

Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

×



Memorial Sloan Kettering
Cancer Center

[Make an Appointment](#)

[Back](#)

[Center for Experimental Therapeutics](#)

[Solid Tumor Oncology Treatment](#)

[Refer a Patient](#)

ABOUT US

[Our mission, vision & core values](#)

[Leadership](#)

[History](#)

[Equality, diversity & inclusion](#)

[Annual report](#)

[Give to MSK](#)

Curative therapy for leukemia through blockade of aberrant transcription and translation

Scott Armstrong, MD, PhD; Omar Abdel-Wahab, MD; Alex Kentsis, MD, PhD; Michael Kharas, PhD; Ross Levine, MD; Yueming Li, PhD

Innovative approaches to translating CAR T cell therapies to solid tumors

Renier Brentjens, MD, PhD; Prasad Adusumilli, MD; Christopher Klebanoff, MD; Michel Sadelain, MD, PhD; David Scheinberg, MD, PhD; Susan Slovin, MD

Strategies to harness cancer cell stress for treatment and diagnosis

Gabriela Chiosis, PhD; Adriana Corben, MD; Mark Dunphy, DO; Katharine Hsu, MD, PhD; Xuejun Jiang, PhD; Shanu Modi, MD; Larry Norton, MD; Nagavarakishore Pillarsetty, PhD; Derek Tan, PhD

A nanoscale therapeutic platform to target the

Daniel Heller, PhD; Adriana Haimovitz-

Immunologic therapeutic platform to target the solid tumor microenvironment

Project

Baron-Henry, PhD; Amanda Hammond

Investigator(s)
Friedman, PhD; John Humm, PhD; Charles Rudin, MD, PhD; Charles Sawyers, MD; David Spriggs, MD

Curing relapsed refractory myeloma with combined immune-therapies

Sergio Giralt, MD; Sham Mailankody, MD; Jonathan Peled, MD, PhD; David Chung, MD; Kazunori Murata, PhD

Toward the cure of adult acute lymphocytic leukemia: A personalized, genetic and epigenetic, chemo-immunotherapeutic approach

Joseph Jurcic, MD; Renier Brentjens, MD, PhD; Cyrus Hedvat, MD, PhD; Ross Levine, MD; Peter Maslak, MD; Hans Guido Wendel, MD; Scott Armstrong, MD, PhD; Michael Kharas, PhD; David Scheinberg, MD, PhD

Targeted immunotherapeutic approaches to cure multiple myeloma

Guenther Koehne, MD, PhD; David Chung, MD, PhD; C. Ola Landgren, MD, PhD; Alexander Lesokhin, MD

Multi-modality treatment of pancreatic ductal adenocarcinoma (PDAC)

Jason Lewis, PhD; Peter Allen, MD; Jan Grimm, PhD; Christine Iacobuzio-Donahue, MD, PhD; Kayvan Keshari, PhD; Steven Leach, MD; Thomas Reiner, PhD

Developing curative therapies for BRAF and NRAS mutant tumors

Neal Rosen, MD, PhD; David Solit, MD

Changing the natural history of metastatic melanoma with multimodality therapy

Neal Rosen, MD; Paul Chapman, MD; David Solit, MD; Scott Lowe, PhD; Jedd Wolchok, MD, PhD

Development of therapeutic strategies that change the natural history of tumors with mutant RAS

Neal Rosen, MD, PhD; Scott Lowe, PhD; David Solit, MD; Barry Taylor, PhD; Jedd Wolchok, MD, PhD

Towards a cure for prostate cancer

Charles Sawyers, MD; Jason Lewis, PhD; Dana Rathkopf, MD; Michael Zelefsky, MD

Project

Innovations in the structures, functions and targets of monoclonal antibody-based drugs for cancer

Curing ovarian cancer through early detection and personalized treatment

Investigator(s)

David Scheinberg, MD, PhD; Renier Brentjens, MD, PhD; Steven Larson, MD; Hans-Guido Wendel, MD

David Spriggs, MD; Carol Aghajanian, MD; Douglas Levine, MD; Paul Sabbatini, MD

Multidisciplinary Team Research

Project

Quillaja saponin adjuvants in carbohydrate conjugate cancer vaccines

Cellular target discovery and therapeutic agents — Proteases as targets for cancer therapy

