

Annual Report 2023



**Aging and
Cancer lab**

We translate aging research into oncology practice

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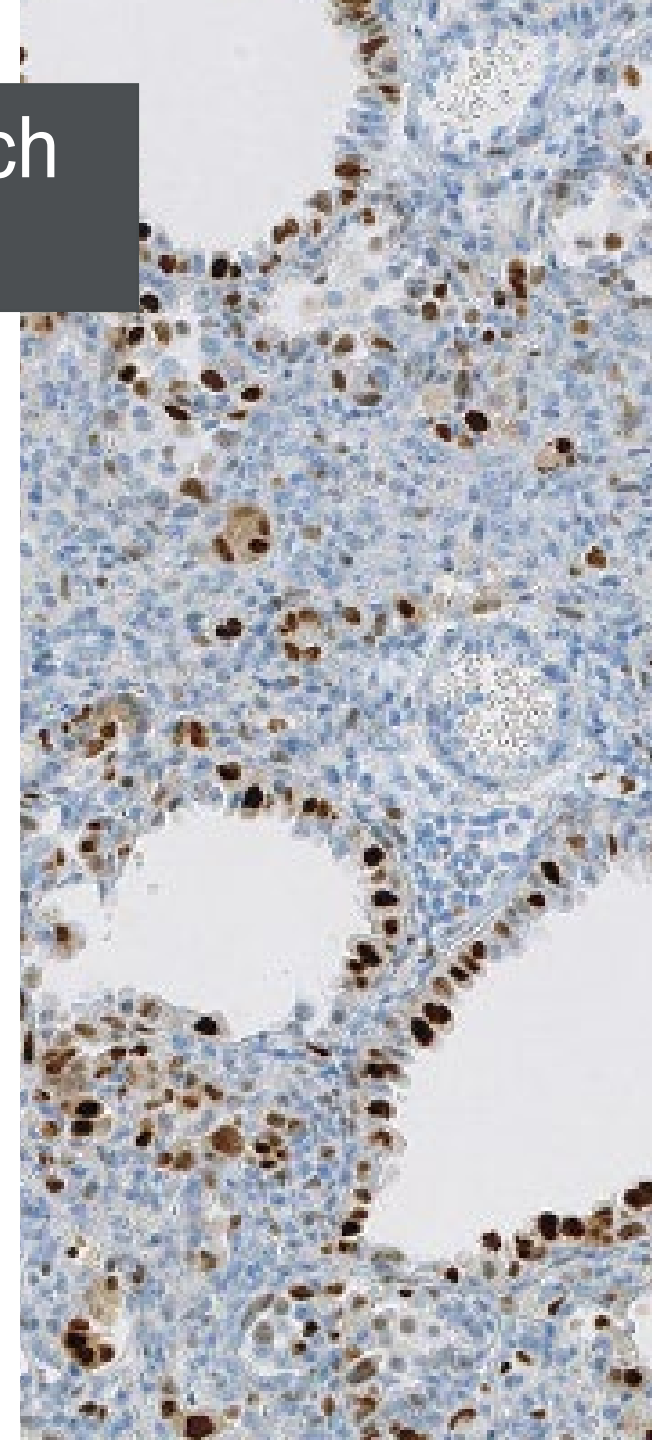


Aging and
Cancer lab

We translate aging research into oncology practice

Our mission is to translate aging research into oncology practice.

Age is the best predictor of cancer. Our mission is to identify and understand age-related processes that make tissues permissive to cancer and to develop technologies capable of identifying and reversing these processes, thereby eliminating cancer before it can arise.



