

# ANEEL PAULUS, MD. MS.

[LINKEDIN](#) . [NKORE BIOTHERAPEUTICS](#) . [WEST EASTERN HEALTH](#)

## PROFILE

- ❖ **Cross-tumor translational oncology.** 17+ years across hematologic malignancies, solid tumors, and cancer prevention. Translational lead and protocol co-author across nine industry-sponsored Phase I/II oncology trials with eleven pharma sponsors. Cross-tumor mechanistic portfolio spanning anti-CD38, anti-CD20, anti-SLAMF7 mAbs; CD3×CD20 and CD16×CD30 bispecifics; IMiDs; Bcl-2 / BTK / PI3K combinations; and NK cell therapy.
- ❖ **Biotech executive experience.** Co-Founder & former CSO of Alpha2 Pharmaceuticals (Mayo Clinic spinoff biotech with a cancer-vaccine product being licensed to a new venture partner); Co-Founder & former CSO of Tyme Institute (cancer-prevention clinic); Founder of West Eastern Health; current Board Member of NKore Biotherapeutics (allogeneic, genetically unaltered NK-cell therapy).
- ❖ **Multimodal AI & multi-omic fluency.** Hands-on with high-dimensional, multimodal datasets (scRNA-seq, CITE-seq, bulk transcriptomics, proteomics, high-parameter flow / mass cytometry); active use of AI-enabled analytical workflows; scalable clinical-data-pipeline design — directly relevant to precision-oncology biomarker development and product validation.
- ❖ **Established medical voice.** >55 peer-reviewed publications (H-index 26), 44 invited national/international lectures, U.S. Chair of the CD38 & CD157 Think Tank, Leukemia & Lymphoma Society WM Roadmaps Think Tank member, multiple sponsor advisory roles (AstraZeneca, Ascentage, BMS, NKore, Fight Cancer Global), >\$5.4M in NIH and industry research funding. Newly appointed Member of the U.S. Preventive Services Task Force (sworn in June 2026).

## RELEVANT EXPERIENCE

### BOARD OF DIRECTORS | MEDICAL ADVISOR

#### NKORE BIOTHERAPEUTICS

2023 – Present (*Board appointment 2026*)

Board Director and Medical Advisor at NKore, a clinical-stage company developing NK101 — an allogeneic, genetically unaltered NK-cell therapy built on 35+ years of foundational research from UCLA. Conducted independent medical due diligence for NKore's first patient treatments and established criteria for patient qualification, clinical oversight, and post-treatment care across an early cohort spanning hematologic and solid tumors; coordinated decentralized and hybrid trial-strategy design with external investigators at Mayo Clinic.

### CO-FOUNDER | CHIEF SCIENTIFIC OFFICER

#### TYME INSTITUTE (2025 – 2026)

Co-founded Tyme Institute as a vertically integrated cancer-prevention clinic, biorepository, and research center. As CSO, owned scientific strategy and the prevention-oriented R&D agenda — vaccine formulation, biorepository design, real-world data capture, and formulator / manufacturer partnerships.

### FOUNDER

#### WEST EASTERN HEALTH (2024 – Present)

Founded West Eastern Health as an integrative mental health and optimization center applying evidence-based non-pharmaceutical protocols; built structured outcome-measurement and real-world data-capture infrastructure through the R&D arm, Psynaptic Solutions.

### CO-FOUNDER | CHIEF SCIENTIFIC OFFICER

#### ALPHA2 PHARMACEUTICALS (Mayo Clinic spinoff venture)

2019 – 2024

Co-founded Alpha2 Pharmaceuticals as a Mayo Clinic spinoff biotech translating discovery-stage assets — patented small-molecule scaffolds and an individualized cancer-vaccine concept now being licensed to a new venture partner — toward IND-enabling and clinical-stage development. As CSO, owned scientific strategy, preclinical-to-clinical translation, and CRO / academic-CRO partnership management across medicinal chemistry, in-vivo pharmacology, formulation, and regulatory readiness.