Non-invasive imaging and monitoring of tumor hypoxia

Development of active and adoptive immunotherapy of ovarian cancer targeting MUC16 and WT1

Development of rational strategies for anti-cancer therapy based on inhibition of signaling through the Ras and PI3kinase signaling pathways — Combined inhibition of Raf/MEK/MAPK and PI3K/AKT signaling for the treatment of cancer

Targeting tumors with genetically enhanced T lymphocytes

Investigator(s)

David Gin, PhD; Adam Boruchov, MD; Paul Chapman, MD; Govind Ragupathi, PhD and Jim Young, MD

Yueming Li, PhD; David Scheinberg, MD, PhD; Xuejun Jiang, PhD and Johanna Joyce, PhD

Clifton Ling, PhD; Jason Koutcher, MD, PhD; John Humm, PhD; Pat Zanzonico, PhD; Joseph O'Donoghue, PhD; and Ronald Finn, PhD

Philip Livingston, MD and Richard O'Reilly, MD

Neal Rosen, MD, PhD; Charles Sawyers, MD; David Solit, MD; and David Spriggs, MD

Michel Sadelain, MD, PhD; Prasad Adusumilli, MD; Renier Brentjens, MD, PhD; Vladimir

lymphocytes

Project

Functional and advanced anatomic techniques for response assessment in solid tumors

An integrated multidisciplinary approach to developing new treatments for advanced prostate cancer

Identification of cell cycle related kinase inhibitors for cancer therapy

Immunotherapy of cancer: Development of cancer vaccines, adoptive cellular therapies, immune modulation and combination immunotherapies

MD, Pieter Brestgens, MD, PhD, Vladimir

Investigator(s)
Ponomarev, MD, PhD; Isabelle Riviere, PhD; Susan Slovin, MD, PhD

Lawrence Schwartz, MD and Robert Motzer, MD

Derek Tan, PhD; Gabriela Chiosis, PhD; Yueming Li, PhD; Neal Rosen, MD, PhD and Howard Scher, MD

Archie Tse, MD, PhD and David Spriggs, MD

Marcel van den Brink, MD, PhD; Ronald Blasberg, MD; Bo Dupont, MD, DSc; Alan Houghton, MD; Robert Jenq, MD; Steve Larson, MD; Jedd Wolchok, MD, PhD

Clinical Investigations

Project

A phase I trial of malignant pleural mesothelioma treated with autologous T cells genetically targeted to the cancer cell

A Phase 1a/1b Trial to Assess Safety and Bioactivity of Intrathecal Deferoxamine in Patients with Leptomeningeal Metastases from Non Small Cell Lung Cancer

Experimental Therapeutics Clinical Treatment Unit

Vaccination of pancreatic cancer patients

Investigator(s)

Prasad Adusumilli, MD

Adrienne Boire, MD, PhD

Richard Carvajal, MD

Paul Chapman, MD

against mutated K-ras

Project

Biologic correlates in a phase I/II study of humanized 3F8 bispecific antibody (hu3F8-BsAb) in patients with relapsed/refractory neuroblastoma, osteosarcoma, and other GD2(+) solid tumors

Clinical translation of PU-H71, a small molecule Hsp90 inhibitor

Langerhans-type dendritic cell vaccination as consolidation for multiple myeloma after autologous stem cell transplantation

Circulating tumor cells in patients with metastatic prostate cancer: Development of predictive biomarkers for sensitivity to androgen receptor targeted treatment sensitivity

The Development of a Novel AML-directed CAR T Cell Capable of Bystander Tumor Killing

Preclinical and clinical evaluations of first-generation recombinant modified vaccinia virus Ankara (MQ710) for the treatment of anaplastic thyroid cancer and other solid tumors

Targeting Lewis Y in small cell lung cancer using the humanized monoclonal antibody, hu3S193

Cardenolides as novel agents for the treatment of retinoblastoma

Radioimmunotherapy, reduced-dose radiation therapy, and chemotherapy for medulloblastoma

Investigator(s)

