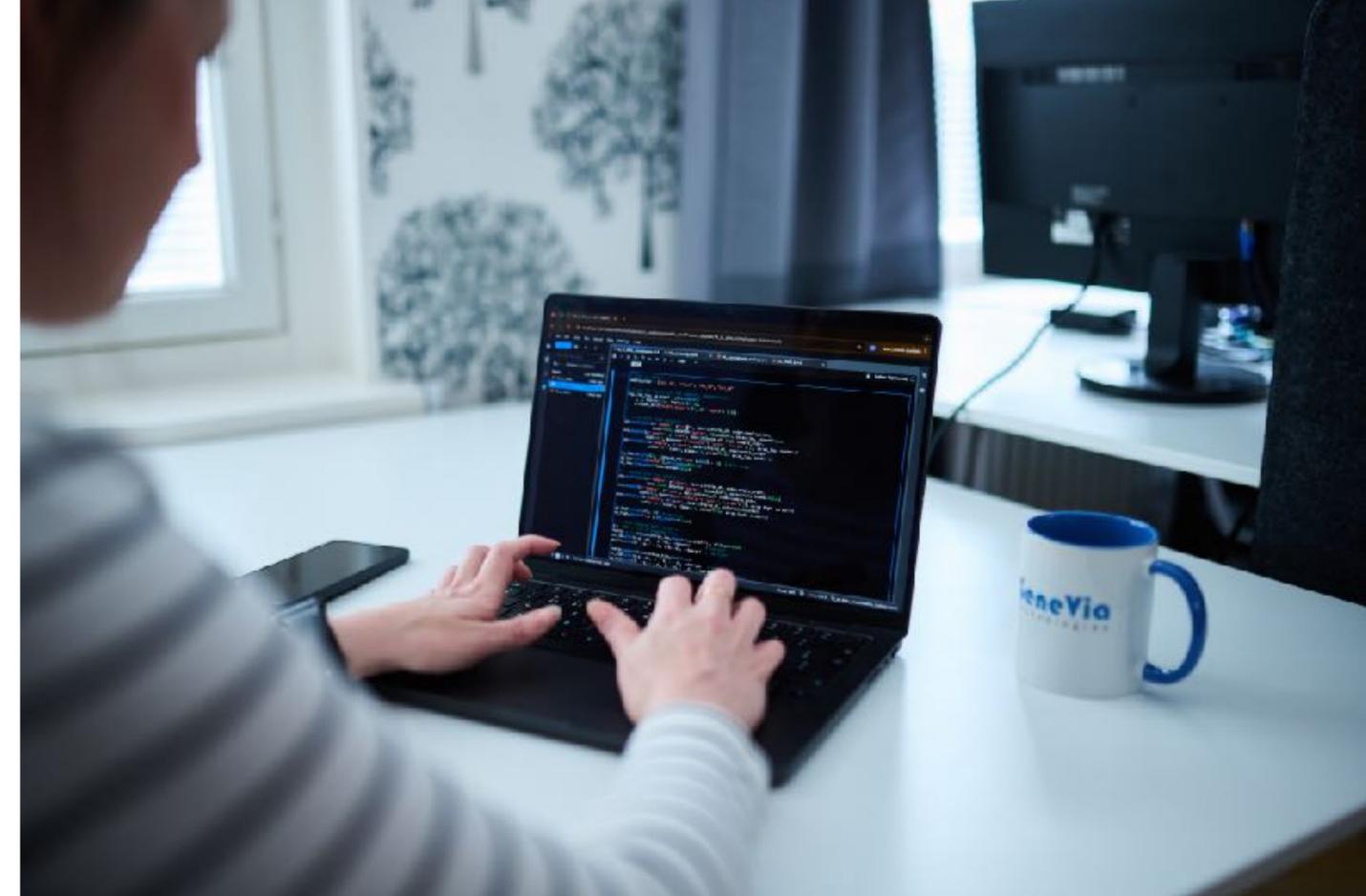
- Start when you want, pause when you want, wrap up when you want
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You choose your deliverables

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- Ideas, interpretation & insight
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We make it happen!

Have our international team of experts support you at the scale your need:

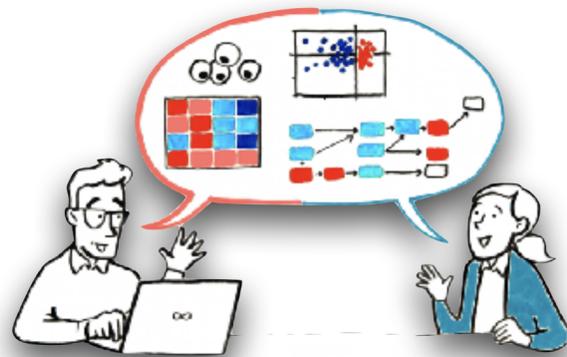
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Modes of collaboration

Fee-per-service

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Joint grant funding

We can join your grant application as a co-applicant or subcontractor



Genevia Grants

Apply for our bioinformatics mini grants for academic researchers



Seminars & Workshops

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Case: Amazentis

“We really like the flexibility of Genevia’s approach. They go beyond being a simple service provider to give a scientific input that is comparable to a top academic collaboration.”

