

The Patient-Centered Learning Lab

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Our vision for the Patient Lab

Bring the latest technology to bear on kidney cancer patients by building teams of doctors and researchers to work with each participant



Building the Patient Lab together

Foundation support launched the program. Investigator and patient input will shape it.

THANK YOU

**Robert J. and Claire Pasarow
Foundation**

The generous \$500,000 gift
gives the Patient Lab the
resources to begin.

INVESTIGATOR INPUT

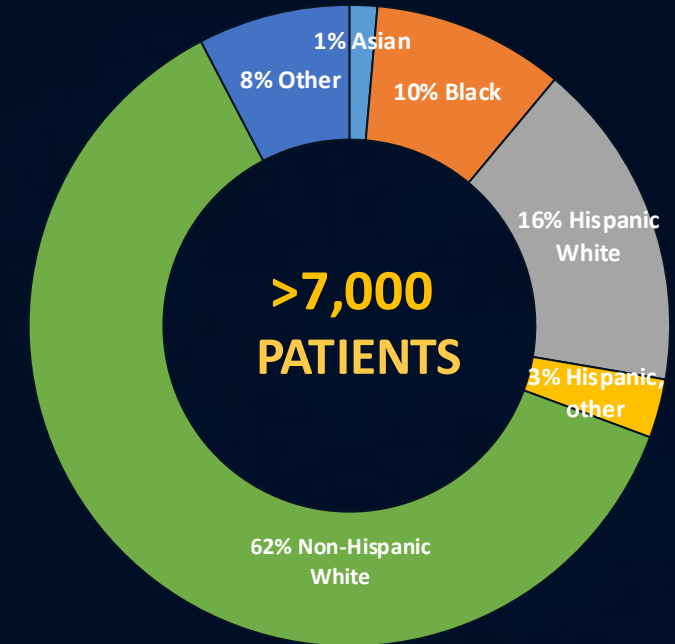
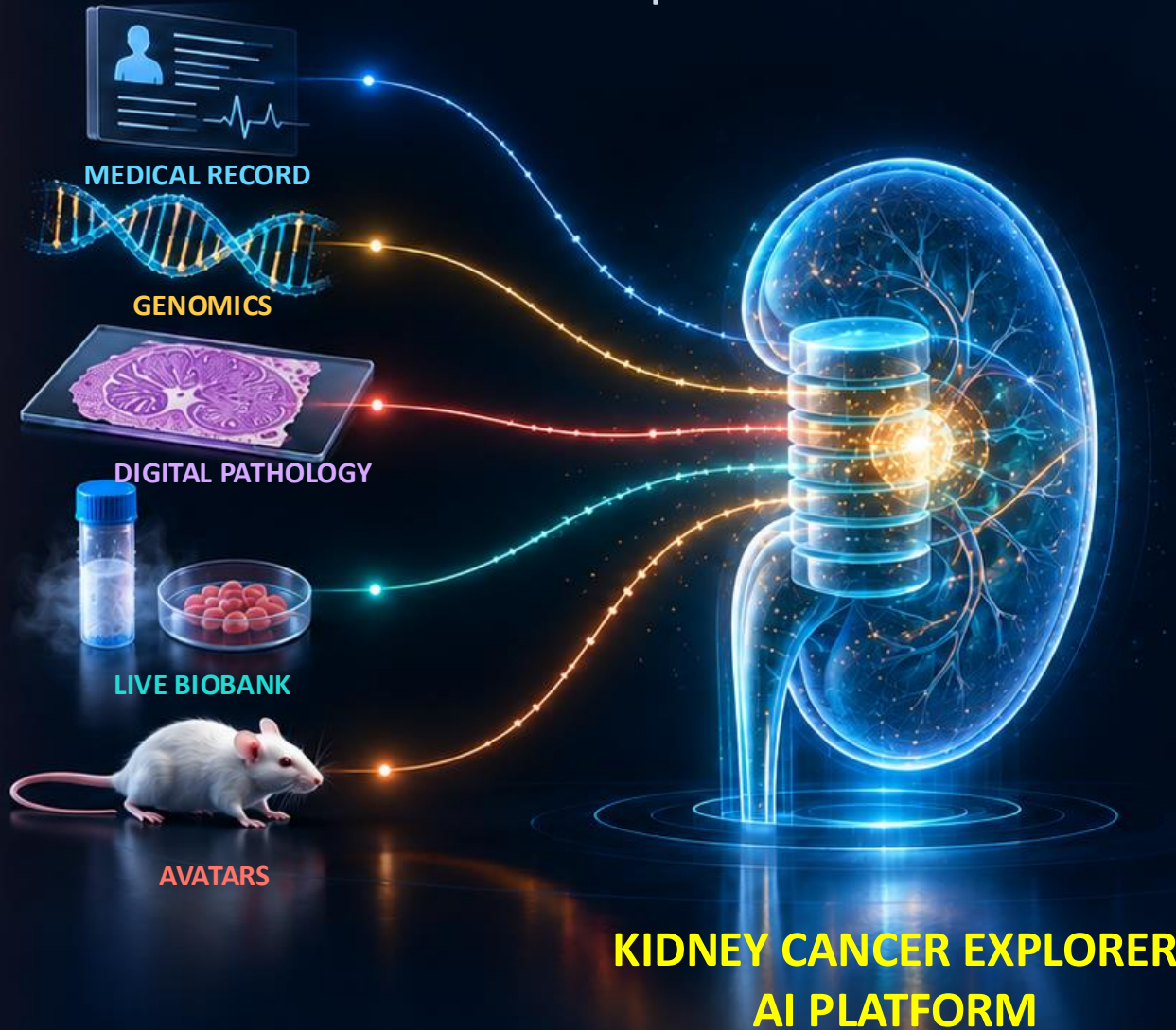
Investigators across UT Southwestern are
invited to propose new tools and
approaches.