Nai-Kong Cheung, MD, PhD

Gabriela Chiosis, PhD

David Chung, MD, PhD

Daniel Danila, MD and Howard Scher, MD

Anthony Daniyan, MD

Liang Deng, MD, PhD

Chaitanya Divgi, MD

Hakim Djaballah, PhD and David Abramson, MD

Ira Dunkel, MD and Kim Kramer, MD

Project

Iso-fludelone, a novel epothilone: First in human phase 1 trial

Investigator(s)

Mrinal Gounder, MD and Naiyer Rizvi, MD

Assessing the continual reassessment method as a phase I design by comparing it to the standard dose escalation scheme

Alexia Iasonos, PhD

Pilot trial ^{89}Zr -trastuzumab-PET as pharmacodynamic marker in patients with HER2-positive esophagogastric cancer

Yelena Janjigian, MD

Hyperpolarized pyruvate MR imaging of prostate cancer

Kayvan Keshari, PhD

Comparative analyses of WT1 expression and WT1 antigen-specific T-cell frequencies in patients with plasma cell leukemia following treatment with donor-derived Wilms tumor antigen-specific T lymphocyte infusions

Guenther Koehne, MD, PhD

Development of KSR phosphorothioate antisense oligonucleotides for phase I clinical trial

Richard Kolesnick, MD

A phase I study of convection-enhanced delivery of ^{124}I -8H9 for patients with non-progressive diffuse pontine gliomas previously treated with external beam radiation therapy

Kim Kramer, MD

Phase I study of intrathecal ^{131}I -8H9 for central nervous system and leptomeningeal malignancies

Kim Kramer, MD

Pilot trial of a tetravalent KLH conjugate vaccine against small cell lung cancer

Lee Krug, MD

Project

Targeting small cell lung cancer with an Ac-labeled antibody to the ganglioside GD2

Investigator(s)

Lee Krug, MD

Phase I trial of a tetravalent vaccine with escalating doses of the immunological adjuvant QS-21, in combination with oral beta-glucan for high-risk neuroblastoma

Brian Kushner, MD

A Phase I Dose Escalation Study of ESK1-Bispecific T-cell Engager (ESK-TCE) Antibody Targeting WT1 for the Treatment of Patients with Recurrent Ovarian Cancers

Chrisann Kyi, MD

Clinical and molecular-metabolic phase II trial of perifosine for recurrent/progressive malignant gliomas

Andrew Lassman, MD

Combination of targeted radiotherapy and anti-angiogenesis for resistant neuroblastoma

Shakeel Modak, MD

Lutetium-177 radiolabeled anti-prostate specific membrane antigen antibodies and its relationship to tumor-absorbed radiation dose

Michael Morris, MD

Quantitative PET imaging with yttrium-86 radiolabeled humanized anti-prostate specific membrane antibody J591 for dosimetric evaluation of yttrium-90-huJ591 therapy

Michael Morris, MD

Targeted radioimmunotherapy using Ley as a target in castrate metastatic prostate cancer

Michael Morris, MD

Prostate specific membrane antigen vaccine in prostate cancer

Luke Nordquist, MD

Preclinical and clinical development of 10-
Project
propargyl-10-deazaaminopterin (PDX) in
relapsed or refractory aggressive non-Hodgkin's
lymphomas

Owen O'Connor, MD, PhD
Investigator(s)

A phase I clinical trial of a new targeted therapy
for the treatment of metastatic pancreatic cancer

Eileen O'Reilly, MD

Cytokine Secreting CAR T-Cell Therapy for
Treatment of Leukemia

Jae Park, MD

GM-CSF DNA vaccine in melanoma

Miguel Perales, MD

Phase 1 study of humanized 3F8 monoclonal
antibody (Hu3F8) when combined with
interleukin-2 in patients with high-risk
neuroblastoma and GD2-positive solid tumors

Stephen Roberts, MD

Augmented PSMA CAR therapy for castrate-
resistant, metastatic prostate cancer

Michel Sadelain, MD, PhD and Susan Slovin,
MD, PhD

Preparation of a peptide vaccine for chronic
myelogenous leukemia

David Scheinberg, MD, PhD

Biomarker development in patients with
metastatic prostate cancer: Assays for androgen
receptor signaling pathway in circulating tumor
cells