Dr. Davide D’Amico
R&D Group Leader, Amazentis

Full interview: geneviatechnologies.com/references/cases/tailored-bioinformatics-support-for-a-clinical-trial/

- The client

- A Swiss biotech conducting preclinical and clinical research on a postbiotic, Urolithin A

- Omics analysis for clinical trials

- Transcriptomic, proteomic & metabolomic data
- Aims: mechanism of action, "molecular endpoints"

- Papers

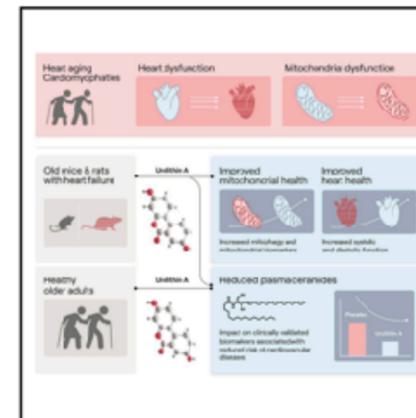
- **iScience 2025** <https://doi.org/10.1016/j.isci.2025.111814>
- **medRxiv (preprint) 2023** <https://doi.org/10.1101/2023.06.16.23291378>
- **Cell Rep Med 2022** <https://doi.org/10.1016/j.xcrm.2022.100633>

iScience

Article

Urolithin A provides cardioprotection and mitochondrial quality enhancement preclinically and improves human cardiovascular health biomarkers

Graphical abstract:



Authors

Sophia Liu, Julie Faltg, Charlotte Tissot, ..., Chris Rinsch, David J. Marcinek, Davide D’Amico

Correspondence

dmarc@uw.edu (D.J.M.), ddamico@amazentis.com (D.D.)

In brief

Biological sciences; Cardiovascular medicine; Health sciences; Internal medicine; Medical specialty; Medicine; Natural sciences; Physiology

Highlights

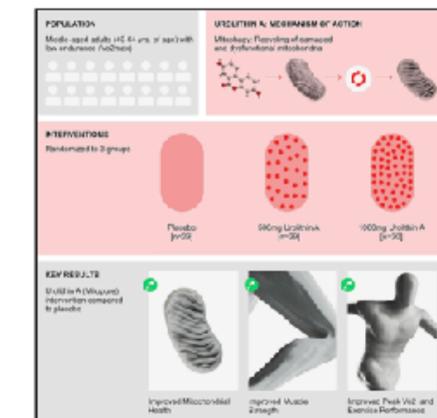
- Urolithin A enhances heart mitochondrial quality in aging and heart failure models
- Cardiac function decline in these models is reduced by urolithin A
- In humans, urolithin A lowers plasma ceramides associated with heart disease risk
- Urolithin A is a promising nutritional approach to support heart health as we age

Cell Reports
Medicine

Article

Urolithin A improves muscle strength, exercise performance, and biomarkers of mitochondrial health in a randomized trial in middle-aged adults

Graphical abstract



Authors

Anurag Singh, Davide D’Amico, Pénélope A. Andrieux, ..., Patrick Ambischer, Johan Auwerx, Chris Rinsch

Correspondence

asingh@amazentis.com

In brief

Singh et al. investigate the impact of oral supplementation with Urolithin A, a gut microbiome postbiotic known to activate mitophagy, in a randomized clinical trial in middle-aged adults. Results show that supplementation results in improvements in muscle strength and exercise-performance measures along with an impact on mitochondrial biomarkers.

Highlights

- Oral supplementation with Urolithin A increases muscle strength
- High dose of Urolithin A positively impacts exercise-performance measures
- An increase in mitophagy proteins in human skeletal muscle observed in parallel
- Supplementation is safe and increases circulating levels of Urolithin A

Case: CDR-Life

- The client

- A Swiss biotech developing anti-cancer T-cell engagers

- Public omic data analysis

- Characterizing target expression across tumor types to identify indications to include in a clinical trial
- Biomarker discovery (molecular correlates of target expression)

- Abstracts

- **ASCO 2024** https://doi.org/10.1200/JCO.2024.42.16_suppl.e20024
- **ESMO 2023** <https://doi.org/10.1016/j.annonc.2023.09.2923>

“As is typical in scientific exploration, initial findings frequently resulted in new questions, steering our investigation in different directions. Geneva seamlessly navigated these pivots.”

