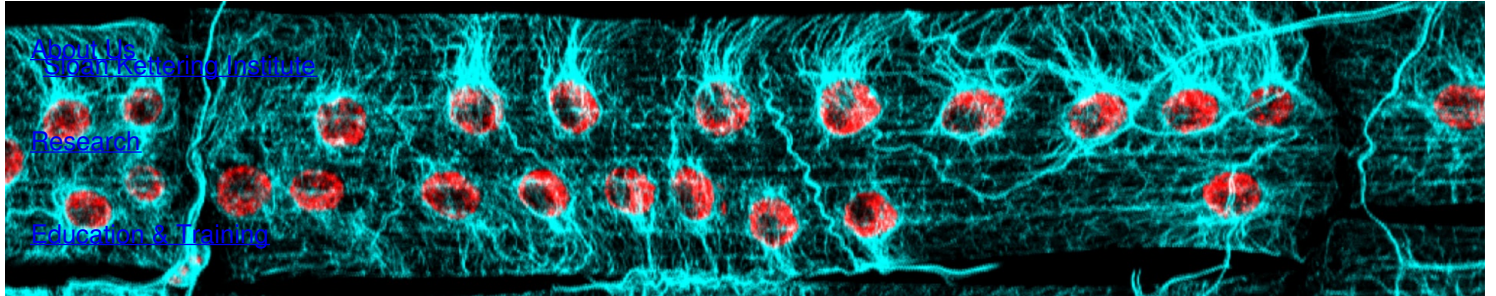


Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

×



Memorial Sloan Kettering  
Cancer Center



[News & Events](#)

DEVELOPMENTAL BIOLOGY PROGRAM

## The Mary Baylies Lab

[Open Positions](#)

[Developmental Biology Program](#)

### Research



Mary Baylies, PhD

---

Developmental biologist Mary Baylies studies the mechanisms that form and maintain muscle both during normal development and in disease.

[View Lab Overview](#) →

## Research Projects

[Mechanisms Required for Muscle Formation and Homeostasis](#)

[Mechanisms Driving Muscle Wasting and Identification of Novel Therapeutics](#)



## Featured News

IN THE LAB



The Mary Baylies Lab

## [Scientists Home In On “Equation” for Muscle Cell Size](#)

A new study in flies reveals a previously unknown type of cooperation at work in muscle cells.



## [At Work: Developmental Biologist Mary Baylies](#)

Learn about Mary Baylies, a developmental biologist studying muscle biology at the Sloan Kettering Institute.



## [Student Lecture Highlights Major Trends in Modern Cancer Research](#)

More than 500 high school students and their teachers filled the Rockefeller Research Laboratories to learn about recent discoveries.

## Publications Highlights

[Balakrishnan M, Yu SF, Chin S, Soffar DB, Windner S, Goode B, Baylies MK \(2020\). Cofilin loss in \*Drosophila\* contributes to muscle weakness through defective sarcomerogenesis during muscle growth. \*Cell Reports\*. 32\(3\): 107893. PMID: PMC7479987.](#)

Windner SE, Manhart A, Brown A, Mogilner A, Baylies MK. (2019.) Nuclear Scaling Is Coordinated among Individual Nuclei in Multinucleated Muscle Fibers. *Dev Cell*. Apr 8;49(1):48-62.e3. Featured as a cover image and in a Preview.

[View All Publications](#)

## People




## Mary Baylies, PhD

The Baylies laboratory studies the mechanisms that form and maintain muscle both during normal development and in disease.

PhD, The Rockefeller University

 [m-baylies@ski.mskcc.org](mailto:m-baylies@ski.mskcc.org)

Email Address

 [212-639-5888](tel:212-639-5888)

Office Phone

 [Download CV](#)

