



The ROCRO Quarterly

Vol.6/03.31.2021

**Weill Cornell
Medicine**

Radiation Oncology Clinical Research Office (ROCRO) Newsletter

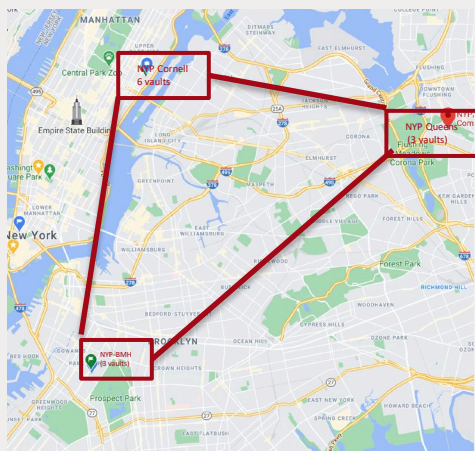
ROCRO's mission is to be a high impact clinical research program focusing on Radiation Therapy and Immunotherapy.



Silvia C. Formenti, M.D

Chair's note:

Many accomplishments of the department during this quarter. Covid-19 seems to have facilitated productivity and research, as demonstrated by new grants and increased accrual to clinical trials. We are also fortunate to introduce Vicky and Joelle, two new NPs that will also contribute to our research, as well as Sarah, our new research coordinator at WCM NYP-Queens Hospital. Our clinical research is growing across the network, a key progress to reach our catchment area for cancer care and access to clinical trials.



#WCMRadOnc

For more information email: pry2003@med.cornell.edu



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Clinical Trial Enrollments



	Protocol #	Short Title	PI	Enrolled (treated)/ target accrual	Enrolled since 01/01/2021
1	1505016201	PBI	Dr. Silvia Formenti	176/200	3
		BMH-PBI	Dr.Hani Ashmalla	4	1
		NYPQ- PBI	Dr. Akkamma Ravi	25	13
		USC-PBI	Dr.Jason Ye	38/84	2
2	1602017017	ART	Dr. Silvia Formenti	41/74	7
		NYPQ- ART	Dr. Andrew Brandmaier	1	1
3	1607017434	BMS- NSCLC	Dr. Silvia Formenti	15/41	3
4	1708018471	VARIAN	Dr. Formenti/Dr. Kang	67/80	4
5	1710018694	SRS-Pembro	Dr. Silvia Formenti	5/41	0
6	1712018849	PREPARE-SBRT	Dr.Himashu Nagar	12/40	1
7	19-07020533	PRART	Dr. Formenti/Dr.Ng	39/400	10
8	19-04020263	PRAGMA	Drs. Kang/Formenti/Sternberg	11/20	4
9	19-07020531	PSCBC	Dr.John Ng	4/55	1
10	20-03021572	SHORTER	Dr.Himanshu Nagar	35/136	17
11	20-04021831	WELCOME	Drs.Formenti/Ross/Pascual	95/1000	2
12	20-09022641	CIMER	Drs.Formenti/Andreopoulos/Golden	2/35	1
13	1808019498	CBCV	Dr. Silvia Formenti	2/20	2
14	19-10020928	PSMA-SIB	Dr.Josephine Kang	14/50	14
15	19-12021203	COMPARRE	Dr. Silvia Formenti	13/30	7
16	19-04020160	SMART Pancreas	Dr.John Ng	3/25	3
17	1612017834	EISAI - Rectal Cancer	Dr. John Ng	2/10	0
18	1708018460	NRG GU003	Dr. Himanshu Nagar	3/10	0
				607	96

Please visit us at:

<https://radiationoncology.weillcornell.org/research/clinical-trials>



Weill Cornell Medicine

Faculty & Staff News



Silvia Formenti, M.D.



Jonathan Knisely, M.D.

We are extremely proud to announce that Dr. Silvia Formenti and Dr. Jonathan Knisely have been once again named to Castle Connolly's Top Doctors for 2021!

Each year, Castle Connolly releases a list of top doctors from all 50 states and all major specialties, based on nominations from doctors themselves. Once nominated, Castle Connolly's physician-led research team then thoroughly screens each nomination to ensure that every Top Doctor selection meets Castle Connolly's rigorous standards. Please join us in congratulating Drs. Formenti and Knisely on this recognition of excellence! For more information please click on the links below:

<https://www.castleconnolly.com/top-doctors/silvia-c-formenti-radiation-oncology-85cc013676>

<https://www.castleconnolly.com/top-doctors/jonathan-p-knisely-radiation-oncology-81cc038246>





Weill Cornell Medicine

Faculty & Staff News



Silvia Formenti, M.D.



Sandra Demaria, M.D.

The grant proposal titled: *Breast Cancer and Host Immune Responses at Inflection Points in the Disease Trajectory* (Dr. Silvia Formenti P.I. and Dr. Sandra Demaria co-P.I.) has been selected for funding by United States Department of Defense.