In 2023, we put together our team



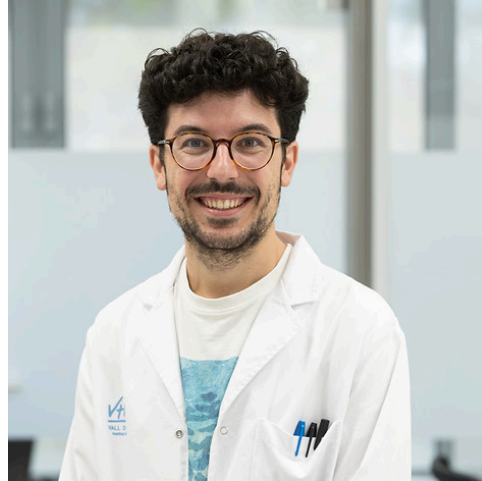
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2022 October
Dr. MATE MAUS
Group leader

Is recruited by the VHIO to found the Aging and Cancer lab.



2023 January
MARC GUASCH
PhD student

Joins to study the metabolic aging of the colon to help patients with colorectal cancer.



2023 August
CLAUDIA GUTIERREZ
Lab manager

Technology development and operative lab management.



2023 September
Ning Huang
PhD student

Joins to study the metabolic aging of the bone marrow to help patients with MDS and AML.



2023 September
Francesca Cogo
PhD student

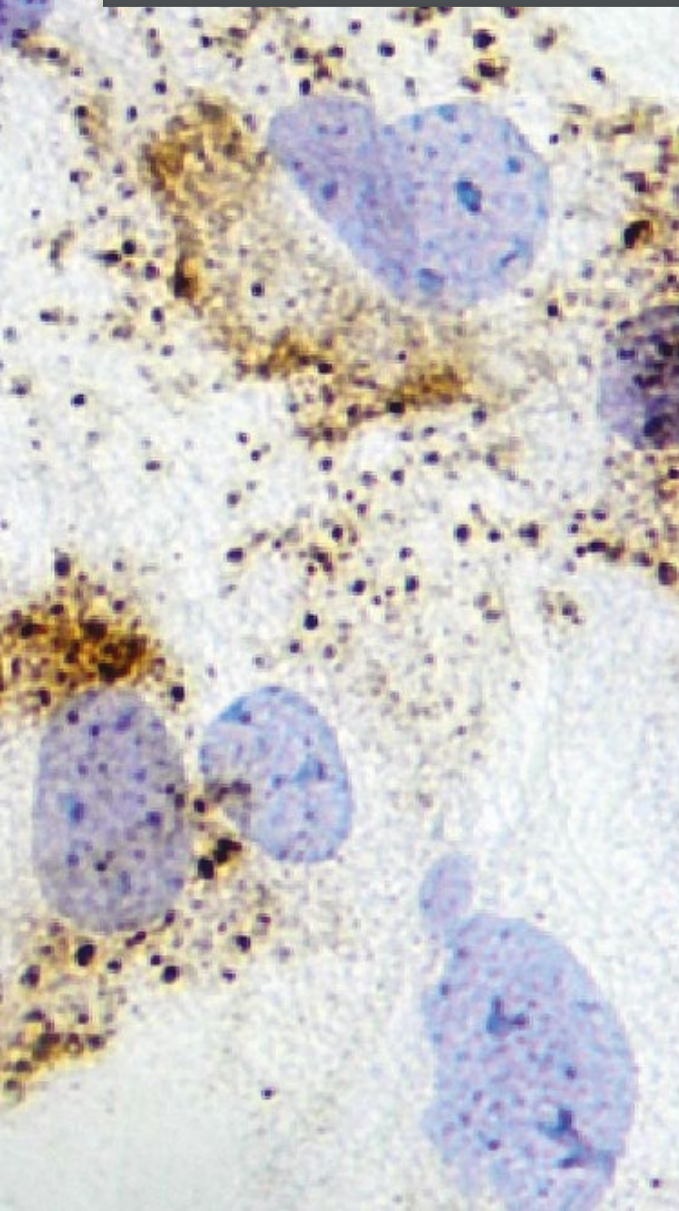
Joins to study the metabolism of cellular senescence to help cancer survivors.