PATIENT PARTNERSHIP

Patients will help shape the program and
how results are shared.

Kidney Cancer Explorer

Computational backbone of the Patient Lab

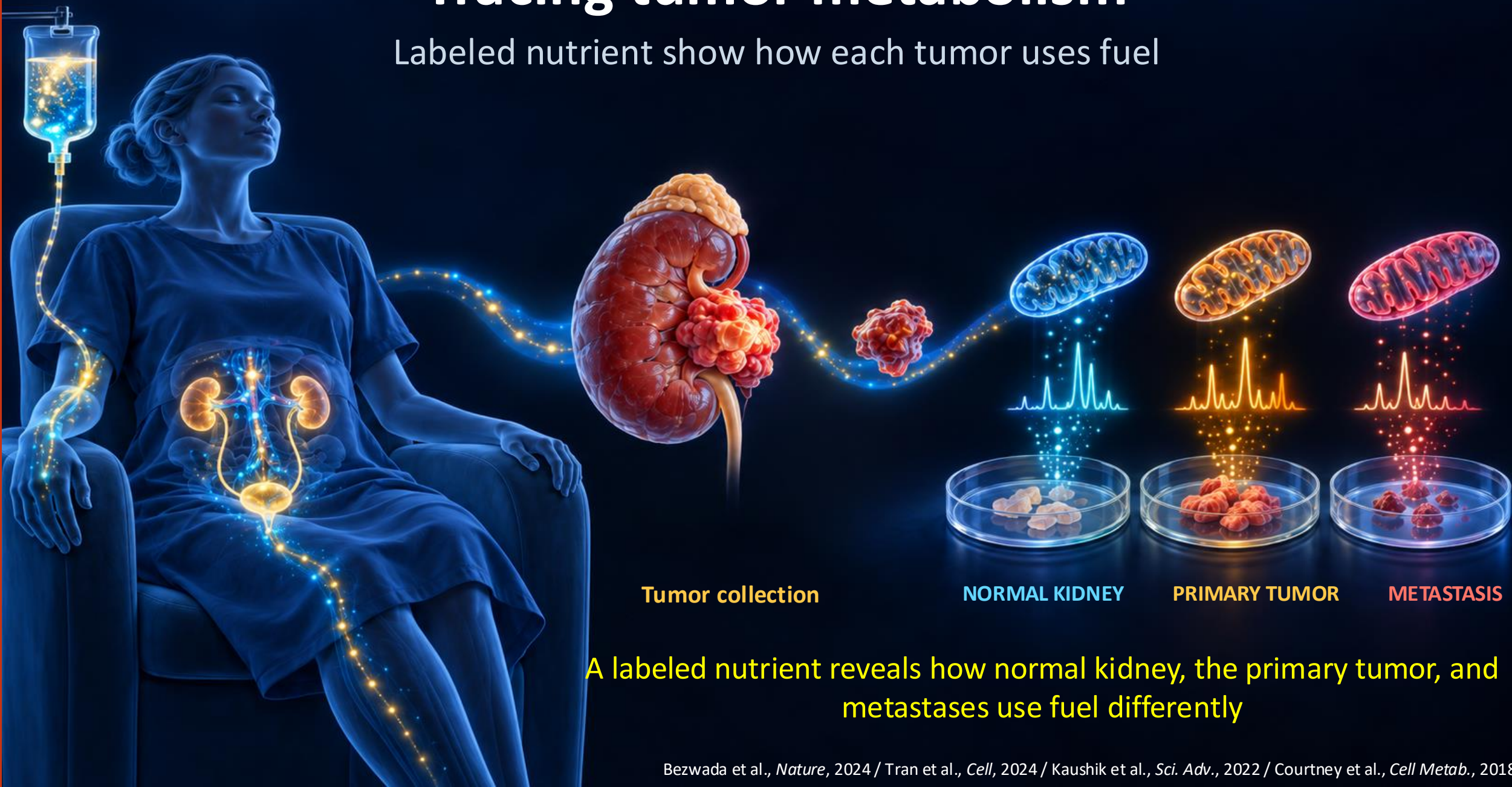


