Stanford University School of Medicine Department of Radiation Oncology Division of Radiation Physics

# Pushing PET Imaging to the Cellular Level: Development of a Radioluminescence Microscope

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AAPM Annual Meeting Nanotechnology & Molecular Imaging Thursday, August 8<sup>th</sup>, 2013

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*Eur J Nucl Med Mol Imaging* **38**:426–435 (2011)





























Note: Video available on PLOS One





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## Conclusions

Radioluminescence microscopy is a new imaging technique that can sensitively and quantitatively characterize the uptake of small molecules in heterogeneous populations of single cells.

We are applying it to relate macroscopic parameters measured by PET to cellular parameters that are specific to cellular function, disease state, and response to therapy.

# Acknowledgements

Conroy Sun Laura Sasportas Marian Axente Marta Colomer <u>Colin Carpenter</u>

![](_page_12_Picture_3.jpeg)

![](_page_12_Picture_4.jpeg)

Equipment loan

Kai Chen Lynn Martin John Sunwoo Ted Graves Lei Xing

![](_page_12_Picture_7.jpeg)

NIH 5P50CA114747 ICMIC