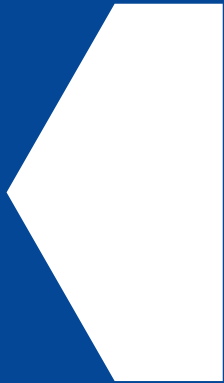


IRBM

INTEGRATED RESEARCH FOR
BIOTECHNOLOGY & MEDICINE



*Deep expertise for decisive
drug discovery outcomes*



When stakes are high and standard drug discovery approaches fall short, IRBM designs, runs, and interprets experiments that answer the toughest questions needed to progress your program.



Our History



~80K m²
(~860K ft²)



All scientists at
a single site



Big pharma infrastructure and experience, building drugs from A-Z

1990 MERCK RESEARCH LAB

Isentress® (HIV)
HIV Integrase inh.

Grazoprevir (HCV)
HCV Protease inh.

Zejula® (Cancer)
PARP1/2 inh.

Legacy scientists, entrepreneurially driven founders, and global experts, focused on solving the most difficult drug discovery challenges

2010

2014

2019

IRBM

2021

2025

1st client-sponsored
SM in the clinic

1st client-sponsored
peptide in the clinic

Out-licensing of IRBM
CAM inh. (SM, HBV)

IRBM pipeline: 3 novel
preclinical candidates



Mission: Accelerating drug discovery for the greater good.

Deep Expertise for Decisive Drug Discovery Outcomes

The
IRBM
Edge



Integration that matters

Med chem, biology, DMPK, *in vivo* pharmacology, and structural biology—all under one roof



Expert drug hunters

Deep problem-solving expertise and experience making drugs that get to market



Flexible to meet your needs

Flexible partnership models, target-agnostic, modality-diverse

3



drugs delivered
to the market

800+



scientific publications
authored by our
scientists

30+



preclinical candidates
delivered

100+



patents to which our
scientists have
contributed

5+



notable chemistry
and patent awards

Strong Roots, Proven Mastery, and a Focus on Advancing Therapies that Make a Difference

Our expertise spans multiple therapeutic disciplines and modalities, with specialized depth in high-impact diseases

Neuro-degeneration

Oncology

Infectious disease
(antivirals)