Howard Scher, MD

Therapeutic response assessment in clinical
trials: Development of tools for precise
quantitative image analysis

Lawrence Schwartz, MD

Synthesis of 150 grams of PDX

Francis Sirotnak, PhD

Phase I trial of mouse TRP-2 DNA vaccine for

Jedd Wolchok, MD, PhD

patients with melanoma
Project

Investigator(s)

Alemtuzumab treatment of steroid-refractory
acute graft-versus-host disease

James Young, MD

Drug Discovery and Development

Project

Investigator(s)

Synthetic introns to enable mutation-dependent
targeting of cancer cells

Omar Abdel-Wahab, MD

Imaging the efficacy of TRAIL-enhanced cancer
immunotherapy

Prasad Adusumilli, MD and Vladimir Ponomarev,
MD, PhD

Small molecule degrader of HMGCS1 to
harness the mevalonate pathway in cancer

Heeseon An, PhD

Self-immolative tumor-targeted nanogenerators

Christophe Antczak, PhD

New DPP8/9-binding ligands for the treatment of
acute myeloid leukemia

Daniel Bachovchin, PhD

Induction of pyroptosis for cancer
monocytic/macrophage lineage

Daniel Bachovchin, PhD

Peptidase Inhibitors as New Cancer
Immunotherapy Agents

Daniel Bachovchin, PhD

ID protein degradation as a therapeutic strategy
for advanced cancers

Robert Benezra, PhD; James Harding, MD

Tumor endothelial cell-specific inhibitor for Id-
proteins

Robert Benezra, PhD

Project
Over expression of asmasse in endothelial stem cells by lentiviral vector delivery

Investigator(s)
Nira Bloom, PhD

Expression and modulation of Fcy receptors on human dendritic cells for targeted immunotherapy

Adam Boruchov, MD

Mesoporous silica nanoparticles as drug delivery vehicles in a PDGFB-driven murine high grade glioma model

Michelle Bradbury, MD, PhD

Construction and characterization of retroviral vectors encoding genes capable of generating both primary and efficient co-stimulatory signals to T cells for use in the adoptive immunotherapy of B cell malignancies

Renier Brentjens, MD, PhD

Development and characterization of novel inhibitors of JAK kinases

Jacqueline Bromberg, MD, PhD

Induction of natural EGFR inhibitors

Luca Cartegni, PhD

Therapeutic modulation of alternative splicing

Luca Cartegni, PhD

Overcoming CDK4/6 inhibitor resistance

Sarat Chandarlapaty, MD, PhD

Therapeutic targeting of Gαq pathway in uveal melanoma

Yu Chen, PhD

Development of small molecule inhibitors of MCL-1 for cancer therapy

Emily Cheng, PhD

Using Self-Assembling DisAssembling (SADA) Platform in Pretargeted Radioimmunotherapy and DNA Damage Repair Inhibitors to Enhance

Nai-Kong Cheung, MD, PhD

Immunogenic Cell Death

Project

Dual specific human monoclonal antibody targeting IGF-I and IGF-II for treating cancer in children

Multistep targeting of GD2 using DOTA hook

Optimizing radioimmunotherapy delivered through cerebrospinal fluid: Testing affinity-matured scFv constructs in xenograft models

Humanized antibody targeting CSPG4 on melanoma

SADA DOTA-PRID and SADA DOTA-PRIT for incurable cancers

Therapeutic and diagnostic targeting of DLK1 in cancer

Development of the epichaperome inhibitor LSI-137

Novel compounds inhibiting Hsp90

Development of novel Hsp70 ATPase activity modulators

PU24FCI, a novel selective Hsp90 inhibitor

Bcr-Abl substrates and inhibitors

Leptin receptor as a target to eradicate CML tumor initiating cells

Investigator(s)

