

CURRICULUM VITAE VALENTIN CALU

C.1 CURRICULUM VITAE

Personal information

Name, Surname:	Valentin, Calu		
Date of birth:	29/03/1971	Sex:	Male
Nationality:	Romanian		
Researcher unique identifier(s) (ORCID, Researcher ID etc.):	ORCID ID 0000-0001-7710-9109 Web of Science Researcher ID AAN-8374-2020		
URL for personal website (if case):	https://www.researchgate.net/profile/Valentin	<u>-Calu</u>	

Education

Year	Faculty/department - University/institution - Country
2019	Certification in Hepato-bilio-pancreatic Surgery – Department of General Surgery and Transplant Surgery – Fundeni Clinical Institute – Romania
2016	Certification in Oncologic Surgery – First Surgery Clinic – Alexandru Trestioreanu Oncological Institute Bucharest – Romania
2010	Certification in Hepatic and Transplant Surgery – Department of General Surgery and Transplant Surgery – Fundeni Clinical Institute – Romania
2009	Ph.D. Degree in General Surgery – Carol Davila University of Medicine and Pharmacy – Romania
2008 - 2010	Thoracic Surgery Resident Doctor – Thoracic Surgery Department/Marius Nasta National Institute of Pneumology – Romania
2005 - 2007	Master's Degree in Public Health and Health Services Management – Public Health Department – Carol Davila University of Medicine and Pharmacy, Romania

2002	Certification in Laparoscopic Surgery - CNPDS – PERFMED, Romania	
1997 - 2002	General Surgery Resident Doctor - Caritas Surgery Department/Caritas Clinical Hospital – Romania	
1990 - 1996	Medical Doctor - Carol Davila University of Medicine and Pharmacy - Romania	

Positions - current and previous

(Academic sector/research institutes/industrial sector/public sector/other)

Year	Job title – Employer – Country
2023 - present	Ph.D. advisor – Carol Davila University of Medicine and Pharmacy Bucharest – Romania
2021 - present	Associate Professor – General Surgery Department/Carol Davila University of Medicine and Pharmacy Bucharest – Romania
2013 - 2021	Lecturer – General Surgery Department/Carol Davila University of Medicine and Pharmacy Bucharest – Romania
2010 - present	Thoracic Surgeon – Surgery Department/Elias Emergency University Hospital, Romania
2008 -	Consultant General Surgeon - Surgery Department/Elias Emergency University Hospital –
present	Romania
2002 - 2008	General Surgeon - Surgery Department/Elias Emergency University Hospital – Romania

Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.)

Year	Project title - Role - Funder - Budget - link to project webpage
2021	Multicentric European study GOODBYE HARTMANN (Goodbye Hartmann – after 100 years Hartmann's procedure is going to be abandoned?) – member of the research team – organised by WSES (World Society for Emergency Surgery)
2021	Multicentric European study MANCTRA-1 (coMpliAnce with evideNce-based cliniCal guidelines in the managemenT of acute biliaRy pancreAtitis MANCTRA-1) ClinicalTrials.Gov ID Number: NCT04747990 – principal site investigator – organised by WSES (World Society for Emergency Surgery)
2020	"High-sensitivity technology for diagnosing colorectal cancer patients at risk of post-resection peritoneal recurrence; personalized therapy guidance" – project coordinator – Funded by the Romanian Government via CNCSIS-UEFISCDI Grant PTE from 07/09/2020 (project registration code PN-III-P2-2.1-PTE-2019-0544),
2020	Multicentric study "Phase III, Prospective, Multinational, Multicenter, Randomized, Controlled, Two-arm, Double Blind Study to Assess Efficacy and Safety of D-PLEX Administered Concomitantly with the Standard of Care (SoC), Compared to a SoC Treated Control Arm, in Prevention of Post Abdominal Surgery Incisional Infection" – principal investigator
2018	Multicentric European study PIPAS (Physiologic Indicators for Prognosis in Abdominal Sepsis) – principal site investigator – Funded by the World Society for Emergency Surgery
2017	Multicentric European study – project member – the European Society of Coloproctology (ESCP) Collaborating Group

2015	Project POSDRU 186/3.2/S/155295 "Dezvoltarea competențelor în transplant" – regional coordinator (South Muntenia Region)
2014	" Research project regarding the establishment, management, and operation of a center of excellence in endocrine surgery " – grant participant – financed by Academica Medical Center
2013	"The adipose tissue at the pathogenetic crossroad of diabetes and vascular disease" – grant participant – Funded by the Romanian Government via UEFISCDI PN-II-ID-PCE-2011-3-0429

Other relevant professional experiences

(e.g. institutional responsibilities, organisation of scientific meetings, membership in academic societies, review boards, advisory boards, committees and major research or innovation collaborations, other commissions of trust in public or private sector)