IRBM

Our scientists have trained and worked at world renowned institutions

NOVARTIS

Roche

HARVARD
UNIVERSITY

EMBL

gsk
GlaxoSmithKline

AstraZeneca

SANOFI

MERCK
Be well

AMGEN

Lilly

Janssen
PHARMACEUTICAL COMPANIES OF
JOHNSON & JOHNSON

COLUMBIA
UNIVERSITY

THE UNIVERSITY OF TEXAS
MD Anderson
Cancer Center
Making Cancer History®

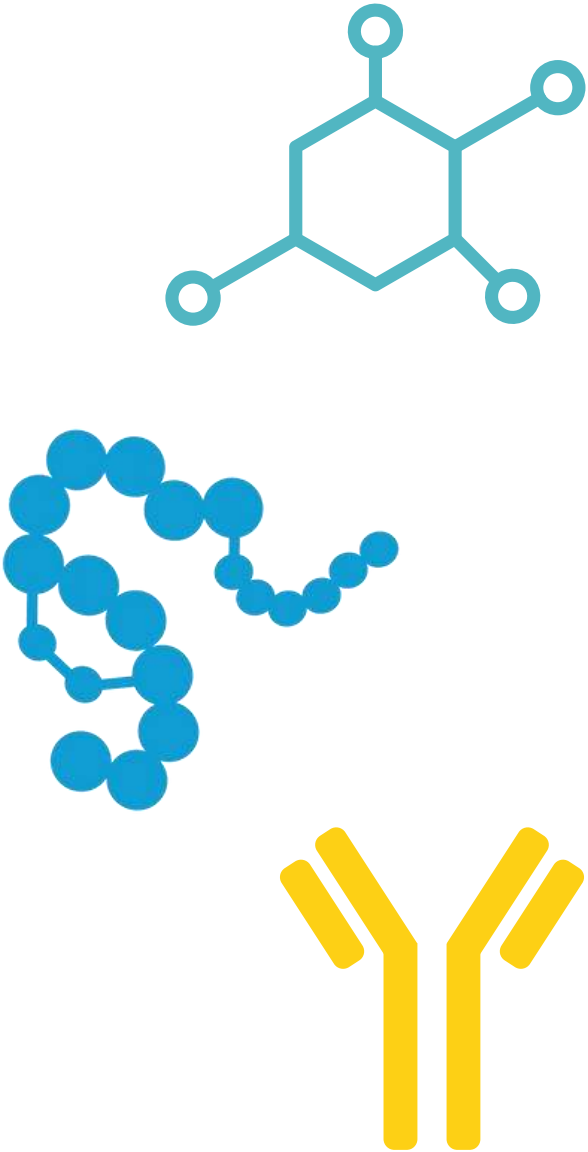
Karolinska
Institutet

From Target to Pre-IND, Seamlessly Connected

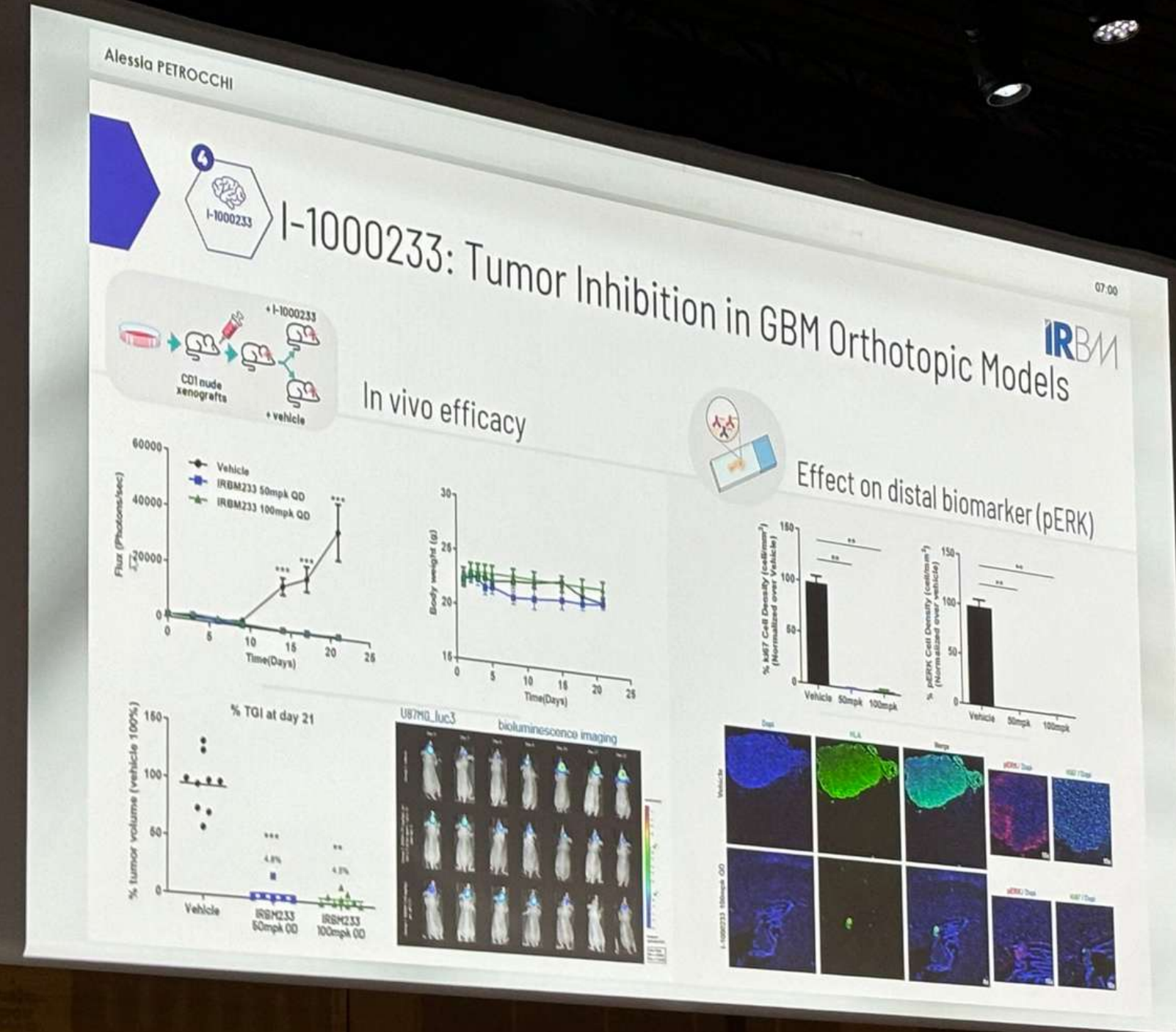
Modality agnostic with special expertise in small molecules, peptides & antibodies