Dr. Melissa Vrohings

Translational Science Leader, CDR-Life

Full interview: geneviatechnologies.com/references/cases/characterizing-a-cancer-immunotherapy-target-with-genomic-data/

200P Precise tumor & patient selection for CDR404: A bispecific & bivalent MAGE-A4 T cell engager

G. Giacomazzi¹, M. Liivrand², R. Hieta², N. Dupuis³, D. Rondas⁴, P. Swatkowski⁵, M. Vrohings⁶, D. Lenherr-Frey⁷, L. Borrás⁸, S. Biswas⁹, R. Leidner¹⁰, E. Calvo¹¹

¹Assay Development, CellCarta, Antwerp, Belgium; ²Bioinformatics Core, Geneva Technologies, Tampere, Finland; ³Scientific Business Development, CellCarta, Antwerp, Belgium; ⁴Clinical Operations, CellCarta, Antwerp, Belgium; ⁵Global Regulatory Affairs, CellCarta, Naperville, IL, USA; ⁶Translational Science, CDR-Life Inc., Horgen, Switzerland; ⁷Project Management, CDR-Life, Horgen, Switzerland; ⁸Research, CDR-Life, Horgen, Switzerland; ⁹Clinical, CDR-Life Inc., Horgen, Switzerland; ¹⁰Earle A Chilea Research Institute, Providence Cancer Institute, Southfield, MI, USA; ¹¹Dept. Early Clinical Drug Development, Hospital Madrid Norte San Chinarro - Centro Integral Oncológico Clara Campal, Madrid, Spain

Background: A phase 1 trial of CDR404, an antibody-based T-cell engager (TCE) targeting MAGE-A4, is planned for 2024. CDR404 binds to a MAGE-A4 peptide presented on cancer cell surface HLA-A2. There are no validated assays to measure HLA peptide presentation. RNA sequencing or immunohistochemistry (IHC) for total MAGE-A4 can be used as surrogates. To identify tumors for trial inclusion and enable precise patient selection, we performed bioinformatic analyses and compared two IHC antibodies.

Methods: 32 solid tumors were selected from the TCGA dataset and ranked based on MAGE-A4 mRNA prevalence and expression (high to low). To assess protein expression, we compared specificity of two commercial MAGE-A4 antibodies for patient selection: an anti-rabbit E701U clone and an anti-mouse OT1F9 clone. Cross reactivity to MAGE-A family members was confirmed using IHC of individually transfected HEK293 cells.

Results: In ranking order, we identified 6 (RNA^{high}) tumors: squamous lung (LUSC),

LUNG CANCER—NON-SMALL CELL LOCAL/REGIONAL/SMALL CELL/OTHER THORACIC CANCERS

e20024



Publication Only

In silico tumor immune microenvironment (TIME) analysis of non-small cell lung cancer (NSCLC) to inform clinical development of CDR404: A first-of-its-kind MAGE-A4 targeted T-cell engager.

Daniel Lenherr-Frey, Melissa Vrohings, Mara Liivrand, Reija Hieta, Heather May Shaw, Gilberto Lopes, Leonardo Borrás, Sushruti Ghosh, CDR Life Inc., Horgen, Switzerland, Geneva Technologies Oy, Tampere, Finland, University College London Hospital, London, United Kingdom, University of Miami, Miami, FL