Nai-Kong Cheung, MD, PhD

Nai-Kong Cheung, MD, PhD

Nai-Kong Cheung, MD, PhD

Nai-Kong Cheung, MD, PhD

Nai-Kong Cheung, MD, PhD; Darren Veach, PhD

Ping Chi, MD, PhD

Gabriela Chiosis, PhD

Gabriela Chiosis, PhD and Neal Rosen, MD, PhD

Gabriela Chiosis, PhD

Gabriela Chiosis, PhD

Bayard Clarkson, MD

Bayard Clarkson, MD

Project

Design of molecular glue degraders to selectively target ERK2 over ERK1

Investigator(s)

Arvin Dar, PhD

Development of D-peptide inhibitors of oncogenic KRAS mutants

Samuel Danishefsky, PhD

Testing the immunogenicity of a new unimolecular hexavalent vaccine in combination with the novel synthetic saponin adjuvant SQS-1-0-5-5

Samuel Danishefsky, PhD

Cell migration inhibition: synthesis and evaluation of migrastatin and analogues for the identification of a novel chemotherapeutic

Samuel Danishefsky, PhD

Preparation of multiple drug reversal agent 5-N-acetyl-ardeemin and some active analogues

Samuel Danishefsky, PhD

Synthesis and evaluation of a novel unimolecular multiantigenic vaccine against breast cancer

Samuel Danishefsky, PhD

Telomerase inhibition: Synthesis and evaluation of UCS1025A and analogues for the identification of a novel chemotherapeutic

Samuel Danishefsky, PhD and Malcolm Moore, D.Phil.

Development of an AML-directed dual-targeted CAR T cell

Anthony Daniyan, MD

Targeting DJ-1 for cancer therapy

Yael David, PhD

Synthesis of a multi-scaffold library for high-throughput screening for novel inhibitors of androgen receptor signaling

Christine DiBlasi, PhD

Project Synthetic study on proteasome inhibitor salinosporamide A	Investigator(s) Atsushi Endo, PhD
Novel enhancement strategies for cancer DNA vaccines: Epitope optimization and fusion vectors	Manuel Engelhorn, PhD
Development of reagents to antagonize ceramide-mediated raft clustering in vivo	Zvi Fuks, MD
High throughput screening of specific inhibitors for kinase suppressor of Ras1 (KSR1)	Zvi Fuks, MD
ASMase gene therapy for radiosensitization	Zvi Fuks, MD and Richard Kolesnick, MD
Preclinical development of anti-ceramide monoclonal antibodies	Zvi Fuks, MD
Preclinical evaluation of KSR phosphorothioate antisense oligonucleotides in treating gf Ras-dependent human malignancies	Zvi Fuks, MD and Richard Kolesnick, MD
The development of highly concise routes to epothilones in the context of the chemical synthesis of the promising antitumor agent 4-desmethyl-12,13-desoxyEpothilone B	Ana Gabarda Ortega, PhD
L1CAM targeting 1xx CAR T cells for advanced solid tumors	Karuna Ganesh, MD, PhD
Design of small molecules that trigger secretion of neoantigen: Chaperone complexes	Jonathan Goldberg, PhD
Mechanism of TEM8 in increasing CD8 T cell responses	Polly Gregor, PhD

Project	Investigator(s)
ROS-activatable prodrug of Doxazoline	Jan Grimm, MD, PhD
Clinically approved nanoparticles as environmental-responsive self reporting drug delivery system	Jan Grimm, MD, PhD
Multimodality theranostics of pancreas cancer	Jan Grimm, MD, PhD
Gene expression profiling to identify therapeutic targets in chronic lymphocytic leukemia	Mark Heaney, MD, PhD
Targeted nanoformulation and delivery strategy to improve the utility of PROTACS	Daniel Heller, PhD
Nanoscale bio-imaging	Daniel Heller, PhD
ZIC1: Therapeutic target and predictor of outcome in adult male germ cell tumors	Jane Houldsworth, PhD
Biodistribution and radiobiological effectiveness of ²²⁵ Ac and ²¹³ Bi for alpha-particle radioimmunotherapy	John Humm, PhD
Targeting isocitrate dehydrogenase mutations by enzyme hyperactivation	Andrew Intlekofer, MD, PhD
Identification of chemical inhibitors of the ULK1 kinase complex	Xuejun Jiang, PhD and Derek Tan, PhD
Development of novel therapies for endometrial carcinomas	Xuejun Jiang, PhD; Neal Rosen, MD, PhD
Identification and characterization of small molecule inhibitors of Apaf-1/Cytochrome c-	Xuejun Jiang, PhD and Derek Tan, PhD

mediated apoptosis

Project

Investigator(s)