Molecular & cellular biology	Assay development	Medicinal chemistry	ADME & DMPK	Biomarkers
Functional genomics	High throughput screening, FBDD	Peptide chemistry	Pre-clinical <i>in vivo</i> efficacy/imaging	Responder ID
Primary & iPSCs	High content screening	AI, virtual screening	Flow cytometry	Bioinformatics
Proteomics	~400K compound collection	Structural biology by NMR	Digital pathology	Translational biology
Protein production	mAb phage libraries	Biophysical assays	Human PK prediction	Early tox (GLP-like)
High content imaging	Peptide phage & mRNA display	Computational biology	PK/PD/efficacy relationships	Synthetic route optimization



Integration in Action



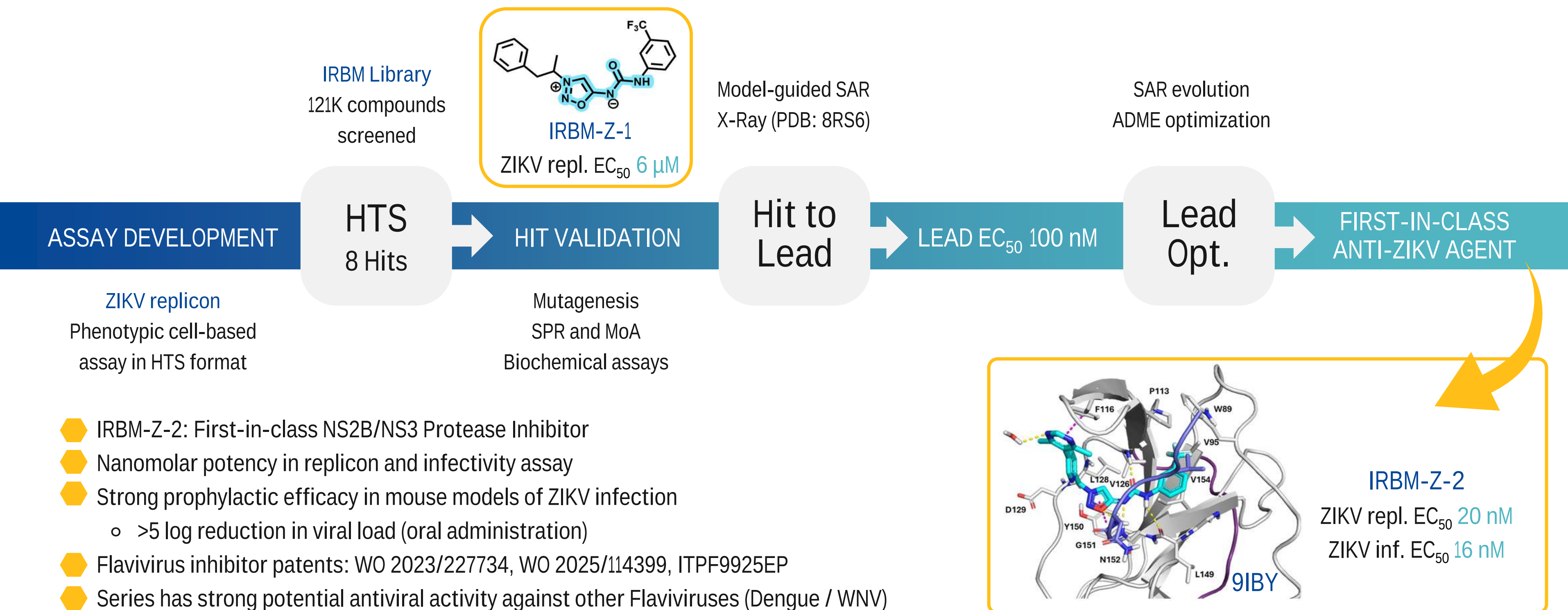
EFMC-ESAC
International Symposium
on Medicinal Chemistry
Rome, Italy
September 14, 2024