Year	Description - Role	
2002 – 2007 2010 – pres. 2015-2018 2022 – pres. 2022 – 2024	Managerial roles: Head of Emergency Room at Elias Emergency University Hospital Head of Thoracic Surgery Compartment at Elias Emergency University Hospital President of the Administration Council of the Nicolae Paulescu Institute of Diabetes, Nutrition and Metabolic Diseases, at present – member of the Administration Council President of the Administration Council of the Ana Aslan National Institute of Geriatrics and Gerontology Member of the Administration Council of the Emergency University Hospital Bucharest	
2020	National Expert – General Surgery – Healthcare ministry Order MS from 3.11.2020 regarding changes to the National Medical Expert List, aproved by Order of the heathcare minister nr. 1.344/2006	
2016 - 2018	Member of Technical Work Group – subcomponent Operating Room - from Healthcare ministry. Project regarding the Healthcare Sector Reform - "Îmbunătățirea Calității și Eficienței Sistemului Sanitar" - financed through World Bank - phase II-A (MS-UMP-APL2)	
2007 – 2015	Spokesperson for the Elias Emergency University Hospital—elaboration of press releases for the hospital; mass-media communication	
1998 – pres. 2001 – pres. 2002 – pres. 2011 – pres. 2014 – pres.	Member of national scientific organisations: Romanian Society of Surgery - Secretary Societatea Română de Chirurgie Laparoscopică și Suturi Mecanice Romanian Association for Endoscopic Surgery and Other Interventional Techniques - ARCE - (2002 - present) – member of the board – External Relations Committee, member of Directorial Committee (since 2017), Vicepresident (2019 - 2022), Deputy General Secretary (2024 - 2025), General Secretary (2025 – present) Romanian Society of Thoracic Surgery Romanian Association of Hepato-bilio-pancreatic Surgery and Hepatic Transplant -	
2014 – pres. 2015 – pres.	ARCHBPTH Romanian Hernia Club - RHC (National Chapter of the European Hernia Society) – founding member and General Secretary	

	Member of international scientific organisations:
2006 – pres.	EAES (European Association of Endoscopic Surgery)
2009 – pres.	EDS (European Digestive Surgery)
2012 – pres.	ESCP – European Society for Coloproctology
2013 – pres.	WSES – World Society for Emergency Surgery
2013 – pres.	IASGO – International Association of Surgeons, Gastroenterologists and Oncologists
2013 – pres.	ACS – American College of Surgeons – Associate Fellow
2014 – pres.	EHS – European Hernia Society – National Delegate for the Romanian Chapter
2014 – pres.	ESSO – European Society for Surgical Oncology
2015 – pres.	AFC – Association Française de Chirurgie
2021 – pres.	RSM – Royal Society of Medicine – Fellow
2021 – pres.	ISFGS - International Society for Fluorescence Guided Surgery
2022 – pres.	ACPGBI - Association of Coloproctology of Great Britain and Ireland