- ❖ Led the preclinical → IND-enabling roadmap: target validation, in-vivo pharmacology, PK/PD characterization, formulation strategy, and regulatory-readiness planning; managed outsourced CRO and academic-CRO execution, budget, and deliverables.
- ❖ Co-inventor on pending patent applications licensed to Alpha2: individualized cancer-treatment / prevention vaccines (PCT/US2020/067237) and novel proteasome-inhibitor compositions (US20170128518A1, PCT/US20/55010).

## HEAD OF TRANSLATIONAL RESEARCH IN MATURE B-CELL CANCERS ASSOCIATE PROFESSOR OF MEDICINE | ASSOCIATE CONSULTANT

MAYO CLINIC FLORIDA (Former)

2012 – 2023

Led a multidisciplinary translational research program: preclinical drug development, target-engagement and clinical biomarker discovery, immune correlative-assay design, and integration of translational science into industry-sponsored Phase I/II clinical programs. Directed a multidisciplinary team; mentored 10+ trainees now serving as faculty and physicians across U.S. academic centers.

- ❖ Designed target-engagement, pharmacodynamic, and host-immune-response biomarker readouts (scrRNA-seq, CITE-seq, bulk transcriptomics, proteomics, high-parameter flow / mass cytometry) to inform mechanism-of-action, resistance, and Go/No-Go decisions — translatable to host-immune-response assays in gene-therapy / vector trial settings.
- ❖ Authored preclinical-rationale packages and translational-science content supporting sponsor regulatory submissions and Investigator Brochures. Translational Research Site Director, Waldenström Macroglobulinemia Research Group; Site PI, Multiple Myeloma SPORE Biospecimens Core; Director, Mature B-Cell Cancers Biospecimens Repository.

### ADVISORY & CONSULTING

- ❖ **Committee Member** — U.S. Preventive Services Task Force (USPSTF), AHRQ / HHS (starting June 2026)
- ❖ **Board / Medical Advisor** — NKore Biotherapeutics (2023–Present; Board 2026–Present); SAB — Fight Cancer Global (2024–Present); Plastic Minds, a personalized Neuro-Psych digital health startup (2026–Present)
- ❖ **U.S. Chair, Organizing Committee** — CD38 & CD157 Think Tank (2020–2023); global convening of academic and pharma scientists in CD38-targeted therapy
- ❖ **Sponsor Consulting / SAB roles** — Bristol Myers Squibb (2021–2022); Ascentage Pharmaceuticals (2019–2023); AstraZeneca Pharmaceutical, U.K. (2019); Capvision Consulting, NY (2019–2020); Roadmap to a Cure for Waldenström Macroglobulinemia (ILS / IWMF, 2015–2019)

### SELECTED FUNDED RESEARCH

- ❖ **NIH SPORE Awards (PI)**. Multiple Principal Investigator awards under the Mayo Clinic Multiple Myeloma SPORE (P50 CA186781) and Mayo Clinic / University of Iowa Lymphoma SPORE (P50 CA97274), including SPORE Clinical Database Core Project 2 (\$280k), Career Enhancement Awards in MM (PSMB9 resistance; Bcl-2 / immunotherapy synergy), and Developmental Research Awards in Lymphoma (VLX1570; USP14 / UCHL5 in ibrutinib-resistant MCL). Combined NIH SPORE PI awards: ~\$547k.
- ❖ **NIH R01 CA233790-01A1 (Co-Investigator)**. Therapeutic implications of targeting CD38 in CLL. \$3,459,346. (2019–2024)
- ❖ **Foundation Awards (PI)**. Henry J. Predolin Foundation Career Development Award (ibrutinib resistance in WM; \$75k) and Gerald A. & Margaret A. Wellik Foundation Career Development Award in Lymphoma (nimbolide chemical modulation; \$100k).
- ❖ **Industry-Sponsored Research (PI / Co-PI)**. Ascentage Pharma (\$605k, preclinical small-molecule investigation in heme malignancies), Bayer Pharma AG (\$208k, IRAK4 in WM), and Bristol Myers Squibb (\$164k, immune landscape in MM). Co-PI on Genentech Research Fund in Individualized Medicine (\$200k, COVID-19 biomarker panel) and Affimed Therapeutics (\$130k, lenalidomide + AFM13 preclinical activity). Combined: ~\$1.31M.