Targeting the PTEN ubiquitin ligase NEDD4 with a novel electrophilic fragment library

Xuejun Jiang, PhD and Derek Tan, PhD

A modular platform for cell specific macromolecular drug delivery

Alex Kentsis, MD, PhD

Chemical library screen for musashi inhibitors

Michael Kharas, PhD

Inhibition of MSI translation in MSI driven leukemias

Michael Kharas, PhD

Tunable peptidomimetic nanoconjugates for cancer gene control

Alex Kentsis, MD, PhD

IL10 blockade as a novel immunotherapy across solid cancers

Danny Khalil, MD, PhD

Developing MUSASHI RNA binding protein inhibitors to target cancer

Michael Kharas, PhD

Raman nanostar-triggered automated laser ablation device

Moritz Kircher, MD, PhD and Ricardo Toledo-Crow, PhD

C16:0 ceramide nano-liposomes reverse multi-drug resistance

Richard Kolesnick, MD

Sphingolipid-based anti-angiogenic chemosensitization

Richard Kolesnick, MD

Acid sphingomyelinase is obligate for gemcitabine action

Richard Kolesnick, MD

Small animal imaging and spectroscopy

Jason Koutcher, MD PhD

Project	Investigator(s)
Developing living drugs for tumor-targeted radiotherapy	Simon Larson, MD
Pre-clinical development of a novel class of proteasome inhibitors	Marc Ladanyi, MD
Improved detection of abl, c-kit, src and PDGFR α expressing tumors using a combination of positron labeled EGFR tyrosine kinase inhibitors and “stealth” nanocarriers	Steve Larson, MD
Ac-225 DOTA Proteus for Pre-targeted Radioimmunotherapy (PRIT) of solid tumors	Steven Larson, MD
Alpha and Beta Pre-targeted Radioimmunotherapy for Peritoneal Carcinomatosis	Steven Larson, MD
Statins to Enhance Pretargeted Radioimmunotherapy of HER2-expressing Esophagogastric Tumors	Jason Lewis, PhD
Amplifying the efficacy of pretargeted radioimmunotherapy (PRIT) in pancreatic cancer	Jason Lewis, PhD
Radiosensitization of malignant gliomas by gene therapy	Gloria Li, PhD and Philip Gutin, MD
Targeted delivery of attenuated interleukin-15 for ILC1-mediated cancer immunotherapy	Ming Li, PhD
Targeting TGF- β signaling in CD4+ T cells for cancer immunotherapy	Ming Li, PhD
Development of lysosomal inhibitors for	Yueming Li, PhD

pancreatic cancer treatment
Project

Investigator(s)

Development of the autophagy-lysosome pathway blockers for pancreatic cancer treatment

Yueming Li, PhD

Development of sulfonamide γ -secretase inhibitors for cancer therapy

Yueming Li, PhD

Preclinical studies of sulfonamide γ -secretase inhibitors for cancer therapy

Yueming Li, PhD

γ -Secretase: Target validation and inhibitor development

Yueming Li, PhD

Target notch signal pathway in B-cell neoplasm

Yueming Li, PhD

Harnessing senolytic CAR T cell based therapies for the treatment of solid tumors

Scott Lowe, PhD

Targeting p53-regulated metabolism for anti-leukemia therapy

Scott Lowe, PhD

Advancing CARM1 Inhibitors as Preclinical Candidates Against Metastatic Breast Cancer

Minkui Luo, PhD

Developing mechanism-based protein arginine methyltransferase inhibitors as anti-cancer reagents

Minkui Luo, PhD

Develop protein methyltransferase inhibitors as anti-cancer drugs

Minkui Luo, PhD

High-throughput screening for SETMAR inhibitors: Develop protein methyltransferase inhibitors as anticancer drugs

Minkui Luo, PhD

Project

High throughput screening for SETMAR inhibitors

Investigator(s)