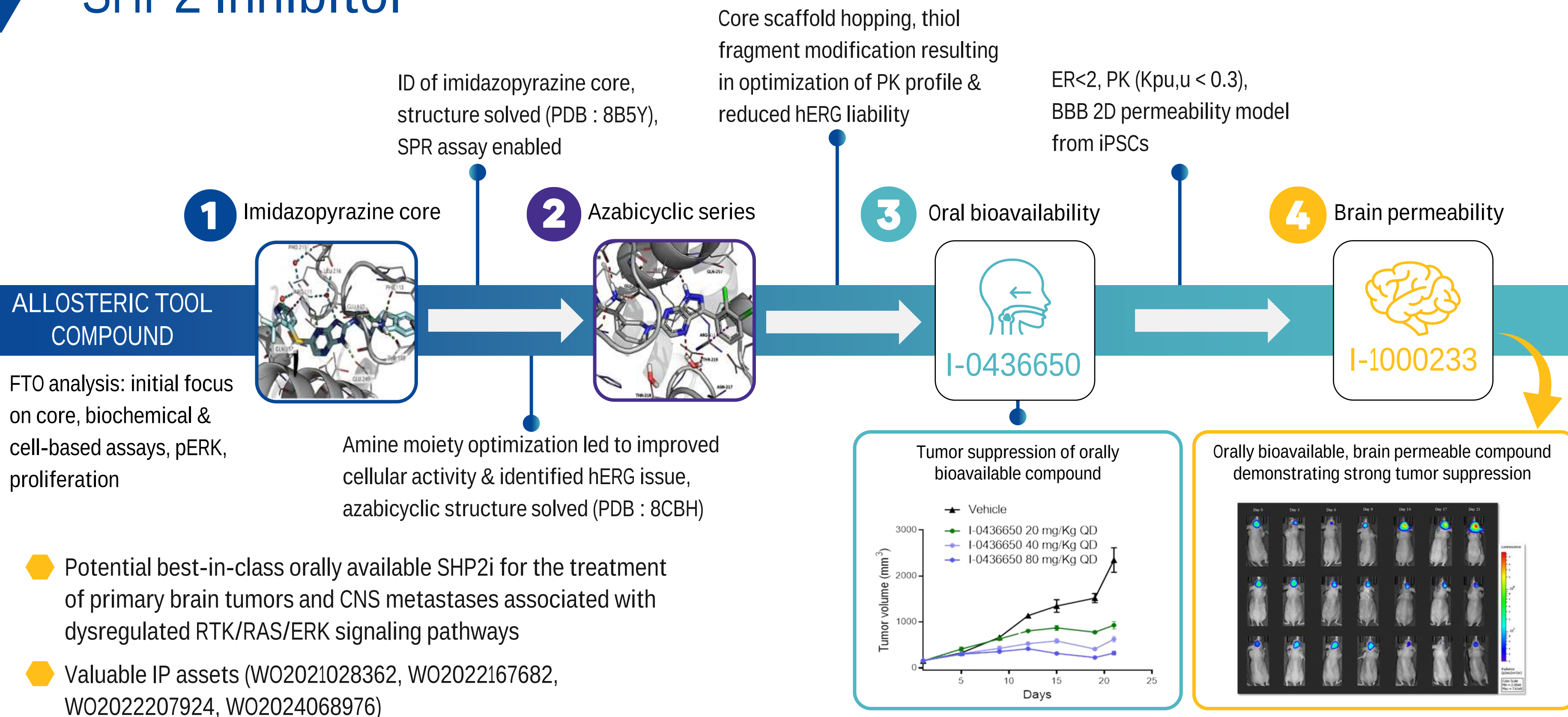
				← DELIVERABLES →				
MODALITY	THERAPEUTIC AREA	MOA	COLLABORATION	TARGET ID / VALIDATION	HIT ID / VALIDATION	HIT TO LEAD / LEAD ID	LEAD OPTIMIZATION	PRECLINICAL CANDIDATE
Peptide	Viral Disease, CVD, Autoimmune Disease, Inflammation	Protein-Protein Interaction Inhibitor	Big Pharma					
Peptide	CVD, Metabolic Disease	Receptor agonist	Big Pharma / Biotech					
Peptide	Oncology	Theranostic	Big Pharma					
Peptide	Oncology	Targeted Intracellular Delivery	Biotech					
Peptide	Ophthalmology	Enzymatic Inhibitor	Big Pharma					
Small Molecule	Viral Disease	Protein-Protein Interaction Inhibitor	Govt / Grants (IRBM)					**
Small Molecule	Viral Disease	Allosteric Enzyme Inhibitor	Govt / Grants (IRBM)					
Small Molecule	Neurodegenerative Disorders	Protein-Protein Interaction Inhibitor	Non-Profit Foundation					
Small Molecule	Oncology	Protein-Protein Interaction Inhibitor	Biotech					
Small Molecule	Oncology	Kinase Inhibitor	Non-Profit Academic Center					
Small Molecule	Oncology	Allosteric Enzyme Inhibitor	Govt / Grants (IRBM)					
Small Molecule	Oncology	Covalent Enzyme Inhibitor	Govt / Grants (IRBM)					
Antibody	Oncology	Immune Check-point	Non-Profit Academic Center					
Antibody	Oncology	ADC	Govt / Grants (IRBM)					
Antibody	Oncology	CAR-T	Govt / Grants (IRBM)					