#### *Cross-Modality Drug Development Experience*

- ❖ **Cell therapy & cancer vaccines**: NK101 (NKore — NK-cell therapy, heme + solid tumors); individualized cancer vaccines (Tyme Institute; co-inventor, PCT/US2020/067237).
- ❖ **Anti-CD38 mAbs**: Daratumumab (Janssen — Research Funding); Isatuximab (Sanofi).
- ❖ **Anti-CD20 mAbs**: Rituximab (Genentech); Obinutuzumab (Roche).
- ❖ **Anti-SLAMF7 mAb**: Elotuzumab (BMS — Research funding, SAB).
- ❖ **Bispecific engagers**: AFM13 (Affimed; CD16a × CD30); Plamotamab / XmAb®13676 (Xencor; CD3 × CD20).
- ❖ **IMiDs**: Lenalidomide (Celgene).
- ❖ **Bcl-2 / BTK / PI3K / proteasome inhibitors**: AT-101, Venetoclax/ABT-199, Lisafoclax/APG-2575; Ibrutinib, Copanlisib; b-AP15/VLX1570, Ixazomib (multi-sponsor; multiple Research funding / SAB roles).
- ❖ **Natural products & nanotherapeutics**: Neem leaf extract (NCT01251250); Curcumin; drug-bearing lipid nanoparticles; D1XB / D1XN (Sagitraxx).

#### *Clinical Trial Experience*

- ❖ **Active studies in design / enrollment**: (1) VITALITY (Sama Therapeutics, IRB-approved) — multimodal AI + inflammatory / neurotrophic biomarker validation in rapid-acting antidepressant treatment, decentralized telehealth

across Veterans, oncology-comorbid, and general MDD/TRD cohorts (~360 participants); (2) Accelerated TMS + low-dose IM ketamine for chemotherapy-induced cognitive impairment ("chemo brain").

❖ **Completed Phase I / I-II:** NCT03537482 (APG-2575 in heme malignancies); NCT03015792 (ibrutinib + dex + lenalidomide in MM); NCT02697344 (R-(-)-gossypol + lenalidomide + dex in MM); NCT01003769 (lenalidomide + AT-101 in CLL); NCT04260217 (APG-2575 ± ibrutinib / rituximab).

❖ **Completed Phase II:** NCT04230304 / DIRECT (daratumumab + ibrutinib in R/R CLL); NCT03477539 (daratumumab in transplant-eligible MM); NCT03713294 (dexamethasone + elotuzumab + pomalidomide in R/R MM); NCT02649387 / MERIT (ibrutinib in CLL; single-cell correlative analyses).

## **EDUCATION & TRAINING**

WINDSOR UNIVERSITY, ST. KITTS — BS/MD, 2008

SUNY BUFFALO / ROSWELL PARK CANCER INSTITUTE — MS, Translational Oncology and Interdisciplinary Science, 2010

## **PENDING PATENTS**

(1) Individualized vaccines for cancer treatment and prevention (PCT/US2020/067237). (2) Methods and materials for identifying and treating mammals resistant to proteasome inhibitor treatments (US20170128518A1). (3) Novel proteasome inhibitors (PCT/US20/55010). (4) Novel CKL-BP<sub>i</sub> series of compounds — Dual BTK/PI3K inhibitors for treatment of cancer (filed).

## **SKILLS & COMPETENCIES**

Medical & scientific strategy across the preclinical → clinical → regulatory continuum · Translational oncology (heme + solid tumor) · Precision-oncology biomarker development · Scalable clinical-data-pipeline design · Cell therapy & cancer-vaccine clinical strategy Phase I/II clinical-trial design & correlative-science strategy · Pharma sponsor & academic partnership development · Medical due diligence & board governance · KOL engagement