We started building collaborations



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Dr. Elena Elez
VHIO
Colonic aging and
CRC



Dr. André M. Ferreira
**Werner Siemens
Imaging Center**
Fibrotic complications
post-cancer therapy



Dr. David Valcarcel
VHIO
Bone Marrow aging
and MDS



Dr. Josep M. Cruzado
IDIBELL
Predicting kidney
fibrosis



We started spreading the word about our science

Invited talks 2023

Dr. Mate Maus

- European Iron Club, Frankfurt, 2023
- IFIT 2023, Zell am See, 2023
- CAMS, A Coruña, 2023
- Portuguese Biochemical Society, Online, 2023
- IberolCSA, Online, 2023
- UNIL, Lausanne, 2023

Marc Guasch

- CAMS, A Coruña, 2023 (15 minutes talk)

Francesca Cogo, Marc Guasch, Ning Huang

- VHIO PhD Day 2023 (poster presentation)



We started securing our funding

Funding and Awards 2023



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**Proyectos de Generación de
Conocimiento**



**José Baselga
Innovative Disruption Program
Astra Zeneca**



**EXCELENCIA
SEVERO
OCHOA**

Funding to the lab
Bone Marrow Aging and
AML

Funding to the lab
Colon aging and CRC

PhD Fellowship
Ning Huang



We published our founding paper Publications 2023

nature metabolism



Article

<https://doi.org/10.1038/s42255-023-00928-2>

Iron accumulation drives fibrosis, senescence and the senescence-associated secretory phenotype