**Out-licensed

IRBM-Z-2: First-in-Class Antiviral Agent against ZIKV



I-1000233: Orally Bioavailable & Brain Penetrant SHP2 Inhibitor

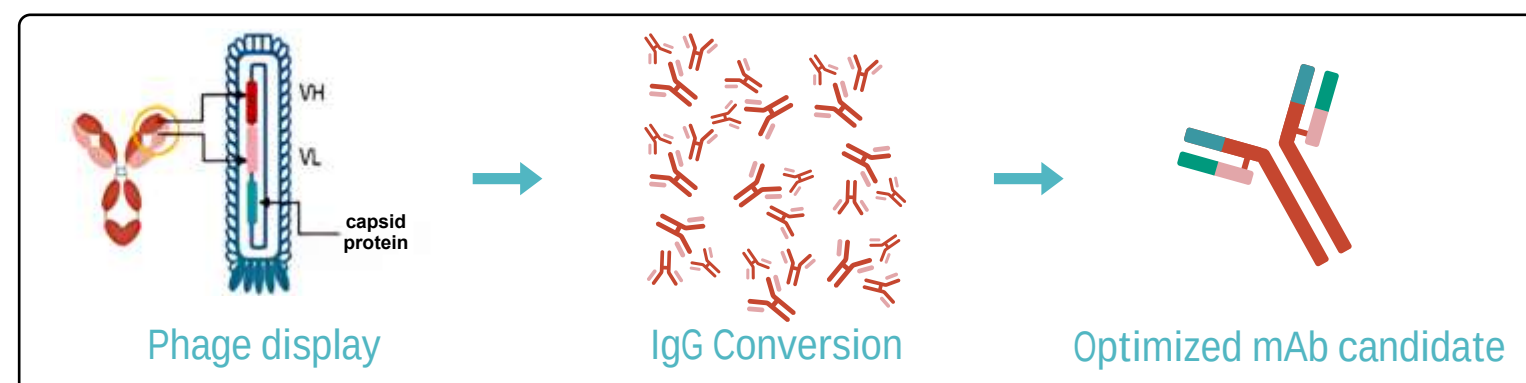


- Potential best-in-class orally available SHP2i for the treatment of primary brain tumors and CNS metastases associated with dysregulated RTK/RAS/ERK signaling pathways
- Valuable IP assets (WO2021028362, WO2022167682, WO2022207924, WO2024068976)