Background: CDR404 is an antibody-based bivalent MAGE-A4 targeted T-cell engager (TCE). One key mechanism-of-action of TCEs is CD8 T-cell redirection which involves T-cell intravasation into tumors [Damico et al, 2019]. CDR404 mediated TIME remodeling will likely be dependent on the inflammatory (INFLAM) and vascular (VASC) phenotype especially since tumor vasculature constitutes functional and physical barriers to T-cell infiltration [Sahu et al, 2021] [Desbois et al, 2020] [Dutzi et al, 2020]. To identify biomarkers for CDR404 anti-tumor responses in NSCLC, we evaluated the associations between MAGE-A4 mRNA expression, immune cell populations and frequency of 9p21 deletions mediating T-cell infiltration [Han et al, 2022]. **Methods:** Expression of MAGE-A4 mRNA was evaluated by the Tempus RR RNA-Seq assay (Tempus AI, Inc. Chicago IL). ConsensusTM bulk RNA-sequencing deconvolution (Limón-Sánchez et al, 2019) was used to analyze 16 TIME cell lineages in two NSCLC TCGA datasets – primary LUSC & LUAD [Giacomazzi et al, 2023]. Immune cell data was stratified by MAGE-A4 expression quartiles (Q): Null – not detected, MAGE-A4^{LOW} – (Q1-Q2), MAGE-A4^{HIGH} = Q3. GISTIC2.0 was used to identify 9p21 gene deletions [Mermel et al, 2011]. **Results:** MAGE-A4 is enriched in LUSC. MAGE-A4 levels were similar across metastatic organ sites (e.g., liver vs. lymph nodes) in LUSC indicating that tumor location is not a confounding factor for TIME analysis. In LUSC, MAGE-A4^{HIGH} vs. MAGE-A4^{LOW} tumors had lower levels of 15/16 immune cell populations. Largest reductions were in endothelial cells (p=7.71e-05) and CD8 T-cells (p=0.00096). Deletions in 9p21 genes were more frequent in MAGE-A4^{HIGH} vs. MAGE-A4^{LOW} tumors, e.g., CDKN2A: 41% vs. 58% (p=0.0028), consistent with reduced CD8 T-cells in MAGE-A4^{HIGH} vs. MAGE-A4^{LOW} tumors. In LUAD, immune cell levels were similar across MAGE-A4 subgroups except lower endothelial cells in MAGE-A4^{HIGH} vs. MAGE-A4^{LOW} (p=0.0005). **Conclusions:** LUSC MAGE-A4^{HIGH} tumors had a differentiated TIME profile. Our findings are consistent with an INFLAM^{LOW}/VASC^{LOW} phenotype possibly indicative of an “immune desert” [Desbois et al, 2020]. In contrast, LUAD MAGE-A4^{HIGH} tumors had an INFLAM^{HIGH}/VASC^{LOW} phenotype indicating that MAGE-A4 associations with TIME may be histology dependent in NSCLC. Overall, in MAGE-A4^{HIGH} LUSC & LUAD, susceptibility to CDR404 mediated T-cell tumor intravasation may be better because of a lower angiogenic barrier. Translational baseline tumor biopsy sub-studies from the CDR404 Phase 1 trial are awaited to confirm INFLAM/VASC phenotype is predictive of response in resected locally advanced/metastatic NSCLC patients. CDR Life acknowledges

Case: Herantis Pharma

- The client
 - A Finnish biotech company developing a peptidomimetic molecule (based on CDNF) to treat Parkinson's disease
- Spatial and bulk transcriptomic data analysis
 - To study the mechanisms of action in preclinical disease models

“She [Genevia’s bioinformatician] is able to explain the technical side very well to us non-bioinformaticians and has been very patient with our questions. This is very important in this kind of interface where we understand the biology and she has the bioinformatics and methodological knowledge”

Dr. Henri Huttunen
CSO, Herantis Pharma

Full interview: geneviatechnologies.com/references/cases/investigating-the-mechanism-of-action-of-a-disease-modifying-treatment-for-parkinsons-disease-using-bulk-and-spatial-transcript/

Case: VIB / KU Leuven

“The keyword here is collaboration. Typically, when contracting a service, you specify what you want, and the next interaction occurs months later -- with Genevia, it’s different.”

- The client

- A developmental neurobiology group

- Analysis and integration of single-cell datasets

- Aims: build neuronal single-cell atlas, study developmental trajectories

- Papers

- **bioRxiv (preprint) 2025** <https://doi.org/10.1101/2025.02.19.636192>
- **Neuron 2024** <https://doi.org/10.1016/j.neuron.2023.11.013>

Dr. Lynette Lim
Group Leader, VIB / KU Leuven

Full interview: geneviatechnologies.com/references/cases/building-a-neuronal-atlas-with-single-cell-technologies/

Neuron Article

Cortical somatostatin long-range projection neurons and interneurons exhibit divergent developmental trajectories

Graphical abstract

Key regulators of SST+ LRP neuro development

In brief

Fisher et al. reveal that cortical GABAergic neurons expressing somatostatin are highly diverse during embryonic development. However, the timing of cell fate acquisition among these cells varies depending on their identity. Fisher and colleagues also identify distinct molecular programs governing the diversification of GABAergic long-range projection neurons and interneurons.

Highlights

- Diversity among cortical inhibitory SST+ neurons emerges early in development
- The timing of interneuron diversification varies among different SST+ neurons
- Long-range GABAergic neurons implement unique molecular programs of development

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A single-cell transcriptomic atlas of developing inhibitory neurons reveals expanding and contracting modes of diversification

Ella Micoli, Facundo Ferrero Restelli, Giulia Barbiera, Rani Moors, Evelien Nouboers, Jessica Xinyun Du, Hannah Bercels, Minhui Liu, Dimitris Konstantopoulos, Aya Takeoka, Giordano Lippi, Lynette Lim

doi: <https://doi.org/10.1101/2025.02.19.636192>

Abstract

The cerebral diversity of inhibitory neurons (scRNAseq) is a complex problem, with multiple datasets and cell types. We identify long-range projecting inhibitory neurons that commit early, with distinct embryonic and neonatal clusters that map directly to adult counterparts. In contrast, interneurons diversify gradually, with each developmental cluster giving rise to distinct cell types.