DIVERSE POPULATION

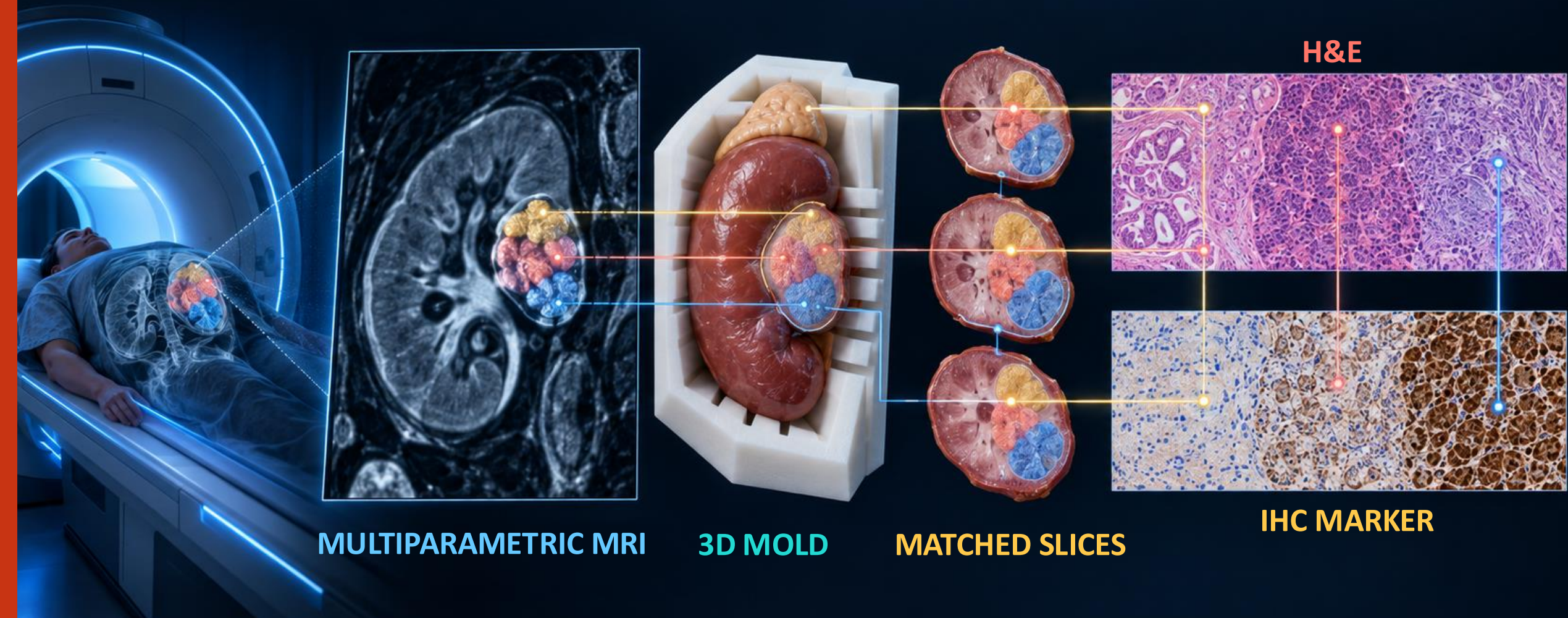
^{13}C -NUTRIENT INFUSION

Tracing tumor metabolism

Labeled nutrient show how each tumor uses fuel