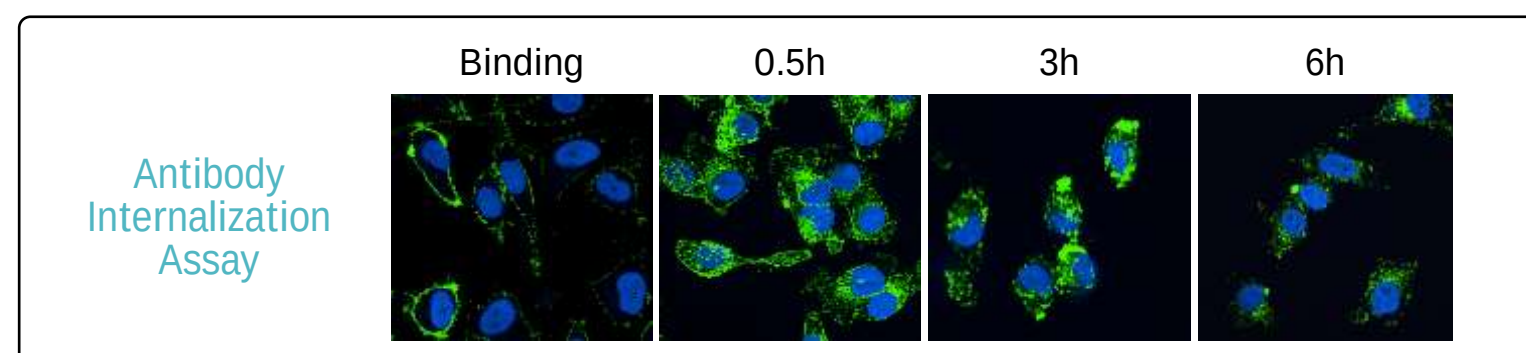
E3-SG3249: First-in-Class CRLF2/TLSPR Antibody Drug Conjugate

HIT ID | ANTIBODY CHARACTERIZATION & OPTIMIZATION

- Phage Display used to identify AM E3, a potent mAb against human CRLF2

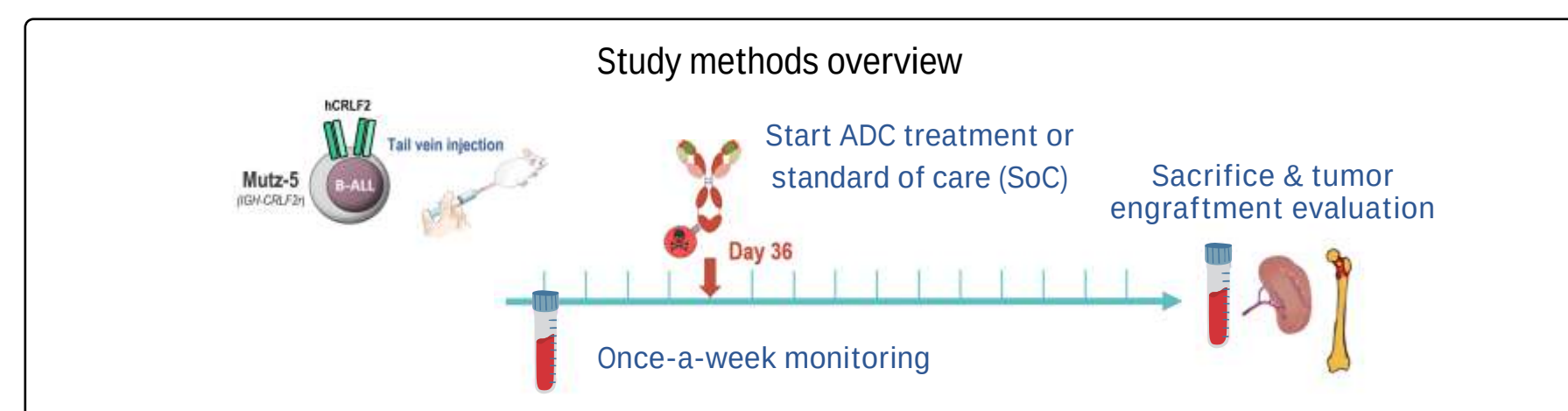


- Campaign 1 bait: hCRLF2/TLSPR
 - Screening on recombinant protein and cells
- ~100 IgGs identified, with unique H-CDR3
- Multiple internalizing IgGs with double-digit nM affinity selected
- AM E3 IgG with single-digit nM affinity selected for validation
- Tesirine-conjugated AM E3 mAb in hCRLF2+ xenograft models