Abstract Figure: UMAP plots showing cell types (nMC, LRP, etc.) and a flowchart of the analysis pipeline (Module 1: Find rare cells, Module 2: Integrability test, Module 3: Atlas).

Case: Weill Cornell Medical College

- The client

- A developmental / regenerative neurobiology group

- Single-cell RNA-seq data analysis

- Aims: molecular characterization of cortico-brainstem neurons (CBN) vs corticospinal neurons (CSN)

- Papers

- **Res Sq (preprint) 2025** <https://doi.org/10.21203/rs.3.rs-6150344/v1>

“I really appreciate the way he [Genevia’s bioinformatician] took it upon himself to take the lead.”

Dr. Vibhu Sahni

Group Leader, Weill Cornell Medical College

Full interview: geneviatechnologies.com/references/cases/studying-neural-circuit-development-with-single-cell-rna-sequencing/

Developmental molecular signatures define *de novo* cortico-brainstem circuit for skilled forelimb movement

Julia Kaiser¹, Payal Patel¹, Sam Fedde¹, Alexander Lammers¹, Matthew R Kenwood², Asim Iqbal^{1,2}, Mark Goldberg³, Vibhu Sahni^{1,3,4}

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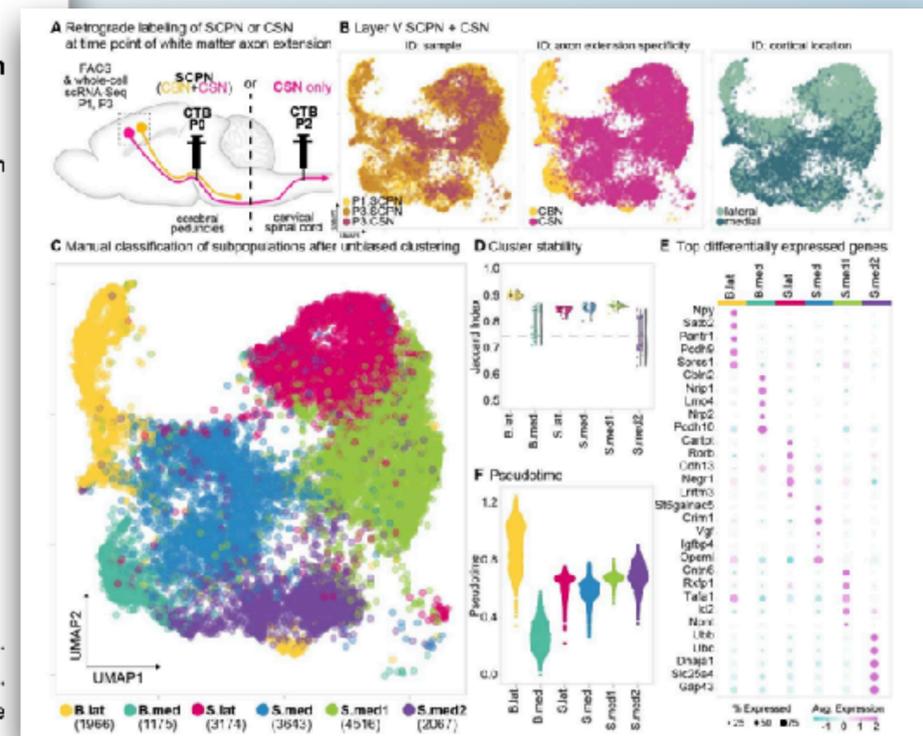
⁴ Feil Family Brain and Mind Research Institute, Weill Cornell Medicine, New York City, NY, 10065

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Keywords: development, motor circuitry, sensory circuitry, corticospinal, cortico-brainstem, cortical development, molecular controls over neuronal diversity, skilled movement, axon guidance, subcerebral projection neurons, projection neuron diversity