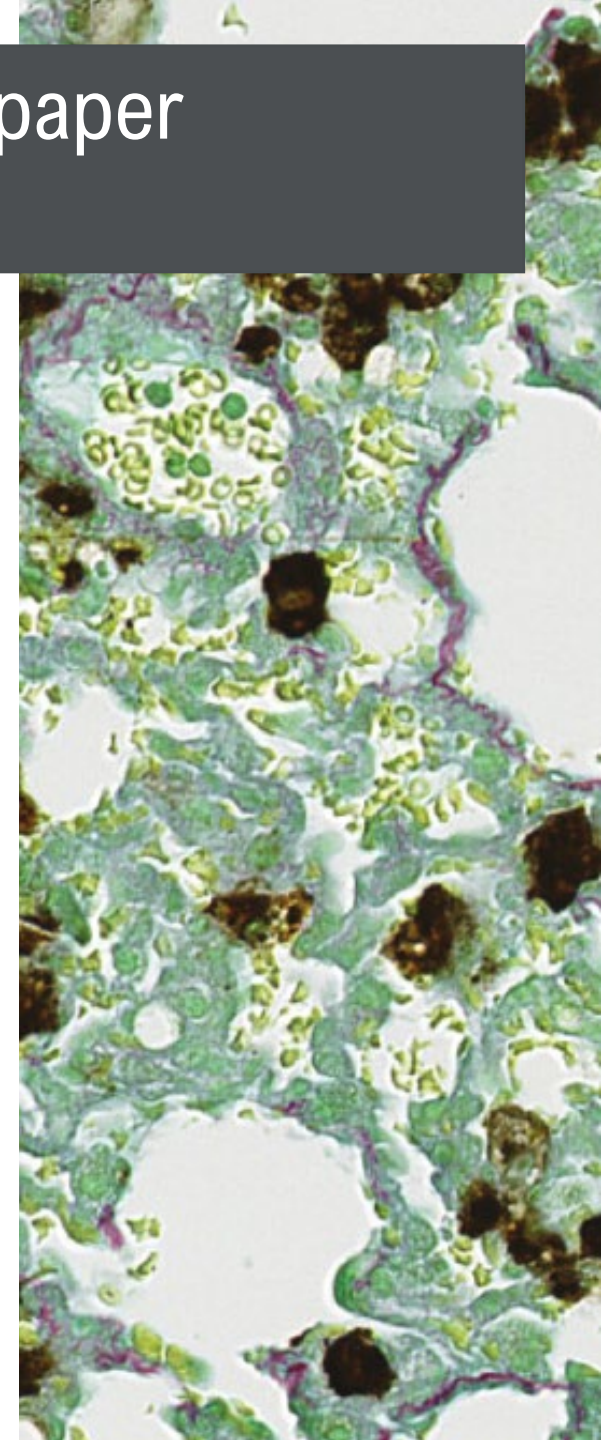
Received: 28 July 2022

Accepted: 11 October 2023

Published online: 14 December 2023

Check for updates

Mate Maus ^{1,2,22}✉, Vanessa López-Polo ^{1,22}, Lidia Mateo ¹, Miguel Lafarga ³,
Mònica Aguilera ¹, Eugenia De Lama ⁴, Kathleen Meyer ^{1,5}, Anna Sola ⁶,
Cecilia Lopez-Martinez ^{7,8,9}, Ines López-Alonso ¹⁰, Marc Guasch-Piqueras ²,
Fernanda Hernandez-Gonzalez ^{1,11}, Selim Chaib ¹, Miguel Rovira ¹,
Mayka Sanchez ¹², Rosa Faner ¹³, Alvar Agusti ¹⁴, Rodrigo Diéguez-Hurtado ¹⁵,