Minkui Luo, PhD

Synthesis of polyketide-like small molecule libraries

Daniel Macks, PhD

Effect of histone deacetylase inhibitors on normal and transformed prostate cells

Paul Marks, PhD

Monitoring molecular biomarkers in human cancer

Peter Maslak, MD

Targeting CDH5 and simultaneously treating PSMA-positive and PSMA-negative prostate cancer with alpha particle therapy

Michael McDevitt, PhD

Camelid antibodies armed with alpha particles and directed at enzalutamide-treated prostate cancer

Michael McDevitt, PhD

A self-assembling synthetic clot to specifically infarct tumor tissue in vivo

Michael McDevitt, PhD

RNAi prophylaxis of chemotherapy-induced nephrotoxicity

Michael McDevitt, PhD

Optimizing EGFR Blockade in Human Glioblastoma

Ingo Mellinghoff, MD

Evaluation of epothilone analogs, synthetic microtubule stabilizing agents with potent anti-myeloma and anti-ovarian cancer action

Malcolm Moore, D.Phil.

Murine tumor xenograft models for preclinical

Malcolm Moore, D.Phil.

drug development
Project

Investigator(s)

Targeting activated ADAM17 for the treatment of epithelial ovarian cancer

Dimitar Nikolov, PhD

Function blocking antibodies against ADAM metalloproteases for inhibition of Eph, EGFR and Notch-dependent tumorigenesis

Dimitar Nikolov, PhD

Small-molecule inhibitors of Eph receptor signaling

Dimitar Nikolov, PhD

Single-chain anti-EphA2 antibodies for treatment of lymphoma and leukemia

Dimitar Nikolov, PhD

Real time polymerase chain reaction (PCR) for clinical and correlative studies

Stephen Nimer, MD

The role of arginine methyltransferases in the pathogenesis of myeloid malignancies

Stephen Nimer, MD

DNA vaccines against breast cancer: Synergy through targeting both tumor cells and tumor stroma

Francesca Orlandi, PhD

Chemical synthesis in carbohydrate-based cancer vaccines

Ouathek Ouerfelli, PhD

Overcoming acquired resistance to targeted therapy in lung cancer

William Pao, MD, PhD

Development of Gboxin, a benzimidazolium compound, as an antitumor reagent

Luis Parada, PhD

Protein chip biology system for high-throughput screening

Gavril Pasternak MD, PhD

Project

Sigma receptors: a novel anti-proliferative target for tumor therapy

Investigator(s)

Gavril Pasternak, MD, PhD

Structure activity of the sigma₁ antagonist binding pocket

Gavril Pasternak, MD, PhD

Development of potent small molecule inhibitors of the cGAS-STING dsDNA-sensing immune pathway

Dinshaw Patel, PhD

Development of small molecule inhibitors of METTL3-METTL14 RNA methyltransferase complex as drugs against acute myeloid leukemia

Dinshaw Patel, PhD

T-cell precursors and allogeneic hematopoietic stem cell transplant

Miguel Perales, MD

SKI-N69: A candidate radiosensitizer

John Petrini, PhD

Modulation of DNA damage signaling pathways

John Petrini, PhD

Targeted synthetic immunity for activating site specific anti-tumor innate immune response

Nagavarakishore Pillarsetty, PhD

Site specific activation of $\gamma\delta$ T cells for cancer immunotherapy applications

Nagavarakishore Pillarsetty, PhD

Targeted nuclear delivery of EGF-Auger emitting radioconjugates for cancer therapy

Nagavarakishore Pillarsetty, PhD

Tumor antigen-directed molecular imaging to strategize T-cell immunotherapy

Vladimir Ponomarev, MD, PhD

Project
Evaluation of endothelial cell apoptosis in human cancer specimens in response to ionizing radiation

Elizabeth Poyner, MD, PhD
Investigator(s)

Novel structure derivatives of trehalose dimycolate as cancer vaccine adjuvants

Vivek Rao, PhD

Imaging of the Peripheral Nervous System

Thomas Reiner, PhD

Preclinical Testing of Hedgehog Inhibitors in Pancreatic Cancer

Marilyn Resh, PhD

Identification of hedgehog palmitoylation inhibitors

Marilyn Resh, PhD

Efficacy testing of TDI-3410, a Hedgehog Acyltransferase inhibitor, in mouse models of lung, breast and pancreatic cancer

