

Domenico

De Santis

RADIOLOGO

Dettagli

Esperienze Professionali

Radiologo presso Affidea, Mediacenter Group, Monterotondo, RM

AGOSTO 2018 — A TUTT'OGGI

Radiologo presso BIOS, Bracciano, RM

SETTEMBRE 2018 — A TUTT'OGGI

Radiologo presso Alliance Medical, Lissone, MB

SETTEMBRE 2018 — A TUTT'OGGI

Radiologo presso Namur, Roma

AGOSTO 2018 — AGOSTO 2021

Radiologo presso CMC Clinical Medical Consulting, Roma

SETTEMBRE 2018 — AGOSTO 2021

Radiologo presso Istituti di Ricovero e Cura Gruppo Iseni Sanità, Lonate Pozzolo, VA

APRILE 2019 — DICEMBRE 2019

Radiologo presso Villa Benedetta Group, Roma

AGOSTO 2018 — APRILE 2019

Radiologo presso IRCCS San Raffaele Pisana, Roma

AGOSTO 2018 — MARZO 2019

Istruzione

Specializzazione in Radiodiagnostica, Sapienza Università di Roma

SETTEMBRE 2013 — LUGLIO 2018

Votazione: 70 e lode/70.

Corso di Laurea in Medicina e Chirurgia, Sapienza Università di Roma

SETTEMBRE 2006 — LUGLIO 2012

Votazione: 110 e lode/110.

Percorso di Eccellenza, Sapienza Università di Roma

MARZO 2010 — MARZO 2012

Fellowships

Radiology Research Fellow, MUSC, Charleston, SC, USA

MGGIO 2016 — LUGLIO 2017

Dept. of Radiology, Division of Cardiovascular Imaging - Medical University of South Carolina. Team di ricercatori guidato dal prof. U. Joseph Schoepf. Ricerca clinica focalizzata sulla dual-energy CT, in particolare sull'imaging cardiovascolare, mezzi di contrasto e tecniche avanzate di ricostruzione delle immagini.

Articoli Scientifici

1. Fusaro M, Caruso D, Tessarin G, **De Santis D**, Balestriero G, Bortolanza C, Panvini N, Polidori T, Laghi A, Morana G. **Comparison of Triple-Rule-Out Prospectively ECG-triggered Systolic and Diastolic Acquisition Protocol in Patients With Acute Chest Pain.** Journal of thoracic imaging. 2021.
2. Caruso D, Pucciarelli F, Zerunian M, Ganeshan B, **De Santis D**, Polici M, Rucci C, Polidori T, Guido G, Bracci B, Benvenga A, Barbato L, Laghi A. **Chest CT texture-based radiomics analysis in differentiating COVID-19 from other interstitial pneumonia.** La Radiologia medica. 2021;126:1415-1424.