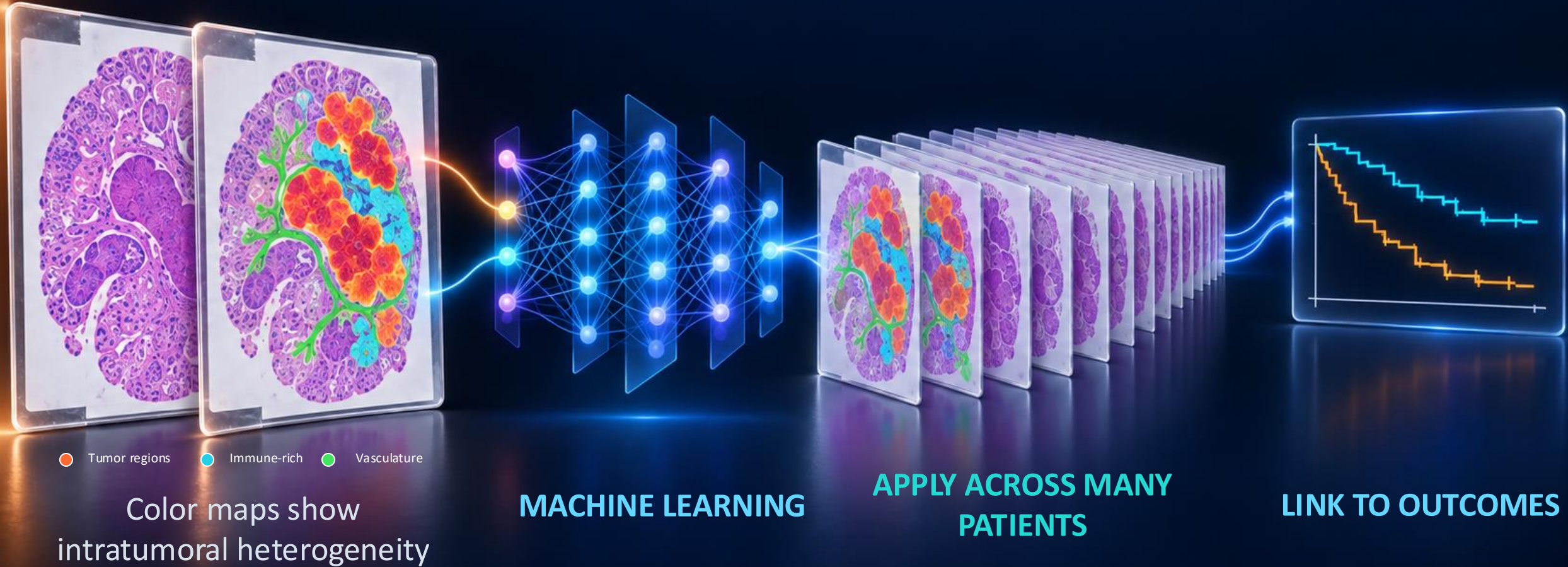
Matching imaging to tumor biology



Dissecting heterogeneity by aligning radiology images, tissue molds, and pathology slides