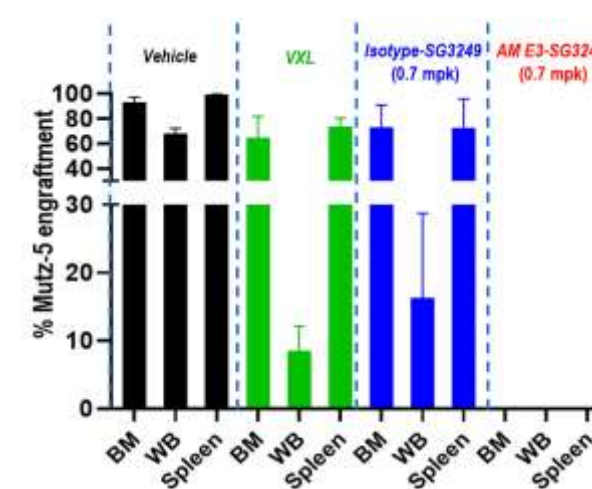


IN VIVO PROOF OF CONCEPT STUDIES

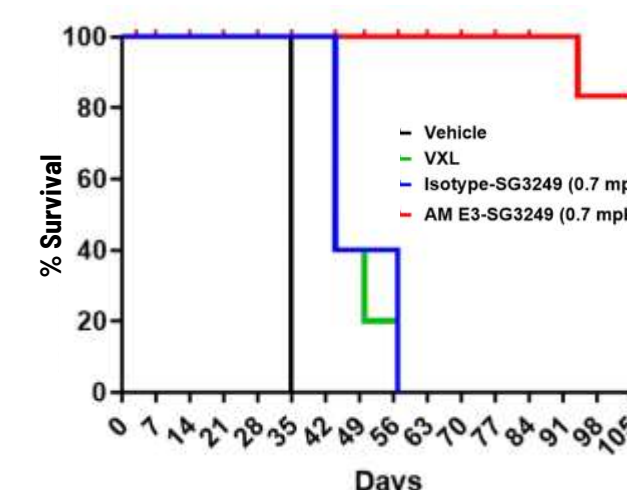
- Efficacy of E3-SG3249 ADC in hCRLF2+ B-ALL Orthotopic Xenograft Models



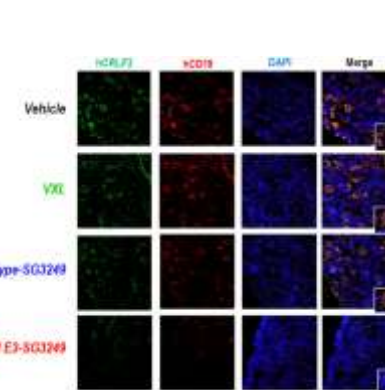
Mutz-5 Engraftment Across Tissues (5 weeks post-Tx)