Marilyn Resh, PhD

Development and in vivo evaluation of clinical retroviral vectors designed to express high levels of mutant HSV thymidine kinase to increase the safety of T lymphocyte infusions

Isabelle Riviere, PhD

Development of improved TORC1 inhibitor-based therapies for the treatment of breast cancer and other carcinomas

Neal Rosen, MD, PhD; Daniel Heller

Development of improved TORC1 inhibitor-based therapies for the treatment of breast cancer and other carcinomas

Neal Rosen, MD, PhD; Daniel Heller

Development of combined inhibition of ERK and PI3K/AKT signaling as a strategy for the treatment of mutant RAS-dependent tumors

Neal Rosen, MD, PhD

Project
DLL3 radioimmunoconjugates for high-grade neuroendocrine tumor imaging and therapy

Investigator(s)
Charles Rudin, MD, PhD

Design of combinatorial therapeutics

Chris Sander, PhD

Preclinical development of the anti-androgen A52 for prostate cancer therapy

Charles Sawyers, MD

Therapeutic self-assembling nanodevices

David Scheinberg, MD, PhD

Radiotherapy with targeted multivalent α -particle generators

David Scheinberg, MD, PhD

Development of novel inhibitors of SCCRO

Bhuvanesh Singh, MD

A novel class of peptidomimetic agents targeting tumor growth, angio-genesis, and metastases

Francis Sirotnak, PhD and David Scheinberg, MD, PhD

Modulation of chemotherapy sensitivity by alterations in PTEN/AKT signaling

David Solit, MD

Characterization of an RNA binding protein targeted by thalidomide analogues

David Spriggs, MD

MUC16 synthetic lethal screening in ovarian cancer

David Spriggs, MD

Development of novel menin inhibitors for glioma therapy

Viviane Tabar, MD

pdfSEAKER: Development of CAR T cells that express human peptide deformylase (hsPDF) to activate synergistic small-molecule prodrugs locally at tumors

Derek Tan, PhD

Project
 onSEAKER: Engineering CAR T cells to
 biosynthesize synergistic small molecule drugs
 in situ

Derek Tan, PhD
Investigator(s)

Targeted delivery of epigenetic small-molecule
 drugs by SEAKER cells

Derek Tan, PhD

A novel CAR T-cell platform for targeted, local
 biosynthesis of small-molecule therapeutics

Derek Tan, PhD

Studying Chk1-mediated signaling pathways
 using chemical genetics and functional imaging

Archie N. Tse, MD, PhD

Identification of novel small molecules with anti-
 proliferative action towards human lung cancer
 cell lines harboring oncogenic EGFR or KRAS

Harold Varmus, MD

ESSENCE compounds as tools for specific
 modulation of alternative splicing patterns

Sandra Vorlova, PhD

The oncogenic action of NRF2 depends on de-
 glycation by Fructosamine-3-kinase

Hans-Guido Wendel, MD

Defining the mechanism underlying G1TR
 agonist activity

Jedd Wolchok, MD, PhD

TMC-95A analogues as potential antitumor
 agents

Zhi-Qiang Yang, PhD

Controlled rate freezer for preclinical laboratory
 studies

James Young, MD

Janus kinase 2 (JAK2) as a therapeutic target in
 graft-versus-host disease

James Young, MD and Brian Betts, MD

Reversal of indoleamine 2,3-dioxygenase (IDO)-

James Young, MD

Reversal of indoleamine 2,3-dioxygenase (IDO)-
mediated suppression of tumor immunity
stimulated by human dendritic cells

James Young, MD
Investigator(s)

PREVIOUS

[Major Accomplishments](#)

NEXT

[Research Community Events](#)

- [Communication preferences](#)
- [Cookie preferences](#)
- [Legal disclaimer](#)
- [Accessibility statement](#)
- [Privacy policy](#)
- [Price transparency](#)
- [Public notices](#)

© 2024 Memorial Sloan Kettering Cancer Center