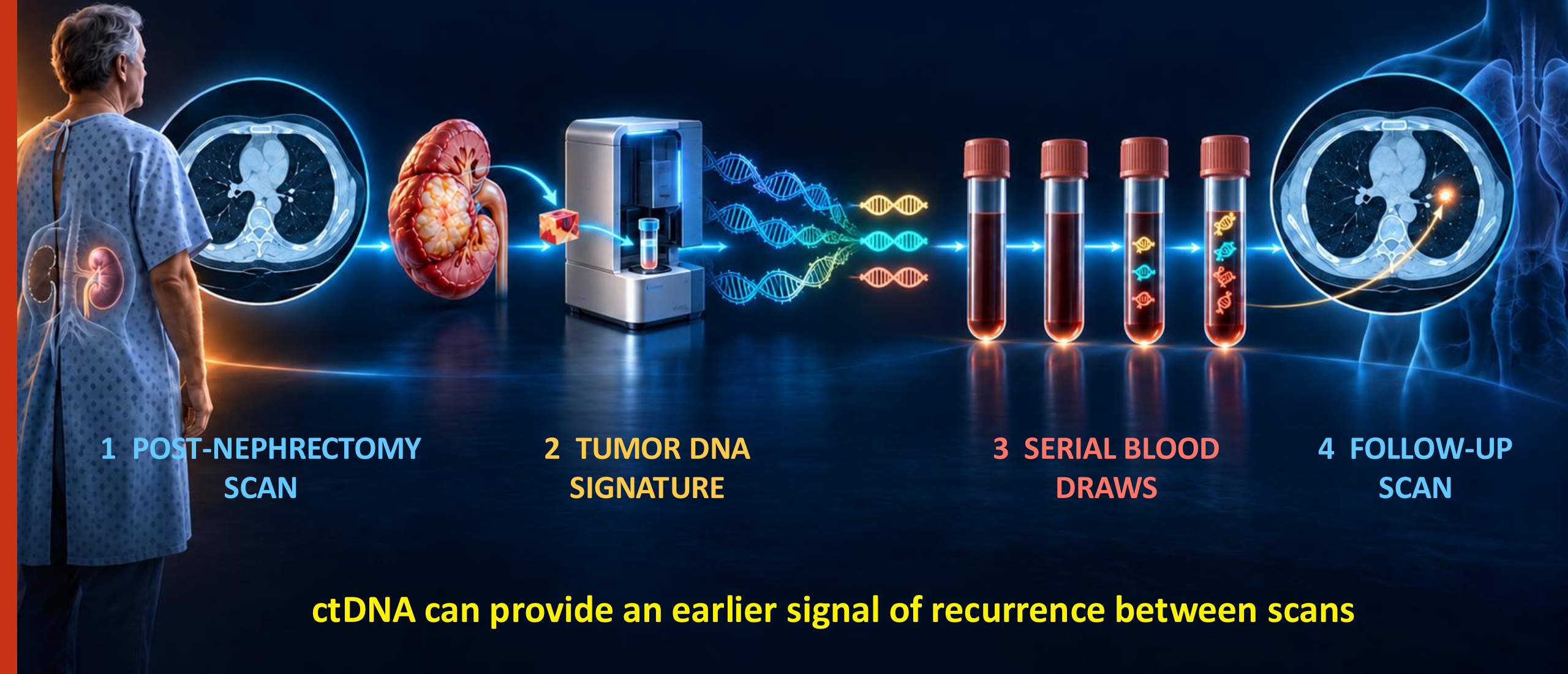
Scaling routine H&E with machine learning

Computational pathology measures patterns that are difficult to score by eye at scale



A personalized blood test tracks cancer between scans

Serial blood tests look for the tumor's leaked DNA between routine scans



ctDNA can provide an earlier signal of recurrence between scans

TUMOR PIECES

TUMOR + IMMUNE CELL RECONSTITUTED AVATAR

TEST IMMUNOTHERAPY RESPONSE

**Do the patient's immune cells kill the tumor in the presence of immunotherapy?
What can improve the response?**

What participation means for patients

Participation is voluntary, secure, and guided by you

ENROLLMENT

Patients presenting with
a large primary kidney tumor

Surgery provides enough tissue
for diagnosis and research

MOMENTUM

More than 10 investigator
applications received

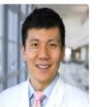
BUILD WITH PATIENTS

Patients may choose whether
to take part after discussing
with the team

Enrollment will start in 2027Q2

**Thank you for your trust and
partnership**

Urology

 Jeffrey Cadeddu, M.D. Professor, Urology and Radiology	 Jeffrey Gahan, M.D. Associate Professor, Urology	 Kris Gaston, M.D. Associate Professor, Urology	 Ryan Hutchinson, M.D. Assistant Professor, Urology	 Brett Johnson, M.D. Assistant Professor, Urology
 Yair Lotan, M.D. Professor, Urology	 Vitaly Margulis, M.D. Professor, Urology	 Xiaosong Meng, M.D., Ph.D. Dedman Family Scholar in Clinical Care; Assistant Professor, Urology	 Isamu Tachibana, M.D. Assistant Professor, Urology	 Solomon Woldu, M.D. Associate Professor, Urology