Sagrario Ortega ¹⁶, Anna Manonelles ^{6,17,18}, Stefan Engelhardt ^{19,20},
Freddy Monteiro ¹, Camille Stephan-Otto Attolini ¹, Neus Prats ¹,
Guillermo Albaiceta ^{7,8,9}, Josep M. Cruzado ^{6,17,18} & Manuel Serrano ^{1,5,21}✉





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The media started talking about us

Study establishes iron accumulation as a driver of pathological senescence and fibrosis



Nouvelles Du Monde



mauslab.org



The Maus Lab
@maus_lab

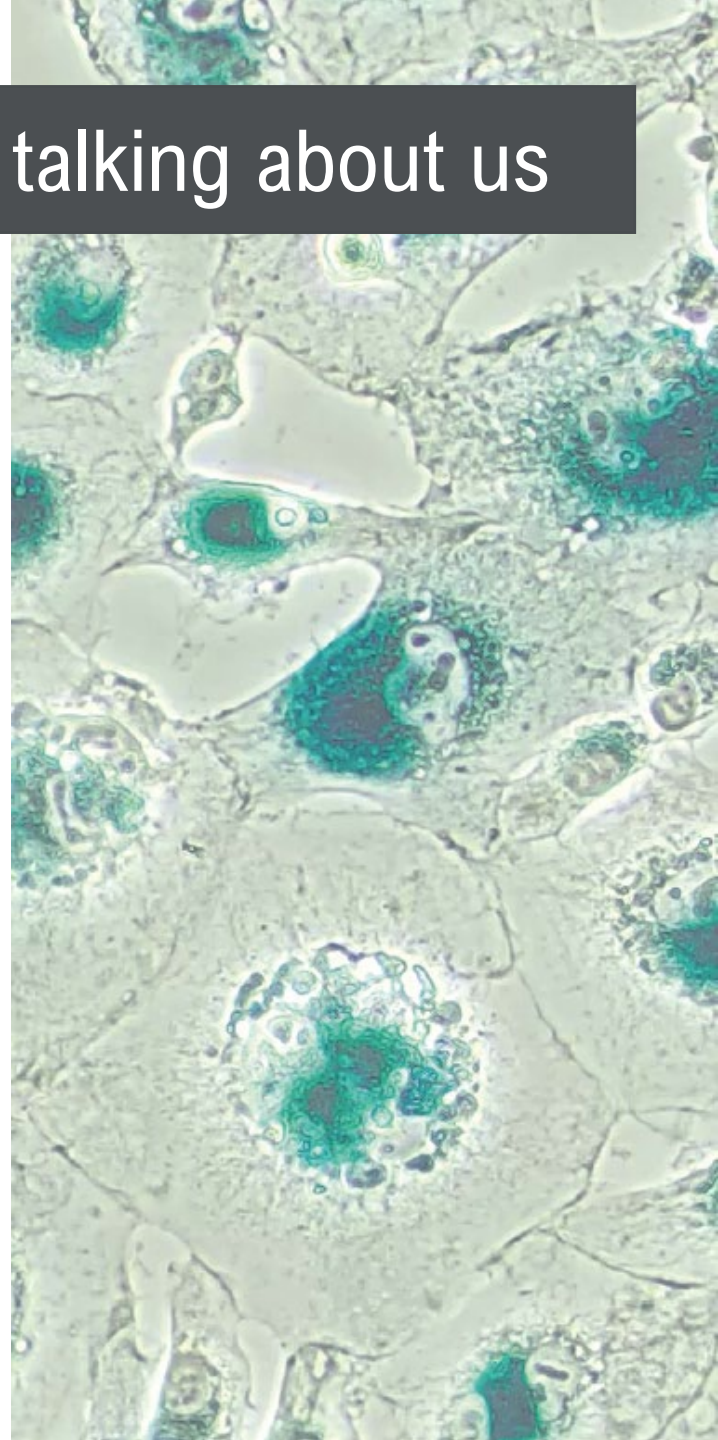
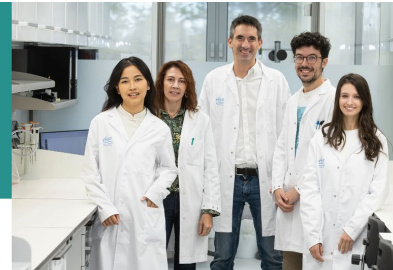