3. Caruso D, Rosati E, Panvini N, Rengo M, Bellini D, Moltoni G, Bracci B, Lucertini E, Zerunian M, Polici M, **De Santis D**, Iannicelli E, Anibaldi P, Carbone I, Laghi A. **Optimization of contrast medium volume for abdominal CT in oncologic patients: prospective comparison between fixed and lean body weight-adapted dosing protocols.** Insights Imaging. 2021;12:40.
4. Booz C, Vogl TJ, Joseph Schoepf U, Caruso D, Inserra MC, Yel I, Martin SS, Bucher AM, Lenga L, Caudo D, Schreckenbach T, Schoell N, Huegel C, Stratmann J, Vasa-Nicotera M, Rachovitsky-Duarte DE, Laghi A, **De Santis D**, Mazziotti S, D'Angelo T, Albrecht MH. **Value of minimum intensity projections for chest CT in COVID-19 patients.** Eur J Radiol. 2021;135:109478.
5. Yin WH, Yu YT, Zhang Y, An YQ, Hou ZH, Gao Y, Wang HP, Lu B, **De Santis D**, Rollins JD, Schoepf UJ. **Contrast medium injection protocols for coronary CT angiography: should contrast medium volumes be tailored to body weight or body surface area?** Clin Radiol. 2020;75:395 e317-395 e324.
6. Fischer AM, Eid M, De Cecco CN, Gulsun MA, van Assen M, Nance JW, Sahbaee P, **De Santis D**, Bauer MJ, Jacobs BE, Varga-Szemes A, Kabakus IM, Sharma P, Jackson LJ, Schoepf UJ. **Accuracy of an Artificial Intelligence Deep Learning Algorithm Implementing a Recurrent Neural Network With Long Short-term Memory for the Automated Detection of Calcified Plaques From Coronary Computed Tomography Angiography.** Journal of thoracic imaging. 2020;35 Suppl 1:S49-S57.
7. Caruso D, Zerunian M, **De Santis D**, Biondi T, Paolantonio P, Rengo M, Bellini D, Ferrari R, Ciolina M, Lucertini E, Polici M, Iannicelli E, Tombolini V, Laghi A. **Magnetic Resonance of Rectal Cancer Response to Therapy: An Image Quality Comparison between 3.0 and 1.5 Tesla.** BioMed research international. 2020;2020:9842732.
8. von Knebel Doeberitz PL, De Cecco CN, Schoepf UJ, Duguay TM, Albrecht MH, van Assen M, Bauer MJ, Savage RH, Pannell JT, **De Santis D**, Johnson AA, Varga-Szemes A, Bayer RR, Schonberg SO, Nance JW, Tesche C. **Coronary CT angiography-derived plaque quantification with artificial intelligence CT fractional flow reserve for the identification of lesion-specific ischemia.** Eur Radiol. 2019;29:2378-2387.
9. von Knebel Doeberitz PL, De Cecco CN, Schoepf UJ, Albrecht MH, van Assen M, **De Santis D**, Gaskins J, Martin S, Bauer MJ, Ebersberger U, Giovagnoli DA, Varga-Szemes A, Bayer RR, 2nd, Schonberg SO, Tesche C. **Impact of Coronary Computerized Tomography Angiography-Derived Plaque Quantification and Machine-Learning Computerized Tomography Fractional Flow Reserve on Adverse Cardiac Outcome.** The American journal of cardiology. 2019;124:1340-1348.
10. Mastrodicasa D, Albrecht MH, Schoepf UJ, Varga-Szemes A, Jacobs BE, Gassenmaier S, **De Santis D**, Eid MH, van Assen M, Tesche C, Mantini C, De Cecco CN. **Artificial intelligence machine learning-based coronary CT fractional flow reserve (CT-FFRML): Impact of iterative and filtered back projection reconstruction techniques.** J Cardiovasc Comput Tomogr. 2019;13:331-335.
11. **De Santis D**, De Cecco CN, Schoepf UJ, Nance JW, Yamada RT, Thomas BA, Otani K, Jacobs BE, Turner DA, Wichmann JL, Eid M, Varga-Szemes A, Caruso D, Grant KL, Schmidt B, Vogl TJ, Laghi A, Albrecht MH. **Modified calcium subtraction in dual-energy CT angiography of the lower extremity runoff: impact on diagnostic accuracy for stenosis detection.** Eur Radiol. 2019;29:4783-4793.