Probability of Survival



Bone Marrow Sections





Partnering to Accelerate Drug Discovery for the Greater Good



Flexible Partnership Models to Advance High-Impact Programs



DEDICATED TO INNOVATION THROUGH

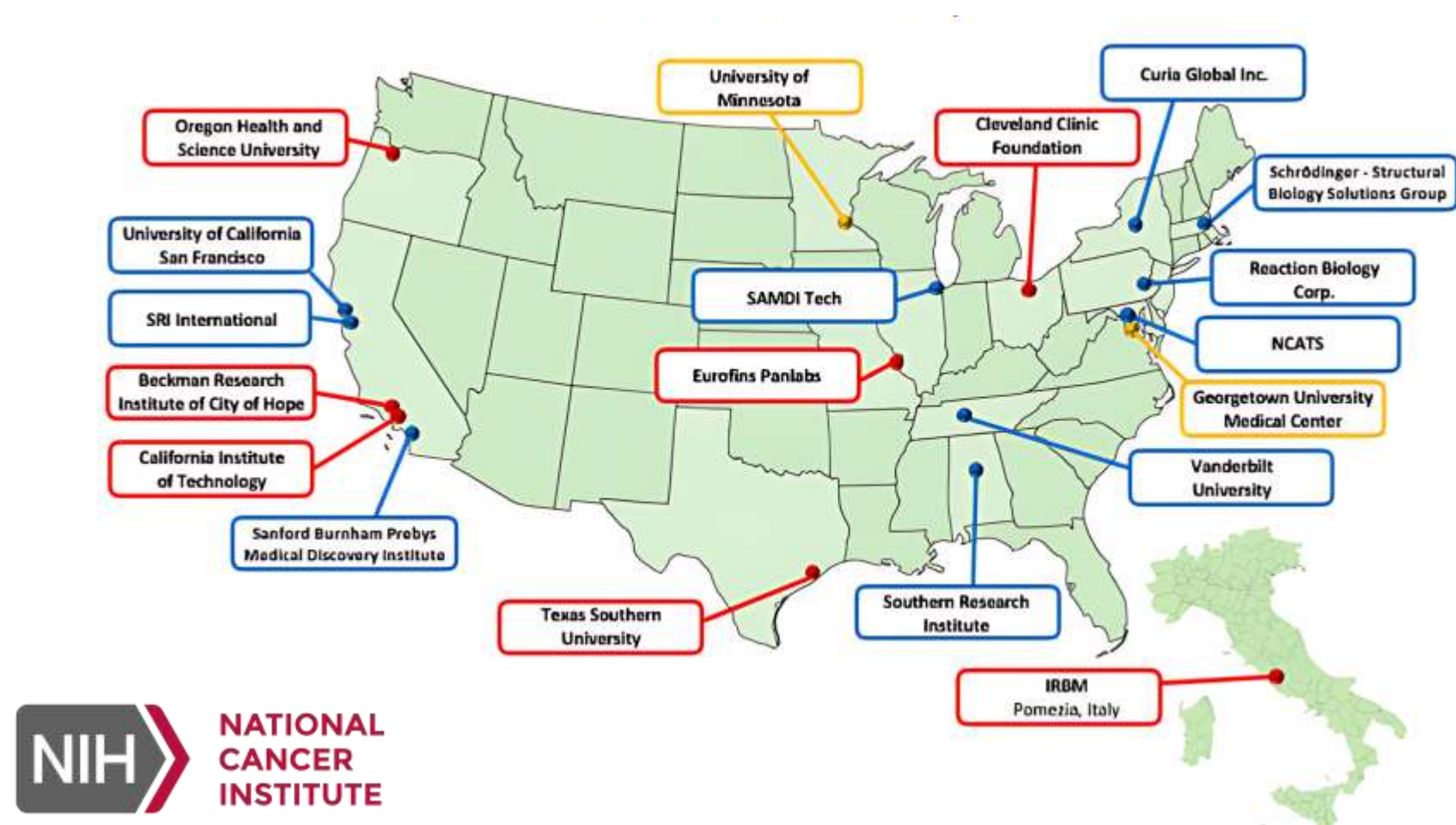
- Inventive scientific contributions
- Investment in internal R&D
- Fully-integrated teams and capabilities

Repeat partnerships. 15+ years of success.

Expanding Discovery Through National & International Consortiums

NCI Chemical Biology Consortium (CBC)

CNCCS Consortium



- CSO & Head of Oncology are board members
 - Actively participate in NIH program review



IRBM acts as a bridge between academic discoveries and the clinic through effective public-private partnerships

Great Science. Expert Teams. Candidates that Progress.



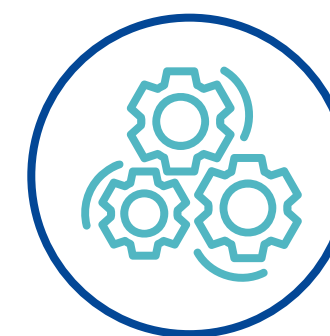
Experienced

Proven outcomes across modalities & therapeutic areas



Trusted

Partnerships built on transparency & results



True Integration

All scientists under one roof, end-to-end discovery



Ready to advance your unique drug discovery project with the expertise it deserves



www.irbm.com

Your
IRBM
Edge