1149 followers

We translate aging research into oncology practice



1913 unique visitors



In 2023, we started our conscious interaction with our environment and community



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We joined the Green VHIO





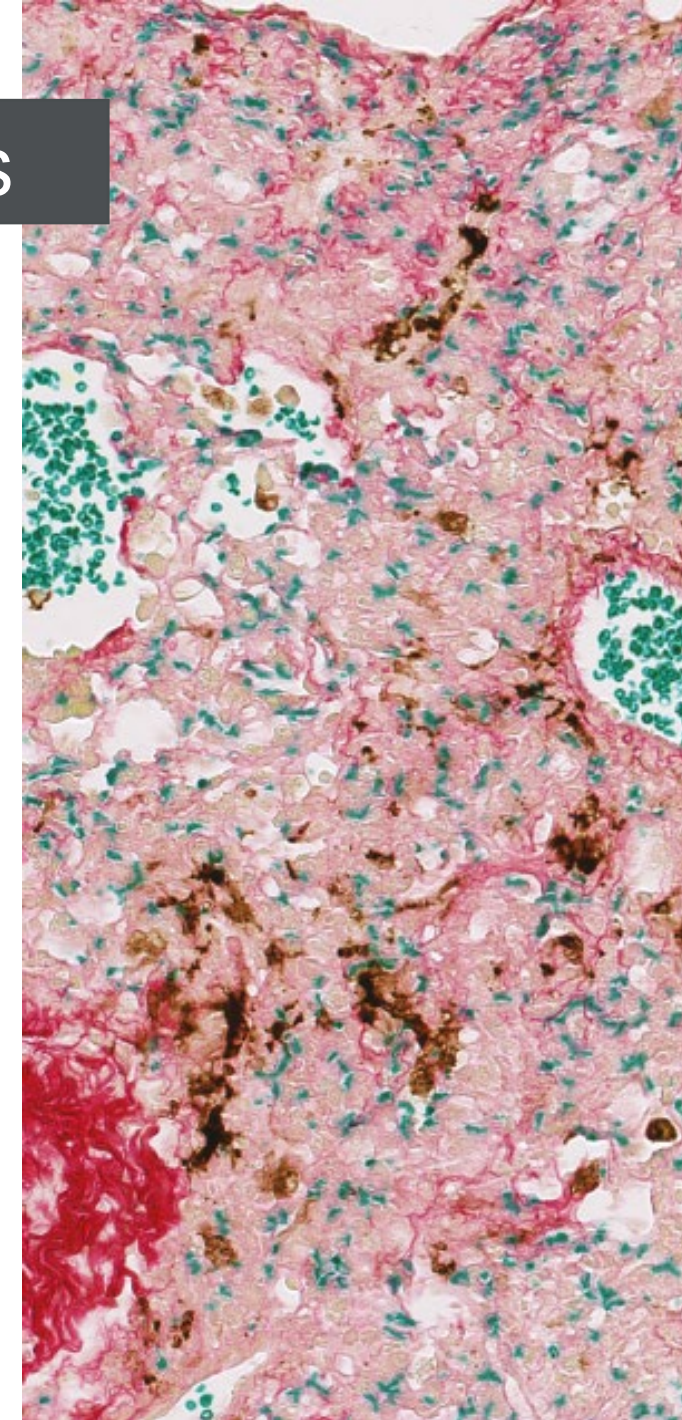
We started building our team traditions



International dinner nights



Christmas dinner
with the Barriga lab

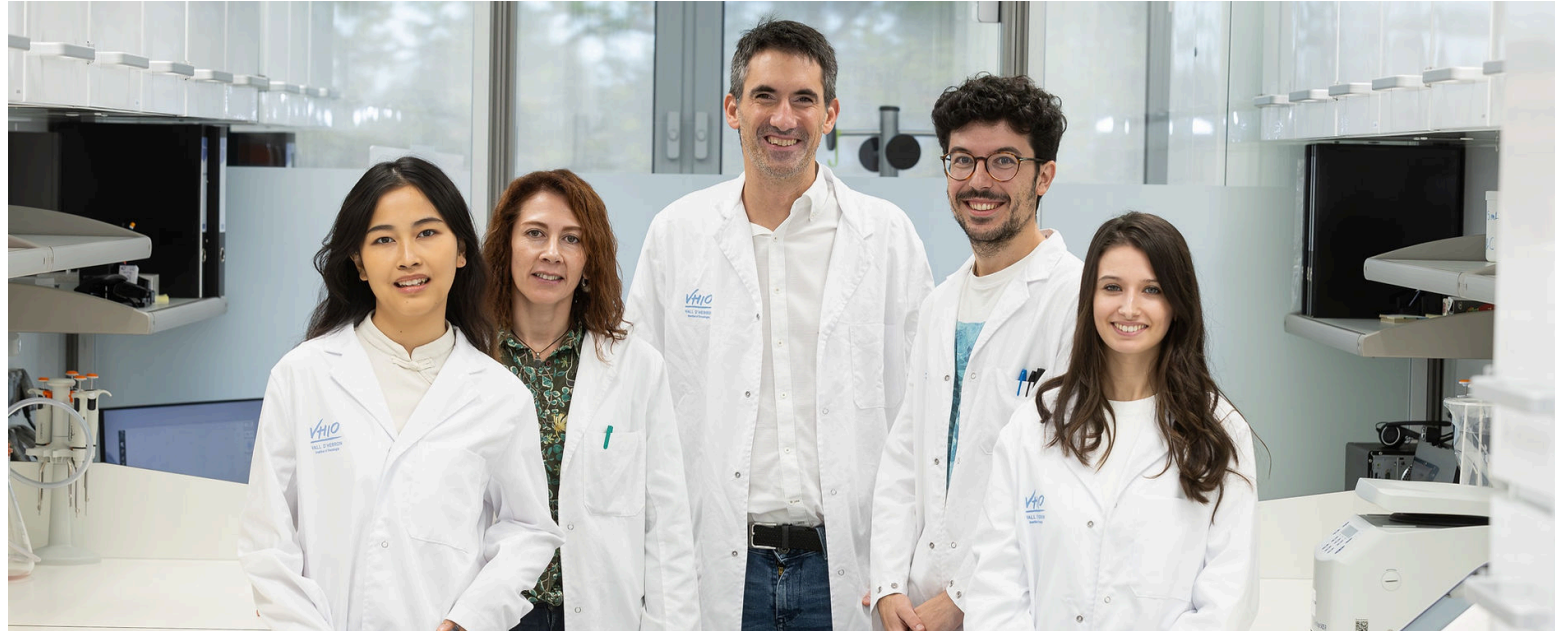


Major milestones in 2023 a year of initiation and growth



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- Marc, Claudia, Ning and Francesca joined the lab
- We equipped the lab
- We produced our first in vitro results
- We launched our homepage
- We published our founding paper in Nature Metabolism