12. Ciolina M, Caruso D, **De Santis D**, Zerunian M, Rengo M, Alfieri N, Musio D, De Felice F, Ciardi A, Tombolini V, Laghi A. **Dynamic contrast-enhanced magnetic resonance imaging in locally advanced rectal cancer: role of perfusion parameters in the assessment of response to treatment.** *La Radiologia medica.* 2019;124:331-338.
13. Caruso D, **De Santis D**, Biondi T, Panvini N, Zerunian M, Rivosecchi F, Montesano M, Bellini D, Rengo M, Laghi A. **Half-dose Coronary Artery Calcium Scoring: Impact of Iterative Reconstruction.** *Journal of thoracic imaging.* 2019;34:18-25.
14. Albrecht MH, Varga-Szemes A, Schoepf UJ, Nance JW, De Cecco CN, **De Santis D**, Tesche C, Eid MH, Penmetsa M, Lesslie VW, Piccini D, Goeller M, Wichmann JL, Vogl TJ, Chowdhury SM, Nutting A, Hlavacek AM. **Diagnostic Accuracy of Noncontrast Self-navigated Free-breathing MR Angiography versus CT Angiography: A Prospective Study in Pediatric Patients with Suspected Anomalous Coronary Arteries.** *Acad Radiol.* 2019;26:1309-1317.
15. Gassenmaier S, van der Geest RJ, Schoepf UJ, Suranyi P, Rehwald WG, De Cecco CN, Mastrodicasa D, Albrecht MH, **De Santis D**, Lesslie VW, Ruzsics B, Varga-Szemes A. **Quantitative inversion time prescription for myocardial late gadolinium enhancement using T1-mapping-based synthetic inversion recovery imaging: reducing subjectivity in the estimation of inversion time.** *The international journal of cardiovascular imaging.* 2018;34:921-929.
16. **De Santis D**, Jin KN, Schoepf UJ, Grant KL, De Cecco CN, Nance JW, Jr., Vogl TJ, Laghi A, Albrecht MH. **Heavily Calcified Coronary Arteries: Advanced Calcium Subtraction Improves Luminal Visualization and Diagnostic Confidence in Dual-Energy Coronary Computed Tomography Angiography.** *Invest Radiol.* 2018;53:103-109.
17. **De Santis D**, Eid M, De Cecco CN, Jacobs BE, Albrecht MH, Varga-Szemes A, Tesche C, Caruso D, Laghi A, Schoepf UJ. **Dual-Energy Computed Tomography in Cardiothoracic Vascular Imaging.** *Radiologic clinics of North America.* 2018;56:521-534.
18. **De Santis D**, Caruso D, Schoepf UJ, Eid M, Albrecht MH, Duguay TM, Varga-Szemes A, Laghi A, De Cecco CN. **Contrast media injection protocol optimization for dual-energy coronary CT angiography: results from a circulation phantom.** *Eur Radiol.* 2018.
19. De Cecco CN, Caruso D, Schoepf UJ, **De Santis D**, Muscogiuri G, Albrecht MH, Meinel FG, Wichmann JL, Burchett PF, Varga-Szemes A, Sheafor DH, Hardie AD. **A noise-optimized virtual monoenergetic reconstruction algorithm improves the diagnostic accuracy of late hepatic arterial phase dual-energy CT for the detection of hypervascular liver lesions.** *Eur Radiol.* 2018.
20. Caruso D, Zerunian M, Ciolina M, **De Santis D**, Rengo M, Soomro MH, Giunta G, Conforto S, Schmid M, Neri E, Laghi A. **Haralick's texture features for the prediction of response to therapy in colorectal cancer: a preliminary study.** *La Radiologia medica.* 2018;123:161-167.
21. Caruso D, De Santis D, Rivosecchi F, Zerunian M, Panvini N, Montesano M, Biondi T, Bellini D, Rengo M, Laghi A. **Lean Body Weight-Tailored Iodinated Contrast Injection in Obese Patient: Boer versus James Formula.** *BioMed research international.* 2018;2018:8521893.
22. Bellini D, **De Santis D**, Caruso D, Rengo M, Ferrari R, Biondi T, Laghi A. **Bowel preparation in CT colonography: Is diet restriction necessary? A randomised trial (DIETSAN).** *Eur Radiol.* 2018;28:382-389.
23. Apfaltrer G, Albrecht MH, Schoepf UJ, Duguay TM, De Cecco CN, Nance JW, **De Santis D**, Apfaltrer P, Eid MH, Eason CD, Thompson ZM, Bauer MJ, Varga-