C.2 Track record of the last 10 years

- "The 12th National Congress Of The Romanian Association For Endoscopic Surgery The 25th
 Annual Conference Of The European Society Of Surgery The 14th Romanian National Symposium
 Of Bariatric And Metabolic Surgery And The 4th Romanian National Symposium Of Robotic
 Surgery" V. Calu, V. Tomulescu, C. Duţă, R. Popescu, D.I. Ulmeanu, C. Copăescu Scientific
 Event, No. 1, 2024 DOI: 10.21614/Chirurgia.2024.V.119.I.1.P.106
- 2. "Treatment of Achalasia in the Evidence-Based Medicine Era A Quest in Search for a Proper Attitude by Reviewing the Present Guidelines" V. Calu, O. Enciu, Elena Adelina Toma, C. Pîrîianu, A. Miron Chirurgia (Bucur). 2022 March April; 117(2):154-163.
- 3. "Multivariate Risk Analysis of RAS, BRAF and EGFR Mutations Allelic Frequency and Coexistence as Colorectal Cancer Predictive Biomarkers" Ionescu, A.; Bilteanu, L.; Geicu, O.I.; Iordache, F.; Stanca, L.; Pisoschi, A.M.; Miron, A.; Serban, A.I.; Calu, V. Cancers 2022, 14, 2792.
- 4. "Laparoscopic vs. open resection for colon cancer-quality of oncologic resection evaluation in a medium volume center" Enciu, O., Avino, A., Calu, V., Toma, E. A., Tulin, A., Tulin, R., Slavu, I., Răducu, L., Balcangiu-Stroescu, A., Gheoca Mutu, D., Tomescu, L. F., Miron, A. *Experimental and Therapeutic Medicine* 24, no. 1 (2022): 455.
- 5. "How Many Times Can One Go Back to the Drawing Board before the Accurate Diagnosis and Surgical Treatment of Glucagonoma?" Martin, C.S.; Parfeni, O.D.; Popa, L.G.; Mihai, M.M.; Terzea, D.; Herlea, V.; Gherghe, M.; Adam, R.; Alnuaimi, O.; Calu, V.; et al. *Diagnostics* 2022, 12, 216.
- 6. "Key biomarkers within the colorectal cancer related inflammatory microenvironment" Calu, V., Ionescu, A., Stanca, L. et al. Scientific Reports Sci Rep 11, 7940 (2021).
- 7. "Human Eye Optics within a Non-Euclidian Geometrical Approach and Some Implications in Vision Prosthetics Design." Bilteanu, L.; Geicu, O.I.; Stanca, L.; Pisoschi, A.M.; Şerban, F.; Şerban, A.I.; Calu, V. Biomolecules 2021, 11, 215.
- 8. "Dietary AGEs involvement in colonic inflammation and cancer: insights from an in vitro enterocyte model." Geicu, O.I., Stanca, L., Voicu, S.N., A.Dinischiotu, L.Bilteanu, A.I.Şerban, V.Calu. Scientific Reports Sci Rep 10, 2754 (2020).
- 9. "Clostridium difficile Infection and Colorectal Surgery: Is There Any Risk?" V.Calu, Elena Adelina Toma, Octavian Enciu, Adrian Miron *Medicina* 2019, 55, 683;
- 10. "Persistent pancreatic fistula after surgical necrosectomy for severe pancreatitis" V.Calu, Mădălina.Duţu, R.Pârvuleţu, A.Miron Chirurgia (2012) Nr.6 Nov-Dec;107:796-801

C.3 Narrative CV

Dr. Valentin Calu is an eminent surgeon with a wealth of education and professional experience in the field of surgical medicine and oncology. He obtained his Ph.D. in General Surgery from Carol Davila University of Medicine and Pharmacy in Romania in 2009, following a rigorous course of study that laid the foundation for his illustrious career. Dr. Valentin Calu possesses an extensive array of competencies in surgical practice, underscored by his diverse certifications and significant clinical experience. His proficiency in laparoscopic surgery dates back

to 2002, complemented by subsequent certifications in hepatic and transplant surgery (2010), oncologic surgery (2016), and hepato-bilio-pancreatic surgery (2019) from esteemed institutions such as Fundeni Clinical Institute and Alexandru Trestioreanu Oncological Institute in Bucharest, Romania. Dr. Calu's clinical and operative activities in general and thoracic surgery are noteworthy, averaging over 300 surgical interventions annually. His areas of medical expertise encompass a broad spectrum, including laparoscopic colorectal surgery, open colorectal surgery for advanced cases, minimally invasive transanal surgery, and laparoscopic surgery for benign digestive conditions such as gallstones, hiatal hernia, achalasia, and appendicitis. Moreover, he demonstrates proficiency in laparoscopic and open abdominal wall surgery for hernias and incisional hernias, as well as expertise in oncologic surgery, hepatobiliary pancreatic surgery, and endocrine surgery involving the thyroid, parathyroid, and adrenal glands. Dr. Calu's comprehensive skill set and clinical acumen position him as a versatile and accomplished surgeon capable of addressing a wide range of surgical challenges with precision and expertise. Additionally, he holds a Master's Degree in Public Health and Health Services Management, demonstrating his commitment to holistic patient care and healthcare system improvement. With a solid educational background, Dr. Calu has seamlessly transitioned into various roles within academia and clinical practice, contributing significantly to both fields. Since 2002, he has been actively involved in surgical care at Elias Emergency University Hospital, where he has served as a General Surgeon, Senior General Surgeon, and currently as a Thoracic Surgeon. Moreover, since 2013 Dr. Calu has dedicated himself to the education and mentorship of future surgeons, holding positions as a Lecturer, Associate Professor, and Ph.D. advisor at Carol Davila University of Medicine and Pharmacy in Bucharest, Romania. Dr. Valentin Calu's contributions extend beyond his clinical and academic pursuits, encompassing a significant body of published work that reflects his expertise and dedication to advancing surgical knowledge. He has authored or contributed to several seminal works, including chapters in textbooks such as Treatise on Surgery (2009) and Commented Atlas of Laparoscopic Surgery (2012). His expertise in laparoscopic surgery is particularly notable, with chapters dedicated to this field in various publications. Additionally, Dr. Calu has co-authored chapters addressing critical topics in surgical practice, such as the surgical management of achalasia and acute appendicitis, in manuals and practical guides aimed at both medical students and practicing physicians. His commitment to disseminating knowledge and best practices is evident in his extensive literary contributions, which serve as valuable resources for surgical education and practice.