This project is part of a Transformative Breast Cancer Consortium (TBCC) aimed at developing novel personalized treatments for patients with breast cancer. The overarching hypothesis is that breast cancer progression to lethal outcomes depends on the genetic and epigenetic changes in the cancer cells and their impact on the cross-talk between cancer cells and the immune system. The consortium builds on the multidisciplinary expertise of investigators at Weill Cornell Medicine (Dr. Silvia Formenti and Dr. Sandra Demaria), Harvard University (Dr. Karen Cichowski and Dr. Steven Elledge), Duke University (Dr. Kim Lyster and Dr. Zach Hartman) and Cedar Sinai (Dr. Simon Knott).

The funds allocated to Cornell (~4 M direct cost over 4 years) will support the creation of an annotated live biobank of patient derived organoids (PDOs) that maps the clinical inflection points of the DIGNITY study, a protocol focused on patients with triple negative BC (TNBC) that are either nonresponsive to neoadjuvant therapy or have recurred after treatment. The live biobank obtained by the DIGNITY trial will then become a unique opportunity for converging the research from a dynamic set of consortium members, teamed with consumer advocates to address this overarching question.



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Faculty News



Laura Santambrogio, M.D., PhD

Dr. Laura Santambrogio has been promoted to rank of Professor of Radiation Oncology with tenure.

Dr. Santambrogio joined the Department of Radiation Oncology in 2019 and holds joint appointment as Professor of Physiology and Biophysics. She is also Associate Director of Precision Immunology in the Englander Institute of Precision Medicine at Weill Cornell Medicine and Visiting Professor in the Department of Pathology and Microbiology and Immunology at the Albert Einstein School of Medicine.

As a dedicated researcher, she currently leads several research projects and is currently supported by 6 NIH grants. She published over 180 peer-reviewed papers and serves in numerous editorial boards and NIH study sections. Dr. Santambrogio's studies focus on the mechanisms of antigen processing and presentation, peptide binding to MHC class II molecules and the overall role of dendritic cells in innate and adaptive immune responses.

Since joining WCM, Dr. Santambrogio continues to expand her research towards the analysis of how radiation therapy influences the MHC-associated immunopeptidome. She looks forward to long-lasting and productive collaborations with all the Departmental laboratories.



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Dr. Laura Santambrogio has been awarded a 5-year NIH RO1 grant on Lymphatics-Glyphatics in CNS Fluid Homeostasis



Dr. Sandra Demaria was invited to join the AACR Task Force on Precision Combination Therapies.

She was also invited to join the ESMO 2022 Scientific Committee as member of the Basic science & translational research track.

Faculty News



Dr. Claire Vanpouille-Box has been appointed as member of the 2021 Radiation Research Society (RRS) Program committee.



Dr. Higinia Cardenes presented "Advances in the Radiation therapy Management on Cervical Cancer: IMRT, IGRT, SBRT and IGBT" at VIII International Oncology Congress - Cordoba, Argentina on 03/10/21.

Dr. Cardenes also presented at Best of ASTRO - Mexico on 3/26/21 and 3/27/21: Review of Gastrointestinal and Gynecological ASTRO 2020 abstracts.



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Faculty and Staff News



Higinia Cardenes, M.D., PhD

Dr. Cardenes is the new Director of Diversity, Equity and Inclusion for the Department of Radiation Oncology. In this role, she will represent the department in the school's and hospital's initiatives about diversity, equity and inclusion. She will serve on key committees for faculty and lead departmental compliance in initiatives to assess and recognize unconscious biases.



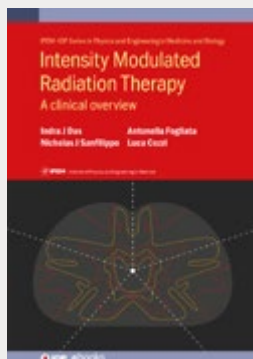
Maria Fenton-Kerimian, APN-bc, OCN

Maria Fenton-Kerimian has been promoted as Supervisor for the Radiation Oncology Nurse Practitioners. In her new role, Maria will oversee the NP Onboarding and Training, scheduling, cross-coverage during leaves, continuous education and research responsibilities, etc. She will also assess performance, in collaboration with the Physicians the NP works with. This new role assures for a more formalized and structured role for Nurse Practitioners in Radiation Oncology, who are very valued colleagues in the care of our patients.



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New Books



Dr. Nicholas Sanfilippo is one of the authors on this recently published book – ***Intensity Modulated Radiation Therapy***. This book is a part of IPEM-IOP Series in Physics and Engineering in Medicine and Biology. It describes the advances in IMRT technique over 3 decades to current day standards in Radiation Therapy. The book covers different aspects of Intensity modulated planning process, contouring, dose calculation and plan variability. It also provides information on clinical applications in various disease sites like head and neck, lung, breast, prostate and cervix.

DOI <https://doi.org/10.1088/978-0-7503-1335-3>



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Staff introduction



Vicky Chen joins the department as a Nurse Practitioner, and she will be working with Drs. Ng and Dr. Cardenes. Vicky has been an inpatient oncology nurse for three years. She started her nursing career as a hematology oncology nurse at City of Hope, and then moved to NYC to further her education. Recently, she obtained her Doctoral degree as an Adult-Geriatric Acute Care Nurse Practitioner from Columbia University.