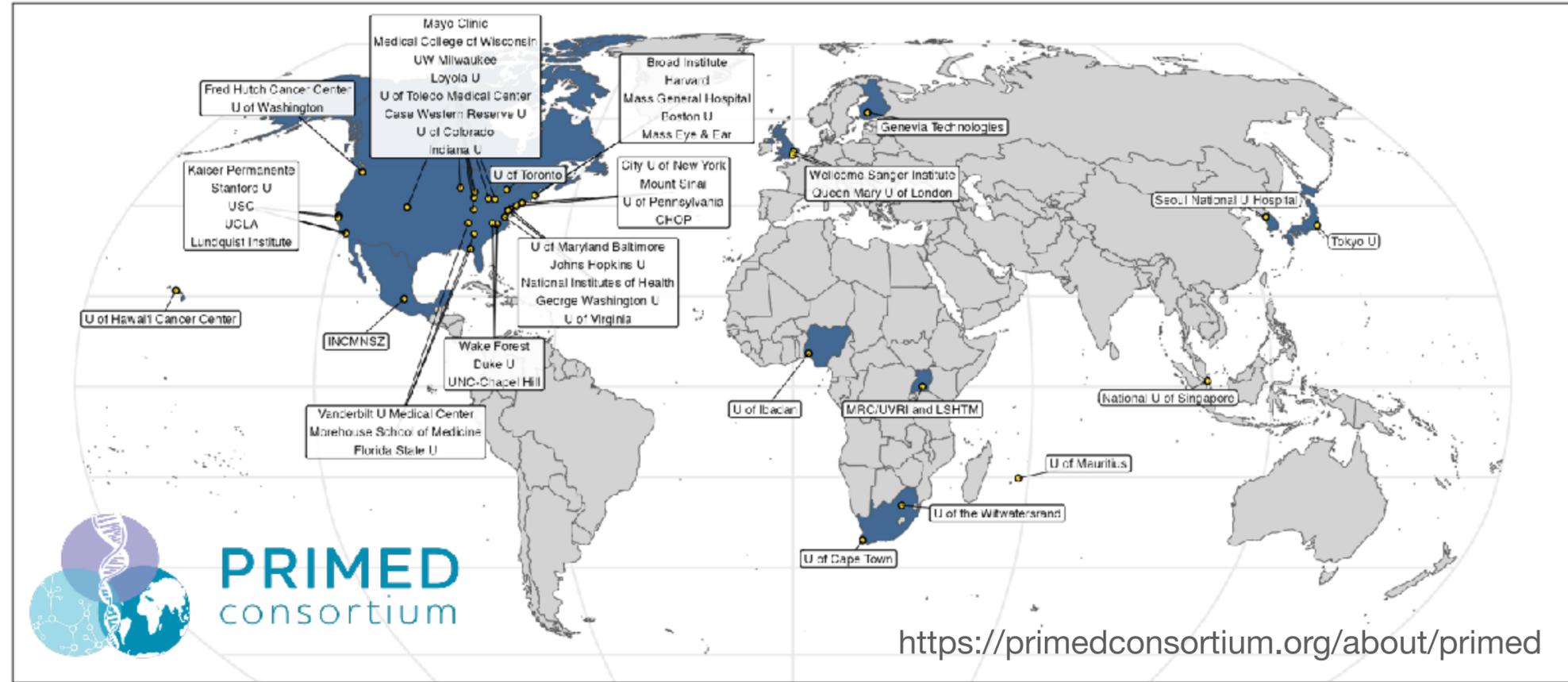
Abstract

Skilled movement relies on descending cortical projections to the brainstem and spinal cord. While corticospinal neurons (CSN) have long been recognized for their role in fine motor control, the contribution of cortical projections to the brainstem remains poorly understood. Here, we identify a previously unrecognized direct cortico-brainstem circuit that emerges early in development and persists into adulthood. A subset of subcerebral projection neurons (SCP



Case: University of Maryland

- The client
 - A genetic epidemiology group
- Population genetics
 - GWAS and PRS analysis for cardiovascular and HPV-related endpoints in African cohorts



Papers

- **Obesity 2024** <https://doi.org/10.1002/oby.24123>
- **European journal of human genetics 2024** <https://doi.org/10.1038/s41431-023-01521-7>

Received: 9 April 2024 | Revised: 18 June 2024 | Accepted: 5 July 2024
DOI: 10.1002/oby.24123

ORIGINAL ARTICLE
Epidemiology/Genetics

Obesity | WILEY

A meta-analysis and polygenic score study identifies novel genetic markers for waist-hip ratio in African populations

Michael Zhong¹ | Ebuka Onyenobi¹ | Ayo Duomatey² | Guanjie Chen² | James Perry³ | Zhenyao Ye¹ | ACCME Research Group as part of the H3Africa Consortium | Charles Rotimi³ | Clement A. Adebamowo^{1,4} | Adebawale Adeyemo² | Sally N. Adebamowo^{1,4}

¹Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, Maryland, USA
²Center for Research for Genomics and Global Health, National Human Genome Research Institute, Bethesda, Maryland, USA
³Department of Medicine, University of Maryland School of Medicine, Baltimore, Maryland, USA
⁴Greenbaum Comprehensive Cancer Center, University of Maryland School of Medicine, Baltimore, Maryland, USA