Dr. Valentin Calu's research portfolio includes several notable publications, with several stand-out papers that

showcase his expertise and contributions to the field of surgical oncology, colorectal surgery, and molecular pathology. One of Dr. Calu's notable contributions in this area is the paper "Multivariate Risk Analysis of RAS, BRAF and EGFR Mutations Allelic Frequency and Coexistence as Colorectal Cancer Predictive Biomarkers." published in the esteemed journal "Cancers" in 2022, which investigates the interplay of genetic mutations in RAS, BRAF, and EGFR genes and their implications for colorectal cancer prognosis and treatment response. By conducting a multivariate risk analysis, Dr. Calu and his co-authors provide valuable insights into the predictive value of these mutations and their coexistence patterns, shedding light on potential targets for precision medicine strategies in colorectal cancer management. Another notable research paper is "Key Biomarkers Within the Colorectal Cancer Related Inflammatory Microenvironment", published in "Scientific Reports" in 2021. Dr. Calu, as the lead author, and his collaborators investigate the role of inflammatory markers in tumor progression and metastasis, providing valuable insights into the molecular mechanisms driving colorectal cancer pathogenesis. This study enhances our understanding of the tumor microenvironment and identifies potential targets for novel therapeutic interventions. In another research article titled "Dietary AGEs Involvement in Colonic Inflammation and Cancer: Insights from an In Vitro Enterocyte Model" published in "Scientific Reports" in 2020, he investigates the involvement of dietary advanced glycation end products (AGEs) in colonic inflammation and cancer development using an in vitro enterocyte model. As the corresponding author, Dr. Calu contributes to unraveling the intricate relationship between diet, inflammation, and colorectal cancer risk. This research highlights the potential role of dietary modifications in mitigating colonic inflammation and reducing cancer risk, offering novel avenues for preventive strategies against colorectal cancer. These three papers exemplify his significant contributions to the field of surgical oncology and molecular pathology, showcasing Dr. Calu's commitment to advancing scientific knowledge. Among Dr. Calu's experience in research projects, the top three notable contributions are: The 2020 Grant PTE from 07/09/2020 (project registration code PN-III-P2-2.1-PTE-2019-0544), "High- Sensitivity Technology for Diagnosing Patients with Colorectal Cancer at Risk of Post-Resection Peritoneal Recurrence; Personalized Therapy Guidance " - Dr. Calu was the project coordinator from the partner Elias Emergency University Hospital. This role stands out as Dr. Valentin Calu lead a significant research project focusing on the development of high-sensitivity technology for diagnosing patients with colorectal cancer at risk of peritoneal recurrence post-resection. As a project coordinator, Dr. Calu oversaw key aspects of the research, from planning and implementation to management, a position that required strong leadership and expertise. In the 2021 Multicentric European study MANCTRA-1 (coMpliAnce with evideNce-based cliniCal guidelines in the managemenT of acute biliaRy pancreAtitis MANCTRA-1) organised by WSES (World Society for Emergency Surgery) Dr. Valentin Calu served as the principal site investigator. Dr. Calu played a crucial role in ensuring the successful implementation and adherence to evidence-based clinical guidelines in the management of acute biliary pancreatitis. This role involved coordinating research activities across multiple sites and overseeing data collection and analysis, contributing valuable insights to the improvement of patient care in this challenging clinical scenario. In the 2018 Multicentric European study PIPAS (Physiologic Indicators for Prognosis in Abdominal Sepsis) as the principal site investigator Dr. Calu lead research efforts focused on identifying physiologic indicators for prognosis in abdominal sepsis. This role involved coordinating research activities across multiple European centers and overseeing data collection and analysis to improve prognostic accuracy and clinical decision-making in patients with abdominal sepsis. Dr. Calu's contributions are essential for advancing our understanding of sepsis pathophysiology and improving patient outcomes in emergency surgical settings. Dr. Valentin Calu's wealth of experience and expertise position him as a pivotal figure for a cancer research project focused on investigating biomarkers for rapid cancer staging. With a background in surgical oncology, he has successfully led multicentric studies, including those organized by esteemed institutions like the World Society for Emergency Surgery. As a principal site investigator in European studies, Dr. Calu has demonstrated his ability to oversee complex research endeavors and ensure adherence to evidence-based clinical guidelines. Furthermore, his role as a project coordinator in developing high-sensitivity technology for diagnosing colorectal cancer recurrence

showcases his innovative approach to cancer diagnostics and personalized therapy guidance. Dr. Calu's profound knowledge in cancer biology, clinical research, and project coordination renders him invaluable, and his contribution will drive scientific innovation, ultimately enhancing patient outcomes in cancer care.