Joelle Gary joins the department as a Nurse Practitioner, and she will be working with Dr. Golden and Dr. Nagar. Joelle has been a nurse for over 11 years. Her work as an RN at Hospital for Special Surgery during this timeframe offered her an array of experiences in different clinical settings (Med-Surg, PACU, Stepdown/ICU). Meanwhile, she earned her Master's degree in the Family Nurse Practitioner program from Pace University.

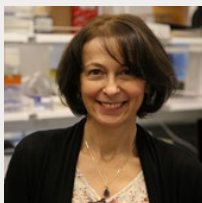


Sarah Stankiewicz joins the department as a Clinical Research Coordinator at New York-Presbyterian/Queens focusing on Radiation Oncology investigator-initiated trials and hospital wide biorepository. Her previous experience includes research coordination for the NYPQ Department of Orthopedics and Rehabilitation and providing research assistance to the Department of Trauma Surgery. She has a Bachelor's of Science in Public Health from Temple University.



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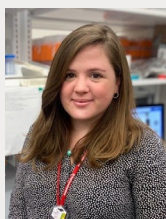
Research News 



The following publication was one of the most highly cited Cancer Immunology Research articles published in 2019 **CD73 blockade promotes dendritic cell infiltration of irradiated tumors and tumor rejection**

Wennerberg E, Spada S, Rudqvist NP, Lhuillier C, Gruber S, Chen Q, Zhang F, Zhou XK, Gross SS, Formenti SC, Demaria S.

The AACR journals will be highlighting the 2019 most-cited research articles, also known as **The Best of the AACR Journals**, at the upcoming AACR Virtual Annual Meeting in May 2021.



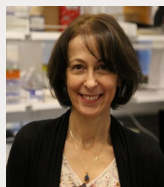
Mara De Martino, PhD got an AACR Scholar-in-Training Award to support her virtual attendance at the AACR Virtual Special Conference on Radiation Science and Medicine. She was also selected for a 10min+5min Q&A oral presentation at the AACR Virtual Special Conference on Radiation Science and Medicine. Her work was also selected for a short talk at the Virtual SNO/NCI joint symposium: Targeting CNS tumor metabolism, which will be held April 6-7, 2021



Samantha Van Nest, PhD was selected to receive an AACR Scholar-in-Training Award to support her attendance at the AACR Virtual Special Conference on Radiation Science and Medicine, held on March 2-3, 2021.



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**Liver Metastasis Irradiation
Can Restore
Immunotherapeutic
Responsiveness**

Demaria S, Formenti SC.
Trends Immunol. 2021 Feb
23;. doi:10.1016/j.it.2021.02.
007PubMed PMID:
33637449.

Recent Publications



**Radiotherapy-exposed CD8+ and CD4+
neoantigens enhance tumor control**

Claire Lhuillier , Nils-Petter
Rudqvist , Takahiro Yamazaki , Tuo
Zhang , Maud Charpentier , Lorenzo
Galluzzi , Noah Dephore , Cristina C
Clement , Laura, Xi Kathy Zhou , Silvia C
Formenti , Sandra Demaria
J Clin Invest. 2021 Mar 1;131 (5)



**Radiotherapy Delivered before CDK4/6
Inhibitors Mediates Superior Therapeutic
Effects in ER + Breast Cancer**

Giulia Petroni , Aitziber
Buqué , Takahiro Yamazaki , Norma
Bloy , Maurizio Di Liberto , Selina
Chen-Kiang , Silvia C
Formenti , Lorenzo Galluzzi
Clin Cancer Res 2021 Jan25



**Intratumoral heterogeneity in cancer
progression and response to
immunotherapy**

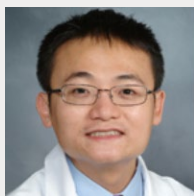
Ilio Vitale , Efrat Shema , Sherene
Loi , Lorenzo Galluzzi

Nat Med. 2021 Feb; 27 (2):212-224



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Recent Publications



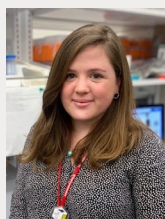
Development of a Model to Estimate the Association Between Delay in Cancer Treatment and Local Tumor Control and Risk of Metastases

John Ng , Yael R Stovezky , David J Brenner , Silvia C Formenti , Igor Shuryak

JAMA Netw Open 2021 Jan 4; 4(1): e2034065

Pleiotropic consequences of metabolic stressor on the MHC class II antigen processing and presentation machinery

Cristina C. Clement , Padma P. Nanaware , Takahiro Yamazaki , Sangeetha Thangaswamy , Laura Santambrogio
Immunity 54, 1-16



Activin A backs-up TGF-beta to promote regulatory T cells

Mara De Martino , Camille Daviaud , Claire Vanpouille-Box
Oncoimmunology. 2021 Feb 11; 10 (1)