Correspondence: Sally N. Adebamowo. Email: sallyadebamowo@umms.edu

Funding Information: National Institutes of Health (NIH) Grant/Award Numbers: 1R01HG011317, 1R01HG011317

Abstract
Objective: Understanding the genetic underpinnings of anthropometric traits in diverse populations is crucial for gaining insights into their biological mechanisms and potential implications for health.
Methods: We conducted a genome-wide association study, meta-analysis, and gene set analysis of waist-hip ratio (WHR), WHR adjusted for BMI (WHRadjBMI), waist circumference, BMI, and height using the African Collaborative Center for Microbiome and Genomics Research (ACCME) cohort (n = 11,000) for discovery and polygenic score target analyses and the Africa America Diabetes Mellitus (AADM) study (n = ~5200) for replication and polygenic score validation. We generated and compared polygenic scores from European, African, Afro-Caribbean, and multiethnic ancestry populations.
Results: The top loci associated with each trait in the meta-analysis were in CD36 (rs2211826 [p = 5.93 × 10⁻¹²] for WHR and rs3749033 [p = 1.75 × 10⁻¹²] for WHRadjBMI), IR27L (rs59775050 [p = 2.66 × 10⁻¹⁰] for waist circumference), INP48

www.nature.com/hhg

ARTICLE OPEN

Genome, HLA and polygenic risk score analyses for prevalent and persistent cervical human papillomavirus (HPV) infections

Sally N. Adebamowo^{1,2}, Adebawale Adeyemo³, Amos Adebayo⁴, Peter Achara⁵, Burmi Alzabi⁶, Rasheed A. Bakare⁷, Ayotunde O. Famooto⁸, Kayode Goede⁹, Richard Offiong¹⁰, Crayinka Olaniran¹¹, Sanni Ologun¹², Charles Rotimi¹³ and , ACCME Research Group as part of the H3Africa Consortium^{13,14} | Clement A. Adebamowo^{1,2,14}

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Genetic variants that underlie susceptibility to cervical high-risk human papillomavirus (hrHPV) infections are largely unknown. We conducted discovery genome-wide association studies (GWAS), replication, meta-analysis and subanalyses, generated polygenic risk scores (PRS) and examined the association of classical HLA alleles and cervical hrHPV infections in a cohort of over 10,000 women. We identified genome-wide significant variants for prevalent hrHPV around LDB2 and for persistent hrHPV near TPST2, SMAD2, and CD112, which code for proteins that are significantly expressed in the human endocervix. Genetic variants associated with persistent hrHPV are in genes enriched for the antigen processing and presentation gene set: HLA-DQB1*13:02, HLA-DQB*05:02 and HLA-DQB1*03:01 were associated with increased risk, and HLA-DQB1*15:03 was associated with decreased risk of persistent hrHPV. The analyses of peptide binding predictions showed that HLA-DQB1 alleles that were positively associated with persistent hrHPV showed weaker binding with peptides derived from hrHPV proteins and vice versa. The PRS for persistent hrHPV with the best model fit had a P-value threshold (PT) of 0.091 and a p-value of 0.06 (log₁₀(0.06 = 1.22). The findings of this study expand our understanding of genetic risk factors for hrHPV infection and persistence and highlight the roles of MHC class II molecules in hrHPV infection.

European Journal of Human Genetics (2024) 32:708–716. <https://doi.org/10.1038/s41431-023-01521-7>

INTRODUCTION
Human papillomavirus (HPV) infection is the second most common oncogenic infection in the world, accounting for 31.4% of all infection-attributable cancers (690,000 of 2.2 million cases) globally^{1,2}. Persistent HPV infection (which is HPV test positivity at consecutive timepoints, usually several months apart) is a necessary but not sufficient cause of anogenital and oropharyngeal cancers. While those associated with persistent infection were near Death Associated Protein gene (DAP), Catenin Delta 2 (CTNND2), MicroRNA 365b gene (MIR35-2) and Nuclear Receptor Subfamily 5 Group A Member 2 gene (NR5A2). To date, no other GWAS of cervical HPV infection has been conducted. Candidate gene association studies provide additional insights into the genetic risk of prevalent and persistent cervical HPV infections, but few

“The keyword here is collaboration”

“It’s a whole different level of professionalism; a service, but on an academic level.”

Dr. Robert Hänsel-Hertsch
University of Cologne

“It’s not just somebody doing what I ask them to do and then emailing me a report – it’s collaborative.”

Dr. Rhoel Dinglasan
University of Florida

“I would, without a doubt, recommend Genevia – this collaboration has been just easy and great in many ways.”

Dr. Henri Huttunen
Herantis Pharma

“With a company like Genevia, there is a team with a range of different competencies, and you can trust that they are always up to date.”

Dr. Eric Feraille
University of Geneva

“Data safety and security are paramount for Genevia -- I feel more secure compared to certain previous collaborations.”