2024 looks bright on the horizon

New in vivo
and in vitro data

New people

Entering new disciplines:
tumor immunology

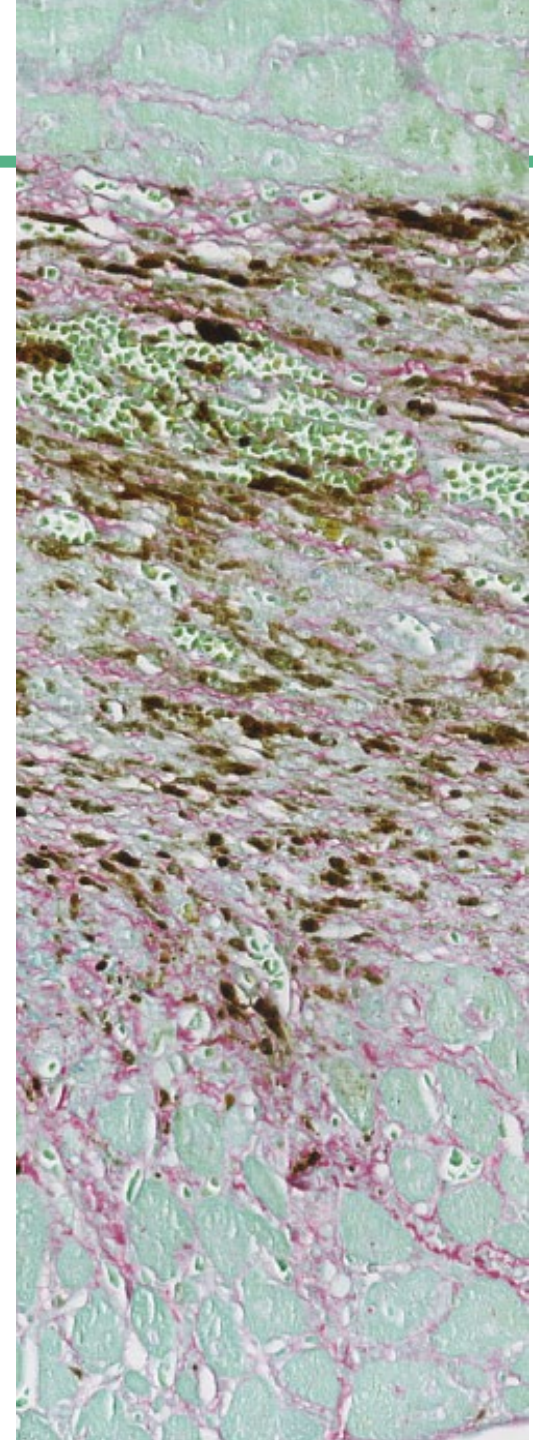
Refining projects

New technologies

Applying for more
funding

Celebrating our lab's
second birthday

Becoming into a high-
performing fun team



Closing remarks 2023



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Dear Team and Supporters,

As we say goodbye to 2023, I am proud and grateful for the incredible first year of our lab.

We've accomplished significant milestones that have laid a robust foundation for our future. From conceptualizing and initiating projects to assembling our talented team, launching our website, equipping our lab, generating crucial data, and publishing our founding paper in Nature Metabolism.

Thanks to the funding we've secured, our financial stability for the coming year is ensured, allowing us to concentrate on our research and scientific pursuits.

Our team fills me with confidence. I firmly believe that the groundwork we laid in 2023 will start paying dividends in 2024 and beyond.

With appreciation for all your contributions, accept my warm wishes for a happy holiday season and a prosperous new year.

With unwavering optimism and excitement about our research, Mate Maus