Investigators

 Ralph DeBerardinis, M.D., Ph.D. Metabolism Professor & Director, Genetic and Metabolic Disease Program (GMD)	 Qing Zhang, Ph.D. Professor, Pathology	 Maralice Conacci-Sorrell, Ph.D. Faculty Development Associate Professor, Cell Biology	 Xiankai Sun, Ph.D. Professor, Radiology and Director, Cytoprotection and Radiochemistry Program
 Chen Yao, Ph.D. Assistant Professor, Immunology	 Tao Yue, Ph.D. Assistant Professor, Surgery and Immunology	 Satwik Rajaram, Ph.D. Assistant Professor, Bioinformatics	
 Alana Christie, M.S. Bioinformatics and Data Analytics Researcher/Consultant	 Bingqing Xie, Ph.D. Assistant Professor, Internal Medicine		

KCP Staff

 Jenny Beth Humann, MHA Operations Analyst	 Kathy Worland, MA Senior Program Coordinator
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THANK YOU

Radiation Oncology

 Aurelie Garant, M.D. Associate Professor, Radiation Oncology	 Raquibul Hannan, M.D., Ph.D. Professor, Radiation Oncology and Immunology	 Robert Timmerman, M.D. Professor, Radiation Oncology and Neurological Surgery
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Clinical Genetics

 Remington Fenter, M.S., CGC	 Amber Gemmell, M.S., CGC	 Brian Reys, M.S., CGC
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Pathology

 Prayal Kapur, M.D. Professor Group Leader of Genitourinary Pathology Kidney Cancer Program Co-Leader Clements University Hospital Email	 Jyoti Batani, M.D. Professor G.I. Officer Asst. Chief Medical Informatics Officer Clements University Hospital Email	 Qi Cai, M.D., Ph.D. Associate Professor Clements University Hospital Email	 Liwei Jia, M.D., Ph.D. Associate Professor Clements University Hospital Email
 Urooba Nadeem, M.D. Assistant Professor UTSW - POB 1 Email	 Doreen Palsgrove, M.D. Associate Professor Clements University Hospital Email Publications	 Rajal Shah, M.D. Fellowship Director of Genitourinary Pathology Clements University Hospital Email Publications	 Lan Zheng, M.D. Assistant Professor Clements University Hospital Email Publications

Oncology

 Waddah Arafat, M.D. Associate Professor, Internal Medicine - Hematology/Oncology Parkland Health and Hospital System - Dallas	 James Brugarolas, M.D., Ph.D. Associate Professor, Internal Medicine - Hematology/Oncology Director, Kidney Cancer Program	 Suzanne Cole, M.D. Associate Professor, Internal Medicine - Hematology/Oncology Medical Director, University Hospital Simmons Cancer Clinic at UT Southwestern Medical Center - Richardson/Plano	 Kevin Courtney, M.D., Ph.D. Professor, Internal Medicine - Hematology/Oncology	 Hans Hammers, M.D., Ph.D. Professor, Internal Medicine - Hematology/Oncology
 Charles Jiang, M.D. Assistant Professor, Internal Medicine - Hematology/Oncology	 Jude Khatib, M.D. Assistant Professor, Internal Medicine	 Jake Lichterman, D.O. Instructor, Internal Medicine - Hematology/Oncology	 Jay Lohrey, M.D. Assistant Professor, Internal Medicine - Hematology/Oncology Medical Director, Harold C. Simmons Comprehensive Cancer at Moncrief Cancer Institute - Fort Worth	 Qian Qin, M.D. Assistant Professor, Internal Medicine - Hematology/Oncology
 Joseph Vento, M.D. Assistant Professor, Internal Medicine	 Jue Wang, M.D. Professor, Internal Medicine - Hematology/Oncology	 Tian Zhang, M.D. Associate Professor, Internal Medicine - Hematology/Oncology		

Radiology

 Asim Afaq, M.D. Associate Professor, Radiology	 Maddy Artunduaga, M.D. Assistant Professor, Radiology	 Jovan Begovic, M.D. Assistant Professor, Radiology	 David Fetzer, M.D. Assistant Professor, Radiology
 Orhan Oz, M.D., Ph.D. Professor & Division Chief, Radiology	 Martin Pomper, M.D., Ph.D. Professor and Chair, Radiology	 Lori Watumull, M.D. Professor, Radiology	 Gaurav Khatri, M.D. Associate Professor & Division Chief, Radiology