Dr. Michaela Lucas
University of Western Australia

“I think Genevia’s service definitely was an asset, and I highly recommend it: every time I give a talk somewhere I talk about Genevia.”

Dr. Vibhu Sahni
Weill Cornell Medical College

“I really appreciate the regular meetings, being kept up to date, and having very easy access to everything.”

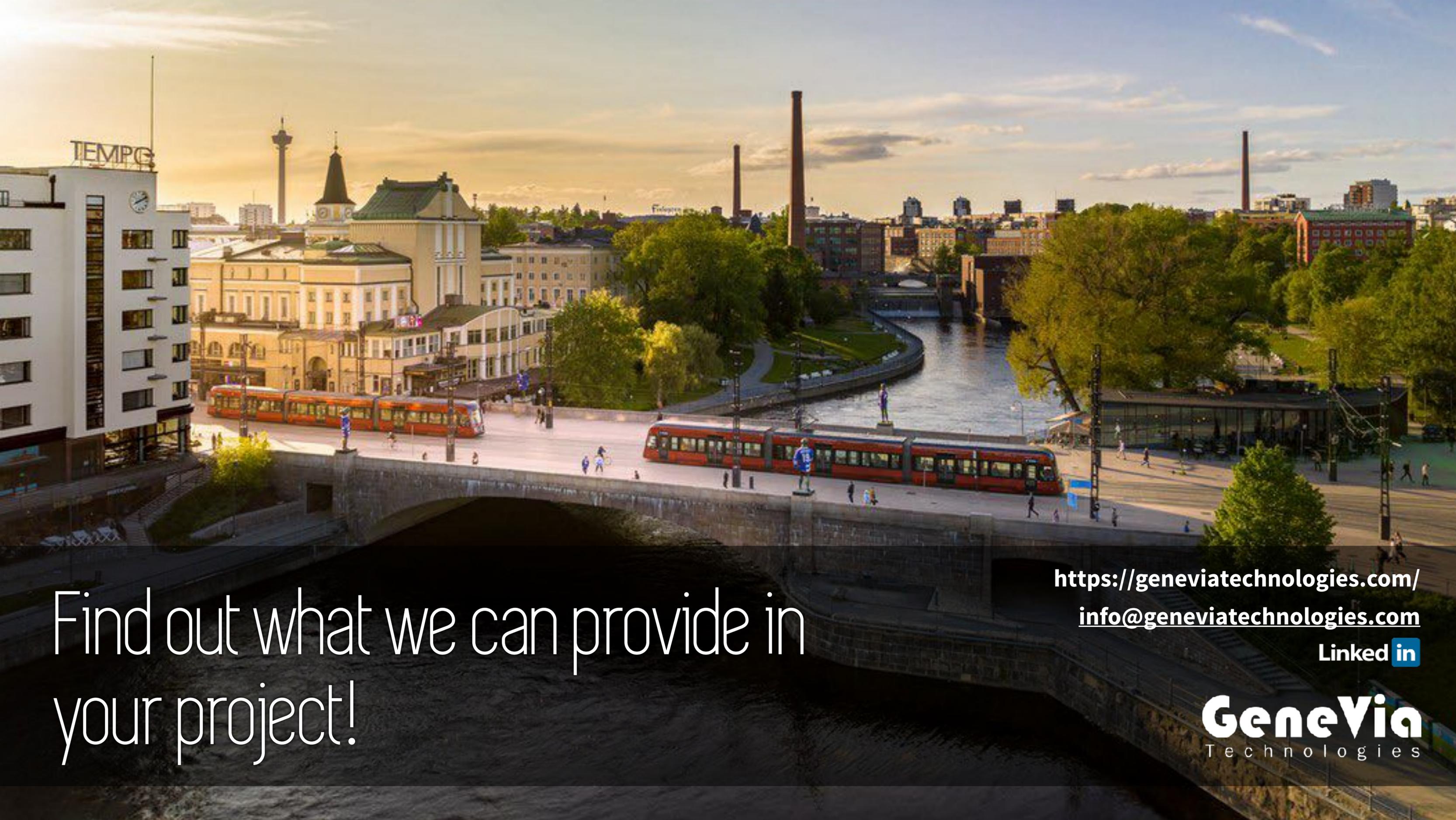
Dr. Laura Stone
University of Minnesota

“The keyword here is collaboration. Typically, when contracting a service, you specify what you want, and the next interaction occurs months later -- with Genevia, it’s different.”

Dr. Lynette Lim
VIB / KU Leuven

“Initial findings resulted in new questions, steering our investigation in different directions. Genevia seamlessly navigated these pivots.”

Dr. Melissa Vrohings
CDR-Life



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