- Szemes A, Jacobs BE, Sorantin E, Tesche C. **High-pitch low-voltage CT coronary artery calcium scoring with tin filtration: accuracy and radiation dose reduction.** *Eur Radiol.* 2018.
24. Albrecht MH, Nance JW, Schoepf UJ, Jacobs BE, Bayer RR, 2nd, Litwin SE, Reynolds MA, Otani K, Mangold S, Varga-Szemes A, **De Santis D**, Eid M, Apfaltrer G, Tesche C, Goeller M, Vogl TJ, De Cecco CN. **Diagnostic accuracy of low and high tube voltage coronary CT angiography using an X-ray tube potential-tailored contrast medium injection protocol.** *Eur Radiol.* 2018;28:2134-2142.
25. Albrecht MH, De Cecco CN, Schoepf UJ, Spandorfer A, Eid M, **De Santis D**, Varga-Szemes A, van Assen M, von Knebel-Doerberitz PL, Tesche C, Puntmann VO, Nagel E, Vogl TJ, Nance JW. **Dual-energy CT of the heart current and future status.** *Eur J Radiol.* 2018;105:110-118.
26. Albrecht MH, Bickford MW, Schoepf UJ, Tesche C, **De Santis D**, Eid M, Jacobs BE, Duguay TM, Schmidt BT, Canstein C, Varga-Szemes A, Leithner D, Martin S, Vogl TJ, De Cecco CN. **Beam-hardening in 70-kV Coronary CT angiography: Artifact reduction using an advanced post-processing algorithm.** *Eur J Radiol.* 2018;101:111-117.
27. von Knebel Doeberitz P, Albrecht MH, De Cecco CN, Nance JW, Jacobs B, Eid M, **De Santis D**, Henzler T, Schoenberg SO, Schoepf UJ. **Coronary CT-Derived Fractional Flow Reserve.** *Current Radiology Reports.* 2017;5:1-7.
28. Tesche C, Vliegenthart R, Duguay TM, De Cecco CN, Albrecht MH, **De Santis D**, Langenbach MC, Varga-Szemes A, Jacobs BE, Jochheim D, Baquet M, Bayer RRN, Litwin SE, Hoffmann E, Steinberg DH, Schoepf UJ. **Coronary Computed Tomographic Angiography-Derived Fractional Flow Reserve for Therapeutic Decision Making.** *The American journal of cardiology.* 2017;120:2121-2127.
29. Tesche C, De Cecco CN, Schoepf UJ, Duguay TM, Albrecht MH, **De Santis D**, Varga-Szemes A, Lesslie VW, Ebersberger U, Bayer RRN, Canstein C, Hoffmann E, Allmendinger T, Nance JW. **CT coronary calcium scoring with tin filtration using iterative beam-hardening calcium correction reconstruction.** *Eur J Radiol.* 2017;91:29-34.
30. Rengo M, Picchia S, Marzi S, Bellini D, Caruso D, Caterino M, Ciolina M, **De Santis D**, Musio D, Tombolini V, Laghi A. **Magnetic resonance tumor regression grade (MR-TRG) to assess pathological complete response following neoadjuvant radiochemotherapy in locally advanced rectal cancer.** *Oncotarget.* 2017;8:114746-114755.
31. Rengo M, Bellini D, Businaro R, Caruso D, Azzara G, **De Santis D**, Picchia S, Biondi T, Eid M, Boschiero D, Laghi A. **MDCT of the liver in obese patients: evaluation of a different method to optimize iodine dose.** *Abdom Radiol (NY).* 2017;42:2420-2427.
32. Lavra F, De Cecco CN, Varga-Szemes A, **De Santis D**, Albrecht MH, Lesslie VW, van Assen M, von Knebel Doeberitz P, Mastrodicasa D, Eid M. **New Imaging Techniques for Atherosclerotic Plaque Characterization.** *Current Radiology Reports.* 2017;5:1-13.
33. Eid M, De Cecco CN, Nance JW, Jr., Caruso D, Albrecht MH, Spandorfer AJ, **De Santis D**, Varga-Szemes A, Schoepf UJ. **Cinematic Rendering in CT: A Novel, Lifelike 3D Visualization Technique.** *AJR Am J Roentgenol.* 2017;209:370-379.
34. Duguay TM, Tesche C, Vliegenthart R, De Cecco CN, Lin H, Albrecht MH, Varga-Szemes A, **De Santis D**, Ebersberger U, Bayer RRN, Litwin SE, Hoffmann E, Steinberg DH, Schoepf UJ. **Coronary Computed Tomographic Angiography-Derived Fractional Flow Reserve Based on Machine Learning**