PDF File

## Members

Research Technician

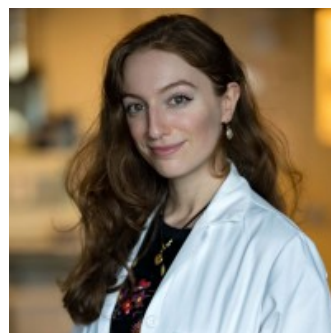
Graduate Student



Meg Distini

Marco Gualtieri

Research Fellow



Therandë Jashari





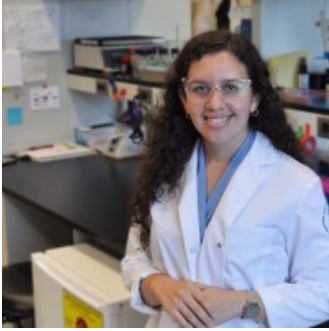
Administrative Assistant

Graduate Student

Ruth

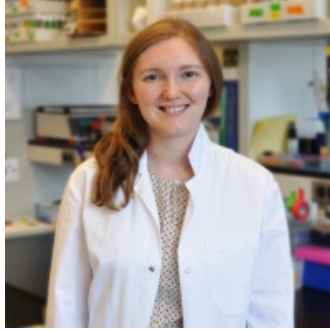
Silimon

Graduate Student



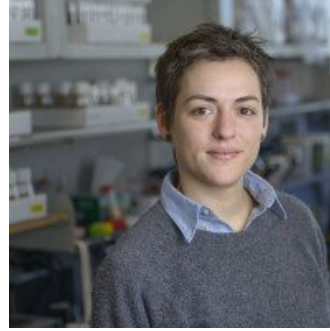
Nicole J. Torres-Santiago

MSK Bridge Program  
Scholar



Victoria von  
Saucken

Graduate Student



Stefanie Windner

Research Fellow

Lab Alumni  
+

Lab Affiliations  
+

## Achievements

Identified that global, regional, and local inputs contribute to nuclear size regulation in multinucleated skeletal muscle fibers.

Demonstrated that properly placed nuclei are critical for healthy muscle function.

Discovered that microtubules are critical for the movement and positioning of nuclei in the multinucleated skeletal muscle cell.

Developed Drosophila models of muscle wasting in cancer cachexia and aging.

Identified how actin filament dysregulation contributes to skeletal muscle dysfunction in models of nemaline myopathy.

Read more  
+

## Lab News & Events

UPCOMING EVENT

[Human Myogenesis in Development and Disease](#)

Thursday, September 26, 2024 - 2:00 PM to 3:00 PM

Memorial Sloan Kettering Cancer Center  
Rockefeller Research Laboratories  
430 East 67th Street  
RRL-120 (Auditorium)  
New York, NY 10065

## Get in Touch

✉ [m-baylies@ski.mskcc.org](mailto:m-baylies@ski.mskcc.org)

Lab Head Email

☎ [212-639-5888](tel:212-639-5888)

Office Phone

☎ [212-639-5953](tel:212-639-5953)

Lab Phone

☎ [646-422-2355](tel:646-422-2355)

Lab Fax

✂ [@BayliesLab](#)

Lab Resources

+

## Disclosures

Doctors and faculty members often work with pharmaceutical, device, biotechnology, and life sciences companies, and other organizations outside of MSK, to find safe and effective cancer treatments, to improve patient care, and to educate the health care community.

MSK requires doctors and faculty members to report (“disclose”) the relationships and financial interests they have with external entities. As a commitment to transparency with our community, we make that information available to the public.

Mary Baylies discloses the following relationships and financial interests:

French National Research Agency

Professional Services and Activities (Uncompensated)

Howard Hughes Medical Institute

Professional Services and Activities

The information published here is for a specific annual disclosure period. There may be differences between information on this and other public sites as a result of different reporting periods and/or the various ways relationships and financial interests are

categorized by organizations that publish such data.

---

This page and data include information for a specific MSK annual disclosure period (January 1, 2022 through disclosure submission in spring 2023). This data reflects interests that may or may not still exist. This data is updated annually.

Learn more about MSK's COI policies [here](#). For questions regarding MSK's COI-related policies and procedures, email MSK's Compliance Office at [ecoi@mskcc.org](mailto:ecoi@mskcc.org).

[View all disclosures](#) →

## ▼ About Us

[Overview](#)

[Leadership](#)

[Administration](#)

[History](#)

[Contact Us](#)



## ▼ Research

[Overview](#)

[Research programs](#)

[Research labs](#)

[Core facilities & resources](#)

## ▼ Education & Training

[Overview](#)

[Postdoctoral training](#)

[Gerstner Sloan Kettering Graduate School](#)

[Joint graduate programs](#)

[Programs for college & high school students](#)

## ▼ News & Events

[Overview](#)

[Seminars & events](#)



## ▼ Open Positions

[Overview](#)

[Faculty positions](#)

[Postdoctoral positions](#)

---

[Communication preferences](#)

[Cookie preferences](#)

[Legal disclaimer](#)

[Accessibility Statement](#)

[Privacy policy](#)

[Public notices](#)

© 2024 Memorial Sloan Kettering Cancer Center