- for Risk Stratification of Non-Culprit Coronary Narrowings in Patients with Acute Coronary Syndrome.** *The American journal of cardiology.* 2017;120:1260-1266.
35. Caruso D, Parinella AH, Schoepf UJ, Stroebel MH, Mangold S, Wichmann JL, Varga-Szemes A, Ball BD, Jr., **De Santis D**, Laghi A, De Cecco CN. **Optimization of window settings for standard and advanced virtual monoenergetic imaging in abdominal dual-energy CT angiography.** *Abdom Radiol (NY).* 2017;42:772-780.
 36. Caruso D, Eid M, Schoepf UJ, **De Santis D**, Varga-Szemes A, Mangold S, Canstein C, Lesslie VW, Fuller SR, Ball BD, Laghi A, De Cecco CN. **Optimizing Contrast Media Injection Protocols in Computed Tomography Angiography at Different Tube Voltages: Evaluation in a Circulation Phantom.** *Journal of computer assisted tomography.* 2017;41:804-810.
 37. Caruso D, **De Santis D**, Schoepf UJ, Zerunian M, Eid M, Varga-Szemes A, Tesche C, Duguay TM, Laghi A, De Cecco CN. **CT myocardial perfusion: state of the science.** *Minerva cardioangiologica.* 2017;65:252-264.
 38. Albrecht MH, De Cecco CN, Nance JW, Varga-Szemes A, **De Santis D**, Eid M, Tesche C, Apfaltrer G, von Knebel Doeberitz PL, Jacobs B. **Cardiac dual-energy CT applications and clinical impact.** *Current Radiology Reports.* 2017;5:1-7.
 39. Bellini D, Maceroni MM, Cavallaro G, **De Santis D**, Iorio O, Rengo M, Silecchia G, Laghi A. **CT diagnosis of small bowel obstruction caused by internal hernia from persistent attachment of a Meckel's diverticulum to the umbilicus by the obliterated omphalomesenteric duct.** *BJR|case reports.* 2016;2:20150131.
 40. Brozzetti S, Bezzi M, De Sanctis GM, Andreoli GM, De Angelis M, Miccini M, Galati F, Panetta V, Furlan C, **De Santis D**, De Toma G, Tocchi A. **Elderly and very elderly patients with hepatocellular carcinoma. Strategy for a first line treatment.** *Ann Ital Chir.* 2014;85:120-128.
 41. Pastore AL, Palleschi G, Manfredonia G, Maceroni P, Alvaro D, **De Santis D**, Ferretti S, Porta N, Di Cristofano C, Della Rocca C, Fuschi A, Al Salhi Y, Maggioni C, Moschese D, Petrozza V, Carbone A. **Penile metastasis from primary cholangiocarcinoma: the first case report.** *BMC Gastroenterol.* 2013;13:149.

Capitoli di Libri

1. **De Santis D**, Landolfi F, Zerunian M, Caruso D, Laghi A. **Computed Tomography of the Liver.** *In: Quia E, ed. Imaging of the Liver and Intra-hepatic Biliary Tract: Springer, 2021; p. 77-98.*
2. **De Santis D**, Eid M, Duguay TM, De Cecco CN. **Myocardial Perfusion Imaging: Dual-Energy Approaches.** *In: Schoepf UJ, ed. CT of the Heart: Springer, 2019; p. 791-810.*
3. Caruso D, **De Santis D**, Duguay TM, Litwin SE, De Cecco CN. **The Challenging Patient.** *In: Schoepf UJ, ed. CT of the Heart: Springer, 2019; p. 125-130.*
4. Laghi A, Paolantonio P, **De Santis D**. **Apparato Gastrointestinale.** *In: Vanzulli A, Torricelli P, G R, eds. Manuale di RM per TSRM. 2 ed: Poletto Editore, 2018.*
5. **De Santis D**, Eid M, Duguay TM, Schoepf UJ, De Cecco CN. **Functional Cardiac CT Angiography.** *In: Nikolaou K, Bamberg F, Laghi A, Rubin G, eds. Multislice CT: Springer, 2017; p. 777-803.*
6. Bellini D, De Cecco CN, **De Santis D**, Rengo M, Morris J, Andrea L. **Diseases of the Upper Gastrointestinal Tract and Small Bowel.** *In: Saba L, ed. Imaging of the Cardiovascular System, Thorax, and Abdomen: CRC Press, 2016; p. 481-498.*

Peer Reviewer

- Atherosclerosis
- BMC Medical Imaging
- The British Journal of Radiology
- European Journal of Radiology
- European Radiology Experimental
- Journal of Cardiovascular Computed Tomography
- Journal of Thoracic Imaging
- PLOS ONE

Honors e Awards

- European Radiology ESGAR Bronze Award 2019
- JTI - Editors' Recognition Awards for Distinction in Reviewing in 2019
- JTI - Editors' Recognition Awards for Distinction in Reviewing in 2018
- JTI - Editors' Recognition Awards for Distinction in Reviewing in 2017
- RSNA 2016: Young Investigators Travel Award
- SCBT-MR 2016: 2nd Power Poster Award

Roma, 04.01.2022

A handwritten signature in black ink, appearing to read 'Alessandro...', written over a faint horizontal line.